PCTEST
18855 Adams Ct, Morgan Hill, CA 95037 USA
Tel. +1.410.290.6652 / Fax +1.410.290.6654
http://www.pctest.com



# SAR EVALUATION REPORT

**Applicant Name:**
Apple, Inc.
One Apple Park Way
Cupertino, CA 95014

**Date of Testing:**
12/16/2019 – 01/21/2020
**Test Site/Location:**
PCTEST Lab, Morgan Hill, CA, USA
**Document Serial No.:**
1C1912170051-01-R2.BCG

| | |
|---|---|
| **FCC ID:** | **BCGA2068** |
| **APPLICANT:** | **APPLE, INC.** |

| | |
|---|---|
| **DUT Type:** | Tablet Device |
| **Application Type:** | Certification |
| **FCC Rule Part(s):** | CFR §2.1093 |
| **Model:** | A2068 |

| Equipment Class | Band & Mode | Tx Frequency | SAR |
|---|---|---|---|
| | | | 1g Body (W/kg) |
| PCB | GPRS/EDGE 850 | 824.20 - 848.80 MHz | 1.11 |
| PCB | GPRS/EDGE 1900 | 1850.20 - 1909.80 MHz | 1.08 |
| PCB | UMTS 850 | 826.40 - 846.60 MHz | 1.17 |
| PCB | UMTS 1750 | 1712.4 - 1752.6 MHz | 1.10 |
| PCB | UMTS 1900 | 1852.4 - 1907.6 MHz | 1.16 |
| PCB | LTE Band 71 | 665.5 - 695.5 MHz | 1.07 |
| PCB | LTE Band 12 | 699.7 - 715.3 MHz | 1.13 |
| PCB | LTE Band 17 | 706.5 - 713.5 MHz | N/A |
| PCB | LTE Band 13 | 779.5 - 784.5 MHz | 1.14 |
| PCB | LTE Band 14 | 790.5 - 795.5 MHz | 1.11 |
| PCB | LTE Band 26 (Cell) | 814.7 - 848.3 MHz | 1.04 |
| PCB | LTE Band 5 (Cell) | 824.7 - 848.3 MHz | 1.01 |
| PCB | LTE Band 4 (AWS) | 1710.7 - 1754.3 MHz | 1.09 |
| PCB | LTE Band 66 (AWS) | 1710.7 - 1779.3 MHz | 1.07 |
| PCB | LTE Band 2 (PCS) | 1850.7 - 1909.3 MHz | 1.19 |
| PCB | LTE Band 25 (PCS) | 1850.7 - 1914.3 MHz | 1.13 |
| PCB | LTE Band 30 | 2307.5 - 2312.5 MHz | 1.13 |
| PCB | LTE Band 7 | 2502.5 - 2567.5 MHz | 1.17 |
| PCB | LTE Band 41 | 2498.5 - 2687.5 MHz | 1.18 |
| CBE | LTE Band 48 | 3552.5 - 3697.5 MHz | 1.19 |
| DTS | 2.4 GHz WLAN | 2412 - 2472 MHz | 1.16 |
| NII | U-NII-1 | 5180 - 5240 MHz | N/A |
| NII | U-NII-2A | 5260 - 5320 MHz | 1.12 |
| NII | U-NII-2C | 5500 - 5720 MHz | 1.18 |
| NII | U-NII-3 | 5745 - 5825 MHz | 1.18 |
| DSS/DTS | Bluetooth | 2402 - 2480 MHz | 1.18 |
| **Simultaneous SAR per KDB 690783 D01v01r03:** | | | 1.59 |

Note: This revised Test Report (S/N: 1C1912170051-01-R2.BCG) supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE C95.1-1992 and has been tested in accordance with the measurement procedures specified in Section 1.7 of this report; for North American frequency bands only.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them. Test results reported herein relate only to the item(s) tested.

Randy Ortanez
President

The SAR Tick is an initiative of the Mobile & Wireless Forum (MWF). While a product may be considered eligible, use of the SAR Tick logo requires an agreement with the MWF. Further details can be obtained by emailing: sartick@mwfai.info.



© 2020 PCTEST.
REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# TABLE OF CONTENTS


1 DEVICE UNDER TEST ..... 3

2 LTE INFORMATION ..... 32

3 INTRODUCTION ..... 33

4 DOSIMETRIC ASSESSMENT ..... 34

5 TEST CONFIGURATION POSITIONS ..... 35

6 RF EXPOSURE LIMITS ..... 36

7 FCC MEASUREMENT PROCEDURES ..... 37

8 RF CONDUCTED POWERS ..... 43

9 SYSTEM VERIFICATION ..... 236

10 SAR DATA SUMMARY ..... 238

11 FCC MULTI-TX AND ANTENNA SAR CONSIDERATIONS ..... 265

12 SAR MEASUREMENT VARIABILITY ..... 284

13 ADDITIONAL TESTING PER FCC GUIDANCE ..... 285

14 EQUIPMENT LIST ..... 293

15 MEASUREMENT UNCERTAINTIES ..... 294

16 CONCLUSION ..... 295

17 REFERENCES ..... 296

APPENDIX A: SAR TEST PLOTS

APPENDIX B: SAR DIPOLE VERIFICATION PLOTS

APPENDIX C: SAR TISSUE SPECIFICATIONS

APPENDIX D: SAR SYSTEM VALIDATION

APPENDIX E: DUT ANTENNA DIAGRAM & SAR TEST SETUP PHOTOGRAPHS

APPENDIX F: DOWNLINK LTE CA RF CONDUCTED POWERS

APPENDIX G: POWER REDUCTION VERIFICATION

APPENDIX H: IEEE 802.11AX RU SAR EXCLUSION

APPENDIX I: PROBE AND DIPOLE CALIBRATION CERTIFICATES





© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 1 DEVICE UNDER TEST

## 1.1 Device Overview

| Band & Mode | Operating Modes | Tx Frequency |
|---|---|---|
| GPRS/EDGE 850 | Data | 824.20 - 848.80 MHz |
| GPRS/EDGE 1900 | Data | 1850.20 - 1909.80 MHz |
| UMTS 850 | Data | 826.40 - 846.60 MHz |
| UMTS 1750 | Data | 1712.4 - 1752.6 MHz |
| UMTS 1900 | Data | 1852.4 - 1907.6 MHz |
| LTE Band 71 | Data | 665.5 - 695.5 MHz |
| LTE Band 12 | Data | 699.7 - 715.3 MHz |
| LTE Band 17 | Data | 706.5 - 713.5 MHz |
| LTE Band 13 | Data | 779.5 - 784.5 MHz |
| LTE Band 14 | Data | 790.5 - 795.5 MHz |
| LTE Band 26 (Cell) | Data | 814.7 - 848.3 MHz |
| LTE Band 5 (Cell) | Data | 824.7 - 848.3 MHz |
| LTE Band 4 (AWS) | Data | 1710.7 - 1754.3 MHz |
| LTE Band 66 (AWS) | Data | 1710.7 - 1779.3 MHz |
| LTE Band 2 (PCS) | Data | 1850.7 - 1909.3 MHz |
| LTE Band 25 (PCS) | Data | 1850.7 - 1914.3 MHz |
| LTE Band 30 | Data | 2307.5 - 2312.5 MHz |
| LTE Band 7 | Data | 2502.5 - 2567.5 MHz |
| LTE Band 41 | Data | 2498.5 - 2687.5 MHz |
| LTE Band 48 | Data | 3552.5 - 3697.5 MHz |
| 2.4 GHz WLAN | Voice/Data | 2412 - 2472 MHz |
| U-NII-1 | Voice/Data | 5180 - 5240 MHz |
| U-NII-2A | Voice/Data | 5260 - 5320 MHz |
| U-NII-2C | Voice/Data | 5500 - 5720 MHz |
| U-NII-3 | Voice/Data | 5745 - 5825 MHz |
| Bluetooth | Data | 2402 - 2480 MHz |

## 1.2 Power Reduction for SAR

This device uses the manufacturer's proprietary motion detect mode to determine proximity to the user's body and set the licensed power level accordingly for SAR compliance. When being used in the hand or the body, the output power for licensed transmitters will always be reduced. Per FCC KDB Guidance, SAR testing was performed only using reduced output powers following the test positions in KDB Publication 616217.

This device additionally utilizes a power reduction mechanism for Bluetooth and WLAN operations. When WLAN/Bluetooth is operating simultaneously with certain combinations of 2G/3G/4G and 5 GHz WLAN antennas,



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

the output power of is permanently reduced. SAR evaluations were additionally performed at the maximum allowed output power for these scenarios to evaluate simultaneous transmission compliance.

Detailed descriptions of the power reduction mechanisms are included in the operational description. The power reduction mechanisms were confirmed during the SAR Evaluation. Appendix G contains a summary of the verification results.

## 1.3 Nominal and Maximum Output Power Specifications

This device operates using the following maximum and nominal output power specifications. SAR values were scaled to the maximum allowed power to determine compliance per KDB Publication 447498 D01v06.

### 1.3.1 2G/3G/4G Output Power for Portable Use Conditions

**A. Antenna 1**

| Mode / Band | | Burst Average GMSK (dBm) | | Burst Average 8-PSK (dBm) | |
|---|---|---|---|---|---|
| | | *1 TX Slots* | *2 TX Slots* | *1 TX Slots* | *2 TX Slots* |
| GPRS/EDGE 850 | Maximum | **29.80** | **26.80** | **25.75** | **24.75** |
| | Nominal | **29.05** | **26.05** | **25.00** | **24.00** |
| Mode / Band | | Modulated Average (dBm) | | | |
| | | *3GPP WCDMA* | *3GPP HSDPA* | *3GPP HSUPA* | *3GPP DC-HSDPA* |
| UMTS Band 5 (850 MHz) | Maximum | **20.60** | **20.60** | **20.60** | **20.60** |
| | Nominal | **20.10** | **20.10** | **20.10** | **20.10** |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 71 | Maximum | **20.00** |
| | Nominal | **19.50** |
| LTE Band 12 | Maximum | **21.50** |
| | Nominal | **21.00** |
| LTE Band 17 | Maximum | **21.50** |
| | Nominal | **21.00** |
| LTE Band 13 | Maximum | **21.50** |
| | Nominal | **21.00** |
| LTE Band 14 | Maximum | **21.50** |
| | Nominal | **21.00** |
| LTE Band 5 (Cell) | Maximum | **20.60** |
| | Nominal | **20.10** |
| LTE Band 5 (Cell) Intra-band ULCA | Maximum | **20.60** |
| | Nominal | **19.60** |
| LTE Band 26 (Cell) | Maximum | **20.60** |
| | Nominal | **20.10** |
| LTE Band 48 | Maximum | **15.30** |
| | Nominal | **14.30** |

**B. Antenna 3**

| Mode / Band | | Burst Average GMSK (dBm) | | Burst Average 8-PSK (dBm) | |
|---|---|---|---|---|---|
| | | *1 TX Slots* | *2 TX Slots* | *1 TX Slots* | *2 TX Slots* |
| GPRS/EDGE 850 | Maximum | **29.00** | **27.30** | **27.75** | **26.75** |
| | Nominal | **28.25** | **26.55** | **27.00** | **26.00** |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

| Mode / Band | | Modulated Average (dBm) | | | |
|---|---|---|---|---|---|
| | | *3GPP WCDMA* | *3GPP HSDPA* | *3GPP HSUPA* | *3GPP DC-HSDPA* |
| UMTS Band 5 (850 MHz) | Maximum | **20.30** | **20.30** | **20.30** | **20.30** |
| | Nominal | **19.80** | **19.80** | **19.80** | **19.80** |

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 71 | Maximum | **22.00** |
| | Nominal | **21.50** |
| LTE Band 12 | Maximum | **20.00** |
| | Nominal | **19.50** |
| LTE Band 17 | Maximum | **20.00** |
| | Nominal | **19.50** |
| LTE Band 13 | Maximum | **20.30** |
| | Nominal | **19.80** |
| LTE Band 14 | Maximum | **20.30** |
| | Nominal | **19.80** |
| LTE Band 5 (Cell) | Maximum | **20.30** |
| | Nominal | **19.80** |
| LTE Band 5 (Cell) Intra-band ULCA | Maximum | **20.30** |
| | Nominal | **19.30** |
| LTE Band 26 (Cell) | Maximum | **20.30** |
| | Nominal | **19.80** |
| LTE Band 48 | Maximum | **16.50** |
| | Nominal | **16.00** |

**C. Antenna 2A**

| Mode / Band | | Burst Average GMSK (dBm) | | Burst Average 8-PSK (dBm) | |
|---|---|---|---|---|---|
| | | *1 TX Slots* | *2 TX Slots* | *1 TX Slots* | *2 TX Slots* |
| GPRS/EDGE 1900 | Maximum | **24.80** | **21.80** | **23.25** | **21.80** |
| | Nominal | **24.05** | **21.05** | **22.50** | **21.05** |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

| Mode / Band | | Modulated Average (dBm) | | | |
|---|---|---|---|---|---|
| | | *3GPP WCDMA* | *3GPP HSDPA* | *3GPP HSUPA* | *3GPP DC-HSDPA* |
| UMTS Band 4 (1750 MHz) | Maximum | **14.75** | **14.75** | **14.75** | **14.75** |
| | Nominal | **13.75** | **13.75** | **13.75** | **13.75** |
| UMTS Band 2 (1900 MHz) | Maximum | **15.10** | **15.10** | **15.10** | **15.10** |
| | Nominal | **14.10** | **14.10** | **14.10** | **14.10** |

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 4 (AWS) | Maximum | **14.75** |
| | Nominal | **13.75** |
| LTE Band 66 (AWS) | Maximum | **14.75** |
| | Nominal | **13.75** |
| LTE Band 25 (PCS) | Maximum | **15.10** |
| | Nominal | **14.10** |
| LTE Band 2 (PCS) | Maximum | **15.10** |
| | Nominal | **14.10** |
| LTE Band 30 | Maximum | **13.00** |
| | Nominal | **12.00** |
| LTE Band 7 | Maximum | **12.70** |
| | Nominal | **11.70** |
| LTE Band 7 Intra-band ULCA | Maximum | **12.70** |
| | Nominal | **11.70** |
| LTE Band 41 (PC3) | Maximum | **14.70** |
| | Nominal | **13.70** |
| LTE Band 41 PC3 Intra-band ULCA | Maximum | **14.70** |
| | Nominal | **13.70** |
| LTE Band 41 (PC2) | Maximum | **14.70** |
| | Nominal | **13.70** |
| LTE Band 41 (PC2) Intra-band ULCA | Maximum | **14.70** |
| | Nominal | **13.70** |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**D. Antenna 2B**

| Mode / Band | | Burst Average GMSK (dBm) | | Burst Average 8-PSK (dBm) | |
|---|---|---|---|---|---|
| | | *1 TX Slots* | *2 TX Slots* | *1 TX Slots* | *2 TX Slots* |
| GPRS/EDGE 1900 | Maximum | **23.50** | **20.50** | **23.25** | **20.50** |
| | Nominal | **22.75** | **19.75** | **22.50** | **19.75** |
| Mode / Band | | Modulated Average (dBm) | | | |
| | | *3GPP WCDMA* | *3GPP HSDPA* | *3GPP HSUPA* | *3GPP DC-HSDPA* |
| UMTS Band 4 (1750 MHz) | Maximum | **14.90** | **14.90** | **14.90** | **14.90** |
| | Nominal | **13.90** | **13.90** | **13.90** | **13.90** |
| UMTS Band 2 (1900 MHz) | Maximum | **14.10** | **14.10** | **14.10** | **14.10** |
| | Nominal | **13.10** | **13.10** | **13.10** | **13.10** |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 4 (AWS) | Maximum | **14.90** |
| | Nominal | **13.90** |
| LTE Band 66 (AWS) | Maximum | **14.90** |
| | Nominal | **13.90** |
| LTE Band 25 (PCS) | Maximum | **14.10** |
| | Nominal | **13.10** |
| LTE Band 2 (PCS) | Maximum | **14.10** |
| | Nominal | **13.10** |
| LTE Band 30 | Maximum | **13.40** |
| | Nominal | **12.40** |
| LTE Band 7 | Maximum | **12.30** |
| | Nominal | **11.30** |
| LTE Band 7 Intra-band ULCA | Maximum | **12.30** |
| | Nominal | **11.30** |
| LTE Band 41 (PC3) | Maximum | **14.20** |
| | Nominal | **13.20** |
| LTE Band 41 (PC3) Intra-band ULCA | Maximum | **14.20** |
| | Nominal | **13.20** |
| LTE Band 41 (PC2) | Maximum | **14.20** |
| | Nominal | **13.20** |
| LTE Band 41 (PC2) Intra-band ULCA | Maximum | **14.20** |
| | Nominal | **13.20** |
| LTE Band 48 | Maximum | **15.30** |
| | Nominal | **14.30** |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**E. Antenna 4A**

| Mode / Band | | Burst Average GMSK (dBm) | | Burst Average 8-PSK (dBm) | |
|---|---|---|---|---|---|
| | | *1 TX Slots* | *2 TX Slots* | *1 TX Slots* | *2 TX Slots* |
| GPRS/EDGE 1900 | Maximum | **23.90** | **20.90** | **23.90** | **20.90** |
| | Nominal | **23.15** | **20.15** | **23.15** | **20.15** |
| Mode / Band | | Modulated Average (dBm) | | | |
| | | *3GPP WCDMA* | *3GPP HSDPA* | *3GPP HSUPA* | *3GPP DC-HSDPA* |
| UMTS Band 4 (1750 MHz) | Maximum | **14.50** | **14.50** | **14.50** | **14.50** |
| | Nominal | **13.50** | **13.50** | **13.50** | **13.50** |
| UMTS Band 2 (1900 MHz) | Maximum | **14.90** | **14.90** | **14.90** | **14.90** |
| | Nominal | **13.90** | **13.90** | **13.90** | **13.90** |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 4 (AWS) | Maximum | **14.50** |
| | Nominal | **13.50** |
| LTE Band 66 (AWS) | Maximum | **14.50** |
| | Nominal | **13.50** |
| LTE Band 25 (PCS) | Maximum | **14.90** |
| | Nominal | **13.90** |
| LTE Band 2 (PCS) | Maximum | **14.90** |
| | Nominal | **13.90** |
| LTE Band 30 | Maximum | **13.20** |
| | Nominal | **12.20** |
| LTE Band 7 | Maximum | **12.50** |
| | Nominal | **11.50** |
| LTE Band 7 Intra-band ULCA | Maximum | **12.50** |
| | Nominal | **11.50** |
| LTE Band 41 (PC3) | Maximum | **14.20** |
| | Nominal | **13.20** |
| LTE Band 41 (PC3) Intra-band ULCA | Maximum | **14.20** |
| | Nominal | **13.20** |
| LTE Band 41 (PC2) | Maximum | **14.20** |
| | Nominal | **13.20** |
| LTE Band 41 (PC2) Intra-band ULCA | Maximum | **14.20** |
| | Nominal | **13.20** |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**F. Antenna 4B**

| Mode / Band | | Burst Average GMSK (dBm) | | Burst Average 8-PSK (dBm) | |
|---|---|---|---|---|---|
| | | *1 TX Slots* | *2 TX Slots* | *1 TX Slots* | *2 TX Slots* |
| GPRS/EDGE 1900 | Maximum | **24.00** | **21.00** | **24.00** | **21.00** |
| | Nominal | **23.25** | **20.25** | **23.25** | **20.25** |
| Mode / Band | | Modulated Average (dBm) | | | |
| | | *3GPP WCDMA* | *3GPP HSDPA* | *3GPP HSUPA* | *3GPP DC-HSDPA* |
| UMTS Band 4 (1750 MHz) | Maximum | **14.50** | **14.50** | **14.50** | **14.50** |
| | Nominal | **13.50** | **13.50** | **13.50** | **13.50** |
| UMTS Band 2 (1900 MHz) | Maximum | **14.70** | **14.70** | **14.70** | **14.70** |
| | Nominal | **13.70** | **13.70** | **13.70** | **13.70** |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 4 (AWS) | Maximum | **14.50** |
| | Nominal | **13.50** |
| LTE Band 66 (AWS) | Maximum | **14.50** |
| | Nominal | **13.50** |
| LTE Band 25 (PCS) | Maximum | **14.70** |
| | Nominal | **13.70** |
| LTE Band 2 (PCS) | Maximum | **14.70** |
| | Nominal | **13.70** |
| LTE Band 30 | Maximum | **13.70** |
| | Nominal | **12.70** |
| LTE Band 7 | Maximum | **13.30** |
| | Nominal | **12.30** |
| LTE Band 7 Intra-band ULCA | Maximum | **13.30** |
| | Nominal | **12.30** |
| LTE Band 41 (PC3) | Maximum | **15.90** |
| | Nominal | **15.40** |
| LTE Band 41 (PC3) Intra-band ULCA | Maximum | **15.90** |
| | Nominal | **14.90** |
| LTE Band 41 (PC2) | Maximum | **15.90** |
| | Nominal | **15.40** |
| LTE Band 41 (PC2) Intra-band ULCA | Maximum | **15.90** |
| | Nominal | **14.90** |
| LTE Band 48 | Maximum | **16.30** |
| | Nominal | **15.80** |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

### 1.3.2 4G Powers – Inter-band ULCA Active

**A. Antenna 1**

| | | |
|---|---|---|
| LTE Band 12 | Maximum | **18.50** |
| | Nominal | **18.00** |
| LTE Band 13 | Maximum | **18.50** |
| | Nominal | **18.00** |
| LTE Band 14 | Maximum | **18.50** |
| | Nominal | **18.00** |
| LTE Band 5 (Cell) | Maximum | **17.60** |
| | Nominal | **17.10** |

**B. Antenna 3**

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 12 | Maximum | **17.00** |
| | Nominal | **16.50** |
| LTE Band 13 | Maximum | **17.30** |
| | Nominal | **16.80** |
| LTE Band 14 | Maximum | **17.30** |
| | Nominal | **16.80** |
| LTE Band 5 (Cell) | Maximum | **17.30** |
| | Nominal | **16.80** |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**C. Antenna 2A**

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 4 (AWS) | Maximum | **11.75** |
| | Nominal | **10.75** |
| LTE Band 66 (AWS) | Maximum | **11.75** |
| | Nominal | **10.75** |
| LTE Band 2 (PCS) | Maximum | **12.10** |
| | Nominal | **11.10** |
| LTE Band 30 | Maximum | **10.00** |
| | Nominal | **9.00** |
| LTE Band 7 | Maximum | **9.70** |
| | Nominal | **8.70** |

**D. Antenna 2B**

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 4 (AWS) | Maximum | **11.90** |
| | Nominal | **10.90** |
| LTE Band 66 (AWS) | Maximum | **11.90** |
| | Nominal | **10.90** |
| LTE Band 2 (PCS) | Maximum | **11.10** |
| | Nominal | **10.10** |
| LTE Band 30 | Maximum | **10.40** |
| | Nominal | **9.40** |
| LTE Band 7 | Maximum | **9.30** |
| | Nominal | **8.30** |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**E. Antenna 4A**

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 4 (AWS) | Maximum | **11.50** |
| | Nominal | **10.50** |
| LTE Band 66 (AWS) | Maximum | **11.50** |
| | Nominal | **10.50** |
| LTE Band 2 (PCS) | Maximum | **11.90** |
| | Nominal | **10.90** |
| LTE Band 30 | Maximum | **10.20** |
| | Nominal | **9.20** |
| LTE Band 7 | Maximum | **9.50** |
| | Nominal | **8.50** |

**F. Antenna 4B**

| Mode / Band | | Modulated Average (dBm) |
|---|---|---|
| LTE Band 4 (AWS) | Maximum | **11.50** |
| | Nominal | **10.50** |
| LTE Band 66 (AWS) | Maximum | **11.50** |
| | Nominal | **10.50** |
| LTE Band 2 (PCS) | Maximum | **11.70** |
| | Nominal | **10.70** |
| LTE Band 30 | Maximum | **10.70** |
| | Nominal | **9.70** |
| LTE Band 7 | Maximum | **10.30** |
| | Nominal | **9.30** |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

### 1.3.3 Unlicensed Maximum Output Power

Note: Targets for 802.11ax RU operations can be found in Appendix G

**A. Antenna 2A**

| Mode/Band | | Modulated Average - Single Tx Chain (dBm) - Antenna 2a |
|---|---|---|
| Bluetooth BDR/LE | Maximum | **14.00** |
| | Nominal | **12.50** |
| Bluetooth EDR | Maximum | **11.00** |
| | Nominal | **9.50** |
| Bluetooth HDR | Maximum | **7.50** |
| | Nominal | **6.00** |

| Mode / Band | | Modulated Average - Single Tx Chain (dBm) - Antenna 2a | | |
|---|---|---|---|---|
| Channel | | 1-11 | 12 | 13 |
| IEEE 802.11b (2.4 GHz) | Maximum | **13.00** | | |
| | Nominal | **11.50** | | |
| IEEE 802.11g (2.4 GHz) | Maximum | **13.00** | **12.00** | **3.00** |
| | Nominal | **11.50** | **10.50** | **1.50** |
| IEEE 802.11n (2.4 GHz) | Maximum | **13.00** | **12.00** | **3.00** |
| | Nominal | **11.50** | **10.50** | **1.50** |
| IEEE 802.11ax SU (2.4 GHz) | Maximum | **13.00** | **11.00** | **N/A** |
| | Nominal | **11.50** | **9.50** | **N/A** |

| Mode/Band | | Modulated Average - MIMO (dBm) - Antenna 2a |
|---|---|---|
| Bluetooth BDR/LE | Maximum | **14.00** |
| | Nominal | **12.50** |
| Bluetooth EDR | Maximum | **11.00** |
| | Nominal | **9.50** |
| Bluetooth HDR | Maximum | **7.50** |
| | Nominal | **6.00** |

Note: In MIMO operations, Antenna 2A transmits at maximum allowed powers at indicated above.




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

| Mode / Band | | Modulated Average - MIMO (dBm) - Antenna 2a | | | |
|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | |
| Channel | | 1 | 2-11 | 12 | 13 |
| IEEE 802.11g (2.4 GHz) | Maximum | **13.00** | | **10.50** | **-0.50** |
| | Nominal | **11.50** | | **9.00** | **-2.00** |
| IEEE 802.11n (2.4 GHz) | Maximum | **13.00** | | **10.50** | **-0.50** |
| | Nominal | **11.50** | | **9.00** | **-2.00** |
| IEEE 802.11ax SU (2.4 GHz) | Maximum | **10.00** | **13.00** | **8.00** | **N/A** |
| | Nominal | **8.50** | **11.50** | **6.50** | **N/A** |

Note: In MIMO operations, Antenna 2A transmits at maximum allowed powers at indicated above.

**B. Antenna 4A**

| Mode/Band | | Modulated Average - Single Tx Chain (dBm) - Antenna 4a |
|---|---|---|
| Bluetooth BDR/LE | Maximum | **14.00** |
| | Nominal | **12.50** |
| Bluetooth EDR | Maximum | **13.50** |
| | Nominal | **12.00** |
| Bluetooth HDR | Maximum | **9.50** |
| | Nominal | **8.00** |

| Mode / Band | | Modulated Average - Single Tx Chain (dBm) - Antenna 4a | | |
|---|---|---|---|---|
| Channel | | 1-11 | 12 | 13 |
| IEEE 802.11b (2.4 GHz) | Maximum | **13.00** | | |
| | Nominal | **11.50** | | |
| IEEE 802.11g (2.4 GHz) | Maximum | **13.00** | **12.00** | **1.00** |
| | Nominal | **11.50** | **10.50** | **-0.50** |
| IEEE 802.11n (2.4 GHz) | Maximum | **13.00** | **12.00** | **1.00** |
| | Nominal | **11.50** | **10.50** | **-0.50** |
| IEEE 802.11ax SU (2.4 GHz) | Maximum | **13.00** | **11.00** | **N/A** |
| | Nominal | **11.50** | **9.50** | **N/A** |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

| Mode/Band | | Modulated Average - MIMO (dBm) - Antenna 4a |
|---|---|---|
| Bluetooth BDR/LE | Maximum | **14.00** |
| | Nominal | **12.50** |
| Bluetooth EDR | Maximum | **13.50** |
| | Nominal | **12.00** |
| Bluetooth HDR | Maximum | **9.50** |
| | Nominal | **8.00** |

Note: In MIMO operations, Antenna 4A transmits at maximum allowed powers at indicated above.

| Mode / Band | | Modulated Average - MIMO (dBm) - Antenna 4a | | | |
|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | |
| Channel | | 1 | 2-11 | 12 | 13 |
| IEEE 802.11g (2.4 GHz) | Maximum | **13.00** | | **11.00** | **1.50** |
| | Nominal | **11.50** | | **9.50** | **0.00** |
| IEEE 802.11n (2.4 GHz) | Maximum | **13.00** | | **11.00** | **1.50** |
| | Nominal | **11.50** | | **9.50** | **0.00** |
| IEEE 802.11ax SU (2.4 GHz) | Maximum | **12.00** | **13.00** | **10.00** | **N/A** |
| | Nominal | **10.50** | **11.50** | **8.50** | **N/A** |

Note: In MIMO operations, Antenna 4A transmits at maximum allowed powers at indicated above.

### C. 5GHz ANTlower

| Mode / Band | | Modulated Average - Single Tx Chain (dBm) - 5GHz ANTlower | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | | | | | 40 MHz Bandwidth | | | | | | | | | 80 MHz Bandwidth | | | | |
| Channel | | 36 | 40-48 | 52-60 | 100 | 104-136 | 140 | 144 | 149-165 | 38 | 46 | 54 | 62 | 102 | 110-126 | 134 | 142 | 151-159 | 42-58 | 106 | 122-138 | 155 |
| IEEE 802.11a (5 GHz) | Maximum | **16.00** | **16.00** | **16.50** | **15.50** | **16.50** | **14.75** | **16.50** | **15.50** | | | | | | | | | | | | | |
| | Nominal | **14.50** | **14.50** | **15.00** | **14.00** | **15.00** | **13.25** | **15.00** | **14.00** | | | | | | | | | | | | | |
| IEEE 802.11n (5 GHz) | Maximum | **16.00** | **16.00** | **16.50** | **15.50** | **16.50** | **14.75** | **16.50** | **15.50** | **13.50** | **16.00** | **16.50** | **13.50** | **13.00** | **16.50** | **15.50** | **16.50** | **15.50** | | | | |
| | Nominal | **14.50** | **14.50** | **15.00** | **14.00** | **15.00** | **13.25** | **15.00** | **14.00** | **12.00** | **14.50** | **15.00** | **12.00** | **11.50** | **15.00** | **14.00** | **15.00** | **14.00** | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | **16.00** | **16.00** | **16.50** | **15.50** | **16.50** | **14.75** | **16.50** | **15.50** | **13.50** | **16.00** | **16.50** | **13.50** | **13.00** | **16.50** | **15.50** | **16.50** | **15.50** | **12.00** | **12.50** | **16.50** | **15.50** |
| | Nominal | **14.50** | **14.50** | **15.00** | **14.00** | **15.00** | **13.25** | **15.00** | **14.00** | **12.00** | **14.50** | **15.00** | **12.00** | **11.50** | **15.00** | **14.00** | **15.00** | **14.00** | **10.50** | **11.00** | **15.00** | **14.00** |
| IEEE 802.11ax SU (5 GHz) | Maximum | **15.00** | **16.00** | **16.50** | **14.00** | **16.50** | **13.50** | **16.50** | **15.50** | **12.00** | **16.00** | **16.50** | **11.50** | **11.50** | **16.50** | **14.50** | **16.50** | **15.50** | **10.50** | **10.50** | **16.50** | **15.50** |
| | Nominal | **13.50** | **14.50** | **15.00** | **12.50** | **15.00** | **12.00** | **15.00** | **14.00** | **10.50** | **14.50** | **15.00** | **10.00** | **10.00** | **15.00** | **13.00** | **15.00** | **14.00** | **9.00** | **9.00** | **15.00** | **14.00** |

| Mode / Band | | Modulated Average - MIMO (dBm) 2Tx, CDD - 5GHz ANTlower | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | | | | | | 40 MHz Bandwidth | | | | | | | | | | 80 MHz Bandwidth | | | | |
| Channel | | 36 | 40-48 | 52-60 | 64-100 | 104-132 | 136 | 140 | 144 | 149-165 | 38 | 46 | 54 | 62 | 102 | 110-126 | 134 | 142 | 151-159 | 42 | 58 | 106 | 122-138 | 155 |
| IEEE 802.11a (5 GHz) | Maximum | **15.00** | **16.00** | **16.50** | **15.00** | **16.50** | **15.00** | **12.50** | **16.50** | **15.50** | | | | | | | | | | | | | | |
| | Nominal | **13.50** | **14.50** | **15.00** | **13.50** | **15.00** | **13.50** | **11.00** | **15.00** | **14.00** | | | | | | | | | | | | | | |
| IEEE 802.11n (5 GHz) | Maximum | **15.00** | **16.00** | **16.50** | **15.00** | **16.50** | **15.00** | **12.50** | **16.50** | **15.50** | **12.50** | **16.00** | **16.50** | **12.50** | **11.25** | **16.50** | **14.00** | **16.50** | **15.50** | | | | | |
| | Nominal | **13.50** | **14.50** | **15.00** | **13.50** | **15.00** | **13.50** | **11.00** | **15.00** | **14.00** | **11.00** | **14.50** | **15.00** | **11.00** | **9.75** | **15.00** | **12.50** | **15.00** | **14.00** | | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | **15.00** | **16.00** | **16.50** | **15.00** | **16.50** | **15.00** | **12.50** | **16.50** | **15.50** | **12.50** | **16.00** | **16.50** | **12.50** | **11.25** | **16.50** | **14.00** | **16.50** | **15.50** | **11.00** | **10.50** | **10.00** | **16.50** | **15.50** |
| | Nominal | **13.50** | **14.50** | **15.00** | **13.50** | **15.00** | **13.50** | **11.00** | **15.00** | **14.00** | **11.00** | **14.50** | **15.00** | **11.00** | **9.75** | **15.00** | **12.50** | **15.00** | **14.00** | **9.50** | **9.00** | **8.50** | **15.00** | **14.00** |
| IEEE 802.11ax SU (5 GHz) | Maximum | **13.50** | **16.00** | **16.50** | **13.50** | **16.50** | **13.50** | **10.00** | **16.50** | **15.50** | **11.00** | **16.00** | **16.50** | **10.50** | **10.00** | **16.50** | **13.00** | **16.50** | **15.50** | **9.00** | **9.00** | **9.00** | **16.50** | **14.50** |
| | Nominal | **12.00** | **14.50** | **15.00** | **12.00** | **15.00** | **12.00** | **8.50** | **15.00** | **14.00** | **9.50** | **14.50** | **15.00** | **9.00** | **8.50** | **15.00** | **11.50** | **15.00** | **14.00** | **7.50** | **7.50** | **7.50** | **15.00** | **13.00** |

| Mode / Band | | Modulated Average - MIMO (dBm) 2Tx, SDM - 5GHz ANTlower | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | | | | | | 40 MHz Bandwidth | | | | | | | | | | 80 MHz Bandwidth | | | | |
| Channel | | 36 | 40-48 | 52-60 | 64-100 | 104-132 | 136 | 140 | 144 | 149-165 | 38 | 46 | 54 | 62 | 102 | 110-126 | 134 | 142 | 151-159 | 42 | 58 | 106 | 122-138 | 155 |
| IEEE 802.11n (5 GHz) | Maximum | **15.00** | **16.00** | **16.50** | **15.00** | **16.50** | **15.00** | **12.50** | **16.50** | **15.50** | **12.50** | **16.00** | **16.50** | **12.50** | **11.25** | **16.50** | **14.00** | **16.50** | **15.50** | | | | | |
| | Nominal | **13.50** | **14.50** | **15.00** | **13.50** | **15.00** | **13.50** | **11.00** | **15.00** | **14.00** | **11.00** | **14.50** | **15.00** | **11.00** | **9.75** | **15.00** | **12.50** | **15.00** | **14.00** | | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | **15.00** | **16.00** | **16.50** | **15.00** | **16.50** | **15.00** | **12.50** | **16.50** | **15.50** | **12.50** | **16.00** | **16.50** | **12.50** | **11.25** | **16.50** | **14.00** | **16.50** | **15.50** | **11.00** | **10.50** | **10.00** | **16.50** | **15.50** |
| | Nominal | **13.50** | **14.50** | **15.00** | **13.50** | **15.00** | **13.50** | **11.00** | **15.00** | **14.00** | **11.00** | **14.50** | **15.00** | **11.00** | **9.75** | **15.00** | **12.50** | **15.00** | **14.00** | **9.50** | **9.00** | **8.50** | **15.00** | **14.00** |
| IEEE 802.11ax SU (5 GHz) | Maximum | **13.50** | **16.00** | **16.50** | **13.50** | **16.50** | **13.50** | **10.00** | **16.50** | **15.50** | **11.00** | **16.00** | **16.50** | **10.50** | **10.00** | **16.50** | **13.00** | **16.50** | **15.50** | **9.00** | **9.00** | **9.00** | **16.50** | **14.50** |
| | Nominal | **12.00** | **14.50** | **15.00** | **12.00** | **15.00** | **12.00** | **8.50** | **15.00** | **14.00** | **9.50** | **14.50** | **15.00** | **9.00** | **8.50** | **15.00** | **11.50** | **15.00** | **14.00** | **7.50** | **7.50** | **7.50** | **15.00** | **13.00** |

Note: In MIMO operations, 5GHz ANTlower transmits at maximum allowed powers as indicated above for both 2 Tx CDD and 2 Tx SDM




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

### D. 5GHz ANTupper

| Mode / Band | | Modulated Average - Single Tx Chain (dBm) - 5GHz ANTupper | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | | | | | | 40 MHz Bandwidth | | | | | | | | | 80 MHz Bandwidth | | | |
| Channel | | 36 | 40-48 | 52-60 | 64 | 100 | 104-136 | 140 | 144 | 149-165 | 38 | 46 | 54 | 62 | 102 | 110-126 | 134 | 142 | 151-159 | 42-58 | 106 | 122-138 | 155 |
| IEEE 802.11a (5 GHz) | Maximum | 16.00 | 16.00 | 16.25 | 16.25 | 15.00 | 15.00 | 14.75 | 15.00 | 15.50 | | | | | | | | | | | | | |
| | Nominal | 14.50 | 14.50 | 14.75 | 14.75 | 13.50 | 13.50 | 13.25 | 13.50 | 14.00 | | | | | | | | | | | | | |
| IEEE 802.11n (5 GHz) | Maximum | 16.00 | 16.00 | 16.25 | 16.25 | 15.00 | 15.00 | 14.75 | 15.00 | 15.50 | 13.50 | 16.00 | 16.25 | 13.50 | 13.00 | 15.00 | 15.00 | 15.00 | 15.50 | | | | |
| | Nominal | 14.50 | 14.50 | 14.75 | 14.75 | 13.50 | 13.50 | 13.25 | 13.50 | 14.00 | 12.00 | 14.50 | 14.75 | 12.00 | 11.50 | 13.50 | 13.50 | 13.50 | 14.00 | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | 16.00 | 16.00 | 16.25 | 16.25 | 15.00 | 15.00 | 14.75 | 15.00 | 15.50 | 13.50 | 16.00 | 16.25 | 13.50 | 13.00 | 15.00 | 15.00 | 15.00 | 15.50 | 12.00 | 12.50 | 15.00 | 15.50 |
| | Nominal | 14.50 | 14.50 | 14.75 | 14.75 | 13.50 | 13.50 | 13.25 | 13.50 | 14.00 | 12.00 | 14.50 | 14.75 | 12.00 | 11.50 | 13.50 | 13.50 | 13.50 | 14.00 | 10.50 | 11.00 | 13.50 | 14.00 |
| IEEE 802.11ax SU (5 GHz) | Maximum | 15.00 | 16.00 | 16.25 | 14.50 | 14.00 | 15.00 | 13.50 | 15.00 | 15.50 | 12.00 | 16.00 | 16.25 | 11.50 | 11.50 | 15.00 | 14.50 | 15.00 | 15.50 | 10.50 | 10.50 | 15.00 | 15.50 |
| | Nominal | 13.50 | 14.50 | 14.75 | 13.00 | 12.50 | 13.50 | 12.00 | 13.50 | 14.00 | 10.50 | 14.50 | 14.75 | 10.00 | 10.00 | 13.50 | 13.00 | 13.50 | 14.00 | 9.00 | 9.00 | 13.50 | 14.00 |

| Mode / Band | | Modulated Average - MIMO (dBm) 2Tx, CDD - 5GHz ANTupper | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | | | | | | 40 MHz Bandwidth | | | | | | | | | 80 MHz Bandwidth | | | | |
| Channel | | 36 | 40-48 | 52-60 | 64-100 | 104-132 | 136 | 140 | 144 | 149-165 | 38 | 46 | 54 | 62 | 102 | 110-126 | 134 | 142 | 151-159 | 42 | 58 | 106 | 122-138 | 155 |
| IEEE 802.11a (5 GHz) | Maximum | 15.00 | 16.00 | 16.25 | 15.00 | 15.00 | 15.00 | 12.50 | 15.00 | 15.50 | | | | | | | | | | | | | | |
| | Nominal | 13.50 | 14.50 | 14.75 | 13.50 | 13.50 | 13.50 | 11.00 | 13.50 | 14.00 | | | | | | | | | | | | | | |
| IEEE 802.11n (5 GHz) | Maximum | 15.00 | 16.00 | 16.25 | 15.00 | 15.00 | 15.00 | 12.50 | 15.00 | 15.50 | 12.50 | 16.00 | 16.25 | 12.50 | 11.25 | 15.00 | 14.00 | 15.00 | 15.50 | | | | | |
| | Nominal | 13.50 | 14.50 | 14.75 | 13.50 | 13.50 | 13.50 | 11.00 | 13.50 | 14.00 | 11.00 | 14.50 | 14.75 | 11.00 | 9.75 | 13.50 | 12.50 | 13.50 | 14.00 | | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | 15.00 | 16.00 | 16.25 | 15.00 | 15.00 | 15.00 | 12.50 | 15.00 | 15.50 | 12.50 | 16.00 | 16.25 | 12.50 | 11.25 | 15.00 | 14.00 | 15.00 | 15.50 | 11.00 | 10.50 | 10.00 | 15.00 | 15.50 |
| | Nominal | 13.50 | 14.50 | 14.75 | 13.50 | 13.50 | 13.50 | 11.00 | 13.50 | 14.00 | 11.00 | 14.50 | 14.75 | 11.00 | 9.75 | 13.50 | 12.50 | 13.50 | 14.00 | 9.50 | 9.00 | 8.50 | 13.50 | 14.00 |
| IEEE 802.11ax SU (5 GHz) | Maximum | 13.50 | 16.00 | 16.25 | 13.50 | 15.00 | 13.50 | 10.00 | 15.00 | 15.50 | 11.00 | 16.00 | 16.25 | 10.50 | 10.00 | 15.00 | 13.00 | 15.00 | 15.50 | 9.00 | 9.00 | 9.00 | 15.00 | 14.50 |
| | Nominal | 12.00 | 14.50 | 14.75 | 12.00 | 13.50 | 12.00 | 8.50 | 13.50 | 14.00 | 9.50 | 14.50 | 14.75 | 9.00 | 8.50 | 13.50 | 11.50 | 13.50 | 14.00 | 7.50 | 7.50 | 7.50 | 13.50 | 13.00 |

| Mode / Band | | Modulated Average - MIMO (dBm) 2Tx, SDM - 5GHz ANTupper | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | | | | | | 40 MHz Bandwidth | | | | | | | | | 80 MHz Bandwidth | | | | |
| Channel | | 36 | 40-48 | 52-60 | 64-100 | 104-132 | 136 | 140 | 144 | 149-165 | 38 | 46 | 54 | 62 | 102 | 110-126 | 134 | 142 | 151-159 | 42 | 58 | 106 | 122-138 | 155 |
| IEEE 802.11n (5 GHz) | Maximum | 15.00 | 16.00 | 16.25 | 15.00 | 15.00 | 15.00 | 12.50 | 15.00 | 15.50 | 12.50 | 16.00 | 16.25 | 12.50 | 11.25 | 15.00 | 14.00 | 15.00 | 15.50 | | | | | |
| | Nominal | 13.50 | 14.50 | 14.75 | 13.50 | 13.50 | 13.50 | 11.00 | 13.50 | 14.00 | 11.00 | 14.50 | 14.75 | 11.00 | 9.75 | 13.50 | 12.50 | 13.50 | 14.00 | | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | 15.00 | 16.00 | 16.25 | 15.00 | 15.00 | 15.00 | 12.50 | 15.00 | 15.50 | 12.50 | 16.00 | 16.25 | 12.50 | 11.25 | 15.00 | 14.00 | 15.00 | 15.50 | 11.00 | 10.50 | 10.00 | 15.00 | 15.50 |
| | Nominal | 13.50 | 14.50 | 14.75 | 13.50 | 13.50 | 13.50 | 11.00 | 13.50 | 14.00 | 11.00 | 14.50 | 14.75 | 11.00 | 9.75 | 13.50 | 12.50 | 13.50 | 14.00 | 9.50 | 9.00 | 8.50 | 13.50 | 14.00 |
| IEEE 802.11ax SU (5 GHz) | Maximum | 13.50 | 16.00 | 16.25 | 13.50 | 15.00 | 13.50 | 10.00 | 15.00 | 15.50 | 11.00 | 16.00 | 16.25 | 10.50 | 10.00 | 15.00 | 13.00 | 15.00 | 15.50 | 9.00 | 9.00 | 9.00 | 15.00 | 14.50 |
| | Nominal | 12.00 | 14.50 | 14.75 | 12.00 | 13.50 | 12.00 | 8.50 | 13.50 | 14.00 | 9.50 | 14.50 | 14.75 | 9.00 | 8.50 | 13.50 | 11.50 | 13.50 | 14.00 | 7.50 | 7.50 | 7.50 | 13.50 | 13.00 |

Note: In MIMO operations, 5GHz ANTupper transmits at maximum allowed powers as indicated above for both 2 Tx CDD and 2 Tx SDM.

## 1.3.4 Unlicensed Reduced Output Power

### E. Antenna 2A

Below table is applicable in the following conditions:
-Simultaneous conditions with 5GHz WLAN

| Mode/Band | | Modulated Average (dBm) - Antenna 2a |
|---|---|---|
| Bluetooth BDR/LE Reduced | Maximum | 11.00 |
| | Nominal | 9.50 |
| Bluetooth EDR Reduced | Maximum | 11.00 |
| | Nominal | 9.50 |
| Bluetooth HDR Reduced | Maximum | 7.50 |
| | Nominal | 6.00 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1/2A/2B Active
-Simultaneous conditions with Licensed Bands Antenna 1/2A/2B Active and 5GHz WLAN
-Simultaneous conditions with Inter-band ULCA active
-Simultaneous conditions with Inter-band ULCA active and 5GHz WLAN

| Mode/Band | | Modulated Average (dBm) - Antenna 2a |
|---|---|---|
| Bluetooth BDR/LE Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |
| Bluetooth EDR Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |
| Bluetooth HDR Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2A/2B
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average (dBm) - Antenna 2a | |
|---|---|---|---|
| | Channel | 1-12 | 13 |
| IEEE 802.11b (2.4 GHz) | Maximum | **6.00** | |
| | Nominal | **4.50** | |
| IEEE 802.11g (2.4 GHz) | Maximum | **6.00** | **3.0** |
| | Nominal | **4.50** | **1.5** |
| IEEE 802.11n (2.4 GHz) | Maximum | **6.00** | **3.0** |
| | Nominal | **4.50** | **1.5** |
| IEEE 802.11ax SU (2.4 GHz) | Maximum | **6.00** | **N/A** |
| | Nominal | **4.50** | **N/A** |

Below table is applicable in the following conditions:
-Simultaneous conditions with 5GHz WLAN

| Mode/Band | | Modulated Average - MIMO (dBm) - Antenna 2a |
|---|---|---|
| Bluetooth BDR/LE Reduced | Maximum | **11.00** |
| | Nominal | **9.50** |
| Bluetooth EDR Reduced | Maximum | **11.00** |
| | Nominal | **9.50** |
| Bluetooth HDR Reduced | Maximum | **7.50** |
| | Nominal | **6.00** |

Note: In MIMO operations, Antenna 2A transmits at maximum allowed powers at indicated above.



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1/2A/2B Active
-Simultaneous conditions with Licensed Bands Antenna 1/2A/2B Active and 5GHz WLAN
-Simultaneous conditions with Inter-band ULCA active
-Simultaneous conditions with Inter-band ULCA active and 5GHz WLAN

| Mode/Band | | Modulated Average - MIMO (dBm) - Antenna 2a |
|---|---|---|
| Bluetooth BDR/LE Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |
| Bluetooth EDR Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |
| Bluetooth HDR Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |

Note: In MIMO operations, Antenna 2A transmits at maximum allowed powers at indicated above.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2A/2B
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average - MIMO (dBm) - Antenna 2a | |
|---|---|---|---|
| | | 20 MHz Bandwidth | |
| | Channel | 1-12 | 13 |
| IEEE 802.11g (2.4 GHz) | Maximum | **6.00** | **-0.5** |
| | Nominal | **4.50** | **-2.0** |
| IEEE 802.11n (2.4 GHz) | Maximum | **6.00** | **-0.5** |
| | Nominal | **4.50** | **-2.0** |
| IEEE 802.11ax SU (2.4 GHz) | Maximum | **6.00** | **N/A** |
| | Nominal | **4.50** | **N/A** |

Note: In MIMO operations, Antenna 2A transmits at maximum allowed powers at indicated above.



© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

### F. Antenna 4A

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3/4A/4B Active
-Simultaneous conditions with Licensed Bands Antenna 3/4A/4B Active and 5GHz WLAN
-Simultaneous conditions with Inter-band ULCA active
-Simultaneous conditions with Inter-band ULCA active and 5GHz WLAN

| Mode/Band | | Modulated Average (dBm) - Antenna 4a |
|---|---|---|
| Bluetooth BDR/LE Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |
| Bluetooth EDR Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |
| Bluetooth HDR Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 4A/4B
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average (dBm) - Antenna 4a | |
|---|---|---|---|
| | Channel | 1-12 | 13 |
| IEEE 802.11b (2.4 GHz) | Maximum | **6.00** | |
| | Nominal | **4.50** | |
| IEEE 802.11g (2.4 GHz) | Maximum | **6.00** | **1.0** |
| | Nominal | **4.50** | **-0.5** |
| IEEE 802.11n (2.4 GHz) | Maximum | **6.00** | **1.0** |
| | Nominal | **4.50** | **-0.5** |
| IEEE 802.11ax SU (2.4 GHz) | Maximum | **6.00** | **N/A** |
| | Nominal | **4.50** | **N/A** |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3/4A/4B Active
-Simultaneous conditions with Licensed Bands Antenna 3/4A/4B Active and 5GHz WLAN
-Simultaneous conditions with Inter-band ULCA active
-Simultaneous conditions with Inter-band ULCA active and 5GHz WLAN

| Mode/Band | | Modulated Average - MIMO (dBm) - Antenna 4a |
|---|---|---|
| Bluetooth BDR/LE | Maximum | **7.00** |
| | Nominal | **5.50** |
| Bluetooth EDR | Maximum | **7.00** |
| | Nominal | **5.50** |
| Bluetooth HDR Reduced | Maximum | **7.00** |
| | Nominal | **5.50** |

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 4A/4B
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average - MIMO (dBm) - Antenna 4a | |
|---|---|---|---|
| | | 20 MHz Bandwidth | |
| | Channel | 1-12 | 13 |
| IEEE 802.11g (2.4 GHz) | Maximum | **6.00** | **1.5** |
| | Nominal | **4.50** | **0.0** |
| IEEE 802.11n (2.4 GHz) | Maximum | **6.00** | **1.5** |
| | Nominal | **4.50** | **0.0** |
| IEEE 802.11ax SU (2.4 GHz) | Maximum | **6.00** | **N/A** |
| | Nominal | **4.50** | **N/A** |

Note: In MIMO operations, Antenna 4A transmits at maximum allowed powers at indicated above.

### G. 5GHz ANTlower

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2A
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average - Single Tx Chain (dBm) - 5GHz ANTlower | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | 40 MHz Bandwidth | | | | | 80 MHz Bandwidth | | | |
| | Channel | 36-48 | 52-144 | 149-165 | 38-46 | 54 | 62-102 | 110-142 | 151-159 | 42-58 | 106 | 122-138 | 155 |
| IEEE 802.11a (5 GHz) | Maximum | **12.00** | **12.50** | **11.50** | | | | | | | | | |
| | Nominal | **10.50** | **11.00** | **10.00** | | | | | | | | | |
| IEEE 802.11n (5 GHz) | Maximum | **12.00** | **12.50** | **11.50** | **12.00** | **12.50** | **12.50** | **12.50** | **11.50** | | | | |
| | Nominal | **10.50** | **11.00** | **10.00** | **10.50** | **11.00** | **11.00** | **11.00** | **10.00** | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | **12.00** | **12.50** | **11.50** | **12.00** | **12.50** | **12.50** | **12.50** | **11.50** | **12.00** | **12.50** | **12.50** | **11.50** |
| | Nominal | **10.50** | **11.00** | **10.00** | **10.50** | **11.00** | **11.00** | **11.00** | **10.00** | **10.50** | **11.00** | **11.00** | **10.00** |
| IEEE 802.11ax SU (5 GHz) | Maximum | **12.00** | **12.50** | **11.50** | **12.00** | **12.50** | **11.50** | **12.50** | **11.50** | **10.50** | **10.50** | **12.50** | **11.50** |
| | Nominal | **10.50** | **11.00** | **10.00** | **10.50** | **11.00** | **10.00** | **11.00** | **10.00** | **9.00** | **9.00** | **11.00** | **10.00** |



© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2A
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average - MIMO (dBm) 2Tx, CDD - 5GHz ANTlower | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | | 40 MHz Bandwidth | | | | | | | 80 MHz Bandwidth | | | | | |
| | Channel | 36-48 | 52-136 | 140 | 144 | 149-165 | 38 | 46 | 54 | 62 | 102 | 110-142 | 151-159 | 42 | 58 | 106 | 122-138 | 155 | |
| IEEE 802.11a (5 GHz) | Maximum | 12.00 | 12.50 | 12.50 | 12.50 | 11.50 | | | | | | | | | | | | | |
| | Nominal | 10.50 | 11.00 | 11.00 | 11.00 | 10.00 | | | | | | | | | | | | | |
| IEEE 802.11n (5 GHz) | Maximum | 12.00 | 12.50 | 12.50 | 12.50 | 11.50 | 12.00 | 12.00 | 12.50 | 12.50 | 11.25 | 12.50 | 11.50 | | | | | | |
| | Nominal | 10.50 | 11.00 | 11.00 | 11.00 | 10.00 | 10.50 | 10.50 | 11.00 | 11.00 | 9.75 | 11.00 | 10.00 | | | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | 12.00 | 12.50 | 12.50 | 12.50 | 11.50 | 12.00 | 12.00 | 12.50 | 12.50 | 11.25 | 12.50 | 11.50 | 11.00 | 10.50 | 10.00 | 12.50 | 11.50 | |
| | Nominal | 10.50 | 11.00 | 11.00 | 11.00 | 10.00 | 10.50 | 10.50 | 11.00 | 11.00 | 9.75 | 11.00 | 10.00 | 9.50 | 9.00 | 8.50 | 11.00 | 10.00 | |
| IEEE 802.11ax SU (5 GHz) | Maximum | 12.00 | 12.50 | 10.00 | 12.50 | 11.50 | 11.00 | 12.00 | 12.50 | 10.50 | 10.00 | 12.50 | 11.50 | 9.00 | 9.00 | 9.00 | 12.50 | 11.50 | |
| | Nominal | 10.50 | 11.00 | 8.50 | 11.00 | 10.00 | 9.50 | 10.50 | 11.00 | 9.00 | 8.50 | 11.00 | 10.00 | 7.50 | 7.50 | 7.50 | 11.00 | 10.00 | |

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2A
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average - MIMO (dBm) 2Tx, SDM - 5GHz ANTlower | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | | 40 MHz Bandwidth | | | | | | | 80 MHz Bandwidth | | | | | |
| | Channel | 36-48 | 52-136 | 140 | 144 | 149-165 | 38 | 46 | 54 | 62 | 102 | 110-142 | 151-159 | 42 | 58 | 106 | 122-138 | 155 | |
| IEEE 802.11n (5 GHz) | Maximum | 12.00 | 12.50 | 12.50 | 12.50 | 11.50 | 12.00 | 12.00 | 12.50 | 12.50 | 11.25 | 12.50 | 11.50 | | | | | | |
| | Nominal | 10.50 | 11.00 | 11.00 | 11.00 | 10.00 | 10.50 | 10.50 | 11.00 | 11.00 | 9.75 | 11.00 | 10.00 | | | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | 12.00 | 12.50 | 12.50 | 12.50 | 11.50 | 12.00 | 12.00 | 12.50 | 12.50 | 11.25 | 12.50 | 11.50 | 11.00 | 10.50 | 10.00 | 12.50 | 11.50 | |
| | Nominal | 10.50 | 11.00 | 11.00 | 11.00 | 10.00 | 10.50 | 10.50 | 11.00 | 11.00 | 9.75 | 11.00 | 10.00 | 9.50 | 9.00 | 8.50 | 11.00 | 10.00 | |
| IEEE 802.11ax SU (5 GHz) | Maximum | 12.00 | 12.50 | 10.00 | 12.50 | 11.50 | 11.00 | 12.00 | 12.50 | 10.50 | 10.00 | 12.50 | 11.50 | 9.00 | 9.00 | 9.00 | 12.50 | 11.50 | |
| | Nominal | 10.50 | 11.00 | 8.50 | 11.00 | 10.00 | 9.50 | 10.50 | 11.00 | 9.00 | 8.50 | 11.00 | 10.00 | 7.50 | 7.50 | 7.50 | 11.00 | 10.00 | |

Note: In MIMO operations, 5GHz ANTlower transmits at maximum allowed powers as indicated above for both 2 Tx CDD and 2 Tx SDM.

### H. 5GHz ANTupper

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average - Single Tx Chain (dBm) - 5GHz ANTupper | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | 40 MHz Bandwidth | | | | | 80 MHz Bandwidth | | | | |
| Channel | | 36-48 | 52-64 | 100-144 | 149-165 | 36-48 | 52-62 | 102-142 | 110-142 | 151-159 | 42 | 58 | 106-138 | 155 | |
| IEEE 802.11a (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | | | | | | | | | | |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | | | | | | | | | | |
| IEEE 802.11n (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | 11.00 | 11.25 | 10.00 | 12.50 | 10.50 | | | | | |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | 9.50 | 9.75 | 8.50 | 11.00 | 9.00 | | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | 11.00 | 11.25 | 10.00 | 12.50 | 10.50 | 11.00 | 11.25 | 10.00 | 10.50 | |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | 9.50 | 9.75 | 8.50 | 11.00 | 9.00 | 9.50 | 9.75 | 8.50 | 9.00 | |
| IEEE 802.11ax SU (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | 11.00 | 11.25 | 10.00 | 12.50 | 10.50 | 10.50 | 10.50 | 10.00 | 10.50 | |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | 9.50 | 9.75 | 8.50 | 11.00 | 9.00 | 9.00 | 9.00 | 8.50 | 9.00 | |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average - MIMO (dBm) 2Tx, CDD - 5GHz ANTupper | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | 40 MHz Bandwidth | | | | | 80 MHz Bandwidth | | | | |
| | Channel | 36-48 | 52-64 | 100-144 | 149-165 | 38-46 | 54 | 62 | 102-142 | 151-159 | 42 | 58 | 106 | 122-138 | 155 |
| IEEE 802.11a (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | | | | | | | | | | |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | | | | | | | | | | |
| IEEE 802.11n (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | 11.00 | 11.25 | 11.25 | 10.00 | 10.50 | | | | | |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | 9.50 | 9.75 | 9.75 | 8.50 | 9.00 | | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | 11.00 | 11.25 | 11.25 | 10.00 | 10.50 | 11.00 | 10.50 | 10.00 | 10.00 | 10.50 |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | 9.50 | 9.75 | 9.75 | 8.50 | 9.00 | 9.50 | 9.00 | 8.50 | 8.50 | 9.00 |
| IEEE 802.11ax SU (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | 11.00 | 11.25 | 10.50 | 10.00 | 10.50 | 9.00 | 9.00 | 9.00 | 10.00 | 10.50 |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | 9.50 | 9.75 | 9.00 | 8.50 | 9.00 | 7.50 | 7.50 | 7.50 | 8.50 | 9.00 |

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3
-Simultaneous conditions with LTE Inter-band ULCA

| Mode / Band | | Modulated Average - MIMO (dBm) 2Tx, SDM - 5GHz ANTupper | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 MHz Bandwidth | | | | 40 MHz Bandwidth | | | | | 80 MHz Bandwidth | | | | |
| | Channel | 36-48 | 52-64 | 100-144 | 149-165 | 38-46 | 54 | 62 | 102-142 | 151-159 | 42 | 58 | 106 | 122-138 | 155 |
| IEEE 802.11n (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | 11.00 | 11.25 | 11.25 | 10.00 | 10.50 | | | | | |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | 9.50 | 9.75 | 9.75 | 8.50 | 9.00 | | | | | |
| IEEE 802.11ac (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | 11.00 | 11.25 | 11.25 | 10.00 | 10.50 | 11.00 | 10.50 | 10.00 | 10.00 | 10.50 |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | 9.50 | 9.75 | 9.75 | 8.50 | 9.00 | 9.50 | 9.00 | 8.50 | 8.50 | 9.00 |
| IEEE 802.11ax SU (5 GHz) | Maximum | 11.00 | 11.25 | 10.00 | 10.50 | 11.00 | 11.25 | 10.50 | 10.00 | 10.50 | 9.00 | 9.00 | 9.00 | 10.00 | 10.50 |
| | Nominal | 9.50 | 9.75 | 8.50 | 9.00 | 9.50 | 9.75 | 9.00 | 8.50 | 9.00 | 7.50 | 7.50 | 7.50 | 8.50 | 9.00 |

Note: In MIMO operations, 5GHz ANTupper transmits at maximum allowed powers as indicated above for both 2 Tx CDD and 2 Tx SDM.




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 1.4 DUT Antenna Locations

The overall diagonal dimension of the device is > 200 mm. A diagram showing the location of the device antennas can be found in Appendix F. Exact antenna dimensions and separation distances are shown in the Technical Descriptions in the FCC filings.

**Table 1-1**
**Device Edges/Sides for SAR Testing**

| Device Sides/Edges for SAR Testing | | | | | | |
|---|---|---|---|---|---|---|
| Mode | Back | Front | Top | Bottom | Right | Left |
| GPRS 850 Ant 1 | Yes | No | No | Yes | No | Yes |
| UMTS 850 Ant 1 | Yes | No | No | Yes | No | Yes |
| LTE Band 71 Ant 1 | Yes | No | No | Yes | No | Yes |
| LTE Band 12 Ant 1 | Yes | No | No | Yes | No | Yes |
| LTE Band 13 Ant 1 | Yes | No | No | Yes | No | Yes |
| LTE Band 14 Ant 1 | Yes | No | No | Yes | No | Yes |
| LTE Band 5 (Cell) Ant 1 | Yes | No | No | Yes | No | Yes |
| LTE Band 26 (Cell) Ant 1 | Yes | No | No | Yes | No | Yes |
| LTE Band 48 (Cell) Ant 1 | Yes | No | No | Yes | No | Yes |
| GPRS 850 Ant 3 | Yes | No | Yes | No | Yes | No |
| UMTS 850 Ant 3 | Yes | No | Yes | No | Yes | No |
| LTE Band 71 Ant 3 | Yes | No | Yes | No | Yes | No |
| LTE Band 12 Ant 3 | Yes | No | Yes | No | Yes | No |
| LTE Band 13 Ant 3 | Yes | No | Yes | No | Yes | No |
| LTE Band 14 Ant 3 | Yes | No | Yes | No | Yes | No |
| LTE Band 5 (Cell) Ant 3 | Yes | No | Yes | No | Yes | No |
| LTE Band 26 (Cell) Ant 3 | Yes | No | Yes | No | Yes | No |
| LTE Band 48 (Cell) Ant 3 | Yes | No | Yes | No | Yes | No |
| GPRS 1900 Ant 4A | Yes | No | Yes | No | No | Yes |
| UMTS 1750 Ant 4A | Yes | No | Yes | No | No | Yes |
| UMTS 1900 Ant 4A | Yes | No | Yes | No | No | Yes |
| LTE Band 4 (AWS) Ant 4A | Yes | No | Yes | No | No | Yes |
| LTE Band 66 (AWS) Ant 4A | Yes | No | Yes | No | No | Yes |
| LTE Band 2 (PCS) Ant 4A | Yes | No | Yes | No | No | Yes |
| LTE Band 25 (PCS) Ant 4A | Yes | No | Yes | No | No | Yes |
| LTE Band 30 Ant 4A | Yes | No | Yes | No | No | Yes |
| LTE Band 7 Ant 4A | Yes | No | Yes | No | No | Yes |
| LTE Band 41 Ant 4A | Yes | No | Yes | No | No | Yes |
| GPRS 1900 Ant 4B | Yes | No | Yes | No | No | Yes |
| UMTS 1750 Ant 4B | Yes | No | Yes | No | No | Yes |
| UMTS 1900 Ant 4B | Yes | No | Yes | No | No | Yes |
| LTE Band 4 (AWS) Ant 4B | Yes | No | Yes | No | No | Yes |
| LTE Band 66 (AWS) Ant 4B | Yes | No | Yes | No | No | Yes |
| LTE Band 2 (PCS) Ant 4B | Yes | No | Yes | No | No | Yes |
| LTE Band 25 (PCS) Ant 4B | Yes | No | Yes | No | No | Yes |
| LTE Band 30 Ant 4B | Yes | No | Yes | No | No | Yes |
| LTE Band 7 Ant 4B | Yes | No | Yes | No | No | Yes |
| LTE Band 41 Ant 4B | Yes | No | Yes | No | No | Yes |
| LTE Band 48 (Cell) Ant 4B | Yes | No | Yes | No | No | Yes |
| GPRS 1900 Ant 2A | Yes | No | No | Yes | Yes | No |
| UMTS 1750 Ant 2A | Yes | No | No | Yes | Yes | No |
| UMTS 1900 Ant 2A | Yes | No | No | Yes | Yes | No |
| LTE Band 4 (AWS) Ant 2A | Yes | No | No | Yes | Yes | No |
| LTE Band 66 (AWS) Ant 2A | Yes | No | No | Yes | Yes | No |
| LTE Band 2 (PCS) Ant 2A | Yes | No | No | Yes | Yes | No |
| LTE Band 25 (PCS) Ant 2A | Yes | No | No | Yes | Yes | No |
| LTE Band 30 Ant 2A | Yes | No | No | Yes | Yes | No |
| LTE Band 7 Ant 2A | Yes | No | No | Yes | Yes | No |
| LTE Band 41 Ant 2A | Yes | No | No | Yes | Yes | No |
| GPRS 1900 Ant 2B | Yes | No | No | Yes | Yes | No |
| UMTS 1750 Ant 2B | Yes | No | No | Yes | Yes | No |
| UMTS 1900 Ant 2B | Yes | No | No | Yes | Yes | No |
| LTE Band 4 (AWS) Ant 2B | Yes | No | No | Yes | Yes | No |
| LTE Band 66 (AWS) Ant 2B | Yes | No | No | Yes | Yes | No |
| LTE Band 2 (PCS) Ant 2B | Yes | No | No | Yes | Yes | No |
| LTE Band 25 (PCS) Ant 2B | Yes | No | No | Yes | Yes | No |
| LTE Band 30 Ant 2B | Yes | No | No | Yes | Yes | No |
| LTE Band 7 Ant 2B | Yes | No | No | Yes | Yes | No |
| LTE Band 41 Ant 2B | Yes | No | No | Yes | Yes | No |
| LTE Band 48 (Cell) Ant 2B | Yes | No | No | Yes | Yes | No |
| 2.4 GHz WLAN Ant 4A | Yes | No | Yes | No | No | Yes |
| 2.4 GHz WLAN Ant 2A | Yes | No | No | Yes | Yes | No |
| WLAN 5GHz ANTlower | Yes | No | No | Yes | Yes | No |
| WLAN 5GHz ANTupper | Yes | No | Yes | No | Yes | No |
| Bluetooth Ant 4A | Yes | No | Yes | No | No | Yes |
| Bluetooth Ant 2A | Yes | No | No | Yes | Yes | No |

Note: Per FCC KDB Publication 616217 D04v01r01, particular edges were not required to be evaluated for SAR based on the SAR exclusion threshold in KDB 447498 D01V06. Additional edges may have been evaluated for simultaneous transmission analysis.



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 1.5 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D01v06 4.3.2 procedures.

**Table 1-2**
**Simultaneous Transmission Scenarios**

| No. | Capable Transmit Configuration | Body |
|---|---|---|
| 1 | Cellular Band + 2.4 GHz WI-FI | Yes |
| 2 | Cellular Band + 5 GHz WI-FI | Yes |
| 3 | Cellular Band + 2.4 GHz Bluetooth | Yes |
| 4 | Cellular Band+ 2.4 GHz WI-FI MIMO | Yes |
| 5 | Cellular Band + 5 GHz WI-FI MIMO | Yes |
| 6 | Cellular Band + 2.4 GHz Bluetooth MIMO (TxBF) | Yes |
| 7 | Cellular Band + 2.4 GHz Bluetooth + 5 GHz WI-FI | Yes |
| 8 | Cellular Band + 2.4 GHz Bluetooth MIMO (TxBF) + 5 GHz WI-FI | Yes |
| 9 | Cellular Band + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO | Yes |
| 10 | Cellular Band + 2.4 GHz Bluetooth MIMO (TxBF) + 5 GHz WI-FI MIMO | Yes |
| 11 | 2.4 GHz Bluetooth + 5 GHz WI-FI | Yes |
| 12 | 2.4 GHz Bluetooth MIIMO (TxBF) + 5 GHz WI-FI | Yes |
| 13 | 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO | Yes |
| 14 | 2.4 GHz Bluetooth MIMO (TxBF) + 5 GHz WI-FI MIMO | Yes |

**Table 1-3**
**Simultaneous Transmission Scenarios of Inter-band ULCA**

| No. | LTE Inter-Band ULCA Transmit Configuration | Body | Note |
|---|---|---|---|
| 1 | Cellular Ant 1 + Cellular Ant 2A | Yes | LTE Bands transmitting from Ant 1: LTE B5/12/13/14<br>LTE Bands transmitting from Ant 2A: LTE B2/4/7/66/30 |
| 2 | Cellular Ant 1 + Cellular Ant 4A | Yes | LTE Bands transmitting from Ant 1: LTE B5/12/13/14<br>LTE Bands transmitting from Ant 4A: LTE B2/4/7/66/30 |
| 3 | Cellular Ant 1 + Cellular Ant 4B | Yes | LTE Bands transmitting from Ant 1: LTE B5/12/13/14<br>LTE Bands transmitting from Ant 4B: LTE B2/4/7/66/30 |
| 4 | Cellular Ant 3 + Cellular Ant 2A | Yes | LTE Bands transmitting from Ant 3: LTE B5/12/13/14<br>LTE Bands transmitting from Ant 2A: LTE B2/4/7/66/30 |
| 5 | Cellular Ant 3 + Cellular Ant 2B | Yes | LTE Bands transmitting from Ant 3: LTE B5/12/13/14<br>LTE Bands transmitting from Ant 2B: LTE B2/4/7/66/30 |
| 6 | Cellular Ant 3 + Cellular Ant 4A | Yes | LTE Bands transmitting from Ant 3: LTE B5/12/13/14<br>LTE Bands transmitting from Ant 4A: LTE B2/4/7/66/30 |

Note: The technical description includes all the possible Inter-band ULCA combinations.



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 1-4**
**Simultaneous Transmission Scenarios with Inter-band ULCA Active**

| No. | Capable Transmit Configuration | Body |
|---|---|---|
| 1 | LTE Inter-Band ULCA + 2.4 GHz WI-FI | Yes |
| 2 | LTE Inter-Band ULCA + 5 GHz WI-FI | Yes |
| 3 | LTE Inter-Band ULCA + 2.4 GHz Bluetooth | Yes |
| 4 | LTE Inter-Band ULCA+ 2.4 GHz WI-FI MIMO | Yes |
| 5 | LTE Inter-Band ULCA + 5 GHz WI-FI MIMO | Yes |
| 6 | LTE Inter-Band ULCA + 2.4 GHz Bluetooth MIMO (TxBF) | Yes |
| 7 | LTE Inter-Band ULCA + 2.4 GHz Bluetooth + 5 GHz WI-FI | Yes |
| 8 | LTE Inter-Band ULCA + 2.4 GHz Bluetooth MIMO (TxBF) + 5 GHz WI-FI | Yes |
| 9 | LTE Inter-Band ULCA + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO | Yes |
| 10 | LTE Inter-Band ULCA + 2.4 GHz Bluetooth MIMO (TxBF) + 5 GHz WI-FI MIMO | Yes |

Note: LTE inter-band ULCA can operate in any of the combinations in table 1-3.

1. There are no limitations in the above listed simultaneous transmission scenarios between cellular antennas and BT/WI-FI antennas.
2. 2.4 GHz WLAN, and 2.4 GHz Bluetooth share the same antenna path and cannot transmit simultaneously.
3. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac/ax. 802.11a/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM. Each WLAN antenna can transmit independently or together when operating with MIMO.
4. This device supports VOWIFI.

## 1.6 Miscellaneous SAR Test Considerations

### (A) WIFI/BT

Since U-NII-1 and U-NII-2A bands have the same maximum output power and the highest reported SAR for U-NII-2A is less than 1.2 W/kg, SAR is not required for U-NII-1 band according to FCC KDB Publication 248227 D01v02r02.

The WLAN/Bluetooth chipset in this device is produced by two different suppliers. The electrically identical modules are manufactured with the identical mechanical structure to meet the same specifications and functions. Two device variants are referenced as Variant 1 and Variant 2 in this report. WLAN/Bluetooth SAR worst case configuration was spotchecked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining WLAN/Bluetooth configurations.

This device supports channel 1-13 for 2.4 GHz WLAN. However, because channel 12/13 targets are not higher than that of channels 1-11, channels 1, 6, and 11 were considered for SAR testing per FCC KDB 248227 D01V02r02

This device supports IEEE 802.11ac with the following features:
a) Up to 80 MHz Bandwidth only
b) No aggregate channel configurations
c) 2 Tx antenna output
d) 256 QAM is supported
e) TDWR and Band gap channels are supported




© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

This device supports IEEE 802.11ax with the following features:

a) Up to 80 MHz Bandwidth only for 5 GHz
b) Up to 20 MHz Bandwidth only for 2.4 GHz
c) No aggregate channel configurations
d) 2 Tx antenna output
e) Up to 1024 QAM is supported
f) TDWR and Band gap channels are supported for 5 GHz
g) MU-MIMO UL Operations are not supported

Per April 2019 TCB Workshop Notes, SAR testing was not required for 802.11ax when applying the initial test configuration procedures of KDB 248227, with 802.11ax considered a higher order 802.11 mode.

**(B) Licensed Transmitter(s)**

This device is only capable of QPSK HSUPA in the uplink. Therefore, no additional SAR tests are required beyond that described for devices with HSUPA in KDB 941225 D01v03r01.

LTE SAR for the higher modulations and lower bandwidths were not tested since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth; and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg for all configurations according to FCC KDB 941225 D05v02r04.

This device supports LTE Carrier Aggregation (CA) in the downlink. All uplink communications are identical to Release 8 specifications. Per FCC KDB Publication 941225 D05A v01r02, SAR for LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive. The downlink carrier aggregation exclusion analysis can be found in Appendix F.

This device supports intra-band LTE Carrier Aggregation (CA) for LTE Band 41, LTE Band 5, and LTE Band 7 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per 2017 Fall TCB Workshop Notes.

This device supports downlink 4x4 MIMO operations for some LTE Bands. Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive.

This device supports 64QAM on the uplink and 256QAM on the downlink for LTE Operations. Conducted powers for 64QAM uplink configurations were measured per Section 5.1 of FCC KDB Publication 941225 D05v02r05. SAR was not required for 64QAM since the highest maximum output power for 64 QAM is $\leq \frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is $\leq$ 1.45 W/kg, per Section 5.2.4 of FCC KDB Publication 941225 D05v02r05.

This device supports both Power Class 2 (PC2) and Power Class 3 (PC3) for LTE Band 41. Per May 2017 TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the power class condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly (See Section 13.1).

This device supports LTE capabilities with overlapping transmission frequency ranges. When the supported frequency range of an LTE Band falls completely within an LTE band with a larger transmission frequency range, both LTE bands have the same target power (or the band with the larger transmission frequency range




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

has a higher target power), and both LTE bands share the same transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

This device supports inter-band LTE Carrier Aggregation (CA) for LTE Bands 2/4/5/7/12/13/14/30/66 with two component carriers in the uplink. Additional SAR Measurements were performed for some positions at the maximum allowed output power in inter-band ULCA mode. All single uplink 1g SAR values for each band were < 0.8 W/kg and the algebraic summation of the 1g SAR inter-band ULCA values were < 1.45. Per Fall 2018 TCB Workshop notes, no additional measurements were required.

## 1.7 Guidance Applied

- FCC KDB Publication 941225 D01v03r01, D05v02r04, D05Av01r02 (2G/3G/4G)
- FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- FCC KDB Publication 447498 D01v06 (General SAR Guidance)
- FCC KDB Publication 865664 D01v01r04, D02v01r02 (SAR Measurements up to 6 GHz)
- FCC KDB Publication 616217 D04v01r02 (Tablet)
- October 2013 TCB Workshop Notes (GPRS Testing Considerations)
- May 2017 TCB Workshop Notes (LTE 4x4 Downlink MIMO, LTE Band 41 Power Class 2/3)
- April 2018 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2019 TCB Workshop Notes (IEEE 802.11ax)
- October 2018 TCB Workshop Notes (Inter-band Uplink Carrier Aggregation)

## 1.8 Device Serial Numbers

Several samples with identical hardware were used to support SAR testing. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units. The serial numbers used for each test are indicated alongside the results in Section 10.




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 2 LTE INFORMATION

| LTE Information | | | | | |
|---|---|---|---|---|---|
| Form Factor | Tablet Device | | | | |
| Frequency Range of each LTE transmission band | LTE Band 71 (665.5 - 695.5 MHz) | | | | |
| | LTE Band 12 (699.7 - 715.3 MHz) | | | | |
| | LTE Band 17 (706.5 - 713.5 MHz) | | | | |
| | LTE Band 13 (779.5 - 784.5 MHz) | | | | |
| | LTE Band 14 (790.5 - 795.5 MHz) | | | | |
| | LTE Band 26 (Cell) (814.7 - 848.3 MHz) | | | | |
| | LTE Band 5 (Cell) (824.7 - 848.3 MHz) | | | | |
| | LTE Band 4 (AWS) (1710.7 - 1754.3 MHz) | | | | |
| | LTE Band 66 (AWS) (1710.7 - 1779.3 MHz) | | | | |
| | LTE Band 2 (PCS) (1850.7 - 1909.3 MHz) | | | | |
| | LTE Band 25 (PCS) (1850.7 - 1914.3 MHz) | | | | |
| | LTE Band 30 (2307.5 - 2312.5 MHz) | | | | |
| | LTE Band 7 (2502.5 - 2567.5 MHz) | | | | |
| | LTE Band 41 (2498.5 - 2687.5 MHz) | | | | |
| | LTE Band 48 (3552.5 - 3697.5 MHz) | | | | |
| Channel Bandwidths | LTE Band 71: 5 MHz, 10 MHz, 15 MHz, 20 MHz | | | | |
| | LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz | | | | |
| | LTE Band 17: 5 MHz, 10 MHz | | | | |
| | LTE Band 13: 5 MHz, 10 MHz | | | | |
| | LTE Band 14: 5 MHz, 10 MHz | | | | |
| | LTE Band 26 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz | | | | |
| | LTE Band 5 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz | | | | |
| | LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz | | | | |
| | LTE Band 66 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz | | | | |
| | LTE Band 2 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz | | | | |
| | LTE Band 25 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz | | | | |
| | LTE Band 30: 5 MHz, 10 MHz | | | | |
| | LTE Band 7: 5 MHz, 10 MHz, 15 MHz, 20 MHz | | | | |
| | LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz | | | | |
| | LTE Band 48: 5 MHz, 10 MHz, 15 MHz, 20 MHz | | | | |
| Channel Numbers and Frequencies (MHz) | Low | Low-Mid | Mid | Mid-High | High |
| LTE Band 71: 5 MHz | 665.5 (133147) | | 680.5 (133297) | 695.5 (133447) | |
| LTE Band 71: 10 MHz | 668 (133172) | | 680.5 (133297) | 693 (133422) | |
| LTE Band 71: 15 MHz | 670.5 (133197) | | 680.5 (133297) | 690.5 (133397) | |
| LTE Band 71: 20 MHz | 673 (133222) | | 680.5 (133297) | 688 (133372) | |
| LTE Band 12: 1.4 MHz | 699.7 (23017) | | 707.5 (23095) | 715.3 (23173) | |
| LTE Band 12: 3 MHz | 700.5 (23025) | | 707.5 (23095) | 714.5 (23165) | |
| LTE Band 12: 5 MHz | 701.5 (23035) | | 707.5 (23095) | 713.5 (23155) | |
| LTE Band 12: 10 MHz | 704 (23060) | | 707.5 (23095) | 711 (23130) | |
| LTE Band 17: 5 MHz | 706.5 (23755) | | 710 (23790) | 713.5 (23825) | |
| LTE Band 17: 10 MHz | 709 (23780) | | 710 (23790) | 711 (23800) | |
| LTE Band 13: 5 MHz | 779.5 (23205) | | 782 (23230) | 784.5 (23255) | |
| LTE Band 13: 10 MHz | N/A | | 782 (23230) | N/A | |
| LTE Band 14: 5 MHz | 790.5 (23305) | | 793 (23330) | 795.5 (23355) | |
| LTE Band 14: 10 MHz | N/A | | 793 (23330) | N/A | |
| LTE Band 26 (Cell): 1.4 MHz | 814.7 (26697) | | 831.5 (26865) | 848.3 (27033) | |
| LTE Band 26 (Cell): 3 MHz | 815.5 (26705) | | 831.5 (26865) | 847.5 (27025) | |
| LTE Band 26 (Cell): 5 MHz | 816.5 (26715) | | 831.5 (26865) | 846.5 (27015) | |
| LTE Band 26 (Cell): 10 MHz | 819 (26740) | | 831.5 (26865) | 844 (26990) | |
| LTE Band 5 (Cell): 1.4 MHz | 824.7 (20407) | | 836.5 (20525) | 848.3 (20643) | |
| LTE Band 5 (Cell): 3 MHz | 825.5 (20415) | | 836.5 (20525) | 847.5 (20635) | |
| LTE Band 5 (Cell): 5 MHz | 826.5 (20425) | | 836.5 (20525) | 846.5 (20625) | |
| LTE Band 5 (Cell): 10 MHz | 829 (20450) | | 836.5 (20525) | 844 (20600) | |
| LTE Band 4 (AWS): 1.4 MHz | 1710.7 (19957) | | 1732.5 (20175) | 1754.3 (20393) | |
| LTE Band 4 (AWS): 3 MHz | 1711.5 (19965) | | 1732.5 (20175) | 1753.5 (20385) | |
| LTE Band 4 (AWS): 5 MHz | 1712.5 (19975) | | 1732.5 (20175) | 1752.5 (20375) | |
| LTE Band 4 (AWS): 10 MHz | 1715 (20000) | | 1732.5 (20175) | 1750 (20350) | |
| LTE Band 4 (AWS): 15 MHz | 1717.5 (20025) | | 1732.5 (20175) | 1747.5 (20325) | |
| LTE Band 4 (AWS): 20 MHz | 1720 (20050) | | 1732.5 (20175) | 1745 (20300) | |
| LTE Band 66 (AWS): 1.4 MHz | 1710.7 (131979) | | 1745 (132322) | 1779.3 (132665) | |
| LTE Band 66 (AWS): 3 MHz | 1711.5 (131987) | | 1745 (132322) | 1778.5 (132657) | |
| LTE Band 66 (AWS): 5 MHz | 1712.5 (131997) | | 1745 (132322) | 1777.5 (132647) | |
| LTE Band 66 (AWS): 10 MHz | 1715 (132022) | | 1745 (132322) | 1775 (132622) | |
| LTE Band 66 (AWS): 15 MHz | 1717.5 (132047) | | 1745 (132322) | 1772.5 (132597) | |
| LTE Band 66 (AWS): 20 MHz | 1720 (132072) | | 1745 (132322) | 1770 (132572) | |
| LTE Band 2 (PCS): 1.4 MHz | 1850.7 (18607) | | 1880 (18900) | 1909.3 (19193) | |
| LTE Band 2 (PCS): 3 MHz | 1851.5 (18615) | | 1880 (18900) | 1908.5 (19185) | |
| LTE Band 2 (PCS): 5 MHz | 1852.5 (18625) | | 1880 (18900) | 1907.5 (19175) | |
| LTE Band 2 (PCS): 10 MHz | 1855 (18650) | | 1880 (18900) | 1905 (19150) | |
| LTE Band 2 (PCS): 15 MHz | 1857.5 (18675) | | 1880 (18900) | 1902.5 (19125) | |
| LTE Band 2 (PCS): 20 MHz | 1860 (18700) | | 1880 (18900) | 1900 (19100) | |
| LTE Band 25 (PCS): 1.4 MHz | 1850.7 (26047) | | 1882.5 (26365) | 1914.3 (26683) | |
| LTE Band 25 (PCS): 3 MHz | 1851.5 (26055) | | 1882.5 (26365) | 1913.5 (26675) | |
| LTE Band 25 (PCS): 5 MHz | 1852.5 (26065) | | 1882.5 (26365) | 1912.5 (26665) | |
| LTE Band 25 (PCS): 10 MHz | 1855 (26090) | | 1882.5 (26365) | 1910 (26640) | |
| LTE Band 25 (PCS): 15 MHz | 1857.5 (26115) | | 1882.5 (26365) | 1907.5 (26615) | |
| LTE Band 25 (PCS): 20 MHz | 1860 (26140) | | 1882.5 (26365) | 1905 (26590) | |
| LTE Band 30: 5 MHz | 2307.5 (27685) | | 2310 (27710) | 2312.5 (27735) | |
| LTE Band 30: 10 MHz | N/A | | 2310 (27710) | N/A | |
| LTE Band 7: 5 MHz | 2502.5 (20775) | | 2535 (21100) | 2567.5 (21425) | |
| LTE Band 7: 10 MHz | 2505 (20800) | | 2535 (21100) | 2565 (21400) | |
| LTE Band 7: 15 MHz | 2507.5 (20825) | | 2535 (21100) | 2562.5 (21375) | |
| LTE Band 7: 20 MHz | 2510 (20850) | | 2535 (21100) | 2560 (21350) | |
| LTE Band 41: 5 MHz | 2506 (39750) | 2549.5 (40185) | 2593 (40620) | 2636.5 (41055) | 2680 (41490) |
| LTE Band 41: 10 MHz | 2506 (39750) | 2549.5 (40185) | 2593 (40620) | 2636.5 (41055) | 2680 (41490) |
| LTE Band 41: 15 MHz | 2506 (39750) | 2549.5 (40185) | 2593 (40620) | 2636.5 (41055) | 2680 (41490) |
| LTE Band 41: 20 MHz | 2506 (39750) | 2549.5 (40185) | 2593 (40620) | 2636.5 (41055) | 2680 (41490) |
| LTE Band 48: 5 MHz | 3552.5 (55265) | 3600.8 (55748) | N/A | 3649.2 (56232) | 3697.5 (56715) |
| LTE Band 48: 10 MHz | 3555 (55290) | 3601.7 (55757) | N/A | 3648.3 (56223) | 3695 (56690) |
| LTE Band 48: 15 MHz | 3557.5 (55315) | 3602.5 (55765) | N/A | 3647.5 (56215) | 3692.5 (56665) |
| LTE Band 48: 20 MHz | 3560 (55340) | 3603.3 (55773) | N/A | 3646.7 (56207) | 3690 (56640) |
| UE Category | DL UE Cat 19 (QPSK, 16QAM, 64QAM, 256QAM), UL UE Cat 13 (QPSK, 16QAM, 64QAM) | | | | |
| Modulations Supported in UL | QPSK, 16QAM, 64QAM | | | | |
| LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3~6.2.5? (manufacturer attestation to be provided) | YES | | | | |
| A-MPR (Additional MPR) disabled for SAR Testing? | YES | | | | |
| LTE Carrier Aggregation Possible Combinations | The technical description includes all the possible carrier aggregation combinations | | | | |
| LTE Additional Information | This device does not support full CA features on 3GPP Release 13. It supports carrier aggregation and downlink MIMO features as shown in Section 8 and Appendix F. All other uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC unless otherwise specified. The following LTE Release 13 Features are not supported: Relay, HetNet, Enhanced MIMO, eICIC, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA. | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 3 INTRODUCTION

The FCC and Innovation, Science, and Economic Development Canada have adopted the guidelines for evaluating the environmental effects of radio frequency (RF) radiation in ET Docket 93-62 on Aug. 6, 1996 and Health Canada Safety Code 6 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. [1]

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [3] and Health Canada RF Exposure Guidelines Safety Code 6 [22]. The measurement procedure described in IEEE/ANSI C95.3-2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave [4] is used for guidance in measuring the Specific Absorption Rate (SAR) due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the International Committee for Non-Ionizing Radiation Protection (ICNIRP) in Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," Report No. Vol 74. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

## 3.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density ($\rho$). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 3-1).

**Equation 3-1**
**SAR Mathematical Equation**

$$SAR = \frac{d}{dt}\left(\frac{dU}{dm}\right) = \frac{d}{dt}\left(\frac{dU}{\rho dv}\right)$$

**SAR is expressed in units of Watts per Kilogram (W/kg).**

$$SAR = \frac{\sigma \cdot E^2}{\rho}$$

where:

$\sigma$ = conductivity of the tissue-simulating material (S/m)
$\rho$ = mass density of the tissue-simulating material (kg/m$^3$)
E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]



© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 4 DOSIMETRIC ASSESSMENT

## 4.1 Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

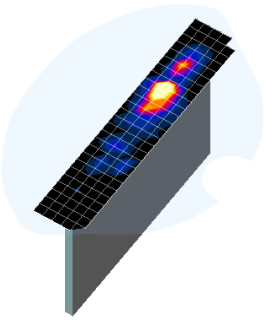


**Figure 4-1**
**Sample SAR Area Scan**

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.
3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):

   a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 4-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).

   b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.

   c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

**Table 4-1**
**Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04***

| Frequency | Maximum Area Scan Resolution (mm) ($\Delta x_{area}$, $\Delta y_{area}$) | Maximum Zoom Scan Resolution (mm) ($\Delta x_{zoom}$, $\Delta y_{zoom}$) | Maximum Zoom Scan Spatial Resolution (mm) | | | Minimum Zoom Scan Volume (mm) (x,y,z) |
|---|---|---|---|---|---|---|
| | | | Uniform Grid | Graded Grid | | |
| | | | $\Delta z_{zoom}(n)$ | $\Delta z_{zoom}(1)$* | $\Delta z_{zoom}(n>1)$* | |
| ≤ 2 GHz | ≤ 15 | ≤ 8 | ≤ 5 | ≤ 4 | ≤ 1.5*$\Delta z_{zoom}(n-1)$ | ≥ 30 |
| 2-3 GHz | ≤ 12 | ≤ 5 | ≤ 5 | ≤ 4 | ≤ 1.5*$\Delta z_{zoom}(n-1)$ | ≥ 30 |
| 3-4 GHz | ≤ 12 | ≤ 5 | ≤ 4 | ≤ 3 | ≤ 1.5*$\Delta z_{zoom}(n-1)$ | ≥ 28 |
| 4-5 GHz | ≤ 10 | ≤ 4 | ≤ 3 | ≤ 2.5 | ≤ 1.5*$\Delta z_{zoom}(n-1)$ | ≥ 25 |
| 5-6 GHz | ≤ 10 | ≤ 4 | ≤ 2 | ≤ 2 | ≤ 1.5*$\Delta z_{zoom}(n-1)$ | ≥ 22 |

*Also compliant to IEEE 1528-2013 Table 6



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 5 TEST CONFIGURATION POSITIONS

## 5.1 Device Holder

The device holder is made out of low-loss POM material having the following dielectric parameters: relative permittivity ε = 3 and loss tangent δ = 0.02.

## 5.2 SAR Testing for Tablet per KDB Publication 616217 D04v01r02

Per FCC KDB Publication 616217 D04v01r02, the back surface and edges of the tablet should be tested for SAR compliance with the tablet touching the phantom. The SAR Exclusion Threshold in KDB 447498 D01v06 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent tablet edge is used to determine if SAR testing is required for the adjacent edges, with the adjacent edge positioned against the phantom and the edge containing the antenna positioned perpendicular to the phantom.




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 6 RF EXPOSURE LIMITS

## 6.1 Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

## 6.2 Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

**Table 6-1**
**SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6**

| HUMAN EXPOSURE LIMITS | | |
|---|---|---|
| | UNCONTROLLED ENVIRONMENT *General Population* (W/kg) or (mW/g) | CONTROLLED ENVIRONMENT *Occupational* (W/kg) or (mW/g) |
| **Peak Spatial Average SAR** Head | 1.6 | 8.0 |
| **Whole Body SAR** | 0.08 | 0.4 |
| **Peak Spatial Average SAR** Hands, Feet, Ankle, Wrists, etc. | 4.0 | 20 |

1. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
2. The Spatial Average value of the SAR averaged over the whole body.
3. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 7 FCC MEASUREMENT PROCEDURES

Power measurements for licensed transmitters are performed using a base station simulator under digital average power.

## 7.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D01v06, when SAR is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance. For simultaneous transmission, the measured aggregate SAR must be scaled according to the sum of the differences between the maximum tune-up tolerance and actual power used to test each transmitter. When SAR is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as *reported* SAR. The highest *reported* SAR results are identified on the grant of equipment authorization according to procedures in KDB 690783 D01v01r03.

## 7.2 3G SAR Test Reduction Procedure

In FCC KDB Publication 941225 D01v03r01, certain transmission modes within a frequency band and wireless mode evaluated for SAR are defined as primary modes. The equivalent modes considered for SAR test reduction are denoted as secondary modes. When the maximum output power including tune-up tolerance specified for production units in a secondary mode is ≤ 0.25 dB higher than the primary mode or when the highest reported SAR of the primary mode, scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode, is ≤ 1.2 W/kg, SAR measurements are not required for the secondary mode. These criteria are referred to as the 3G SAR test reduction procedure. When the 3G SAR test reduction procedure is not satisfied, SAR measurements are additionally required for the secondary mode.

## 7.3 Procedures Used to Establish RF Signal for SAR

The following procedures are according to FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.”

The device is placed into a simulated call using a base station simulator in a RF shielded chamber. Establishing connections in this manner ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. Devices under test are evaluated prior to testing, with a fully charged battery and were configured to operate at maximum output power. In order to verify that the device is tested throughout the SAR test at maximum output power, the SAR measurement system measures a “point SAR” at an arbitrary reference point at the start and end of the 1 gram SAR evaluation, to assess for any power drifts during the evaluation. If the power drift deviates by more than 5%, the SAR test and drift measurements are repeated.

## 7.4 SAR Measurement Conditions for UMTS

### 7.4.1 Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC with TPC (transmit power control) set to all “1s” or applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HS-DPCCH etc) are tabulated in this test report. All configurations that are not supported by the DUT or cannot be measured due to technical or equipment limitations are identified.




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

### 7.4.2 Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits all "1s". The 3G SAR test reduction procedure is applied to other spreading codes and multiple $DPDCH_n$ configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or $DPDCH_n$, for the highest reported SAR configuration in 12.2 kbps RMC.

### 7.4.3 SAR Measurements with Rel 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

### 7.4.4 SAR Measurements with Rel 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA.

When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

### 7.4.5 SAR Measurement Conditions for DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

## 7.5 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r04 publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 or Anritsu MT8820C simulators are used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

### 7.5.1 Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

### 7.5.2 MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

### 7.5.3 A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

### 7.5.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

a. Per Section 5.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
    i. The required channel and offset combination with the highest maximum output power is required for SAR.
    ii. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
    iii. When the reported SAR for a required test channel is > 1.45 W/kg, SAR is required for all RB offset configurations for that channel.
b. Per Section 5.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Section 5.2.1.
c. Per Section 5.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocation is less than the highest maximum output power of the 1 RB and 50% RB allocations and the reported SAR for the 1 RB and 50% RB allocations is < 0.8 W/kg.
d. Per Section 5.2.4 and 5.3, SAR tests for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configurations determined by Sections 5.2.1 through 5.2.3 is less than or equal to ½ dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is <1.45 W/kg.

According to FCC KDB 447498 D01v06, when the reported (scaled) SAR for LTE Band 41 is ≤ 0.6 W/kg, testing of the remaining RB offset configurations and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with the highest output power for that channel.

### 7.5.5 TDD

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05v02r04. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05v02r04. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4.

### 7.5.6 Downlink Only Carrier Aggregation

Conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for downlink only carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive.

## 7.6 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01v02r02 for more details.

### 7.6.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters.

A periodic duty factor is required for current generation SAR systems to measure SAR. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR is scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

### 7.6.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is > 1.2 W/kg. When different maximum output powers are specified for the bands, SAR measurement for the U-NII band with the lower maximum output power is not required unless the highest reported SAR for the U-NII band with the higher maximum output power, adjusted by the ratio of lower to higher specified maximum output power for the two bands, is > 1.2 W/kg.

### 7.6.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification. Unless band gap channels are permanently disabled, SAR must be considered for these channels. Each band is tested independently according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

### 7.6.4 2.4 GHz SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either the fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

2) When the reported SAR is > 0.8 W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

2.4 GHz 802.11 g/n/ax OFDM are additionally evaluated for SAR if the highest reported SAR for 802.11b, adjusted by the ratio of the OFDM to DSSS specified maximum output power, is > 1.2 W/kg. When SAR is required for OFDM modes in 2.4 GHz band, the Initial Test Configuration Procedures should be followed.

### 7.6.5 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. Per April 2019 TCB Workshop guidance, 802.11ax was considered the highest order 802.11 mode. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

### 7.6.6 Initial Test Configuration Procedure

For OFDM, an initial test configuration is determined for each frequency band and aggregated band, according to the transmission mode with the highest maximum output power specified for SAR measurements. When the same maximum output power is specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration(s) with the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order IEEE 802.11 mode. The channel of the transmission mode with the highest average RF output conducted power will be the initial test configuration.

When the reported SAR is ≤ 0.8 W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is ≤ 1.2 W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest 802.11 mode is considered for SAR measurements (See Section 7.6.5).

### 7.6.7 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency band and aggregated band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position procedure. When the highest reported SAR (for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is ≤ 1.2 W/kg, no additional SAR tests for the subsequent test configurations are required.



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

### 7.6.8 MIMO SAR considerations

Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D01v06 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is <1.6 W/kg, no additional SAR measurements for MIMO are required. Alternatively, SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation.




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 8 RF CONDUCTED POWERS

## 8.1 GSM Conducted Powers

**Table 8-1**
**Conducted Power Ant 1**

| Maximum Burst-Averaged Output Power | | | | | |
|---|---|---|---|---|---|
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 850** | 128 | 29.58 | **26.55** | 25.57 | 24.69 |
| | 190 | 29.45 | **26.39** | 25.44 | 24.54 |
| | 251 | 29.38 | **26.36** | 25.38 | 24.50 |
| **Calculated Maximum Frame-Averaged Output Power** | | | | | |
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 850** | 128 | 20.55 | **20.53** | 16.54 | 18.67 |
| | 190 | 20.42 | **20.37** | 16.41 | 18.52 |
| | 251 | 20.35 | **20.34** | 16.35 | 18.48 |
| **GSM 850** | **Frame Avg.Targets:** | 20.02 | **20.03** | 15.97 | 17.98 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-2**
**Conducted Power Ant 3**

| Maximum Burst-Averaged Output Power | | | | | |
|---|---|---|---|---|---|
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 850** | 128 | 28.63 | **26.30** | 27.40 | 26.30 |
| | 190 | 28.53 | **26.29** | 27.31 | 26.29 |
| | 251 | 28.52 | **26.21** | 27.22 | 26.22 |
| **Calculated Maximum Frame-Averaged Output Power** | | | | | |
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 850** | 128 | 19.60 | **20.28** | 18.37 | 20.28 |
| | 190 | 19.50 | **20.27** | 18.28 | 20.27 |
| | 251 | 19.49 | **20.19** | 18.19 | 20.20 |
| **GSM 850** | **Frame Avg.Targets:** | 19.22 | **20.53** | 17.97 | 19.98 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-3**
**Conducted Power Ant 2a**

| Maximum Burst-Averaged Output Power | | | | | |
|---|---|---|---|---|---|
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 1900** | 512 | 24.10 | **21.04** | 22.51 | 20.90 |
| | 661 | 23.84 | **20.87** | 22.34 | 20.77 |
| | 810 | 24.07 | **20.98** | 22.46 | 20.87 |
| **Calculated Maximum Frame-Averaged Output Power** | | | | | |
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 1900** | 512 | 15.07 | **15.02** | 13.48 | 14.88 |
| | 661 | 14.81 | **14.85** | 13.31 | 14.75 |
| | 810 | 15.04 | **14.96** | 13.43 | 14.85 |
| **GSM 1900** | **Frame Avg.Targets:** | 15.02 | **15.03** | 13.47 | 15.03 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-4**
**Conducted Power Ant 2b**

| Maximum Burst-Averaged Output Power | | | | | |
|---|---|---|---|---|---|
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 1900** | 512 | 22.96 | **19.82** | 22.78 | 19.81 |
| | 661 | 22.73 | **19.56** | 22.52 | 19.55 |
| | 810 | 22.95 | **19.74** | 22.70 | 19.74 |
| **Calculated Maximum Frame-Averaged Output Power** | | | | | |
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 1900** | 512 | 13.93 | **13.80** | 13.75 | 13.79 |
| | 661 | 13.70 | **13.54** | 13.49 | 13.53 |
| | 810 | 13.92 | **13.72** | 13.67 | 13.72 |
| **GSM 1900** | **Frame Avg.Targets:** | 13.72 | **13.73** | 13.47 | 13.73 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-5**
**Conducted Power Ant 4a**

| Maximum Burst-Averaged Output Power | | | | | |
|---|---|---|---|---|---|
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 1900** | 512 | 23.72 | **20.87** | 23.87 | 20.72 |
| | 661 | 23.58 | **20.73** | 23.73 | 20.59 |
| | 810 | 23.75 | **20.88** | 23.88 | 20.74 |
| **Calculated Maximum Frame-Averaged Output Power** | | | | | |
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 1900** | 512 | 14.69 | **14.85** | 14.84 | 14.70 |
| | 661 | 14.55 | **14.71** | 14.70 | 14.57 |
| | 810 | 14.72 | **14.86** | 14.85 | 14.72 |
| **GSM 1900** | **Frame Avg.Targets:** | 14.12 | **14.13** | 14.12 | 14.13 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-6**
**Conducted Power Ant 4b**

| Maximum Burst-Averaged Output Power | | | | | |
|---|---|---|---|---|---|
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 1900** | 512 | 22.80 | **19.88** | 22.90 | 19.82 |
| | 661 | 22.64 | **19.64** | 22.69 | 19.62 |
| | 810 | 22.53 | **19.57** | 22.62 | 19.51 |
| **Calculated Maximum Frame-Averaged Output Power** | | | | | |
| | | *GPRS/EDGE Data (GMSK)* | | *EDGE Data (8-PSK)* | |
| **Band** | **Channel** | **GPRS [dBm] 1 Tx Slot** | **GPRS [dBm] 2 Tx Slot** | **EDGE [dBm] 1 Tx Slot** | **EDGE [dBm] 2 Tx Slot** |
| **GSM 1900** | 512 | 13.77 | **13.86** | 13.87 | 13.80 |
| | 661 | 13.61 | **13.62** | 13.66 | 13.60 |
| | 810 | 13.50 | **13.55** | 13.59 | 13.49 |
| **GSM 1900** | **Frame Avg.Targets:** | 14.22 | **14.23** | 14.22 | 14.23 |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

Note:

1. Both burst-averaged and calculated frame-averaged powers are included. Frame-averaged power was calculated from the measured burst-averaged power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
2. GPRS/EDGE (GMSK) output powers were measured with coding scheme setting of 1 (CS1) on the base station simulator. CS1 was configured to measure GPRS output power measurements and SAR to ensure GMSK modulation in the signal. Our Investigation has shown that CS1 - CS4 settings do not have any impact on the output levels or modulation in the GPRS modes.
3. EDGE (8-PSK) output powers were measured with MCS7 on the base station simulator. MCS7 coding scheme was used to measure the output powers for EDGE since investigation has shown that choosing MCS7 coding scheme will ensure 8-PSK modulation. It has been shown that MCS levels that produce 8-PSK modulation do not have an impact on output power.

**GSM Class:** C
**GPRS Multislot class:** 10 (Max 2 Tx uplink slots)
**EDGE Multislot class:** 10 (Max 2 Tx uplink slots)
**DTM Multislot Class: N/A**




**Figure 8-1**
**Power Measurement Setup**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.2 UMTS Conducted Powers

**Table 8-7**
**Conducted Power Ant 1**

| 3GPP Release Version | Mode | 3GPP 34.121 Subtest | Cellular Band [dBm] | | | 3GPP MPR [dB] |
|---|---|---|---|---|---|---|
| | | | 4132 | 4183 | 4233 | |
| 99 | WCDMA | 12.2 kbps RMC | 20.57 | 20.60 | 20.59 | - |
| 6 | HSDPA | Subtest 1 | 20.56 | 20.59 | 20.54 | 0 |
| 6 | | Subtest 2 | 20.58 | 20.60 | 20.48 | 0 |
| 6 | | Subtest 3 | 20.59 | 20.59 | 20.52 | 0.5 |
| 6 | | Subtest 4 | 20.59 | 20.60 | 20.50 | 0.5 |
| 6 | HSUPA | Subtest 1 | 20.56 | 20.58 | 20.49 | 0 |
| 6 | | Subtest 2 | 20.58 | 20.60 | 20.53 | 2 |
| 6 | | Subtest 3 | 20.59 | 20.58 | 20.50 | 1 |
| 6 | | Subtest 4 | 20.59 | 20.60 | 20.56 | 2 |
| 6 | | Subtest 5 | 20.54 | 20.58 | 20.44 | 0 |
| 8 | DC-HSDPA | Subtest 1 | 20.59 | 20.60 | 20.54 | 0 |
| 8 | | Subtest 2 | 20.55 | 20.57 | 20.50 | 0 |
| 8 | | Subtest 3 | 20.56 | 20.60 | 20.49 | 0.5 |
| 8 | | Subtest 4 | 20.60 | 20.58 | 20.47 | 0.5 |

**Table 8-8**
**Conducted Power Ant 3**

| 3GPP Release Version | Mode | 3GPP 34.121 Subtest | Cellular Band [dBm] | | | 3GPP MPR [dB] |
|---|---|---|---|---|---|---|
| | | | 4132 | 4183 | 4233 | |
| 99 | WCDMA | 12.2 kbps RMC | 20.07 | 20.15 | 20.03 | - |
| 6 | HSDPA | Subtest 1 | 20.23 | 20.11 | 20.08 | 0 |
| 6 | | Subtest 2 | 20.21 | 20.09 | 20.05 | 0 |
| 6 | | Subtest 3 | 20.25 | 20.13 | 20.09 | 0.5 |
| 6 | | Subtest 4 | 20.26 | 20.13 | 20.09 | 0.5 |
| 6 | HSUPA | Subtest 1 | 20.17 | 19.89 | 19.83 | 0 |
| 6 | | Subtest 2 | 20.22 | 20.10 | 20.06 | 2 |
| 6 | | Subtest 3 | 20.16 | 20.00 | 19.94 | 1 |
| 6 | | Subtest 4 | 20.24 | 20.15 | 20.10 | 2 |
| 6 | | Subtest 5 | 20.14 | 20.05 | 20.00 | 0 |
| 8 | DC-HSDPA | Subtest 1 | 20.22 | 20.11 | 20.06 | 0 |
| 8 | | Subtest 2 | 20.21 | 20.10 | 20.06 | 0 |
| 8 | | Subtest 3 | 20.22 | 20.12 | 20.00 | 0.5 |
| 8 | | Subtest 4 | 20.22 | 20.08 | 20.03 | 0.5 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-9
## Conducted Power Ant 2a

| 3GPP Release Version | Mode | 3GPP 34.121 Subtest | AWS Band [dBm] | | | PCS Band [dBm] | | | 3GPP MPR [dB] |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1312 | 1412 | 1513 | 9262 | 9400 | 9538 | |
| 99 | WCDMA | 12.2 kbps RMC | 14.17 | 14.39 | 13.93 | 14.93 | 15.01 | 15.02 | - |
| 6 | HSDPA | Subtest 1 | 14.14 | 14.21 | 13.97 | 14.92 | 15.02 | 15.03 | 0 |
| 6 | | Subtest 2 | 14.18 | 14.24 | 14.00 | 14.93 | 15.06 | 15.10 | 0 |
| 6 | | Subtest 3 | 14.23 | 14.27 | 14.01 | 15.02 | 15.10 | 15.10 | 0.5 |
| 6 | | Subtest 4 | 14.25 | 14.27 | 14.06 | 14.97 | 15.10 | 15.10 | 0.5 |
| 6 | HSUPA | Subtest 1 | 14.15 | 14.01 | 13.81 | 14.85 | 14.83 | 14.93 | 0 |
| 6 | | Subtest 2 | 14.16 | 14.22 | 14.00 | 14.94 | 15.10 | 15.10 | 2 |
| 6 | | Subtest 3 | 13.60 | 14.09 | 13.89 | 14.76 | 14.95 | 14.96 | 1 |
| 6 | | Subtest 4 | 14.02 | 14.30 | 14.10 | 15.06 | 15.10 | 15.10 | 2 |
| 6 | | Subtest 5 | 14.13 | 14.23 | 13.98 | 14.88 | 15.05 | 15.07 | 0 |
| 8 | DC-HSDPA | Subtest 1 | 14.15 | 14.24 | 13.93 | 14.86 | 15.00 | 15.05 | 0 |
| 8 | | Subtest 2 | 14.16 | 14.20 | 13.98 | 14.93 | 15.08 | 15.10 | 0 |
| 8 | | Subtest 3 | 14.17 | 14.23 | 14.00 | 15.00 | 15.10 | 15.10 | 0.5 |
| 8 | | Subtest 4 | 14.20 | 14.29 | 13.99 | 15.01 | 15.10 | 15.10 | 0.5 |

## Table 8-10
## Conducted Power Ant 2b

| 3GPP Release Version | Mode | 3GPP 34.121 Subtest | AWS Band [dBm] | | | PCS Band [dBm] | | | 3GPP MPR [dB] |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1312 | 1412 | 1513 | 9262 | 9400 | 9538 | |
| 99 | WCDMA | 12.2 kbps RMC | 14.47 | 14.49 | 14.27 | 13.80 | 13.81 | 14.09 | - |
| 6 | HSDPA | Subtest 1 | 14.40 | 14.37 | 14.30 | 13.88 | 13.86 | 14.05 | 0 |
| 6 | | Subtest 2 | 14.47 | 14.38 | 14.36 | 13.94 | 13.97 | 14.10 | 0 |
| 6 | | Subtest 3 | 14.50 | 14.49 | 14.41 | 13.97 | 13.95 | 14.09 | 0.5 |
| 6 | | Subtest 4 | 14.50 | 14.50 | 14.38 | 14.05 | 14.06 | 14.10 | 0.5 |
| 6 | HSUPA | Subtest 1 | 14.34 | 14.38 | 14.31 | 13.96 | 13.94 | 14.10 | 0 |
| 6 | | Subtest 2 | 14.41 | 14.34 | 14.40 | 14.04 | 14.02 | 14.09 | 2 |
| 6 | | Subtest 3 | 14.41 | 14.42 | 14.39 | 13.96 | 14.00 | 14.10 | 1 |
| 6 | | Subtest 4 | 14.46 | 14.46 | 14.45 | 14.05 | 14.09 | 14.08 | 2 |
| 6 | | Subtest 5 | 14.32 | 14.34 | 14.32 | 13.91 | 13.86 | 14.10 | 0 |
| 8 | DC-HSDPA | Subtest 1 | 14.35 | 14.32 | 14.28 | 13.81 | 13.80 | 14.10 | 0 |
| 8 | | Subtest 2 | 14.41 | 14.29 | 14.30 | 13.88 | 13.94 | 14.10 | 0 |
| 8 | | Subtest 3 | 14.40 | 14.34 | 14.27 | 13.90 | 13.98 | 14.09 | 0.5 |
| 8 | | Subtest 4 | 14.38 | 14.27 | 14.26 | 13.91 | 13.91 | 14.10 | 0.5 |

## Table 8-11
## Conducted Power Ant 4a

| 3GPP Release Version | Mode | 3GPP 34.121 Subtest | AWS Band [dBm] | | | PCS Band [dBm] | | | 3GPP MPR [dB] |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1312 | 1412 | 1513 | 9262 | 9400 | 9538 | |
| 99 | WCDMA | 12.2 kbps RMC | 14.33 | 14.29 | 14.02 | 14.73 | 14.58 | 14.82 | - |
| 6 | HSDPA | Subtest 1 | 14.16 | 14.26 | 14.10 | 14.33 | 14.22 | 14.50 | 0 |
| 6 | | Subtest 2 | 14.22 | 14.29 | 13.96 | 14.35 | 14.31 | 14.60 | 0 |
| 6 | | Subtest 3 | 14.21 | 14.36 | 14.08 | 14.40 | 14.38 | 14.65 | 0.5 |
| 6 | | Subtest 4 | 14.26 | 14.35 | 14.09 | 14.44 | 14.36 | 14.64 | 0.5 |
| 6 | HSUPA | Subtest 1 | 14.15 | 14.21 | 14.04 | 14.60 | 14.50 | 14.79 | 0 |
| 6 | | Subtest 2 | 14.13 | 14.23 | 13.99 | 14.36 | 14.81 | 14.90 | 2 |
| 6 | | Subtest 3 | 14.18 | 14.22 | 14.04 | 14.71 | 14.70 | 14.85 | 1 |
| 6 | | Subtest 4 | 14.20 | 14.30 | 14.06 | 14.81 | 14.73 | 14.90 | 2 |
| 6 | | Subtest 5 | 14.16 | 14.25 | 14.03 | 14.58 | 14.60 | 14.86 | 0 |
| 8 | DC-HSDPA | Subtest 1 | 14.14 | 14.25 | 14.07 | 14.62 | 14.47 | 14.64 | 0 |
| 8 | | Subtest 2 | 14.18 | 14.27 | 14.04 | 14.56 | 14.54 | 14.82 | 0 |
| 8 | | Subtest 3 | 14.23 | 14.29 | 14.12 | 14.58 | 14.59 | 14.81 | 0.5 |
| 8 | | Subtest 4 | 14.17 | 14.28 | 14.10 | 14.60 | 14.54 | 14.80 | 0.5 |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-12**
**Conducted Power Ant 4b**

| 3GPP Release Version | Mode | 3GPP 34.121 Subtest | AWS Band [dBm] | | | PCS Band [dBm] | | | 3GPP MPR [dB] |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1312 | 1412 | 1513 | 9262 | 9400 | 9538 | |
| 99 | WCDMA | 12.2 kbps RMC | 14.04 | 14.00 | 13.85 | 13.96 | 13.93 | 13.82 | - |
| 6 | HSDPA | Subtest 1 | 14.07 | 13.92 | 13.82 | 13.91 | 13.90 | 13.81 | 0 |
| 6 | | Subtest 2 | 14.02 | 13.85 | 13.77 | 13.99 | 13.96 | 13.85 | 0 |
| 6 | | Subtest 3 | 14.10 | 13.98 | 13.97 | 14.00 | 13.99 | 13.84 | 0.5 |
| 6 | | Subtest 4 | 14.10 | 13.99 | 13.91 | 13.99 | 14.00 | 13.84 | 0.5 |
| 6 | HSUPA | Subtest 1 | 13.94 | 13.79 | 13.85 | 13.86 | 13.86 | 13.71 | 0 |
| 6 | | Subtest 2 | 14.06 | 13.83 | 13.97 | 14.00 | 13.99 | 13.89 | 2 |
| 6 | | Subtest 3 | 14.01 | 13.91 | 13.96 | 13.97 | 13.95 | 13.87 | 1 |
| 6 | | Subtest 4 | 13.87 | 13.90 | 13.96 | 14.00 | 14.00 | 13.92 | 2 |
| 6 | | Subtest 5 | 14.03 | 13.85 | 13.79 | 13.90 | 13.91 | 13.79 | 0 |
| 8 | DC-HSDPA | Subtest 1 | 13.91 | 13.74 | 13.79 | 13.93 | 13.93 | 13.74 | 0 |
| 8 | | Subtest 2 | 13.92 | 13.81 | 13.85 | 14.00 | 13.99 | 13.83 | 0 |
| 8 | | Subtest 3 | 14.00 | 13.85 | 13.86 | 13.92 | 13.94 | 13.86 | 0.5 |
| 8 | | Subtest 4 | 14.03 | 13.82 | 13.83 | 14.00 | 13.99 | 13.86 | 0.5 |

DC-HSDPA considerations

- 3GPP Specification 34.121-1 Release 8 Ver 8.10.0 was used for DC-HSDPA guidance
- H-Set 12 (QPSK) was confirmed to be used during DC-HSDPA measurements
- The DUT supports UE category 24 for HSDPA




**Figure 8-2**
**Power Measurement Setup**



© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3 LTE Conducted Powers

### 8.3.1 LTE Band 71

**Table 8-13**
**LTE Band 71 Conducted Powers Ant 1 - 20 MHz Bandwidth**

| LTE Band 71 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 133297 (680.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 19.51 | 0 | 0 |
| | 1 | 50 | 19.56 | | 0 |
| | 1 | 99 | **19.80** | | 0 |
| | 50 | 0 | 19.53 | 0-1 | 0 |
| | 50 | 25 | **19.62** | | 0 |
| | 50 | 50 | 19.56 | | 0 |
| | 100 | 0 | 19.60 | | 0 |
| 16QAM | 1 | 0 | 19.47 | 0-1 | 0 |
| | 1 | 50 | 19.52 | | 0 |
| | 1 | 99 | 19.66 | | 0 |
| | 50 | 0 | 19.05 | 0-2 | 0 |
| | 50 | 25 | 19.13 | | 0 |
| | 50 | 50 | 19.10 | | 0 |
| | 100 | 0 | 19.11 | | 0 |
| 64QAM | 1 | 0 | 19.37 | 0-2 | 0 |
| | 1 | 50 | 19.22 | | 0 |
| | 1 | 99 | 19.75 | | 0 |
| | 50 | 0 | 19.06 | 0-3 | 0 |
| | 50 | 25 | 19.15 | | 0 |
| | 50 | 50 | 19.09 | | 0 |
| | 100 | 0 | 19.14 | | 0 |

**Note: LTE Band 71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-14
## LTE Band 71 Conducted Powers Ant 1 - 15 MHz Bandwidth

| LTE Band 71 15 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 133297 (680.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 19.67 | 0 | 0 |
| | 1 | 36 | 19.57 | | 0 |
| | 1 | 74 | 19.59 | | 0 |
| | 36 | 0 | 19.61 | 0-1 | 0 |
| | 36 | 18 | 19.62 | | 0 |
| | 36 | 37 | 19.63 | | 0 |
| | 75 | 0 | 19.65 | | 0 |
| 16QAM | 1 | 0 | 19.48 | 0-1 | 0 |
| | 1 | 36 | 19.36 | | 0 |
| | 1 | 74 | 19.18 | | 0 |
| | 36 | 0 | 19.11 | 0-2 | 0 |
| | 36 | 18 | 19.12 | | 0 |
| | 36 | 37 | 19.16 | | 0 |
| | 75 | 0 | 19.12 | | 0 |
| 64QAM | 1 | 0 | 19.47 | 0-2 | 0 |
| | 1 | 36 | 19.36 | | 0 |
| | 1 | 74 | 19.35 | | 0 |
| | 36 | 0 | 19.11 | 0-3 | 0 |
| | 36 | 18 | 19.13 | | 0 |
| | 36 | 37 | 19.12 | | 0 |
| | 75 | 0 | 19.11 | | 0 |

**Note: LTE Band 71 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-15
## LTE Band 71 Conducted Powers Ant 1 - 10 MHz Bandwidth

| LTE Band 71 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 133172 (668.0 MHz) | Mid Channel 133297 (680.5 MHz) | High Channel 133422 (693.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 19.80 | 19.62 | 19.74 | 0 | 0 |
| | 1 | 25 | 19.67 | 19.52 | 19.48 | | 0 |
| | 1 | 49 | 19.46 | 19.64 | 19.54 | | 0 |
| | 25 | 0 | 19.78 | 19.57 | 19.47 | 0-1 | 0 |
| | 25 | 12 | 19.68 | 19.57 | 19.50 | | 0 |
| | 25 | 25 | 19.53 | 19.64 | 19.58 | | 0 |
| | 50 | 0 | 19.68 | 19.60 | 19.60 | | 0 |
| 16QAM | 1 | 0 | 19.52 | 19.39 | 19.59 | 0-1 | 0 |
| | 1 | 25 | 19.41 | 19.32 | 19.09 | | 0 |
| | 1 | 49 | 19.32 | 19.31 | 19.34 | | 0 |
| | 25 | 0 | 19.29 | 19.10 | 19.01 | 0-2 | 0 |
| | 25 | 12 | 19.22 | 19.08 | 19.00 | | 0 |
| | 25 | 25 | 19.03 | 19.16 | 19.09 | | 0 |
| | 50 | 0 | 19.19 | 19.12 | 19.12 | | 0 |
| 64QAM | 1 | 0 | 19.57 | 19.38 | 19.35 | 0-2 | 0 |
| | 1 | 25 | 19.45 | 19.24 | 19.20 | | 0 |
| | 1 | 49 | 19.21 | 19.46 | 19.41 | | 0 |
| | 25 | 0 | 19.29 | 19.09 | 19.05 | 0-3 | 0 |
| | 25 | 12 | 19.18 | 19.08 | 19.06 | | 0 |
| | 25 | 25 | 19.05 | 19.14 | 19.09 | | 0 |
| | 50 | 0 | 19.16 | 19.10 | 19.12 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-16
## LTE Band 71 Conducted Powers Ant 1 - 5 MHz Bandwidth

| LTE Band 71 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 133147 (665.5 MHz) | Mid Channel 133297 (680.5 MHz) | High Channel 133447 (695.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 19.78 | 19.77 | 19.65 | 0 | 0 |
| | 1 | 12 | 19.72 | 19.76 | 19.74 | | 0 |
| | 1 | 24 | 19.68 | 19.80 | 19.80 | | 0 |
| | 12 | 0 | 19.80 | 19.65 | 19.67 | 0-1 | 0 |
| | 12 | 6 | 19.78 | 19.63 | 19.66 | | 0 |
| | 12 | 13 | 19.77 | 19.68 | 19.71 | | 0 |
| | 25 | 0 | 19.78 | 19.61 | 19.69 | | 0 |
| 16QAM | 1 | 0 | 19.67 | 19.45 | 19.33 | 0-1 | 0 |
| | 1 | 12 | 19.36 | 19.51 | 19.51 | | 0 |
| | 1 | 24 | 19.33 | 19.61 | 19.53 | | 0 |
| | 12 | 0 | 19.38 | 19.27 | 19.19 | 0-2 | 0 |
| | 12 | 6 | 19.35 | 19.21 | 19.24 | | 0 |
| | 12 | 13 | 19.37 | 19.20 | 19.35 | | 0 |
| | 25 | 0 | 19.33 | 19.18 | 19.27 | | 0 |
| 64QAM | 1 | 0 | 19.48 | 19.48 | 19.47 | 0-2 | 0 |
| | 1 | 12 | 19.39 | 19.38 | 19.53 | | 0 |
| | 1 | 24 | 19.47 | 19.61 | 19.57 | | 0 |
| | 12 | 0 | 19.47 | 19.29 | 19.18 | 0-3 | 0 |
| | 12 | 6 | 19.41 | 19.30 | 19.24 | | 0 |
| | 12 | 13 | 19.37 | 19.31 | 19.36 | | 0 |
| | 25 | 0 | 19.36 | 19.21 | 19.24 | | 0 |

## Table 8-17
## LTE Band 71 Conducted Powers Ant 3 - 20 MHz Bandwidth

| LTE Band 71 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 133297 (680.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | |
| QPSK | 1 | 0 | **21.84** | 0 | 0 |
| | 1 | 50 | 21.53 | | 0 |
| | 1 | 99 | 21.66 | | 0 |
| | 50 | 0 | 21.59 | 0-1 | 0 |
| | 50 | 25 | 21.59 | | 0 |
| | 50 | 50 | **21.68** | | 0 |
| | 100 | 0 | 21.56 | | 0 |
| 16QAM | 1 | 0 | 21.80 | 0-1 | 0 |
| | 1 | 50 | 21.72 | | 0 |
| | 1 | 99 | 21.81 | | 0 |
| | 50 | 0 | 21.39 | 0-2 | 0 |
| | 50 | 25 | 21.40 | | 0 |
| | 50 | 50 | 21.71 | | 0 |
| | 100 | 0 | 21.47 | | 0 |
| 64QAM | 1 | 0 | 21.80 | 0-2 | 0 |
| | 1 | 50 | 21.82 | | 0 |
| | 1 | 99 | 21.83 | | 0 |
| | 50 | 0 | 21.37 | 0-3 | 0 |
| | 50 | 25 | 21.35 | | 0 |
| | 50 | 50 | 21.64 | | 0 |
| | 100 | 0 | 21.47 | | 0 |

**Note: LTE Band 71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-18
## LTE Band 71 Conducted Powers Ant 3 - 15 MHz Bandwidth

| LTE Band 71 15 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 133297 (680.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 21.76 | 0 | 0 |
| | 1 | 36 | 21.71 | | 0 |
| | 1 | 74 | 21.68 | | 0 |
| | 36 | 0 | 21.51 | 0-1 | 0 |
| | 36 | 18 | 21.63 | | 0 |
| | 36 | 37 | 21.67 | | 0 |
| | 75 | 0 | 21.65 | | 0 |
| 16QAM | 1 | 0 | 21.74 | 0-1 | 0 |
| | 1 | 36 | 21.73 | | 0 |
| | 1 | 74 | 21.85 | | 0 |
| | 36 | 0 | 21.24 | 0-2 | 0 |
| | 36 | 18 | 21.53 | | 0 |
| | 36 | 37 | 21.52 | | 0 |
| | 75 | 0 | 21.52 | | 0 |
| 64QAM | 1 | 0 | 21.78 | 0-2 | 0 |
| | 1 | 36 | 21.77 | | 0 |
| | 1 | 74 | 21.74 | | 0 |
| | 36 | 0 | 21.28 | 0-3 | 0 |
| | 36 | 18 | 21.55 | | 0 |
| | 36 | 37 | 21.54 | | 0 |
| | 75 | 0 | 21.48 | | 0 |

**Note: LTE Band 71 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-19
## LTE Band 71 Conducted Powers Ant 3 - 10 MHz Bandwidth

| LTE Band 71 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 133172 (668.0 MHz) | Mid Channel 133297 (680.5 MHz) | High Channel 133422 (693.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 21.55 | 21.64 | 21.40 | 0 | 0 |
| | 1 | 25 | 21.28 | 21.59 | 21.12 | | 0 |
| | 1 | 49 | 21.47 | 21.58 | 21.41 | | 0 |
| | 25 | 0 | 21.34 | 21.35 | 21.16 | 0-1 | 0 |
| | 25 | 12 | 21.30 | 21.48 | 21.21 | | 0 |
| | 25 | 25 | 21.46 | 21.54 | 21.36 | | 0 |
| | 50 | 0 | 21.39 | 21.51 | 21.24 | | 0 |
| 16QAM | 1 | 0 | 21.90 | 21.79 | 21.82 | 0-1 | 0 |
| | 1 | 25 | 21.71 | 21.68 | 21.54 | | 0 |
| | 1 | 49 | 21.89 | 21.75 | 21.83 | | 0 |
| | 25 | 0 | 21.38 | 21.36 | 21.19 | 0-2 | 0 |
| | 25 | 12 | 21.36 | 21.48 | 21.21 | | 0 |
| | 25 | 25 | 21.47 | 21.51 | 21.35 | | 0 |
| | 50 | 0 | 21.41 | 21.49 | 21.23 | | 0 |
| 64QAM | 1 | 0 | 21.91 | 21.89 | 21.83 | 0-2 | 0 |
| | 1 | 25 | 21.73 | 21.82 | 21.54 | | 0 |
| | 1 | 49 | 21.80 | 21.95 | 21.94 | | 0 |
| | 25 | 0 | 21.38 | 21.34 | 21.23 | 0-3 | 0 |
| | 25 | 12 | 21.32 | 21.47 | 21.24 | | 0 |
| | 25 | 25 | 21.47 | 21.52 | 21.38 | | 0 |
| | 50 | 0 | 21.39 | 21.48 | 21.27 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-20
## LTE Band 71 Conducted Powers Ant 3 - 5 MHz Bandwidth

| LTE Band 71 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 133147 (665.5 MHz) | Mid Channel 133297 (680.5 MHz) | High Channel 133447 (695.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 21.43 | 21.52 | 21.44 | 0 | 0 |
| | 1 | 12 | 21.29 | 21.47 | 21.42 | | 0 |
| | 1 | 24 | 21.20 | 21.54 | 21.51 | | 0 |
| | 12 | 0 | 21.57 | 21.49 | 21.38 | 0-1 | 0 |
| | 12 | 6 | 21.42 | 21.54 | 21.45 | | 0 |
| | 12 | 13 | 21.30 | 21.61 | 21.53 | | 0 |
| | 25 | 0 | 21.41 | 21.57 | 21.46 | | 0 |
| 16QAM | 1 | 0 | 21.90 | 21.89 | 21.94 | 0-1 | 0 |
| | 1 | 12 | 21.78 | 21.82 | 21.71 | | 0 |
| | 1 | 24 | 21.63 | 21.91 | 21.87 | | 0 |
| | 12 | 0 | 21.57 | 21.51 | 21.39 | 0-2 | 0 |
| | 12 | 6 | 21.45 | 21.58 | 21.45 | | 0 |
| | 12 | 13 | 21.37 | 21.66 | 21.55 | | 0 |
| | 25 | 0 | 21.42 | 21.50 | 21.45 | | 0 |
| 64QAM | 1 | 0 | 21.80 | 21.86 | 21.80 | 0-2 | 0 |
| | 1 | 12 | 21.71 | 21.79 | 21.69 | | 0 |
| | 1 | 24 | 21.49 | 21.85 | 21.78 | | 0 |
| | 12 | 0 | 21.52 | 21.48 | 21.39 | 0-3 | 0 |
| | 12 | 6 | 21.38 | 21.49 | 21.50 | | 0 |
| | 12 | 13 | 21.39 | 21.62 | 21.57 | | 0 |
| | 25 | 0 | 21.42 | 21.49 | 21.45 | | 0 |

### 8.3.2 LTE Band 12

## Table 8-21
## LTE Band 12 Conducted Powers Ant 1 - 10 MHz Bandwidth

| LTE Band 12 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23095 (707.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | |
| QPSK | 1 | 0 | **21.49** | 0 | 0 |
| | 1 | 25 | 21.38 | | 0 |
| | 1 | 49 | 21.31 | | 0 |
| | 25 | 0 | **21.35** | 0-1 | 0 |
| | 25 | 12 | 21.34 | | 0 |
| | 25 | 25 | 21.33 | | 0 |
| | 50 | 0 | 21.30 | | 0 |
| 16QAM | 1 | 0 | 21.35 | 0-1 | 0 |
| | 1 | 25 | 21.25 | | 0 |
| | 1 | 49 | 21.15 | | 0 |
| | 25 | 0 | 21.18 | 0-2 | 0 |
| | 25 | 12 | 21.13 | | 0 |
| | 25 | 25 | 21.09 | | 0 |
| | 50 | 0 | 21.15 | | 0 |
| 64QAM | 1 | 0 | 21.33 | 0-2 | 0 |
| | 1 | 25 | 21.30 | | 0 |
| | 1 | 49 | 21.26 | | 0 |
| | 25 | 0 | 21.16 | 0-3 | 0 |
| | 25 | 12 | 21.16 | | 0 |
| | 25 | 25 | 21.13 | | 0 |
| | 50 | 0 | 21.19 | | 0 |

**Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-22
## LTE Band 12 Conducted Powers Ant 1 - 5 MHz Bandwidth

| LTE Band 12<br>5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23035<br>(701.5 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23155<br>(713.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 21.02 | 21.16 | 21.17 | 0 | 0 |
| | 1 | 12 | 21.01 | 21.17 | 21.20 | | 0 |
| | 1 | 24 | 20.91 | 21.18 | 21.25 | | 0 |
| | 12 | 0 | 21.09 | 21.09 | 21.08 | 0-1 | 0 |
| | 12 | 6 | 21.11 | 21.09 | 21.09 | | 0 |
| | 12 | 13 | 21.07 | 21.09 | 21.15 | | 0 |
| | 25 | 0 | 21.13 | 21.12 | 21.12 | | 0 |
| 16QAM | 1 | 0 | 21.23 | 21.21 | 21.21 | 0-1 | 0 |
| | 1 | 12 | 21.21 | 21.24 | 21.21 | | 0 |
| | 1 | 24 | 21.24 | 21.27 | 21.30 | | 0 |
| | 12 | 0 | 21.16 | 21.16 | 21.06 | 0-2 | 0 |
| | 12 | 6 | 21.20 | 21.13 | 21.13 | | 0 |
| | 12 | 13 | 21.16 | 21.13 | 21.14 | | 0 |
| | 25 | 0 | 21.20 | 21.17 | 21.11 | | 0 |
| 64QAM | 1 | 0 | 21.14 | 21.09 | 21.10 | 0-2 | 0 |
| | 1 | 12 | 21.27 | 21.22 | 20.99 | | 0 |
| | 1 | 24 | 20.97 | 21.16 | 21.08 | | 0 |
| | 12 | 0 | 20.90 | 20.92 | 20.83 | 0-3 | 0 |
| | 12 | 6 | 20.85 | 20.90 | 20.91 | | 0 |
| | 12 | 13 | 20.87 | 20.92 | 20.90 | | 0 |
| | 25 | 0 | 20.87 | 20.91 | 20.91 | | 0 |

## Table 8-23
## LTE Band 12 Conducted Powers Ant 1 - 3 MHz Bandwidth

| LTE Band 12<br>3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23025<br>(700.5 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23165<br>(714.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 21.06 | 21.19 | 21.00 | 0 | 0 |
| | 1 | 7 | 21.13 | 21.24 | 21.10 | | 0 |
| | 1 | 14 | 21.09 | 21.20 | 21.01 | | 0 |
| | 8 | 0 | 21.10 | 21.15 | 21.13 | 0-1 | 0 |
| | 8 | 4 | 21.12 | 21.14 | 21.19 | | 0 |
| | 8 | 7 | 21.17 | 21.15 | 21.14 | | 0 |
| | 15 | 0 | 21.15 | 21.15 | 21.16 | | 0 |
| 16QAM | 1 | 0 | 21.25 | 21.24 | 21.31 | 0-1 | 0 |
| | 1 | 7 | 21.22 | 21.23 | 21.31 | | 0 |
| | 1 | 14 | 21.24 | 21.29 | 21.29 | | 0 |
| | 8 | 0 | 21.16 | 21.16 | 21.06 | 0-2 | 0 |
| | 8 | 4 | 21.20 | 21.13 | 21.13 | | 0 |
| | 8 | 7 | 21.16 | 21.13 | 21.14 | | 0 |
| | 15 | 0 | 21.20 | 21.17 | 21.11 | | 0 |
| 64QAM | 1 | 0 | 21.12 | 21.15 | 21.19 | 0-2 | 0 |
| | 1 | 7 | 21.08 | 21.25 | 21.23 | | 0 |
| | 1 | 14 | 21.19 | 21.09 | 21.28 | | 0 |
| | 8 | 0 | 20.94 | 20.95 | 20.96 | 0-3 | 0 |
| | 8 | 4 | 20.99 | 20.99 | 21.06 | | 0 |
| | 8 | 7 | 21.02 | 20.94 | 20.95 | | 0 |
| | 15 | 0 | 20.98 | 20.99 | 21.03 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-24
## LTE Band 12 Conducted Powers Ant 1 - 1.4 MHz Bandwidth

| LTE Band 12 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 23017 (699.7 MHz) | Mid Channel 23095 (707.5 MHz) | High Channel 23173 (715.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 21.12 | 21.10 | 21.09 | 0 | 0 |
| | 1 | 2 | 21.09 | 21.12 | 21.22 | | 0 |
| | 1 | 5 | 21.16 | 21.02 | 21.12 | | 0 |
| | 3 | 0 | 21.14 | 21.16 | 21.09 | | 0 |
| | 3 | 2 | 21.12 | 21.07 | 21.01 | | 0 |
| | 3 | 3 | 21.12 | 21.06 | 21.02 | | 0 |
| | 6 | 0 | 21.13 | 21.07 | 21.06 | 0-1 | 0 |
| 16QAM | 1 | 0 | 21.25 | 21.27 | 21.24 | 0-1 | 0 |
| | 1 | 2 | 21.29 | 21.30 | 21.16 | | 0 |
| | 1 | 5 | 21.30 | 21.30 | 21.15 | | 0 |
| | 3 | 0 | 21.25 | 21.29 | 21.22 | | 0 |
| | 3 | 2 | 21.26 | 21.26 | 21.25 | | 0 |
| | 3 | 3 | 21.28 | 21.25 | 21.29 | | 0 |
| | 6 | 0 | 21.25 | 21.22 | 21.29 | 0-2 | 0 |
| 64QAM | 1 | 0 | 21.20 | 21.23 | 21.26 | 0-2 | 0 |
| | 1 | 2 | 21.20 | 21.18 | 21.26 | | 0 |
| | 1 | 5 | 21.22 | 21.15 | 21.39 | | 0 |
| | 3 | 0 | 21.06 | 21.12 | 21.15 | | 0 |
| | 3 | 2 | 21.06 | 21.03 | 21.09 | | 0 |
| | 3 | 3 | 21.11 | 21.12 | 21.15 | | 0 |
| | 6 | 0 | 21.00 | 21.07 | 21.06 | 0-3 | 0 |

## Table 8-25
## LTE Band 12 Conducted Powers Ant 1 - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 12 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23095 (707.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **18.21** | 0 | 0 |
| | 1 | 25 | 18.10 | | 0 |
| | 1 | 49 | 18.04 | | 0 |
| | 25 | 0 | 18.11 | 0-1 | 0 |
| | 25 | 12 | **18.20** | | 0 |
| | 25 | 25 | 18.15 | | 0 |
| | 50 | 0 | 18.17 | | 0 |
| 16QAM | 1 | 0 | 18.35 | 0-1 | 0 |
| | 1 | 25 | 18.34 | | 0 |
| | 1 | 49 | 18.23 | | 0 |
| | 25 | 0 | 17.94 | 0-2 | 0 |
| | 25 | 12 | 18.02 | | 0 |
| | 25 | 25 | 17.95 | | 0 |
| | 50 | 0 | 18.01 | | 0 |
| 64QAM | 1 | 0 | 18.38 | 0-2 | 0 |
| | 1 | 25 | 18.29 | | 0 |
| | 1 | 49 | 18.23 | | 0 |
| | 25 | 0 | 17.99 | 0-3 | 0 |
| | 25 | 12 | 17.98 | | 0 |
| | 25 | 25 | 17.94 | | 0 |
| | 50 | 0 | 18.03 | | 0 |

**Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-26
## LTE Band 12 Conducted Powers Ant 1 - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 12<br>5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23035<br>(701.5 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23155<br>(713.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 17.90 | 17.78 | 17.81 | 0 | 0 |
| | 1 | 12 | 17.94 | 17.88 | 17.91 | | 0 |
| | 1 | 24 | 17.88 | 17.86 | 18.02 | | 0 |
| | 12 | 0 | 17.96 | 17.89 | 17.95 | 0-1 | 0 |
| | 12 | 6 | 18.03 | 17.94 | 17.99 | | 0 |
| | 12 | 13 | 17.98 | 17.90 | 17.94 | | 0 |
| | 25 | 0 | 18.00 | 17.95 | 17.97 | | 0 |
| 16QAM | 1 | 0 | 18.31 | 18.28 | 18.27 | 0-1 | 0 |
| | 1 | 12 | 18.38 | 18.35 | 18.39 | | 0 |
| | 1 | 24 | 18.35 | 18.19 | 18.50 | | 0 |
| | 12 | 0 | 18.08 | 17.99 | 18.00 | 0-2 | 0 |
| | 12 | 6 | 18.04 | 17.98 | 18.02 | | 0 |
| | 12 | 13 | 18.03 | 17.95 | 18.05 | | 0 |
| | 25 | 0 | 18.06 | 18.01 | 18.00 | | 0 |
| 64QAM | 1 | 0 | 18.30 | 18.33 | 18.27 | 0-2 | 0 |
| | 1 | 12 | 18.34 | 18.15 | 18.35 | | 0 |
| | 1 | 24 | 18.26 | 18.37 | 18.49 | | 0 |
| | 12 | 0 | 17.98 | 17.87 | 18.04 | 0-3 | 0 |
| | 12 | 6 | 18.04 | 18.00 | 18.03 | | 0 |
| | 12 | 13 | 18.01 | 17.93 | 18.03 | | 0 |
| | 25 | 0 | 18.10 | 18.00 | 18.02 | | 0 |

## Table 8-27
## LTE Band 12 Conducted Powers Ant 1 - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 12<br>3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23025<br>(700.5 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23165<br>(714.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 18.00 | 17.86 | 17.99 | 0 | 0 |
| | 1 | 7 | 18.07 | 17.98 | 18.04 | | 0 |
| | 1 | 14 | 18.05 | 17.88 | 18.00 | | 0 |
| | 8 | 0 | 17.99 | 17.98 | 18.06 | 0-1 | 0 |
| | 8 | 4 | 18.02 | 18.06 | 18.05 | | 0 |
| | 8 | 7 | 18.10 | 18.07 | 18.16 | | 0 |
| | 15 | 0 | 18.04 | 18.06 | 18.10 | | 0 |
| 16QAM | 1 | 0 | 18.33 | 18.22 | 18.50 | 0-1 | 0 |
| | 1 | 7 | 18.48 | 18.26 | 18.42 | | 0 |
| | 1 | 14 | 18.48 | 18.49 | 18.49 | | 0 |
| | 8 | 0 | 18.00 | 18.03 | 18.13 | 0-2 | 0 |
| | 8 | 4 | 18.03 | 18.01 | 18.11 | | 0 |
| | 8 | 7 | 18.26 | 18.18 | 18.22 | | 0 |
| | 15 | 0 | 18.13 | 18.15 | 18.05 | | 0 |
| 64QAM | 1 | 0 | 18.47 | 18.20 | 18.48 | 0-2 | 0 |
| | 1 | 7 | 18.48 | 18.43 | 18.39 | | 0 |
| | 1 | 14 | 18.46 | 18.49 | 18.39 | | 0 |
| | 8 | 0 | 17.99 | 18.00 | 18.07 | 0-3 | 0 |
| | 8 | 4 | 18.18 | 18.12 | 18.09 | | 0 |
| | 8 | 7 | 18.25 | 18.05 | 18.16 | | 0 |
| | 15 | 0 | 18.14 | 18.14 | 18.16 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-28
## LTE Band 12 Conducted Powers Ant 1 - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 12<br>1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23017<br>(699.7 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23173<br>(715.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 17.95 | 17.85 | 17.92 | 0 | 0 |
| | 1 | 2 | 18.02 | 17.97 | 17.97 | | 0 |
| | 1 | 5 | 18.00 | 17.87 | 17.93 | | 0 |
| | 3 | 0 | 17.94 | 17.97 | 17.99 | | 0 |
| | 3 | 2 | 17.97 | 18.05 | 17.98 | | 0 |
| | 3 | 3 | 18.05 | 18.06 | 18.09 | | 0 |
| | 6 | 0 | 17.99 | 18.05 | 18.03 | 0-1 | 0 |
| 16QAM | 1 | 0 | 18.28 | 18.21 | 18.47 | 0-1 | 0 |
| | 1 | 2 | 18.43 | 18.25 | 18.35 | | 0 |
| | 1 | 5 | 18.43 | 18.48 | 18.48 | | 0 |
| | 3 | 0 | 17.97 | 18.02 | 17.95 | | 0 |
| | 3 | 2 | 18.00 | 17.97 | 18.00 | | 0 |
| | 3 | 3 | 18.23 | 18.14 | 17.96 | | 0 |
| | 6 | 0 | 18.10 | 18.11 | 18.02 | 0-2 | 0 |
| 64QAM | 1 | 0 | 18.49 | 18.13 | 18.01 | 0-2 | 0 |
| | 1 | 2 | 18.50 | 18.36 | 18.12 | | 0 |
| | 1 | 5 | 18.43 | 18.47 | 18.06 | | 0 |
| | 3 | 0 | 17.96 | 17.93 | 18.49 | | 0 |
| | 3 | 2 | 18.15 | 18.05 | 18.38 | | 0 |
| | 3 | 3 | 18.22 | 17.98 | 18.50 | | 0 |
| | 6 | 0 | 18.11 | 18.07 | 18.09 | 0-3 | 0 |

## Table 8-29
## LTE Band 12 Conducted Powers Ant 3 - 10 MHz Bandwidth

| LTE Band 12<br>10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel<br>23095<br>(707.5 MHz)<br>Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 19.66 | 0 | 0 |
| | 1 | 25 | 19.51 | | 0 |
| | 1 | 49 | **19.71** | | 0 |
| | 25 | 0 | 19.53 | 0-1 | 0 |
| | 25 | 12 | 19.54 | | 0 |
| | 25 | 25 | **19.64** | | 0 |
| | 50 | 0 | 19.61 | | 0 |
| 16QAM | 1 | 0 | 19.77 | 0-1 | 0 |
| | 1 | 25 | 19.60 | | 0 |
| | 1 | 49 | 19.80 | | 0 |
| | 25 | 0 | 19.33 | 0-2 | 0 |
| | 25 | 12 | 19.31 | | 0 |
| | 25 | 25 | 19.41 | | 0 |
| | 50 | 0 | 19.37 | | 0 |
| 64QAM | 1 | 0 | 19.65 | 0-2 | 0 |
| | 1 | 25 | 19.54 | | 0 |
| | 1 | 49 | 19.57 | | 0 |
| | 25 | 0 | 19.52 | 0-3 | 0 |
| | 25 | 12 | 19.60 | | 0 |
| | 25 | 25 | 19.58 | | 0 |
| | 50 | 0 | 19.59 | | 0 |

**Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-30
## LTE Band 12 Conducted Powers Ant 3 - 5 MHz Bandwidth

| LTE Band 12<br>5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23035<br>(701.5 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23155<br>(713.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 19.66 | 19.43 | 19.57 | 0 | 0 |
| | 1 | 12 | 19.77 | 19.52 | 19.66 | | 0 |
| | 1 | 24 | 19.70 | 19.61 | 19.60 | | 0 |
| | 12 | 0 | 19.68 | 19.48 | 19.78 | 0-1 | 0 |
| | 12 | 6 | 19.74 | 19.52 | 19.77 | | 0 |
| | 12 | 13 | 19.75 | 19.63 | 19.73 | | 0 |
| | 25 | 0 | 19.77 | 19.60 | 19.79 | | 0 |
| 16QAM | 1 | 0 | 19.78 | 19.67 | 19.62 | 0-1 | 0 |
| | 1 | 12 | 19.80 | 19.60 | 19.80 | | 0 |
| | 1 | 24 | 19.69 | 19.67 | 19.66 | | 0 |
| | 12 | 0 | 19.69 | 19.41 | 19.75 | 0-2 | 0 |
| | 12 | 6 | 19.63 | 19.43 | 19.79 | | 0 |
| | 12 | 13 | 19.65 | 19.58 | 19.64 | | 0 |
| | 25 | 0 | 19.68 | 19.55 | 19.75 | | 0 |
| 64QAM | 1 | 0 | 19.68 | 19.57 | 19.60 | 0-2 | 0 |
| | 1 | 12 | 19.76 | 19.80 | 19.65 | | 0 |
| | 1 | 24 | 19.73 | 19.80 | 19.80 | | 0 |
| | 12 | 0 | 19.58 | 19.44 | 19.70 | 0-3 | 0 |
| | 12 | 6 | 19.70 | 19.48 | 19.73 | | 0 |
| | 12 | 13 | 19.59 | 19.58 | 19.69 | | 0 |
| | 25 | 0 | 19.64 | 19.51 | 19.77 | | 0 |

## Table 8-31
## LTE Band 12 Conducted Powers Ant 3 - 3 MHz Bandwidth

| LTE Band 12<br>3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23025<br>(700.5 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23165<br>(714.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 19.55 | 19.42 | 19.75 | 0 | 0 |
| | 1 | 7 | 19.69 | 19.58 | 19.74 | | 0 |
| | 1 | 14 | 19.69 | 19.58 | 19.64 | | 0 |
| | 8 | 0 | 19.70 | 19.55 | 19.80 | 0-1 | 0 |
| | 8 | 4 | 19.75 | 19.66 | 19.72 | | 0 |
| | 8 | 7 | 19.80 | 19.71 | 19.73 | | 0 |
| | 15 | 0 | 19.78 | 19.69 | 19.73 | | 0 |
| 16QAM | 1 | 0 | 19.80 | 19.50 | 19.79 | 0-1 | 0 |
| | 1 | 7 | 19.80 | 19.61 | 19.77 | | 0 |
| | 1 | 14 | 19.65 | 19.54 | 19.74 | | 0 |
| | 8 | 0 | 19.68 | 19.47 | 19.78 | 0-2 | 0 |
| | 8 | 4 | 19.68 | 19.46 | 19.71 | | 0 |
| | 8 | 7 | 19.72 | 19.60 | 19.74 | | 0 |
| | 15 | 0 | 19.67 | 19.53 | 19.73 | | 0 |
| 64QAM | 1 | 0 | 19.72 | 19.43 | 19.80 | 0-2 | 0 |
| | 1 | 7 | 19.76 | 19.62 | 19.80 | | 0 |
| | 1 | 14 | 19.64 | 19.53 | 19.75 | | 0 |
| | 8 | 0 | 19.67 | 19.46 | 19.79 | 0-3 | 0 |
| | 8 | 4 | 19.65 | 19.45 | 19.66 | | 0 |
| | 8 | 7 | 19.80 | 19.64 | 19.71 | | 0 |
| | 15 | 0 | 19.69 | 19.52 | 19.77 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-32
## LTE Band 12 Conducted Powers Ant 3 - 1.4 MHz Bandwidth

| LTE Band 12 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 23017 (699.7 MHz) | Mid Channel 23095 (707.5 MHz) | High Channel 23173 (715.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 19.69 | 19.56 | 19.74 | 0 | 0 |
| | 1 | 2 | 19.78 | 19.52 | 19.72 | | 0 |
| | 1 | 5 | 19.80 | 19.58 | 19.71 | | 0 |
| | 3 | 0 | 19.68 | 19.61 | 19.80 | | 0 |
| | 3 | 2 | 19.70 | 19.63 | 19.77 | | 0 |
| | 3 | 3 | 19.71 | 19.64 | 19.76 | | 0 |
| | 6 | 0 | 19.70 | 19.62 | 19.79 | 0-1 | 0 |
| 16QAM | 1 | 0 | 19.74 | 19.65 | 19.80 | 0-1 | 0 |
| | 1 | 2 | 19.80 | 19.61 | 19.80 | | 0 |
| | 1 | 5 | 19.80 | 19.61 | 19.70 | | 0 |
| | 3 | 0 | 19.77 | 19.64 | 19.72 | | 0 |
| | 3 | 2 | 19.58 | 19.66 | 19.79 | | 0 |
| | 3 | 3 | 19.80 | 19.61 | 19.80 | | 0 |
| | 6 | 0 | 19.71 | 19.58 | 19.77 | 0-2 | 0 |
| 64QAM | 1 | 0 | 19.77 | 19.54 | 19.76 | 0-2 | 0 |
| | 1 | 2 | 19.71 | 19.69 | 19.74 | | 0 |
| | 1 | 5 | 19.80 | 19.53 | 19.79 | | 0 |
| | 3 | 0 | 19.79 | 19.64 | 19.75 | | 0 |
| | 3 | 2 | 19.57 | 19.60 | 19.78 | | 0 |
| | 3 | 3 | 19.69 | 19.64 | 19.78 | | 0 |
| | 6 | 0 | 19.76 | 19.55 | 19.66 | 0-3 | 0 |

## Table 8-33
## LTE Band 12 Conducted Powers Ant 3 - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 12 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23095 (707.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **16.65** | 0 | 0 |
| | 1 | 25 | 16.42 | | 0 |
| | 1 | 49 | 16.49 | | 0 |
| | 25 | 0 | **16.63** | 0-1 | 0 |
| | 25 | 12 | 16.51 | | 0 |
| | 25 | 25 | 16.49 | | 0 |
| | 50 | 0 | 16.53 | | 0 |
| 16QAM | 1 | 0 | 16.75 | 0-1 | 0 |
| | 1 | 25 | 16.51 | | 0 |
| | 1 | 49 | 16.45 | | 0 |
| | 25 | 0 | 16.42 | 0-2 | 0 |
| | 25 | 12 | 16.33 | | 0 |
| | 25 | 25 | 16.30 | | 0 |
| | 50 | 0 | 16.31 | | 0 |
| 64QAM | 1 | 0 | 16.77 | 0-2 | 0 |
| | 1 | 25 | 16.46 | | 0 |
| | 1 | 49 | 16.48 | | 0 |
| | 25 | 0 | 16.43 | 0-3 | 0 |
| | 25 | 12 | 16.35 | | 0 |
| | 25 | 25 | 16.34 | | 0 |
| | 50 | 0 | 16.34 | | 0 |

**Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-34
## LTE Band 12 Conducted Powers Ant 3 - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 12<br>5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23035<br>(701.5 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23155<br>(713.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 16.66 | 16.62 | 16.63 | 0 | 0 |
| | 1 | 12 | 16.69 | 16.58 | 16.71 | | 0 |
| | 1 | 24 | 16.65 | 16.47 | 16.78 | | 0 |
| | 12 | 0 | 16.81 | 16.70 | 16.70 | 0-1 | 0 |
| | 12 | 6 | 16.77 | 16.61 | 16.70 | | 0 |
| | 12 | 13 | 16.71 | 16.57 | 16.82 | | 0 |
| | 25 | 0 | 16.77 | 16.60 | 16.75 | | 0 |
| 16QAM | 1 | 0 | 16.91 | 17.00 | 16.98 | 0-1 | 0 |
| | 1 | 12 | 16.96 | 16.88 | 16.98 | | 0 |
| | 1 | 24 | 16.98 | 16.85 | 16.99 | | 0 |
| | 12 | 0 | 16.85 | 16.76 | 16.76 | 0-2 | 0 |
| | 12 | 6 | 16.83 | 16.65 | 16.76 | | 0 |
| | 12 | 13 | 16.79 | 16.63 | 16.86 | | 0 |
| | 25 | 0 | 16.81 | 16.63 | 16.75 | | 0 |
| 64QAM | 1 | 0 | 16.98 | 16.88 | 16.91 | 0-2 | 0 |
| | 1 | 12 | 17.00 | 16.95 | 17.00 | | 0 |
| | 1 | 24 | 16.90 | 16.71 | 16.93 | | 0 |
| | 12 | 0 | 16.87 | 16.76 | 16.69 | 0-3 | 0 |
| | 12 | 6 | 16.87 | 16.64 | 16.71 | | 0 |
| | 12 | 13 | 16.76 | 16.58 | 16.87 | | 0 |
| | 25 | 0 | 16.83 | 16.67 | 16.75 | | 0 |

## Table 8-35
## LTE Band 12 Conducted Powers Ant 3 - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 12<br>3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23025<br>(700.5 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23165<br>(714.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 16.61 | 16.55 | 16.56 | 0 | 0 |
| | 1 | 7 | 16.64 | 16.51 | 16.64 | | 0 |
| | 1 | 14 | 16.60 | 16.40 | 16.71 | | 0 |
| | 8 | 0 | 16.76 | 16.63 | 16.63 | 0-1 | 0 |
| | 8 | 4 | 16.72 | 16.54 | 16.63 | | 0 |
| | 8 | 7 | 16.66 | 16.50 | 16.75 | | 0 |
| | 15 | 0 | 16.72 | 16.53 | 16.68 | | 0 |
| 16QAM | 1 | 0 | 16.86 | 17.00 | 16.91 | 0-1 | 0 |
| | 1 | 7 | 16.91 | 16.81 | 16.96 | | 0 |
| | 1 | 14 | 16.93 | 16.78 | 17.00 | | 0 |
| | 8 | 0 | 16.77 | 16.69 | 16.69 | 0-2 | 0 |
| | 8 | 4 | 16.75 | 16.57 | 16.69 | | 0 |
| | 8 | 7 | 16.71 | 16.55 | 16.79 | | 0 |
| | 15 | 0 | 16.73 | 16.55 | 16.70 | | 0 |
| 64QAM | 1 | 0 | 16.90 | 16.80 | 16.86 | 0-2 | 0 |
| | 1 | 7 | 16.98 | 16.87 | 16.95 | | 0 |
| | 1 | 14 | 16.82 | 16.63 | 16.88 | | 0 |
| | 8 | 0 | 16.79 | 16.68 | 16.64 | 0-3 | 0 |
| | 8 | 4 | 16.79 | 16.56 | 16.66 | | 0 |
| | 8 | 7 | 16.68 | 16.50 | 16.82 | | 0 |
| | 15 | 0 | 16.75 | 16.59 | 16.70 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-36
## LTE Band 12 Conducted Powers Ant 3 - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 12<br>1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel<br>23017<br>(699.7 MHz) | Mid Channel<br>23095<br>(707.5 MHz) | High Channel<br>23173<br>(715.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 16.58 | 16.51 | 16.52 | 0 | 0 |
| | 1 | 2 | 16.61 | 16.47 | 16.60 | | 0 |
| | 1 | 5 | 16.57 | 16.36 | 16.67 | | 0 |
| | 3 | 0 | 16.73 | 16.59 | 16.59 | | 0 |
| | 3 | 2 | 16.69 | 16.50 | 16.59 | | 0 |
| | 3 | 3 | 16.63 | 16.46 | 16.71 | | 0 |
| | 6 | 0 | 16.69 | 16.49 | 16.64 | 0-1 | 0 |
| 16QAM | 1 | 0 | 16.83 | 16.97 | 16.87 | 0-1 | 0 |
| | 1 | 2 | 16.88 | 16.77 | 16.92 | | 0 |
| | 1 | 5 | 16.90 | 16.74 | 17.00 | | 0 |
| | 3 | 0 | 16.71 | 16.65 | 16.66 | | 0 |
| | 3 | 2 | 16.69 | 16.53 | 16.66 | | 0 |
| | 3 | 3 | 16.65 | 16.51 | 16.76 | | 0 |
| | 6 | 0 | 16.67 | 16.51 | 16.67 | 0-2 | 0 |
| 64QAM | 1 | 0 | 16.84 | 16.77 | 16.83 | 0-2 | 0 |
| | 1 | 2 | 16.92 | 16.84 | 16.92 | | 0 |
| | 1 | 5 | 16.76 | 16.60 | 16.85 | | 0 |
| | 3 | 0 | 16.73 | 16.65 | 16.61 | | 0 |
| | 3 | 2 | 16.73 | 16.53 | 16.63 | | 0 |
| | 3 | 3 | 16.62 | 16.47 | 16.79 | | 0 |
| | 6 | 0 | 16.69 | 16.56 | 16.67 | 0-3 | 0 |

### 8.3.3 LTE Band 13

## Table 8-37
## LTE Band 13 Conducted Powers Ant 1 - 10 MHz Bandwidth

| LTE Band 13<br>10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel<br>23230<br>(782.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | |
| QPSK | 1 | 0 | **21.26** | 0 | 0 |
| | 1 | 25 | 20.82 | | 0 |
| | 1 | 49 | 20.80 | | 0 |
| | 25 | 0 | **20.95** | 0-1 | 0 |
| | 25 | 12 | 20.91 | | 0 |
| | 25 | 25 | 20.86 | | 0 |
| | 50 | 0 | 20.94 | | 0 |
| 16QAM | 1 | 0 | 21.27 | 0-1 | 0 |
| | 1 | 25 | 20.79 | | 0 |
| | 1 | 49 | 20.66 | | 0 |
| | 25 | 0 | 20.81 | 0-2 | 0 |
| | 25 | 12 | 20.73 | | 0 |
| | 25 | 25 | 20.65 | | 0 |
| | 50 | 0 | 20.77 | | 0 |
| 64QAM | 1 | 0 | 21.30 | 0-2 | 0 |
| | 1 | 25 | 20.92 | | 0 |
| | 1 | 49 | 20.86 | | 0 |
| | 25 | 0 | 20.79 | 0-3 | 0 |
| | 25 | 12 | 20.73 | | 0 |
| | 25 | 25 | 20.64 | | 0 |
| | 50 | 0 | 20.78 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-38
## LTE Band 13 Conducted Powers Ant 1 - 5 MHz Bandwidth

| LTE Band 13 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23230 (782.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 21.08 | 0 | 0 |
| | 1 | 12 | 21.04 | | 0 |
| | 1 | 24 | 21.07 | | 0 |
| | 12 | 0 | 20.92 | 0-1 | 0 |
| | 12 | 6 | 20.94 | | 0 |
| | 12 | 13 | 20.98 | | 0 |
| | 25 | 0 | 20.97 | | 0 |
| 16QAM | 1 | 0 | 21.20 | 0-1 | 0 |
| | 1 | 12 | 21.18 | | 0 |
| | 1 | 24 | 21.10 | | 0 |
| | 12 | 0 | 20.98 | 0-2 | 0 |
| | 12 | 6 | 21.00 | | 0 |
| | 12 | 13 | 20.97 | | 0 |
| | 25 | 0 | 20.95 | | 0 |
| 64QAM | 1 | 0 | 20.88 | 0-2 | 0 |
| | 1 | 12 | 20.78 | | 0 |
| | 1 | 24 | 21.01 | | 0 |
| | 12 | 0 | 20.68 | 0-3 | 0 |
| | 12 | 6 | 20.77 | | 0 |
| | 12 | 13 | 20.76 | | 0 |
| | 25 | 0 | 20.74 | | 0 |

**Note: LTE Band 13 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-39
## LTE Band 13 Conducted Powers Ant 1 - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 13 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23230 (782.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **18.19** | 0 | 0 |
| | 1 | 25 | 17.98 | | 0 |
| | 1 | 49 | 17.78 | | 0 |
| | 25 | 0 | 18.06 | 0-1 | 0 |
| | 25 | 12 | **18.11** | | 0 |
| | 25 | 25 | 18.00 | | 0 |
| | 50 | 0 | 18.10 | | 0 |
| 16QAM | 1 | 0 | 18.45 | 0-1 | 0 |
| | 1 | 25 | 18.34 | | 0 |
| | 1 | 49 | 18.20 | | 0 |
| | 25 | 0 | 18.04 | 0-2 | 0 |
| | 25 | 12 | 18.12 | | 0 |
| | 25 | 25 | 18.06 | | 0 |
| | 50 | 0 | 18.17 | | 0 |
| 64QAM | 1 | 0 | 18.40 | 0-2 | 0 |
| | 1 | 25 | 18.38 | | 0 |
| | 1 | 49 | 18.26 | | 0 |
| | 25 | 0 | 18.09 | 0-3 | 0 |
| | 25 | 12 | 18.17 | | 0 |
| | 25 | 25 | 18.10 | | 0 |
| | 50 | 0 | 18.22 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-40
## LTE Band 13 Conducted Powers Ant 1 - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 13 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23230 (782.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 18.04 | 0 | 0 |
| | 1 | 12 | 18.05 | | 0 |
| | 1 | 24 | 17.98 | | 0 |
| | 12 | 0 | 18.04 | 0-1 | 0 |
| | 12 | 6 | 18.12 | | 0 |
| | 12 | 13 | 18.14 | | 0 |
| | 25 | 0 | 18.14 | | 0 |
| 16QAM | 1 | 0 | 18.36 | 0-1 | 0 |
| | 1 | 12 | 18.36 | | 0 |
| | 1 | 24 | 18.34 | | 0 |
| | 12 | 0 | 18.13 | 0-2 | 0 |
| | 12 | 6 | 18.18 | | 0 |
| | 12 | 13 | 18.18 | | 0 |
| | 25 | 0 | 18.21 | | 0 |
| 64QAM | 1 | 0 | 18.35 | 0-2 | 0 |
| | 1 | 12 | 18.38 | | 0 |
| | 1 | 24 | 18.33 | | 0 |
| | 12 | 0 | 18.14 | 0-3 | 0 |
| | 12 | 6 | 18.16 | | 0 |
| | 12 | 13 | 18.20 | | 0 |
| | 25 | 0 | 18.22 | | 0 |

**Note: LTE Band 13 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-41
## LTE Band 13 Conducted Powers Ant 3 - 10 MHz Bandwidth

| LTE Band 13 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23230 (782.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **19.77** | 0 | 0 |
| | 1 | 25 | 19.75 | | 0 |
| | 1 | 49 | 19.70 | | 0 |
| | 25 | 0 | 19.72 | 0-1 | 0 |
| | 25 | 12 | **19.80** | | 0 |
| | 25 | 25 | 19.71 | | 0 |
| | 50 | 0 | 19.76 | | 0 |
| 16QAM | 1 | 0 | 19.61 | 0-1 | 0 |
| | 1 | 25 | 19.58 | | 0 |
| | 1 | 49 | 19.33 | | 0 |
| | 25 | 0 | 19.44 | 0-2 | 0 |
| | 25 | 12 | 19.36 | | 0 |
| | 25 | 25 | 19.45 | | 0 |
| | 50 | 0 | 19.39 | | 0 |
| 64QAM | 1 | 0 | 19.80 | 0-2 | 0 |
| | 1 | 25 | 19.70 | | 0 |
| | 1 | 49 | 19.39 | | 0 |
| | 25 | 0 | 19.35 | 0-3 | 0 |
| | 25 | 12 | 19.33 | | 0 |
| | 25 | 25 | 19.38 | | 0 |
| | 50 | 0 | 19.38 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-42
## LTE Band 13 Conducted Powers Ant 3 - 5 MHz Bandwidth

| LTE Band 13 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23230 (782.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 19.77 | 0 | 0 |
| | 1 | 12 | 19.90 | | 0 |
| | 1 | 24 | 19.85 | | 0 |
| | 12 | 0 | 19.82 | 0-1 | 0 |
| | 12 | 6 | 19.88 | | 0 |
| | 12 | 13 | 19.87 | | 0 |
| | 25 | 0 | 19.90 | | 0 |
| 16QAM | 1 | 0 | 19.56 | 0-1 | 0 |
| | 1 | 12 | 19.88 | | 0 |
| | 1 | 24 | 19.80 | | 0 |
| | 12 | 0 | 19.53 | 0-2 | 0 |
| | 12 | 6 | 19.62 | | 0 |
| | 12 | 13 | 19.66 | | 0 |
| | 25 | 0 | 19.63 | | 0 |
| 64QAM | 1 | 0 | 19.67 | 0-2 | 0 |
| | 1 | 12 | 19.81 | | 0 |
| | 1 | 24 | 19.75 | | 0 |
| | 12 | 0 | 19.53 | 0-3 | 0 |
| | 12 | 6 | 19.62 | | 0 |
| | 12 | 13 | 19.63 | | 0 |
| | 25 | 0 | 19.67 | | 0 |

**Note: LTE Band 13 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-43
## LTE Band 13 Conducted Powers Ant 3 - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 13 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23230 (782.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **16.62** | 0 | 0 |
| | 1 | 25 | 16.50 | | 0 |
| | 1 | 49 | 16.32 | | 0 |
| | 25 | 0 | 16.44 | 0-1 | 0 |
| | 25 | 12 | **16.60** | | 0 |
| | 25 | 25 | 16.55 | | 0 |
| | 50 | 0 | 16.59 | | 0 |
| 16QAM | 1 | 0 | 16.90 | 0-1 | 0 |
| | 1 | 25 | 16.87 | | 0 |
| | 1 | 49 | 16.69 | | 0 |
| | 25 | 0 | 16.49 | 0-2 | 0 |
| | 25 | 12 | 16.67 | | 0 |
| | 25 | 25 | 16.56 | | 0 |
| | 50 | 0 | 16.65 | | 0 |
| 64QAM | 1 | 0 | 16.82 | 0-2 | 0 |
| | 1 | 25 | 16.87 | | 0 |
| | 1 | 49 | 16.70 | | 0 |
| | 25 | 0 | 16.46 | 0-3 | 0 |
| | 25 | 12 | 16.65 | | 0 |
| | 25 | 25 | 16.61 | | 0 |
| | 50 | 0 | 16.65 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-44**
**LTE Band 13 Conducted Powers Ant 3 - 5 MHz Bandwidth, Inter-band ULCA Active**

| LTE Band 13 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23230 (782.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 16.31 | 0 | 0 |
| | 1 | 12 | 16.47 | | 0 |
| | 1 | 24 | 16.51 | | 0 |
| | 12 | 0 | 16.52 | 0-1 | 0 |
| | 12 | 6 | 16.54 | | 0 |
| | 12 | 13 | 16.59 | | 0 |
| | 25 | 0 | 16.60 | | 0 |
| 16QAM | 1 | 0 | 16.49 | 0-1 | 0 |
| | 1 | 12 | 16.65 | | 0 |
| | 1 | 24 | 16.90 | | 0 |
| | 12 | 0 | 16.54 | 0-2 | 0 |
| | 12 | 6 | 16.64 | | 0 |
| | 12 | 13 | 16.65 | | 0 |
| | 25 | 0 | 16.62 | | 0 |
| 64QAM | 1 | 0 | 16.66 | 0-2 | 0 |
| | 1 | 12 | 16.84 | | 0 |
| | 1 | 24 | 16.63 | | 0 |
| | 12 | 0 | 16.55 | 0-3 | 0 |
| | 12 | 6 | 16.62 | | 0 |
| | 12 | 13 | 16.63 | | 0 |
| | 25 | 0 | 16.63 | | 0 |

**Note: LTE Band 13 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## 8.3.4 LTE Band 14

**Table 8-45**
**LTE Band 14 Conducted Powers Ant 1 - 10 MHz Bandwidth**

| LTE Band 14 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23330 (793.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 20.96 | 0 | 0 |
| | 1 | 25 | 21.02 | | 0 |
| | 1 | 49 | **21.20** | | 0 |
| | 25 | 0 | 20.82 | 0-1 | 0 |
| | 25 | 12 | 20.88 | | 0 |
| | 25 | 25 | **20.99** | | 0 |
| | 50 | 0 | 20.92 | | 0 |
| 16QAM | 1 | 0 | 20.95 | 0-1 | 0 |
| | 1 | 25 | 20.99 | | 0 |
| | 1 | 49 | 21.13 | | 0 |
| | 25 | 0 | 20.61 | 0-2 | 0 |
| | 25 | 12 | 20.66 | | 0 |
| | 25 | 25 | 20.79 | | 0 |
| | 50 | 0 | 20.73 | | 0 |
| 64QAM | 1 | 0 | 20.91 | 0-2 | 0 |
| | 1 | 25 | 20.89 | | 0 |
| | 1 | 49 | 21.06 | | 0 |
| | 25 | 0 | 20.66 | 0-3 | 0 |
| | 25 | 12 | 20.65 | | 0 |
| | 25 | 25 | 20.79 | | 0 |
| | 50 | 0 | 20.76 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-46
## LTE Band 14 Conducted Powers Ant 1 - 5 MHz Bandwidth

| LTE Band 14 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23330 (793.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 20.97 | 0 | 0 |
| | 1 | 12 | 21.03 | | 0 |
| | 1 | 24 | 21.04 | | 0 |
| | 12 | 0 | 20.92 | 0-1 | 0 |
| | 12 | 6 | 20.92 | | 0 |
| | 12 | 13 | 21.03 | | 0 |
| | 25 | 0 | 20.99 | | 0 |
| 16QAM | 1 | 0 | 20.90 | 0-1 | 0 |
| | 1 | 12 | 20.90 | | 0 |
| | 1 | 24 | 20.98 | | 0 |
| | 12 | 0 | 20.74 | 0-2 | 0 |
| | 12 | 6 | 20.78 | | 0 |
| | 12 | 13 | 20.87 | | 0 |
| | 25 | 0 | 20.81 | | 0 |
| 64QAM | 1 | 0 | 20.73 | 0-2 | 0 |
| | 1 | 12 | 21.01 | | 0 |
| | 1 | 24 | 20.95 | | 0 |
| | 12 | 0 | 20.75 | 0-3 | 0 |
| | 12 | 6 | 20.77 | | 0 |
| | 12 | 13 | 20.85 | | 0 |
| | 25 | 0 | 20.83 | | 0 |

**Note: LTE Band 14 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-47
## LTE Band 14 Conducted Powers Ant 1 - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 14 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23330 (793.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **18.20** | 0 | 0 |
| | 1 | 25 | 18.07 | | 0 |
| | 1 | 49 | 18.14 | | 0 |
| | 25 | 0 | 18.23 | 0-1 | 0 |
| | 25 | 12 | 18.17 | | 0 |
| | 25 | 25 | **18.28** | | 0 |
| | 50 | 0 | 18.19 | | 0 |
| 16QAM | 1 | 0 | 18.21 | 0-1 | 0 |
| | 1 | 25 | 18.13 | | 0 |
| | 1 | 49 | 18.23 | | 0 |
| | 25 | 0 | 18.03 | 0-2 | 0 |
| | 25 | 12 | 18.00 | | 0 |
| | 25 | 25 | 18.08 | | 0 |
| | 50 | 0 | 17.99 | | 0 |
| 64QAM | 1 | 0 | 18.24 | 0-2 | 0 |
| | 1 | 25 | 18.11 | | 0 |
| | 1 | 49 | 18.21 | | 0 |
| | 25 | 0 | 18.01 | 0-3 | 0 |
| | 25 | 12 | 17.98 | | 0 |
| | 25 | 25 | 18.10 | | 0 |
| | 50 | 0 | 18.02 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-48
## LTE Band 14 Conducted Powers Ant 1 - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 14 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23330 (793.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 17.84 | 0 | 0 |
| | 1 | 12 | 17.78 | | 0 |
| | 1 | 24 | 17.94 | | 0 |
| | 12 | 0 | 18.00 | 0-1 | 0 |
| | 12 | 6 | 17.89 | | 0 |
| | 12 | 13 | 18.00 | | 0 |
| | 25 | 0 | 17.97 | | 0 |
| 16QAM | 1 | 0 | 18.20 | 0-1 | 0 |
| | 1 | 12 | 18.00 | | 0 |
| | 1 | 24 | 18.34 | | 0 |
| | 12 | 0 | 18.10 | 0-2 | 0 |
| | 12 | 6 | 17.97 | | 0 |
| | 12 | 13 | 18.08 | | 0 |
| | 25 | 0 | 18.01 | | 0 |
| 64QAM | 1 | 0 | 18.28 | 0-2 | 0 |
| | 1 | 12 | 17.94 | | 0 |
| | 1 | 24 | 18.35 | | 0 |
| | 12 | 0 | 18.08 | 0-3 | 0 |
| | 12 | 6 | 18.02 | | 0 |
| | 12 | 13 | 18.03 | | 0 |
| | 25 | 0 | 17.99 | | 0 |

**Note: LTE Band 14 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-49
## LTE Band 14 Conducted Powers Ant 3 - 10 MHz Bandwidth

| LTE Band 14 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23330 (793.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 19.72 | 0 | 0 |
| | 1 | 25 | 19.63 | | 0 |
| | 1 | 49 | **19.87** | | 0 |
| | 25 | 0 | 19.70 | 0-1 | 0 |
| | 25 | 12 | 19.83 | | 0 |
| | 25 | 25 | **19.89** | | 0 |
| | 50 | 0 | 19.77 | | 0 |
| 16QAM | 1 | 0 | 19.83 | 0-1 | 0 |
| | 1 | 25 | 19.77 | | 0 |
| | 1 | 49 | 19.90 | | 0 |
| | 25 | 0 | 19.53 | 0-2 | 0 |
| | 25 | 12 | 19.63 | | 0 |
| | 25 | 25 | 19.66 | | 0 |
| | 50 | 0 | 19.57 | | 0 |
| 64QAM | 1 | 0 | 19.67 | 0-2 | 0 |
| | 1 | 25 | 19.56 | | 0 |
| | 1 | 49 | 19.61 | | 0 |
| | 25 | 0 | 19.39 | 0-3 | 0 |
| | 25 | 12 | 19.32 | | 0 |
| | 25 | 25 | 19.47 | | 0 |
| | 50 | 0 | 19.37 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-50
## LTE Band 14 Conducted Powers Ant 3 - 5 MHz Bandwidth

| LTE Band 14 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23330 (793.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 19.73 | 0 | 0 |
| | 1 | 12 | 19.74 | | 0 |
| | 1 | 24 | 19.87 | | 0 |
| | 12 | 0 | 19.86 | 0-1 | 0 |
| | 12 | 6 | 19.83 | | 0 |
| | 12 | 13 | 19.90 | | 0 |
| | 25 | 0 | 19.84 | | 0 |
| 16QAM | 1 | 0 | 19.74 | 0-1 | 0 |
| | 1 | 12 | 19.90 | | 0 |
| | 1 | 24 | 19.90 | | 0 |
| | 12 | 0 | 19.57 | 0-2 | 0 |
| | 12 | 6 | 19.56 | | 0 |
| | 12 | 13 | 19.57 | | 0 |
| | 25 | 0 | 19.51 | | 0 |
| 64QAM | 1 | 0 | 19.58 | 0-2 | 0 |
| | 1 | 12 | 19.72 | | 0 |
| | 1 | 24 | 19.90 | | 0 |
| | 12 | 0 | 19.53 | 0-3 | 0 |
| | 12 | 6 | 19.54 | | 0 |
| | 12 | 13 | 19.58 | | 0 |
| | 25 | 0 | 19.48 | | 0 |

**Note: LTE Band 14 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-51
## LTE Band 14 Conducted Powers Ant 3 - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 14 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23330 (793.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **16.71** | 0 | 0 |
| | 1 | 25 | 16.51 | | 0 |
| | 1 | 49 | 16.69 | | 0 |
| | 25 | 0 | 16.65 | 0-1 | 0 |
| | 25 | 12 | 16.62 | | 0 |
| | 25 | 25 | **16.68** | | 0 |
| | 50 | 0 | 16.63 | | 0 |
| 16QAM | 1 | 0 | 16.71 | 0-1 | 0 |
| | 1 | 25 | 16.61 | | 0 |
| | 1 | 49 | 16.80 | | 0 |
| | 25 | 0 | 16.43 | 0-2 | 0 |
| | 25 | 12 | 16.44 | | 0 |
| | 25 | 25 | 16.40 | | 0 |
| | 50 | 0 | 16.41 | | 0 |
| 64QAM | 1 | 0 | 16.75 | 0-2 | 0 |
| | 1 | 25 | 16.56 | | 0 |
| | 1 | 49 | 16.77 | | 0 |
| | 25 | 0 | 16.42 | 0-3 | 0 |
| | 25 | 12 | 16.41 | | 0 |
| | 25 | 25 | 16.46 | | 0 |
| | 50 | 0 | 16.44 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-52**
**LTE Band 14 Conducted Powers Ant 3 - 5 MHz Bandwidth, Inter-band ULCA Active**

| LTE Band 14 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 23330 (793.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 16.44 | 0 | 0 |
| | 1 | 12 | 16.46 | | 0 |
| | 1 | 24 | 16.57 | | 0 |
| | 12 | 0 | 16.61 | 0-1 | 0 |
| | 12 | 6 | 16.60 | | 0 |
| | 12 | 13 | 16.61 | | 0 |
| | 25 | 0 | 16.64 | | 0 |
| 16QAM | 1 | 0 | 16.77 | 0-1 | 0 |
| | 1 | 12 | 16.79 | | 0 |
| | 1 | 24 | 16.99 | | 0 |
| | 12 | 0 | 16.65 | 0-2 | 0 |
| | 12 | 6 | 16.71 | | 0 |
| | 12 | 13 | 16.70 | | 0 |
| | 25 | 0 | 16.69 | | 0 |
| 64QAM | 1 | 0 | 16.61 | 0-2 | 0 |
| | 1 | 12 | 16.85 | | 0 |
| | 1 | 24 | 16.74 | | 0 |
| | 12 | 0 | 16.70 | 0-3 | 0 |
| | 12 | 6 | 16.64 | | 0 |
| | 12 | 13 | 16.67 | | 0 |
| | 25 | 0 | 16.69 | | 0 |

**Note: LTE Band 14 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## 8.3.5 LTE Band 26

**Table 8-53**
**LTE Band 26 Conducted Powers Ant 1 - 10 MHz Bandwidth**

| LTE Band 26 (Cell) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26740 (819.0 MHz) | Mid Channel 26865 (831.5 MHz) | High Channel 26990 (844.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | **20.55** | 20.31 | 20.49 | 0 | 0 |
| | 1 | 25 | 20.35 | 20.26 | 20.39 | | 0 |
| | 1 | 49 | 20.49 | 20.33 | 20.45 | | 0 |
| | 25 | 0 | 20.32 | 20.36 | **20.49** | 0-1 | 0 |
| | 25 | 12 | 20.26 | 20.33 | 20.35 | | 0 |
| | 25 | 25 | 20.32 | 20.30 | 20.29 | | 0 |
| | 50 | 0 | 20.36 | 20.34 | 20.29 | | 0 |
| 16QAM | 1 | 0 | 20.41 | 20.57 | 20.48 | 0-1 | 0 |
| | 1 | 25 | 20.29 | 20.38 | 20.29 | | 0 |
| | 1 | 49 | 20.35 | 20.46 | 20.37 | | 0 |
| | 25 | 0 | 20.15 | 20.15 | 20.20 | 0-2 | 0 |
| | 25 | 12 | 20.11 | 20.10 | 20.09 | | 0 |
| | 25 | 25 | 20.13 | 20.09 | 20.02 | | 0 |
| | 50 | 0 | 20.10 | 20.08 | 20.13 | | 0 |
| 64QAM | 1 | 0 | 20.35 | 20.39 | 20.47 | 0-2 | 0 |
| | 1 | 25 | 20.30 | 20.40 | 20.34 | | 0 |
| | 1 | 49 | 20.40 | 20.20 | 20.36 | | 0 |
| | 25 | 0 | 20.11 | 20.16 | 20.19 | 0-3 | 0 |
| | 25 | 12 | 20.09 | 20.18 | 20.10 | | 0 |
| | 25 | 25 | 20.14 | 20.09 | 20.04 | | 0 |
| | 50 | 0 | 20.09 | 20.14 | 20.05 | | 0 |



© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-54
## LTE Band 26 Conducted Powers Ant 1 - 5 MHz Bandwidth

| LTE Band 26 (Cell) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26715 (816.5 MHz) | Mid Channel 26865 (831.5 MHz) | High Channel 27015 (846.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.53 | 20.46 | 20.52 | 0 | 0 |
| | 1 | 12 | 20.38 | 20.39 | 20.42 | | 0 |
| | 1 | 24 | 20.46 | 20.44 | 20.52 | | 0 |
| | 12 | 0 | 20.48 | 20.53 | 20.51 | 0-1 | 0 |
| | 12 | 6 | 20.45 | 20.48 | 20.44 | | 0 |
| | 12 | 13 | 20.50 | 20.44 | 20.38 | | 0 |
| | 25 | 0 | 20.48 | 20.44 | 20.44 | | 0 |
| 16QAM | 1 | 0 | 20.15 | 20.44 | 20.47 | 0-1 | 0 |
| | 1 | 12 | 20.13 | 20.24 | 20.41 | | 0 |
| | 1 | 24 | 20.11 | 20.20 | 20.42 | | 0 |
| | 12 | 0 | 20.02 | 20.10 | 20.09 | 0-2 | 0 |
| | 12 | 6 | 20.00 | 20.05 | 19.94 | | 0 |
| | 12 | 13 | 20.06 | 20.04 | 19.89 | | 0 |
| | 25 | 0 | 20.03 | 20.04 | 20.01 | | 0 |
| 64QAM | 1 | 0 | 20.36 | 20.23 | 20.56 | 0-2 | 0 |
| | 1 | 12 | 20.14 | 20.38 | 20.29 | | 0 |
| | 1 | 24 | 20.39 | 20.43 | 20.38 | | 0 |
| | 12 | 0 | 20.01 | 20.12 | 20.09 | 0-3 | 0 |
| | 12 | 6 | 19.98 | 20.05 | 19.95 | | 0 |
| | 12 | 13 | 20.06 | 19.99 | 19.91 | | 0 |
| | 25 | 0 | 20.01 | 20.04 | 19.97 | | 0 |

## Table 8-55
## LTE Band 26 Conducted Powers Ant 1 - 3 MHz Bandwidth

| LTE Band 26 (Cell) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26705 (815.5 MHz) | Mid Channel 26865 (831.5 MHz) | High Channel 27025 (847.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.51 | 20.33 | 20.28 | 0 | 0 |
| | 1 | 7 | 20.40 | 20.37 | 20.46 | | 0 |
| | 1 | 14 | 20.32 | 20.29 | 20.43 | | 0 |
| | 8 | 0 | 20.54 | 20.46 | 20.43 | 0-1 | 0 |
| | 8 | 4 | 20.45 | 20.43 | 20.54 | | 0 |
| | 8 | 7 | 20.44 | 20.43 | 20.56 | | 0 |
| | 15 | 0 | 20.48 | 20.47 | 20.56 | | 0 |
| 16QAM | 1 | 0 | 20.54 | 20.22 | 20.31 | 0-1 | 0 |
| | 1 | 7 | 20.50 | 20.29 | 20.25 | | 0 |
| | 1 | 14 | 20.49 | 20.10 | 20.22 | | 0 |
| | 8 | 0 | 20.12 | 20.11 | 20.04 | 0-2 | 0 |
| | 8 | 4 | 20.06 | 20.11 | 19.92 | | 0 |
| | 8 | 7 | 19.93 | 20.09 | 20.11 | | 0 |
| | 15 | 0 | 20.04 | 20.09 | 20.04 | | 0 |
| 64QAM | 1 | 0 | 20.56 | 20.17 | 20.19 | 0-2 | 0 |
| | 1 | 7 | 20.25 | 20.27 | 20.28 | | 0 |
| | 1 | 14 | 20.23 | 20.41 | 20.41 | | 0 |
| | 8 | 0 | 20.08 | 20.12 | 20.00 | 0-3 | 0 |
| | 8 | 4 | 20.12 | 20.09 | 19.94 | | 0 |
| | 8 | 7 | 19.96 | 20.07 | 20.13 | | 0 |
| | 15 | 0 | 20.07 | 20.06 | 20.01 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-56
## LTE Band 26 Conducted Powers Ant 1 - 1.4 MHz Bandwidth

| LTE Band 26 (Cell) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26697 (814.7 MHz) | Mid Channel 26865 (831.5 MHz) | High Channel 27033 (848.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.48 | 20.29 | 20.54 | 0 | 0 |
| | 1 | 2 | 20.37 | 20.28 | 20.56 | | 0 |
| | 1 | 5 | 20.32 | 20.28 | 20.56 | | 0 |
| | 3 | 0 | 20.48 | 20.36 | 20.48 | | 0 |
| | 3 | 2 | 20.47 | 20.37 | 20.47 | | 0 |
| | 3 | 3 | 20.47 | 20.33 | 20.48 | | 0 |
| | 6 | 0 | 20.45 | 20.37 | 20.47 | 0-1 | 0 |
| 16QAM | 1 | 0 | 20.49 | 20.47 | 20.55 | 0-1 | 0 |
| | 1 | 2 | 20.54 | 20.50 | 20.55 | | 0 |
| | 1 | 5 | 20.46 | 20.49 | 20.54 | | 0 |
| | 3 | 0 | 20.45 | 20.41 | 20.46 | | 0 |
| | 3 | 2 | 20.50 | 20.39 | 20.48 | | 0 |
| | 3 | 3 | 20.46 | 20.43 | 20.35 | | 0 |
| | 6 | 0 | 20.42 | 20.40 | 20.40 | 0-2 | 0 |
| 64QAM | 1 | 0 | 20.55 | 20.31 | 20.50 | 0-2 | 0 |
| | 1 | 2 | 20.42 | 20.43 | 20.48 | | 0 |
| | 1 | 5 | 20.41 | 20.44 | 20.51 | | 0 |
| | 3 | 0 | 20.34 | 20.42 | 20.52 | | 0 |
| | 3 | 2 | 20.31 | 20.41 | 20.56 | | 0 |
| | 3 | 3 | 20.40 | 20.39 | 20.52 | | 0 |
| | 6 | 0 | 20.44 | 20.29 | 20.41 | 0-3 | 0 |

## Table 8-57
## LTE Band 26 Conducted Powers Ant 3 - 10 MHz Bandwidth

| LTE Band 26 (Cell) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26740 (819.0 MHz) | Mid Channel 26865 (831.5 MHz) | High Channel 26990 (844.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.27 | 20.23 | 20.27 | 0 | 0 |
| | 1 | 25 | 20.18 | 20.18 | 20.20 | | 0 |
| | 1 | 49 | **20.29** | 20.23 | 20.23 | | 0 |
| | 25 | 0 | 20.17 | 20.27 | 20.28 | 0-1 | 0 |
| | 25 | 12 | 20.22 | 20.23 | 20.23 | | 0 |
| | 25 | 25 | **20.30** | 20.22 | 20.22 | | 0 |
| | 50 | 0 | 20.26 | 20.25 | 20.24 | | 0 |
| 16QAM | 1 | 0 | 20.27 | 20.28 | 20.30 | 0-1 | 0 |
| | 1 | 25 | 20.24 | 20.26 | 20.29 | | 0 |
| | 1 | 49 | 20.30 | 20.30 | 20.27 | | 0 |
| | 25 | 0 | 19.97 | 20.03 | 20.05 | 0-2 | 0 |
| | 25 | 12 | 19.99 | 19.99 | 20.02 | | 0 |
| | 25 | 25 | 20.10 | 19.96 | 19.98 | | 0 |
| | 50 | 0 | 20.01 | 20.02 | 20.02 | | 0 |
| 64QAM | 1 | 0 | 20.25 | 20.30 | 20.16 | 0-2 | 0 |
| | 1 | 25 | 20.03 | 20.30 | 20.21 | | 0 |
| | 1 | 49 | 20.15 | 20.18 | 20.15 | | 0 |
| | 25 | 0 | 19.75 | 19.90 | 19.80 | 0-3 | 0 |
| | 25 | 12 | 19.70 | 19.90 | 19.96 | | 0 |
| | 25 | 25 | 19.77 | 19.85 | 19.80 | | 0 |
| | 50 | 0 | 19.73 | 19.92 | 19.95 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-58
## LTE Band 26 Conducted Powers Ant 3 - 5 MHz Bandwidth

| LTE Band 26 (Cell) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26715 (816.5 MHz) | Mid Channel 26865 (831.5 MHz) | High Channel 27015 (846.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.06 | 20.24 | 20.11 | 0 | 0 |
| | 1 | 12 | 19.92 | 20.16 | 20.11 | | 0 |
| | 1 | 24 | 20.00 | 20.20 | 20.19 | | 0 |
| | 12 | 0 | 20.10 | 20.17 | 20.09 | 0-1 | 0 |
| | 12 | 6 | 20.08 | 20.14 | 20.10 | | 0 |
| | 12 | 13 | 20.15 | 20.13 | 20.09 | | 0 |
| | 25 | 0 | 20.06 | 20.14 | 20.13 | | 0 |
| 16QAM | 1 | 0 | 20.11 | 20.20 | 20.20 | 0-1 | 0 |
| | 1 | 12 | 20.12 | 20.12 | 19.87 | | 0 |
| | 1 | 24 | 20.11 | 20.23 | 20.26 | | 0 |
| | 12 | 0 | 19.92 | 20.00 | 19.94 | 0-2 | 0 |
| | 12 | 6 | 20.03 | 20.01 | 19.98 | | 0 |
| | 12 | 13 | 20.07 | 20.07 | 19.95 | | 0 |
| | 25 | 0 | 19.97 | 20.08 | 19.93 | | 0 |
| 64QAM | 1 | 0 | 20.19 | 20.17 | 20.15 | 0-2 | 0 |
| | 1 | 12 | 20.08 | 20.17 | 19.89 | | 0 |
| | 1 | 24 | 20.05 | 20.06 | 20.02 | | 0 |
| | 12 | 0 | 20.04 | 20.03 | 19.99 | 0-3 | 0 |
| | 12 | 6 | 19.94 | 20.03 | 19.89 | | 0 |
| | 12 | 13 | 19.90 | 19.98 | 19.87 | | 0 |
| | 25 | 0 | 19.95 | 20.01 | 19.95 | | 0 |

## Table 8-59
## LTE Band 26 Conducted Powers Ant 3 - 3 MHz Bandwidth

| LTE Band 26 (Cell) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26705 (815.5 MHz) | Mid Channel 26865 (831.5 MHz) | High Channel 27025 (847.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.22 | 20.13 | 20.15 | 0 | 0 |
| | 1 | 7 | 20.17 | 20.16 | 20.15 | | 0 |
| | 1 | 14 | 20.09 | 20.10 | 20.15 | | 0 |
| | 8 | 0 | 20.30 | 20.25 | 20.26 | 0-1 | 0 |
| | 8 | 4 | 20.20 | 20.23 | 20.23 | | 0 |
| | 8 | 7 | 20.19 | 20.21 | 20.30 | | 0 |
| | 15 | 0 | 20.23 | 20.25 | 20.24 | | 0 |
| 16QAM | 1 | 0 | 20.22 | 20.03 | 20.11 | 0-1 | 0 |
| | 1 | 7 | 20.12 | 20.07 | 20.13 | | 0 |
| | 1 | 14 | 20.08 | 20.11 | 20.29 | | 0 |
| | 8 | 0 | 20.17 | 20.14 | 20.02 | 0-2 | 0 |
| | 8 | 4 | 20.01 | 20.15 | 20.02 | | 0 |
| | 8 | 7 | 20.07 | 20.03 | 20.09 | | 0 |
| | 15 | 0 | 20.10 | 20.04 | 19.95 | | 0 |
| 64QAM | 1 | 0 | 20.15 | 19.98 | 20.11 | 0-2 | 0 |
| | 1 | 7 | 20.27 | 20.14 | 20.21 | | 0 |
| | 1 | 14 | 20.13 | 20.02 | 20.28 | | 0 |
| | 8 | 0 | 20.06 | 20.17 | 20.05 | 0-3 | 0 |
| | 8 | 4 | 20.01 | 20.11 | 19.98 | | 0 |
| | 8 | 7 | 20.06 | 20.08 | 20.10 | | 0 |
| | 15 | 0 | 20.06 | 20.06 | 20.10 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-60
## LTE Band 26 Conducted Powers Ant 3 - 1.4 MHz Bandwidth

| LTE Band 26 (Cell) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26697 (814.7 MHz) | Mid Channel 26865 (831.5 MHz) | High Channel 27033 (848.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.25 | 20.17 | 20.21 | 0 | 0 |
| | 1 | 2 | 20.22 | 20.16 | 20.25 | | 0 |
| | 1 | 5 | 20.15 | 20.18 | 20.28 | | 0 |
| | 3 | 0 | 20.30 | 20.22 | 20.28 | | 0 |
| | 3 | 2 | 20.28 | 20.22 | 20.29 | | 0 |
| | 3 | 3 | 20.29 | 20.20 | 20.29 | | 0 |
| | 6 | 0 | 20.29 | 20.22 | 20.28 | 0-1 | 0 |
| 16QAM | 1 | 0 | 20.30 | 20.20 | 20.08 | 0-1 | 0 |
| | 1 | 2 | 20.24 | 20.12 | 20.30 | | 0 |
| | 1 | 5 | 20.19 | 20.17 | 20.30 | | 0 |
| | 3 | 0 | 20.27 | 20.17 | 20.19 | | 0 |
| | 3 | 2 | 20.21 | 20.14 | 20.27 | | 0 |
| | 3 | 3 | 20.10 | 20.17 | 20.19 | | 0 |
| | 6 | 0 | 20.17 | 20.10 | 20.08 | 0-2 | 0 |
| 64QAM | 1 | 0 | 20.26 | 20.26 | 20.20 | 0-2 | 0 |
| | 1 | 2 | 20.17 | 20.14 | 20.30 | | 0 |
| | 1 | 5 | 20.19 | 20.14 | 20.18 | | 0 |
| | 3 | 0 | 20.17 | 20.18 | 20.15 | | 0 |
| | 3 | 2 | 20.15 | 20.18 | 20.24 | | 0 |
| | 3 | 3 | 20.12 | 20.14 | 20.23 | | 0 |
| | 6 | 0 | 20.17 | 20.07 | 20.16 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.6 LTE Band 5

**Table 8-61**
**LTE Band 5 Conducted Powers Ant 1 - 10 MHz Bandwidth**

| LTE Band 5 (Cell) 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20525 (836.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **20.47** | 0 | 0 |
| | 1 | 25 | 20.40 | | 0 |
| | 1 | 49 | 20.45 | | 0 |
| | 25 | 0 | 20.36 | 0-1 | 0 |
| | 25 | 12 | 20.38 | | 0 |
| | 25 | 25 | **20.49** | | 0 |
| | 50 | 0 | 20.46 | | 0 |
| 16QAM | 1 | 0 | 20.40 | 0-1 | 0 |
| | 1 | 25 | 20.48 | | 0 |
| | 1 | 49 | 20.43 | | 0 |
| | 25 | 0 | 20.15 | 0-2 | 0 |
| | 25 | 12 | 20.13 | | 0 |
| | 25 | 25 | 20.27 | | 0 |
| | 50 | 0 | 20.21 | | 0 |
| 64QAM | 1 | 0 | 20.33 | 0-2 | 0 |
| | 1 | 25 | 20.41 | | 0 |
| | 1 | 49 | 20.41 | | 0 |
| | 25 | 0 | 19.92 | 0-3 | 0 |
| | 25 | 12 | 19.90 | | 0 |
| | 25 | 25 | 19.91 | | 0 |
| | 50 | 0 | 19.99 | | 0 |

**Note: LTE Band 5 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

**Table 8-62**
**LTE Band 5 Conducted Powers Ant 1 - 5 MHz Bandwidth**

| LTE Band 5 (Cell) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20425 (826.5 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20625 (846.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.35 | 20.43 | 20.45 | 0 | 0 |
| | 1 | 12 | 20.33 | 20.40 | 20.43 | | 0 |
| | 1 | 24 | 20.34 | 20.45 | 20.44 | | 0 |
| | 12 | 0 | 20.38 | 20.42 | 20.37 | 0-1 | 0 |
| | 12 | 6 | 20.38 | 20.38 | 20.32 | | 0 |
| | 12 | 13 | 20.39 | 20.43 | 20.46 | | 0 |
| | 25 | 0 | 20.40 | 20.46 | 20.39 | | 0 |
| 16QAM | 1 | 0 | 20.38 | 20.37 | 20.39 | 0-1 | 0 |
| | 1 | 12 | 20.46 | 20.41 | 20.44 | | 0 |
| | 1 | 24 | 20.42 | 20.58 | 20.59 | | 0 |
| | 12 | 0 | 20.16 | 20.21 | 20.14 | 0-2 | 0 |
| | 12 | 6 | 20.15 | 20.15 | 20.07 | | 0 |
| | 12 | 13 | 20.21 | 20.27 | 20.21 | | 0 |
| | 25 | 0 | 20.15 | 20.25 | 20.09 | | 0 |
| 64QAM | 1 | 0 | 20.55 | 20.29 | 20.16 | 0-2 | 0 |
| | 1 | 12 | 20.31 | 20.48 | 20.45 | | 0 |
| | 1 | 24 | 20.46 | 20.43 | 20.45 | | 0 |
| | 12 | 0 | 20.09 | 20.22 | 20.14 | 0-3 | 0 |
| | 12 | 6 | 20.10 | 20.19 | 20.06 | | 0 |
| | 12 | 13 | 20.13 | 20.22 | 20.21 | | 0 |
| | 25 | 0 | 20.16 | 20.21 | 20.13 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-63
## LTE Band 5 Conducted Powers Ant 1 - 3 MHz Bandwidth

| LTE Band 5 (Cell) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20415 (825.5 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20635 (847.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.36 | 20.42 | 20.23 | 0 | 0 |
| | 1 | 7 | 20.43 | 20.45 | 20.41 | | 0 |
| | 1 | 14 | 20.42 | 20.43 | 20.37 | | 0 |
| | 8 | 0 | 20.45 | 20.46 | 20.40 | 0-1 | 0 |
| | 8 | 4 | 20.41 | 20.42 | 20.44 | | 0 |
| | 8 | 7 | 20.42 | 20.41 | 20.43 | | 0 |
| | 15 | 0 | 20.43 | 20.40 | 20.45 | | 0 |
| 16QAM | 1 | 0 | 20.40 | 20.44 | 20.31 | 0-1 | 0 |
| | 1 | 7 | 20.30 | 20.47 | 20.32 | | 0 |
| | 1 | 14 | 20.26 | 20.45 | 20.37 | | 0 |
| | 8 | 0 | 20.29 | 20.33 | 20.25 | 0-2 | 0 |
| | 8 | 4 | 20.20 | 20.34 | 20.26 | | 0 |
| | 8 | 7 | 20.22 | 20.37 | 20.37 | | 0 |
| | 15 | 0 | 20.22 | 20.31 | 20.29 | | 0 |
| 64QAM | 1 | 0 | 20.47 | 20.38 | 20.30 | 0-2 | 0 |
| | 1 | 7 | 20.38 | 20.47 | 20.44 | | 0 |
| | 1 | 14 | 20.43 | 20.39 | 20.32 | | 0 |
| | 8 | 0 | 20.31 | 20.19 | 20.26 | 0-3 | 0 |
| | 8 | 4 | 20.21 | 20.28 | 20.29 | | 0 |
| | 8 | 7 | 20.29 | 20.34 | 20.36 | | 0 |
| | 15 | 0 | 20.23 | 20.31 | 20.34 | | 0 |

## Table 8-64
## LTE Band 5 Conducted Powers Ant 1 - 1.4 MHz Bandwidth

| LTE Band 5 (Cell) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20407 (824.7 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20643 (848.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.45 | 20.47 | 20.43 | 0 | 0 |
| | 1 | 2 | 20.46 | 20.45 | 20.44 | | 0 |
| | 1 | 5 | 20.58 | 20.46 | 20.40 | | 0 |
| | 3 | 0 | 20.45 | 20.47 | 20.41 | | 0 |
| | 3 | 2 | 20.45 | 20.41 | 20.47 | | 0 |
| | 3 | 3 | 20.47 | 20.41 | 20.42 | | 0 |
| | 6 | 0 | 20.46 | 20.40 | 20.40 | 0-1 | 0 |
| 16QAM | 1 | 0 | 20.43 | 20.37 | 20.44 | 0-1 | 0 |
| | 1 | 2 | 20.46 | 20.44 | 20.45 | | 0 |
| | 1 | 5 | 20.40 | 20.45 | 20.46 | | 0 |
| | 3 | 0 | 20.38 | 20.41 | 20.44 | | 0 |
| | 3 | 2 | 20.37 | 20.46 | 20.46 | | 0 |
| | 3 | 3 | 20.41 | 20.45 | 20.47 | | 0 |
| | 6 | 0 | 20.32 | 20.35 | 20.34 | 0-2 | 0 |
| 64QAM | 1 | 0 | 20.43 | 20.42 | 20.46 | 0-2 | 0 |
| | 1 | 2 | 20.46 | 20.46 | 20.46 | | 0 |
| | 1 | 5 | 20.40 | 20.45 | 20.45 | | 0 |
| | 3 | 0 | 20.42 | 20.35 | 20.40 | | 0 |
| | 3 | 2 | 20.43 | 20.36 | 20.37 | | 0 |
| | 3 | 3 | 20.42 | 20.33 | 20.31 | | 0 |
| | 6 | 0 | 20.32 | 20.38 | 20.31 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-65
## LTE Band 5 Conducted Powers Ant 1 - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 5 (Cell) 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20525 (836.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 17.22 | 0 | 0 |
| | 1 | 25 | 17.25 | | 0 |
| | 1 | 49 | **17.32** | | 0 |
| | 25 | 0 | 17.25 | 0-1 | 0 |
| | 25 | 12 | 17.27 | | 0 |
| | 25 | 25 | **17.42** | | 0 |
| | 50 | 0 | 17.31 | | 0 |
| 16QAM | 1 | 0 | 17.52 | 0-1 | 0 |
| | 1 | 25 | 17.59 | | 0 |
| | 1 | 49 | 17.58 | | 0 |
| | 25 | 0 | 17.29 | 0-2 | 0 |
| | 25 | 12 | 17.30 | | 0 |
| | 25 | 25 | 17.41 | | 0 |
| | 50 | 0 | 17.40 | | 0 |
| 64QAM | 1 | 0 | 17.57 | 0-2 | 0 |
| | 1 | 25 | 17.48 | | 0 |
| | 1 | 49 | 17.57 | | 0 |
| | 25 | 0 | 17.30 | 0-3 | 0 |
| | 25 | 12 | 17.34 | | 0 |
| | 25 | 25 | 17.46 | | 0 |
| | 50 | 0 | 17.37 | | 0 |

**Note: LTE Band 5 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-66
## LTE Band 5 Conducted Powers Ant 1 - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 5 (Cell) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20425 (826.5 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20625 (846.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 17.26 | 17.05 | 17.24 | 0 | 0 |
| | 1 | 12 | 17.22 | 17.12 | 17.12 | | 0 |
| | 1 | 24 | 17.25 | 17.24 | 17.25 | | 0 |
| | 12 | 0 | 17.27 | 17.18 | 17.29 | 0-1 | 0 |
| | 12 | 6 | 17.27 | 17.23 | 17.20 | | 0 |
| | 12 | 13 | 17.30 | 17.32 | 17.24 | | 0 |
| | 25 | 0 | 17.30 | 17.30 | 17.21 | | 0 |
| 16QAM | 1 | 0 | 17.50 | 17.55 | 17.36 | 0-1 | 0 |
| | 1 | 12 | 17.57 | 17.50 | 17.28 | | 0 |
| | 1 | 24 | 17.51 | 17.60 | 17.35 | | 0 |
| | 12 | 0 | 17.33 | 17.16 | 17.38 | 0-2 | 0 |
| | 12 | 6 | 17.30 | 17.28 | 17.18 | | 0 |
| | 12 | 13 | 17.33 | 17.34 | 17.26 | | 0 |
| | 25 | 0 | 17.34 | 17.33 | 17.24 | | 0 |
| 64QAM | 1 | 0 | 17.57 | 17.37 | 17.55 | 0-2 | 0 |
| | 1 | 12 | 17.49 | 17.37 | 17.24 | | 0 |
| | 1 | 24 | 17.59 | 17.57 | 17.40 | | 0 |
| | 12 | 0 | 17.34 | 17.24 | 17.39 | 0-3 | 0 |
| | 12 | 6 | 17.39 | 17.26 | 17.18 | | 0 |
| | 12 | 13 | 17.34 | 17.38 | 17.29 | | 0 |
| | 25 | 0 | 17.36 | 17.34 | 17.22 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-67
## LTE Band 5 Conducted Powers Ant 1 - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 5 (Cell) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20415 (825.5 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20635 (847.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 17.23 | 17.13 | 17.31 | 0 | 0 |
| | 1 | 7 | 17.19 | 17.20 | 17.19 | | 0 |
| | 1 | 14 | 17.22 | 17.32 | 17.32 | | 0 |
| | 8 | 0 | 17.24 | 17.26 | 17.36 | 0-1 | 0 |
| | 8 | 4 | 17.24 | 17.31 | 17.27 | | 0 |
| | 8 | 7 | 17.27 | 17.40 | 17.31 | | 0 |
| | 15 | 0 | 17.27 | 17.38 | 17.20 | | 0 |
| 16QAM | 1 | 0 | 17.47 | 17.60 | 17.35 | 0-1 | 0 |
| | 1 | 7 | 17.54 | 17.49 | 17.27 | | 0 |
| | 1 | 14 | 17.53 | 17.60 | 17.34 | | 0 |
| | 8 | 0 | 17.35 | 17.15 | 17.37 | 0-2 | 0 |
| | 8 | 4 | 17.32 | 17.27 | 17.17 | | 0 |
| | 8 | 7 | 17.35 | 17.33 | 17.25 | | 0 |
| | 15 | 0 | 17.36 | 17.36 | 17.29 | | 0 |
| 64QAM | 1 | 0 | 17.59 | 17.40 | 17.60 | 0-2 | 0 |
| | 1 | 7 | 17.45 | 17.40 | 17.29 | | 0 |
| | 1 | 14 | 17.55 | 17.60 | 17.45 | | 0 |
| | 8 | 0 | 17.30 | 17.27 | 17.44 | 0-3 | 0 |
| | 8 | 4 | 17.35 | 17.29 | 17.23 | | 0 |
| | 8 | 7 | 17.30 | 17.41 | 17.34 | | 0 |
| | 15 | 0 | 17.32 | 17.37 | 17.27 | | 0 |

## Table 8-68
## LTE Band 5 Conducted Powers Ant 1 - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 5 (Cell) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20407 (824.7 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20643 (848.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 17.17 | 17.18 | 17.28 | 0 | 0 |
| | 1 | 2 | 17.13 | 17.25 | 17.16 | | 0 |
| | 1 | 5 | 17.16 | 17.37 | 17.29 | | 0 |
| | 3 | 0 | 17.18 | 17.31 | 17.33 | | 0 |
| | 3 | 2 | 17.18 | 17.36 | 17.24 | | 0 |
| | 3 | 3 | 17.21 | 17.45 | 17.28 | | 0 |
| | 6 | 0 | 17.21 | 17.43 | 17.17 | 0-1 | 0 |
| 16QAM | 1 | 0 | 17.41 | 17.60 | 17.60 | 0-1 | 0 |
| | 1 | 2 | 17.48 | 17.54 | 17.48 | | 0 |
| | 1 | 5 | 17.45 | 17.60 | 17.59 | | 0 |
| | 3 | 0 | 17.27 | 17.06 | 17.00 | | 0 |
| | 3 | 2 | 17.24 | 17.18 | 17.12 | | 0 |
| | 3 | 3 | 17.27 | 17.24 | 17.18 | | 0 |
| | 6 | 0 | 17.28 | 17.27 | 17.21 | 0-2 | 0 |
| 64QAM | 1 | 0 | 17.51 | 17.31 | 17.25 | 0-2 | 0 |
| | 1 | 2 | 17.37 | 17.31 | 17.25 | | 0 |
| | 1 | 5 | 17.52 | 17.51 | 17.45 | | 0 |
| | 3 | 0 | 17.27 | 17.18 | 17.12 | | 0 |
| | 3 | 2 | 17.32 | 17.20 | 17.14 | | 0 |
| | 3 | 3 | 17.27 | 17.32 | 17.26 | | 0 |
| | 6 | 0 | 17.29 | 17.28 | 17.22 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-69
## LTE Band 5 Conducted Powers Ant 3 - 10 MHz Bandwidth

| LTE Band 5 (Cell) 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20525 (836.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **20.19** | 0 | 0 |
| | 1 | 25 | 20.17 | | 0 |
| | 1 | 49 | 20.18 | | 0 |
| | 25 | 0 | 20.20 | 0-1 | 0 |
| | 25 | 12 | 20.25 | | 0 |
| | 25 | 25 | **20.28** | | 0 |
| | 50 | 0 | 20.18 | | 0 |
| 16QAM | 1 | 0 | 20.19 | 0-1 | 0 |
| | 1 | 25 | 20.22 | | 0 |
| | 1 | 49 | 19.60 | | 0 |
| | 25 | 0 | 19.98 | 0-2 | 0 |
| | 25 | 12 | 20.02 | | 0 |
| | 25 | 25 | 20.10 | | 0 |
| | 50 | 0 | 20.04 | | 0 |
| 64QAM | 1 | 0 | 20.24 | 0-2 | 0 |
| | 1 | 25 | 20.16 | | 0 |
| | 1 | 49 | 20.09 | | 0 |
| | 25 | 0 | 19.90 | 0-3 | 0 |
| | 25 | 12 | 19.80 | | 0 |
| | 25 | 25 | 19.86 | | 0 |
| | 50 | 0 | 19.83 | | 0 |

**Note: LTE Band 5 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-70
## LTE Band 5 Conducted Powers Ant 3 - 5 MHz Bandwidth

| LTE Band 5 (Cell) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20425 (826.5 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20625 (846.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.30 | 20.14 | 20.08 | 0 | 0 |
| | 1 | 12 | 20.23 | 20.16 | 20.06 | | 0 |
| | 1 | 24 | 20.26 | 20.22 | 20.13 | | 0 |
| | 12 | 0 | 20.20 | 20.24 | 20.16 | 0-1 | 0 |
| | 12 | 6 | 20.19 | 20.26 | 20.19 | | 0 |
| | 12 | 13 | 20.21 | 20.25 | 20.17 | | 0 |
| | 25 | 0 | 20.23 | 20.26 | 20.22 | | 0 |
| 16QAM | 1 | 0 | 20.30 | 19.97 | 20.21 | 0-1 | 0 |
| | 1 | 12 | 20.14 | 20.12 | 20.12 | | 0 |
| | 1 | 24 | 20.24 | 20.04 | 20.20 | | 0 |
| | 12 | 0 | 20.09 | 20.09 | 20.00 | 0-2 | 0 |
| | 12 | 6 | 20.00 | 20.12 | 19.97 | | 0 |
| | 12 | 13 | 20.07 | 19.99 | 19.94 | | 0 |
| | 25 | 0 | 20.09 | 20.07 | 19.94 | | 0 |
| 64QAM | 1 | 0 | 20.23 | 19.93 | 20.17 | 0-2 | 0 |
| | 1 | 12 | 20.27 | 20.18 | 20.10 | | 0 |
| | 1 | 24 | 20.10 | 20.05 | 20.14 | | 0 |
| | 12 | 0 | 20.06 | 20.06 | 20.01 | 0-3 | 0 |
| | 12 | 6 | 20.02 | 19.97 | 19.96 | | 0 |
| | 12 | 13 | 20.11 | 20.07 | 19.93 | | 0 |
| | 25 | 0 | 20.08 | 19.96 | 19.95 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-71
## LTE Band 5 Conducted Powers Ant 3 - 3 MHz Bandwidth

| LTE Band 5 (Cell) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20415 (825.5 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20635 (847.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.24 | 20.22 | 20.15 | 0 | 0 |
| | 1 | 7 | 20.23 | 20.24 | 20.13 | | 0 |
| | 1 | 14 | 20.19 | 20.20 | 20.16 | | 0 |
| | 8 | 0 | 20.30 | 20.30 | 20.24 | 0-1 | 0 |
| | 8 | 4 | 20.26 | 20.30 | 20.20 | | 0 |
| | 8 | 7 | 20.25 | 20.29 | 20.26 | | 0 |
| | 15 | 0 | 20.24 | 20.28 | 20.22 | | 0 |
| 16QAM | 1 | 0 | 20.23 | 20.00 | 20.15 | 0-1 | 0 |
| | 1 | 7 | 20.16 | 20.23 | 20.11 | | 0 |
| | 1 | 14 | 20.26 | 20.01 | 20.24 | | 0 |
| | 8 | 0 | 20.26 | 20.20 | 20.01 | 0-2 | 0 |
| | 8 | 4 | 20.21 | 20.12 | 20.00 | | 0 |
| | 8 | 7 | 20.19 | 20.15 | 20.14 | | 0 |
| | 15 | 0 | 20.16 | 20.14 | 20.03 | | 0 |
| 64QAM | 1 | 0 | 20.30 | 20.00 | 20.10 | 0-2 | 0 |
| | 1 | 7 | 20.27 | 20.25 | 20.16 | | 0 |
| | 1 | 14 | 20.22 | 20.17 | 20.13 | | 0 |
| | 8 | 0 | 20.15 | 20.18 | 19.97 | 0-3 | 0 |
| | 8 | 4 | 20.10 | 20.10 | 20.02 | | 0 |
| | 8 | 7 | 20.22 | 20.09 | 20.09 | | 0 |
| | 15 | 0 | 20.13 | 20.16 | 20.03 | | 0 |

## Table 8-72
## LTE Band 5 Conducted Powers Ant 3 - 1.4 MHz Bandwidth

| LTE Band 5 (Cell) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20407 (824.7 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20643 (848.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 20.29 | 20.18 | 20.11 | 0 | 0 |
| | 1 | 2 | 20.30 | 20.15 | 20.16 | | 0 |
| | 1 | 5 | 20.29 | 20.18 | 20.19 | | 0 |
| | 3 | 0 | 20.30 | 20.27 | 20.26 | | 0 |
| | 3 | 2 | 20.29 | 20.27 | 20.25 | | 0 |
| | 3 | 3 | 20.29 | 20.29 | 20.25 | | 0 |
| | 6 | 0 | 20.30 | 20.27 | 20.25 | 0-1 | 0 |
| 16QAM | 1 | 0 | 20.21 | 20.25 | 20.21 | 0-1 | 0 |
| | 1 | 2 | 20.23 | 20.18 | 20.19 | | 0 |
| | 1 | 5 | 20.20 | 20.05 | 20.30 | | 0 |
| | 3 | 0 | 20.21 | 20.12 | 20.19 | | 0 |
| | 3 | 2 | 20.12 | 20.22 | 20.07 | | 0 |
| | 3 | 3 | 20.30 | 20.15 | 20.17 | | 0 |
| | 6 | 0 | 20.15 | 20.09 | 20.24 | 0-2 | 0 |
| 64QAM | 1 | 0 | 20.29 | 20.13 | 20.20 | 0-2 | 0 |
| | 1 | 2 | 20.29 | 20.10 | 20.30 | | 0 |
| | 1 | 5 | 20.24 | 20.16 | 20.21 | | 0 |
| | 3 | 0 | 20.15 | 20.20 | 20.27 | | 0 |
| | 3 | 2 | 20.27 | 20.15 | 20.20 | | 0 |
| | 3 | 3 | 20.28 | 20.14 | 20.12 | | 0 |
| | 6 | 0 | 20.19 | 20.14 | 20.24 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-73
## LTE Band 5 Conducted Powers Ant 3 - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 5 (Cell) 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20525 (836.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **17.29** | 0 | 0 |
| | 1 | 25 | 17.15 | | 0 |
| | 1 | 49 | 17.12 | | 0 |
| | 25 | 0 | 17.19 | 0-1 | 0 |
| | 25 | 12 | **17.23** | | 0 |
| | 25 | 25 | 17.18 | | 0 |
| | 50 | 0 | 17.22 | | 0 |
| 16QAM | 1 | 0 | 17.25 | 0-1 | 0 |
| | 1 | 25 | 17.16 | | 0 |
| | 1 | 49 | 17.23 | | 0 |
| | 25 | 0 | 17.00 | 0-2 | 0 |
| | 25 | 12 | 16.97 | | 0 |
| | 25 | 25 | 16.99 | | 0 |
| | 50 | 0 | 16.94 | | 0 |
| 64QAM | 1 | 0 | 17.21 | 0-2 | 0 |
| | 1 | 25 | 17.16 | | 0 |
| | 1 | 49 | 17.23 | | 0 |
| | 25 | 0 | 16.98 | 0-3 | 0 |
| | 25 | 12 | 16.97 | | 0 |
| | 25 | 25 | 16.98 | | 0 |
| | 50 | 0 | 16.98 | | 0 |

**Note: LTE Band 5 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-74
## LTE Band 5 Conducted Powers Ant 3 - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 5 (Cell) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20425 (826.5 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20625 (846.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 16.97 | 16.84 | 16.97 | 0 | 0 |
| | 1 | 12 | 16.98 | 16.79 | 16.96 | | 0 |
| | 1 | 24 | 17.04 | 16.80 | 16.92 | | 0 |
| | 12 | 0 | 17.04 | 16.98 | 17.03 | 0-1 | 0 |
| | 12 | 6 | 17.04 | 16.93 | 17.02 | | 0 |
| | 12 | 13 | 17.08 | 16.88 | 16.97 | | 0 |
| | 25 | 0 | 17.08 | 16.94 | 17.05 | | 0 |
| 16QAM | 1 | 0 | 17.26 | 17.27 | 17.15 | 0-1 | 0 |
| | 1 | 12 | 17.20 | 17.21 | 17.28 | | 0 |
| | 1 | 24 | 17.30 | 17.30 | 17.17 | | 0 |
| | 12 | 0 | 17.09 | 17.01 | 17.07 | 0-2 | 0 |
| | 12 | 6 | 17.08 | 16.96 | 17.02 | | 0 |
| | 12 | 13 | 17.11 | 16.93 | 16.97 | | 0 |
| | 25 | 0 | 17.10 | 16.97 | 17.06 | | 0 |
| 64QAM | 1 | 0 | 17.26 | 17.27 | 17.30 | 0-2 | 0 |
| | 1 | 12 | 17.26 | 17.20 | 17.22 | | 0 |
| | 1 | 24 | 17.30 | 17.20 | 17.03 | | 0 |
| | 12 | 0 | 17.08 | 17.02 | 17.06 | 0-3 | 0 |
| | 12 | 6 | 17.12 | 16.99 | 17.03 | | 0 |
| | 12 | 13 | 17.15 | 16.95 | 17.00 | | 0 |
| | 25 | 0 | 17.16 | 17.00 | 17.05 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-75
## LTE Band 5 Conducted Powers Ant 3 - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 5 (Cell) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20415 (825.5 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20635 (847.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 16.92 | 16.78 | 16.88 | 0 | 0 |
| | 1 | 7 | 16.93 | 16.73 | 16.87 | | 0 |
| | 1 | 14 | 16.99 | 16.74 | 16.83 | | 0 |
| | 8 | 0 | 16.99 | 16.92 | 16.94 | 0-1 | 0 |
| | 8 | 4 | 16.99 | 16.87 | 16.93 | | 0 |
| | 8 | 7 | 17.03 | 16.82 | 16.88 | | 0 |
| | 15 | 0 | 17.03 | 16.88 | 16.96 | | 0 |
| 16QAM | 1 | 0 | 17.21 | 17.21 | 17.06 | 0-1 | 0 |
| | 1 | 7 | 17.15 | 17.30 | 17.19 | | 0 |
| | 1 | 14 | 17.27 | 17.26 | 17.08 | | 0 |
| | 8 | 0 | 17.04 | 17.22 | 16.98 | 0-2 | 0 |
| | 8 | 4 | 17.03 | 17.17 | 16.93 | | 0 |
| | 8 | 7 | 17.08 | 17.14 | 16.88 | | 0 |
| | 15 | 0 | 17.07 | 17.18 | 17.04 | | 0 |
| 64QAM | 1 | 0 | 17.23 | 17.27 | 17.29 | 0-2 | 0 |
| | 1 | 7 | 17.23 | 17.29 | 17.20 | | 0 |
| | 1 | 14 | 17.28 | 17.30 | 17.01 | | 0 |
| | 8 | 0 | 17.05 | 17.23 | 17.04 | 0-3 | 0 |
| | 8 | 4 | 17.09 | 17.20 | 17.01 | | 0 |
| | 8 | 7 | 17.12 | 17.16 | 16.98 | | 0 |
| | 15 | 0 | 17.13 | 17.21 | 17.03 | | 0 |

## Table 8-76
## LTE Band 5 Conducted Powers Ant 3 - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 5 (Cell) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20407 (824.7 MHz) | Mid Channel 20525 (836.5 MHz) | High Channel 20643 (848.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 16.90 | 16.74 | 16.85 | 0 | 0 |
| | 1 | 2 | 16.91 | 16.69 | 16.84 | | 0 |
| | 1 | 5 | 16.97 | 16.70 | 16.80 | | 0 |
| | 3 | 0 | 16.97 | 16.88 | 16.91 | | 0 |
| | 3 | 2 | 16.97 | 16.83 | 16.90 | | 0 |
| | 3 | 3 | 17.01 | 16.78 | 16.85 | | 0 |
| | 6 | 0 | 17.01 | 16.84 | 16.93 | 0-1 | 0 |
| 16QAM | 1 | 0 | 17.19 | 17.17 | 17.03 | 0-1 | 0 |
| | 1 | 2 | 17.13 | 17.28 | 17.16 | | 0 |
| | 1 | 5 | 17.25 | 17.22 | 17.05 | | 0 |
| | 3 | 0 | 17.02 | 17.18 | 16.95 | | 0 |
| | 3 | 2 | 17.01 | 17.13 | 16.94 | | 0 |
| | 3 | 3 | 17.06 | 17.10 | 16.89 | | 0 |
| | 6 | 0 | 17.05 | 17.12 | 17.05 | 0-2 | 0 |
| 64QAM | 1 | 0 | 17.21 | 17.29 | 17.26 | 0-2 | 0 |
| | 1 | 2 | 17.21 | 17.25 | 17.21 | | 0 |
| | 1 | 5 | 17.30 | 17.24 | 17.02 | | 0 |
| | 3 | 0 | 17.03 | 17.17 | 17.05 | | 0 |
| | 3 | 2 | 17.07 | 17.14 | 17.02 | | 0 |
| | 3 | 3 | 17.10 | 17.10 | 16.99 | | 0 |
| | 6 | 0 | 17.11 | 17.15 | 17.04 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.7 LTE Band 4

**Table 8-77**
**LTE Band 4 Conducted Powers Ant 2a - 20 MHz Bandwidth**

| LTE Band 4 (AWS) 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20175 (1732.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 14.17 | 0 | 0 |
| | 1 | 50 | **14.36** | | 0 |
| | 1 | 99 | 13.97 | | 0 |
| | 50 | 0 | **14.41** | 0-1 | 0 |
| | 50 | 25 | 14.30 | | 0 |
| | 50 | 50 | 14.09 | | 0 |
| | 100 | 0 | 14.29 | | 0 |
| 16QAM | 1 | 0 | 14.22 | 0-1 | 0 |
| | 1 | 50 | 14.33 | | 0 |
| | 1 | 99 | 14.33 | | 0 |
| | 50 | 0 | 14.18 | 0-2 | 0 |
| | 50 | 25 | 14.06 | | 0 |
| | 50 | 50 | 13.90 | | 0 |
| | 100 | 0 | 14.08 | | 0 |
| 64QAM | 1 | 0 | 14.30 | 0-2 | 0 |
| | 1 | 50 | 14.43 | | 0 |
| | 1 | 99 | 14.22 | | 0 |
| | 50 | 0 | 14.20 | 0-3 | 0 |
| | 50 | 25 | 14.14 | | 0 |
| | 50 | 50 | 13.92 | | 0 |
| | 100 | 0 | 14.09 | | 0 |

**Note: LTE Band 4 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

**Table 8-78**
**LTE Band 4 Conducted Powers Ant 2a - 15 MHz Bandwidth**

| LTE Band 4 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20025 (1717.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20325 (1747.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.87 | 14.27 | 13.99 | 0 | 0 |
| | 1 | 36 | 13.85 | 14.42 | 13.90 | | 0 |
| | 1 | 74 | 13.85 | 14.21 | 13.82 | | 0 |
| | 36 | 0 | 13.86 | 14.38 | 13.93 | 0-1 | 0 |
| | 36 | 18 | 13.94 | 14.34 | 14.02 | | 0 |
| | 36 | 37 | 13.98 | 14.23 | 13.96 | | 0 |
| | 75 | 0 | 13.93 | 14.30 | 13.98 | | 0 |
| 16QAM | 1 | 0 | 13.85 | 14.13 | 14.02 | 0-1 | 0 |
| | 1 | 36 | 14.06 | 14.39 | 13.78 | | 0 |
| | 1 | 74 | 13.98 | 14.14 | 13.85 | | 0 |
| | 36 | 0 | 13.75 | 14.17 | 13.83 | 0-2 | 0 |
| | 36 | 18 | 13.80 | 14.15 | 13.81 | | 0 |
| | 36 | 37 | 13.81 | 14.06 | 13.76 | | 0 |
| | 75 | 0 | 13.75 | 14.10 | 13.78 | | 0 |
| 64QAM | 1 | 0 | 13.98 | 13.85 | 13.89 | 0-2 | 0 |
| | 1 | 36 | 13.89 | 14.15 | 13.87 | | 0 |
| | 1 | 74 | 13.88 | 14.17 | 13.80 | | 0 |
| | 36 | 0 | 13.82 | 14.17 | 13.78 | 0-3 | 0 |
| | 36 | 18 | 13.78 | 14.16 | 13.83 | | 0 |
| | 36 | 37 | 13.82 | 14.04 | 13.79 | | 0 |
| | 75 | 0 | 13.84 | 14.09 | 13.78 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-79
## LTE Band 4 Conducted Powers Ant 2a - 10 MHz Bandwidth

| LTE Band 4 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20000 (1715.0 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20350 (1750.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.92 | 14.27 | 13.79 | 0 | 0 |
| | 1 | 25 | 13.75 | 14.19 | 13.77 | | 0 |
| | 1 | 49 | 13.92 | 14.16 | 13.82 | | 0 |
| | 25 | 0 | 13.94 | 14.35 | 13.93 | 0-1 | 0 |
| | 25 | 12 | 13.84 | 14.28 | 13.88 | | 0 |
| | 25 | 25 | 13.92 | 14.21 | 13.91 | | 0 |
| | 50 | 0 | 13.86 | 14.29 | 13.88 | | 0 |
| 16QAM | 1 | 0 | 14.02 | 14.45 | 13.83 | 0-1 | 0 |
| | 1 | 25 | 13.83 | 14.44 | 13.84 | | 0 |
| | 1 | 49 | 13.83 | 14.26 | 14.08 | | 0 |
| | 25 | 0 | 13.81 | 14.25 | 13.80 | 0-2 | 0 |
| | 25 | 12 | 13.76 | 14.15 | 13.79 | | 0 |
| | 25 | 25 | 13.78 | 14.08 | 13.76 | | 0 |
| | 50 | 0 | 13.77 | 14.16 | 13.80 | | 0 |
| 64QAM | 1 | 0 | 13.94 | 14.34 | 13.79 | 0-2 | 0 |
| | 1 | 25 | 13.79 | 14.29 | 13.88 | | 0 |
| | 1 | 49 | 13.88 | 14.23 | 13.80 | | 0 |
| | 25 | 0 | 13.79 | 14.22 | 13.76 | 0-3 | 0 |
| | 25 | 12 | 13.78 | 14.15 | 13.84 | | 0 |
| | 25 | 25 | 13.75 | 14.08 | 13.80 | | 0 |
| | 50 | 0 | 13.76 | 14.15 | 13.80 | | 0 |

## Table 8-80
## LTE Band 4 Conducted Powers Ant 2a - 5 MHz Bandwidth

| LTE Band 4 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19975 (1712.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20375 (1752.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.02 | 14.32 | 13.86 | 0 | 0 |
| | 1 | 12 | 13.90 | 14.22 | 13.84 | | 0 |
| | 1 | 24 | 13.83 | 14.14 | 13.86 | | 0 |
| | 12 | 0 | 13.91 | 14.29 | 13.94 | 0-1 | 0 |
| | 12 | 6 | 13.87 | 14.27 | 13.96 | | 0 |
| | 12 | 13 | 13.81 | 14.20 | 13.96 | | 0 |
| | 25 | 0 | 13.92 | 14.29 | 13.92 | | 0 |
| 16QAM | 1 | 0 | 13.94 | 14.28 | 13.76 | 0-1 | 0 |
| | 1 | 12 | 13.93 | 14.11 | 13.80 | | 0 |
| | 1 | 24 | 13.82 | 14.05 | 13.90 | | 0 |
| | 12 | 0 | 13.81 | 14.07 | 13.80 | 0-2 | 0 |
| | 12 | 6 | 13.75 | 14.04 | 13.77 | | 0 |
| | 12 | 13 | 13.83 | 13.91 | 13.79 | | 0 |
| | 25 | 0 | 13.76 | 14.02 | 13.82 | | 0 |
| 64QAM | 1 | 0 | 13.84 | 14.34 | 13.83 | 0-2 | 0 |
| | 1 | 12 | 13.83 | 14.08 | 13.80 | | 0 |
| | 1 | 24 | 13.77 | 14.07 | 13.94 | | 0 |
| | 12 | 0 | 13.76 | 13.98 | 13.77 | 0-3 | 0 |
| | 12 | 6 | 13.76 | 13.95 | 13.83 | | 0 |
| | 12 | 13 | 13.83 | 13.86 | 13.80 | | 0 |
| | 25 | 0 | 13.81 | 13.99 | 13.77 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-81
## LTE Band 4 Conducted Powers Ant 2a - 3 MHz Bandwidth

| LTE Band 4 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19965 (1711.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20385 (1753.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.92 | 14.08 | 13.79 | 0 | 0 |
| | 1 | 7 | 13.88 | 14.11 | 13.84 | | 0 |
| | 1 | 14 | 13.81 | 13.97 | 13.80 | | 0 |
| | 8 | 0 | 13.93 | 14.19 | 13.93 | 0-1 | 0 |
| | 8 | 4 | 13.92 | 14.15 | 13.92 | | 0 |
| | 8 | 7 | 13.91 | 14.10 | 13.92 | | 0 |
| | 15 | 0 | 13.95 | 14.20 | 13.95 | | 0 |
| 16QAM | 1 | 0 | 13.93 | 14.04 | 13.93 | 0-1 | 0 |
| | 1 | 7 | 14.01 | 14.12 | 14.05 | | 0 |
| | 1 | 14 | 13.88 | 14.03 | 13.84 | | 0 |
| | 8 | 0 | 13.80 | 14.07 | 13.80 | 0-2 | 0 |
| | 8 | 4 | 13.77 | 14.07 | 13.79 | | 0 |
| | 8 | 7 | 13.76 | 14.02 | 13.78 | | 0 |
| | 15 | 0 | 13.77 | 14.06 | 13.78 | | 0 |
| 64QAM | 1 | 0 | 13.84 | 14.11 | 13.83 | 0-2 | 0 |
| | 1 | 7 | 13.76 | 14.19 | 13.83 | | 0 |
| | 1 | 14 | 13.80 | 14.03 | 13.83 | | 0 |
| | 8 | 0 | 13.82 | 14.02 | 13.80 | 0-3 | 0 |
| | 8 | 4 | 13.77 | 14.05 | 13.77 | | 0 |
| | 8 | 7 | 13.77 | 14.05 | 13.77 | | 0 |
| | 15 | 0 | 13.79 | 14.04 | 13.76 | | 0 |

## Table 8-82
## LTE Band 4 Conducted Powers Ant 2a - 1.4 MHz Bandwidth

| LTE Band 4 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19957 (1710.7 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20393 (1754.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.02 | 14.17 | 14.00 | 0 | 0 |
| | 1 | 2 | 13.91 | 14.12 | 13.95 | | 0 |
| | 1 | 5 | 13.88 | 14.16 | 14.01 | | 0 |
| | 3 | 0 | 13.99 | 14.20 | 13.88 | | 0 |
| | 3 | 2 | 13.91 | 14.17 | 13.90 | | 0 |
| | 3 | 3 | 13.92 | 14.17 | 13.92 | | 0 |
| | 6 | 0 | 13.91 | 14.18 | 13.90 | 0-1 | 0 |
| 16QAM | 1 | 0 | 13.97 | 14.19 | 13.90 | 0-1 | 0 |
| | 1 | 2 | 13.95 | 14.28 | 13.93 | | 0 |
| | 1 | 5 | 13.88 | 14.24 | 13.96 | | 0 |
| | 3 | 0 | 13.89 | 14.05 | 13.76 | | 0 |
| | 3 | 2 | 13.91 | 14.11 | 13.86 | | 0 |
| | 3 | 3 | 13.85 | 14.13 | 13.78 | | 0 |
| | 6 | 0 | 13.76 | 14.09 | 13.85 | 0-2 | 0 |
| 64QAM | 1 | 0 | 13.96 | 14.22 | 13.91 | 0-2 | 0 |
| | 1 | 2 | 13.92 | 14.06 | 14.13 | | 0 |
| | 1 | 5 | 13.97 | 14.23 | 13.76 | | 0 |
| | 3 | 0 | 13.93 | 14.08 | 13.97 | | 0 |
| | 3 | 2 | 13.85 | 14.04 | 13.95 | | 0 |
| | 3 | 3 | 13.75 | 14.15 | 13.96 | | 0 |
| | 6 | 0 | 13.79 | 14.15 | 13.76 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-83
## LTE Band 4 Conducted Powers Ant 2a - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20175 (1732.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 11.00 | 0 | 0 |
| | 1 | 50 | **11.25** | | 0 |
| | 1 | 99 | 11.06 | | 0 |
| | 50 | 0 | **11.45** | 0-1 | 0 |
| | 50 | 25 | 11.42 | | 0 |
| | 50 | 50 | 11.39 | | 0 |
| | 100 | 0 | 11.24 | | 0 |
| 16QAM | 1 | 0 | 11.20 | 0-1 | 0 |
| | 1 | 50 | 11.30 | | 0 |
| | 1 | 99 | 11.20 | | 0 |
| | 50 | 0 | 10.95 | 0-2 | 0 |
| | 50 | 25 | 10.92 | | 0 |
| | 50 | 50 | 10.87 | | 0 |
| | 100 | 0 | 10.87 | | 0 |
| 64QAM | 1 | 0 | 10.99 | 0-2 | 0 |
| | 1 | 50 | 11.27 | | 0 |
| | 1 | 99 | 11.16 | | 0 |
| | 50 | 0 | 10.94 | 0-3 | 0 |
| | 50 | 25 | 10.90 | | 0 |
| | 50 | 50 | 10.86 | | 0 |
| | 100 | 0 | 10.88 | | 0 |

**Note: LTE Band 4 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-84
## LTE Band 4 Conducted Powers Ant 2a - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20025 (1717.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20325 (1747.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.06 | 11.31 | 11.13 | 0 | 0 |
| | 1 | 36 | 11.19 | 11.32 | 11.12 | | 0 |
| | 1 | 74 | 11.30 | 11.01 | 11.06 | | 0 |
| | 36 | 0 | 11.19 | 11.52 | 11.23 | 0-1 | 0 |
| | 36 | 18 | 11.27 | 11.46 | 11.25 | | 0 |
| | 36 | 37 | 11.28 | 11.34 | 11.25 | | 0 |
| | 75 | 0 | 11.23 | 11.42 | 11.20 | | 0 |
| 16QAM | 1 | 0 | 11.36 | 11.60 | 11.37 | 0-1 | 0 |
| | 1 | 36 | 11.55 | 11.63 | 11.60 | | 0 |
| | 1 | 74 | 11.70 | 11.24 | 11.46 | | 0 |
| | 36 | 0 | 11.22 | 11.35 | 11.26 | 0-2 | 0 |
| | 36 | 18 | 11.29 | 11.28 | 11.29 | | 0 |
| | 36 | 37 | 11.29 | 11.33 | 11.28 | | 0 |
| | 75 | 0 | 11.25 | 11.22 | 11.24 | | 0 |
| 64QAM | 1 | 0 | 11.44 | 11.45 | 11.31 | 0-2 | 0 |
| | 1 | 36 | 11.60 | 11.56 | 11.56 | | 0 |
| | 1 | 74 | 11.49 | 11.40 | 11.53 | | 0 |
| | 36 | 0 | 11.21 | 11.34 | 11.25 | 0-3 | 0 |
| | 36 | 18 | 11.30 | 11.28 | 11.28 | | 0 |
| | 36 | 37 | 11.32 | 11.17 | 11.26 | | 0 |
| | 75 | 0 | 11.26 | 11.23 | 11.25 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-85
## LTE Band 4 Conducted Powers Ant 2a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20000 (1715.0 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20350 (1750.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.22 | 11.49 | 11.20 | 0 | 0 |
| | 1 | 25 | 11.21 | 11.41 | 11.22 | | 0 |
| | 1 | 49 | 11.31 | 11.26 | 11.20 | | 0 |
| | 25 | 0 | 11.20 | 11.63 | 11.23 | 0-1 | 0 |
| | 25 | 12 | 11.20 | 11.51 | 11.27 | | 0 |
| | 25 | 25 | 11.25 | 11.48 | 11.28 | | 0 |
| | 50 | 0 | 11.21 | 11.52 | 11.27 | | 0 |
| 16QAM | 1 | 0 | 11.62 | 11.52 | 11.62 | 0-1 | 0 |
| | 1 | 25 | 11.45 | 11.66 | 11.59 | | 0 |
| | 1 | 49 | 11.70 | 11.53 | 11.56 | | 0 |
| | 25 | 0 | 11.22 | 11.43 | 11.25 | 0-2 | 0 |
| | 25 | 12 | 11.18 | 11.32 | 11.27 | | 0 |
| | 25 | 25 | 11.26 | 11.33 | 11.30 | | 0 |
| | 50 | 0 | 11.24 | 11.25 | 11.29 | | 0 |
| 64QAM | 1 | 0 | 11.69 | 11.32 | 11.59 | 0-2 | 0 |
| | 1 | 25 | 11.71 | 11.71 | 11.67 | | 0 |
| | 1 | 49 | 11.47 | 11.36 | 11.72 | | 0 |
| | 25 | 0 | 11.20 | 11.38 | 11.26 | 0-3 | 0 |
| | 25 | 12 | 11.23 | 11.31 | 11.29 | | 0 |
| | 25 | 25 | 11.24 | 11.29 | 11.30 | | 0 |
| | 50 | 0 | 11.22 | 11.25 | 11.29 | | 0 |

## Table 8-86
## LTE Band 4 Conducted Powers Ant 2a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19975 (1712.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20375 (1752.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.06 | 11.43 | 11.51 | 0 | 0 |
| | 1 | 12 | 11.06 | 11.42 | 11.61 | | 0 |
| | 1 | 24 | 11.08 | 11.43 | 11.37 | | 0 |
| | 12 | 0 | 11.15 | 11.48 | 11.48 | 0-1 | 0 |
| | 12 | 6 | 11.19 | 11.44 | 11.56 | | 0 |
| | 12 | 13 | 11.18 | 11.47 | 11.59 | | 0 |
| | 25 | 0 | 11.09 | 11.70 | 11.51 | | 0 |
| 16QAM | 1 | 0 | 11.25 | 11.64 | 11.48 | 0-1 | 0 |
| | 1 | 12 | 11.32 | 11.75 | 11.71 | | 0 |
| | 1 | 24 | 11.24 | 11.54 | 11.69 | | 0 |
| | 12 | 0 | 11.11 | 11.31 | 11.64 | 0-2 | 0 |
| | 12 | 6 | 11.16 | 11.28 | 11.66 | | 0 |
| | 12 | 13 | 11.09 | 11.34 | 11.51 | | 0 |
| | 25 | 0 | 11.17 | 11.28 | 11.52 | | 0 |
| 64QAM | 1 | 0 | 11.10 | 11.47 | 11.47 | 0-2 | 0 |
| | 1 | 12 | 11.27 | 11.57 | 11.61 | | 0 |
| | 1 | 24 | 11.10 | 11.55 | 11.69 | | 0 |
| | 12 | 0 | 11.14 | 11.43 | 11.67 | 0-3 | 0 |
| | 12 | 6 | 11.12 | 11.31 | 11.52 | | 0 |
| | 12 | 13 | 11.14 | 11.29 | 11.63 | | 0 |
| | 25 | 0 | 11.52 | 11.22 | 11.38 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-87
## LTE Band 4 Conducted Powers Ant 2a - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19965 (1711.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20385 (1753.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.06 | 11.31 | 11.13 | 0 | 0 |
| | 1 | 7 | 11.19 | 11.32 | 11.12 | | 0 |
| | 1 | 14 | 11.30 | 11.01 | 11.06 | | 0 |
| | 8 | 0 | 11.19 | 11.52 | 11.23 | 0-1 | 0 |
| | 8 | 4 | 11.27 | 11.46 | 11.25 | | 0 |
| | 8 | 7 | 11.28 | 11.34 | 11.25 | | 0 |
| | 15 | 0 | 11.23 | 11.42 | 11.20 | | 0 |
| 16QAM | 1 | 0 | 11.36 | 11.60 | 11.37 | 0-1 | 0 |
| | 1 | 7 | 11.55 | 11.63 | 11.60 | | 0 |
| | 1 | 14 | 11.70 | 11.24 | 11.46 | | 0 |
| | 8 | 0 | 11.22 | 11.35 | 11.26 | 0-2 | 0 |
| | 8 | 4 | 11.29 | 11.28 | 11.29 | | 0 |
| | 8 | 7 | 11.29 | 11.33 | 11.28 | | 0 |
| | 15 | 0 | 11.25 | 11.22 | 11.24 | | 0 |
| 64QAM | 1 | 0 | 11.44 | 11.35 | 11.31 | 0-2 | 0 |
| | 1 | 7 | 11.60 | 11.56 | 11.56 | | 0 |
| | 1 | 14 | 11.49 | 11.40 | 11.63 | | 0 |
| | 8 | 0 | 11.21 | 11.34 | 11.25 | 0-3 | 0 |
| | 8 | 4 | 11.30 | 11.38 | 11.28 | | 0 |
| | 8 | 7 | 11.32 | 11.27 | 11.26 | | 0 |
| | 15 | 0 | 11.26 | 11.23 | 11.25 | | 0 |

## Table 8-88
## LTE Band 4 Conducted Powers Ant 2a - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19957 (1710.7 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20393 (1754.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.22 | 11.49 | 11.20 | 0 | 0 |
| | 1 | 2 | 11.21 | 11.41 | 11.22 | | 0 |
| | 1 | 5 | 11.31 | 11.26 | 11.20 | | 0 |
| | 3 | 0 | 11.20 | 11.63 | 11.23 | | 0 |
| | 3 | 2 | 11.20 | 11.51 | 11.27 | | 0 |
| | 3 | 3 | 11.25 | 11.48 | 11.28 | | 0 |
| | 6 | 0 | 11.21 | 11.52 | 11.27 | 0-1 | 0 |
| 16QAM | 1 | 0 | 11.62 | 11.50 | 11.62 | 0-1 | 0 |
| | 1 | 2 | 11.45 | 11.66 | 11.59 | | 0 |
| | 1 | 5 | 11.70 | 11.53 | 11.56 | | 0 |
| | 3 | 0 | 11.22 | 11.43 | 11.25 | | 0 |
| | 3 | 2 | 11.18 | 11.32 | 11.27 | | 0 |
| | 3 | 3 | 11.26 | 11.33 | 11.30 | | 0 |
| | 6 | 0 | 11.24 | 11.28 | 11.29 | 0-2 | 0 |
| 64QAM | 1 | 0 | 11.69 | 11.43 | 11.59 | 0-2 | 0 |
| | 1 | 2 | 11.71 | 11.71 | 11.67 | | 0 |
| | 1 | 5 | 11.47 | 11.46 | 11.72 | | 0 |
| | 3 | 0 | 11.20 | 11.38 | 11.26 | | 0 |
| | 3 | 2 | 11.23 | 11.31 | 11.29 | | 0 |
| | 3 | 3 | 11.24 | 11.29 | 11.30 | | 0 |
| | 6 | 0 | 11.22 | 11.34 | 11.29 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-89
## LTE Band 4 Conducted Powers Ant 2b - 20 MHz Bandwidth

| LTE Band 4 (AWS) 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20175 (1732.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 13.98 | 0 | 0 |
| | 1 | 50 | **14.30** | | 0 |
| | 1 | 99 | 14.15 | | 0 |
| | 50 | 0 | **14.31** | 0-1 | 0 |
| | 50 | 25 | 14.30 | | 0 |
| | 50 | 50 | 14.17 | | 0 |
| | 100 | 0 | 14.29 | | 0 |
| 16QAM | 1 | 0 | 14.30 | 0-1 | 0 |
| | 1 | 50 | 14.47 | | 0 |
| | 1 | 99 | 14.35 | | 0 |
| | 50 | 0 | 14.55 | 0-2 | 0 |
| | 50 | 25 | 14.50 | | 0 |
| | 50 | 50 | 14.24 | | 0 |
| | 100 | 0 | 14.32 | | 0 |
| 64QAM | 1 | 0 | 14.37 | 0-2 | 0 |
| | 1 | 50 | 14.52 | | 0 |
| | 1 | 99 | 14.31 | | 0 |
| | 50 | 0 | 14.52 | 0-3 | 0 |
| | 50 | 25 | 14.50 | | 0 |
| | 50 | 50 | 14.41 | | 0 |
| | 100 | 0 | 14.45 | | 0 |

**Note: LTE Band 4 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-90
## LTE Band 4 Conducted Powers Ant 2b - 15 MHz Bandwidth

| LTE Band 4 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20025 (1717.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20325 (1747.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.91 | 14.33 | 14.18 | 0 | 0 |
| | 1 | 36 | 13.94 | 14.55 | 13.93 | | 0 |
| | 1 | 74 | 13.96 | 14.25 | 13.94 | | 0 |
| | 36 | 0 | 13.95 | 14.48 | 13.98 | 0-1 | 0 |
| | 36 | 18 | 14.02 | 14.46 | 14.02 | | 0 |
| | 36 | 37 | 14.05 | 14.32 | 13.94 | | 0 |
| | 75 | 0 | 13.99 | 14.44 | 13.98 | | 0 |
| 16QAM | 1 | 0 | 14.30 | 14.51 | 14.57 | 0-1 | 0 |
| | 1 | 36 | 14.23 | 14.53 | 14.38 | | 0 |
| | 1 | 74 | 14.20 | 14.41 | 14.18 | | 0 |
| | 36 | 0 | 13.92 | 14.56 | 14.08 | 0-2 | 0 |
| | 36 | 18 | 14.08 | 14.51 | 14.10 | | 0 |
| | 36 | 37 | 14.11 | 14.35 | 14.04 | | 0 |
| | 75 | 0 | 14.05 | 14.46 | 14.08 | | 0 |
| 64QAM | 1 | 0 | 14.27 | 14.32 | 14.43 | 0-2 | 0 |
| | 1 | 36 | 14.25 | 14.54 | 14.22 | | 0 |
| | 1 | 74 | 14.19 | 14.34 | 14.04 | | 0 |
| | 36 | 0 | 13.93 | 14.52 | 14.08 | 0-3 | 0 |
| | 36 | 18 | 14.08 | 14.48 | 14.17 | | 0 |
| | 36 | 37 | 14.09 | 14.34 | 14.08 | | 0 |
| | 75 | 0 | 14.06 | 14.45 | 14.06 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-91
## LTE Band 4 Conducted Powers Ant 2b - 10 MHz Bandwidth

| LTE Band 4 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20000 (1715.0 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20350 (1750.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.05 | 14.43 | 13.98 | 0 | 0 |
| | 1 | 25 | 13.91 | 14.35 | 13.96 | | 0 |
| | 1 | 49 | 14.03 | 14.12 | 13.93 | | 0 |
| | 25 | 0 | 14.01 | 14.50 | 14.12 | 0-1 | 0 |
| | 25 | 12 | 13.99 | 14.41 | 14.07 | | 0 |
| | 25 | 25 | 14.04 | 14.31 | 13.96 | | 0 |
| | 50 | 0 | 13.99 | 14.41 | 14.06 | | 0 |
| 16QAM | 1 | 0 | 14.35 | 14.48 | 14.28 | 0-1 | 0 |
| | 1 | 25 | 14.20 | 14.37 | 14.31 | | 0 |
| | 1 | 49 | 14.31 | 14.34 | 14.02 | | 0 |
| | 25 | 0 | 13.95 | 14.44 | 14.06 | 0-2 | 0 |
| | 25 | 12 | 13.92 | 14.37 | 14.00 | | 0 |
| | 25 | 25 | 13.99 | 14.25 | 13.95 | | 0 |
| | 50 | 0 | 13.97 | 14.37 | 14.04 | | 0 |
| 64QAM | 1 | 0 | 14.25 | 14.50 | 14.11 | 0-2 | 0 |
| | 1 | 25 | 14.09 | 14.56 | 14.12 | | 0 |
| | 1 | 49 | 14.24 | 14.47 | 14.16 | | 0 |
| | 25 | 0 | 13.94 | 14.47 | 14.06 | 0-3 | 0 |
| | 25 | 12 | 13.94 | 14.39 | 14.04 | | 0 |
| | 25 | 25 | 14.02 | 14.28 | 13.96 | | 0 |
| | 50 | 0 | 13.98 | 14.37 | 14.05 | | 0 |

## Table 8-92
## LTE Band 4 Conducted Powers Ant 2b - 5 MHz Bandwidth

| LTE Band 4 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19975 (1712.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20375 (1752.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.04 | 14.36 | 14.02 | 0 | 0 |
| | 1 | 12 | 13.95 | 14.29 | 13.90 | | 0 |
| | 1 | 24 | 13.98 | 14.26 | 13.90 | | 0 |
| | 12 | 0 | 14.03 | 14.36 | 13.93 | 0-1 | 0 |
| | 12 | 6 | 13.95 | 14.35 | 14.04 | | 0 |
| | 12 | 13 | 13.97 | 14.31 | 14.02 | | 0 |
| | 25 | 0 | 13.94 | 14.36 | 14.05 | | 0 |
| 16QAM | 1 | 0 | 14.12 | 14.51 | 14.21 | 0-1 | 0 |
| | 1 | 12 | 14.14 | 14.55 | 14.07 | | 0 |
| | 1 | 24 | 14.01 | 14.47 | 14.12 | | 0 |
| | 12 | 0 | 14.16 | 14.39 | 14.04 | 0-2 | 0 |
| | 12 | 6 | 14.00 | 14.40 | 13.90 | | 0 |
| | 12 | 13 | 13.95 | 14.38 | 13.95 | | 0 |
| | 25 | 0 | 14.01 | 14.40 | 13.92 | | 0 |
| 64QAM | 1 | 0 | 14.27 | 14.51 | 14.19 | 0-2 | 0 |
| | 1 | 12 | 14.11 | 14.37 | 13.96 | | 0 |
| | 1 | 24 | 13.90 | 14.44 | 14.13 | | 0 |
| | 12 | 0 | 14.07 | 14.36 | 14.03 | 0-3 | 0 |
| | 12 | 6 | 14.00 | 14.36 | 13.91 | | 0 |
| | 12 | 13 | 13.97 | 14.28 | 13.90 | | 0 |
| | 25 | 0 | 14.06 | 14.38 | 13.90 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-93
## LTE Band 4 Conducted Powers Ant 2b - 3 MHz Bandwidth

| LTE Band 4 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19965 (1711.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20385 (1753.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.97 | 14.23 | 13.93 | 0 | 0 |
| | 1 | 7 | 13.94 | 14.30 | 13.98 | | 0 |
| | 1 | 14 | 13.91 | 14.18 | 13.92 | | 0 |
| | 8 | 0 | 14.09 | 14.34 | 14.08 | 0-1 | 0 |
| | 8 | 4 | 13.98 | 14.33 | 14.05 | | 0 |
| | 8 | 7 | 14.00 | 14.31 | 14.05 | | 0 |
| | 15 | 0 | 14.02 | 14.36 | 14.08 | | 0 |
| 16QAM | 1 | 0 | 14.30 | 14.40 | 14.06 | 0-1 | 0 |
| | 1 | 7 | 14.32 | 14.35 | 13.91 | | 0 |
| | 1 | 14 | 14.18 | 14.44 | 14.06 | | 0 |
| | 8 | 0 | 14.08 | 14.37 | 13.93 | 0-2 | 0 |
| | 8 | 4 | 14.01 | 14.37 | 13.92 | | 0 |
| | 8 | 7 | 13.95 | 14.38 | 13.96 | | 0 |
| | 15 | 0 | 13.97 | 14.38 | 13.95 | | 0 |
| 64QAM | 1 | 0 | 14.22 | 14.53 | 14.04 | 0-2 | 0 |
| | 1 | 7 | 14.21 | 14.52 | 14.01 | | 0 |
| | 1 | 14 | 14.05 | 14.40 | 13.97 | | 0 |
| | 8 | 0 | 14.08 | 14.35 | 13.94 | 0-3 | 0 |
| | 8 | 4 | 13.97 | 14.36 | 13.92 | | 0 |
| | 8 | 7 | 13.98 | 14.39 | 13.90 | | 0 |
| | 15 | 0 | 13.99 | 14.38 | 13.92 | | 0 |

## Table 8-94
## LTE Band 4 Conducted Powers Ant 2b - 1.4 MHz Bandwidth

| LTE Band 4 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19957 (1710.7 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20393 (1754.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.98 | 14.28 | 13.92 | 0 | 0 |
| | 1 | 2 | 13.96 | 14.27 | 13.90 | | 0 |
| | 1 | 5 | 13.97 | 14.29 | 13.92 | | 0 |
| | 3 | 0 | 14.04 | 14.32 | 14.00 | | 0 |
| | 3 | 2 | 14.05 | 14.32 | 13.96 | | 0 |
| | 3 | 3 | 14.04 | 14.30 | 13.96 | | 0 |
| | 6 | 0 | 14.03 | 14.32 | 13.97 | 0-1 | 0 |
| 16QAM | 1 | 0 | 14.25 | 14.54 | 14.08 | 0-1 | 0 |
| | 1 | 2 | 14.23 | 14.41 | 13.92 | | 0 |
| | 1 | 5 | 14.09 | 14.55 | 14.05 | | 0 |
| | 3 | 0 | 14.08 | 14.47 | 13.93 | | 0 |
| | 3 | 2 | 14.10 | 14.44 | 13.93 | | 0 |
| | 3 | 3 | 14.11 | 14.43 | 13.91 | | 0 |
| | 6 | 0 | 14.08 | 14.40 | 13.95 | 0-2 | 0 |
| 64QAM | 1 | 0 | 14.14 | 14.54 | 13.93 | 0-2 | 0 |
| | 1 | 2 | 14.21 | 14.56 | 13.97 | | 0 |
| | 1 | 5 | 14.23 | 14.51 | 14.13 | | 0 |
| | 3 | 0 | 14.05 | 14.42 | 14.10 | | 0 |
| | 3 | 2 | 14.08 | 14.48 | 14.10 | | 0 |
| | 3 | 3 | 14.13 | 14.40 | 14.05 | | 0 |
| | 6 | 0 | 14.06 | 14.42 | 13.92 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-95
## LTE Band 4 Conducted Powers Ant 2b - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20175 (1732.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 11.22 | 0 | 0 |
| | 1 | 50 | **11.41** | | 0 |
| | 1 | 99 | 11.06 | | 0 |
| | 50 | 0 | **11.54** | 0-1 | 0 |
| | 50 | 25 | 11.36 | | 0 |
| | 50 | 50 | 11.25 | | 0 |
| | 100 | 0 | 11.33 | | 0 |
| 16QAM | 1 | 0 | 11.34 | 0-1 | 0 |
| | 1 | 50 | 11.47 | | 0 |
| | 1 | 99 | 11.13 | | 0 |
| | 50 | 0 | 11.29 | 0-2 | 0 |
| | 50 | 25 | 11.11 | | 0 |
| | 50 | 50 | 11.00 | | 0 |
| | 100 | 0 | 11.07 | | 0 |
| 64QAM | 1 | 0 | 11.13 | 0-2 | 0 |
| | 1 | 50 | 11.24 | | 0 |
| | 1 | 99 | 10.99 | | 0 |
| | 50 | 0 | 11.30 | 0-3 | 0 |
| | 50 | 25 | 11.09 | | 0 |
| | 50 | 50 | 11.01 | | 0 |
| | 100 | 0 | 11.07 | | 0 |

**Note: LTE Band 4 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-96
## LTE Band 4 Conducted Powers Ant 2b - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20025 (1717.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20325 (1747.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.91 | 10.98 | 11.07 | 0 | 0 |
| | 1 | 36 | 10.92 | 11.13 | 10.92 | | 0 |
| | 1 | 74 | 10.95 | 10.99 | 10.95 | | 0 |
| | 36 | 0 | 11.09 | 11.36 | 10.96 | 0-1 | 0 |
| | 36 | 18 | 11.09 | 11.23 | 10.97 | | 0 |
| | 36 | 37 | 10.95 | 11.17 | 10.97 | | 0 |
| | 75 | 0 | 11.06 | 11.19 | 10.90 | | 0 |
| 16QAM | 1 | 0 | 11.22 | 11.38 | 11.40 | 0-1 | 0 |
| | 1 | 36 | 11.19 | 11.57 | 11.22 | | 0 |
| | 1 | 74 | 11.08 | 11.32 | 11.24 | | 0 |
| | 36 | 0 | 11.11 | 11.36 | 10.99 | 0-2 | 0 |
| | 36 | 18 | 11.10 | 11.22 | 10.96 | | 0 |
| | 36 | 37 | 10.98 | 11.17 | 10.96 | | 0 |
| | 75 | 0 | 11.08 | 11.21 | 10.91 | | 0 |
| 64QAM | 1 | 0 | 11.10 | 11.29 | 11.44 | 0-2 | 0 |
| | 1 | 36 | 11.35 | 11.35 | 11.28 | | 0 |
| | 1 | 74 | 11.15 | 11.60 | 11.04 | | 0 |
| | 36 | 0 | 11.09 | 11.40 | 10.95 | 0-3 | 0 |
| | 36 | 18 | 11.14 | 11.28 | 10.97 | | 0 |
| | 36 | 37 | 11.04 | 11.21 | 10.97 | | 0 |
| | 75 | 0 | 11.09 | 11.22 | 10.90 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-97
## LTE Band 4 Conducted Powers Ant 2b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20000 (1715.0 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20350 (1750.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.03 | 11.21 | 10.91 | 0 | 0 |
| | 1 | 25 | 11.07 | 11.04 | 10.93 | | 0 |
| | 1 | 49 | 11.00 | 10.97 | 10.95 | | 0 |
| | 25 | 0 | 10.99 | 11.30 | 10.95 | 0-1 | 0 |
| | 25 | 12 | 11.04 | 11.17 | 10.98 | | 0 |
| | 25 | 25 | 11.02 | 11.15 | 11.03 | | 0 |
| | 50 | 0 | 11.06 | 11.16 | 10.99 | | 0 |
| 16QAM | 1 | 0 | 11.42 | 11.40 | 11.43 | 0-1 | 0 |
| | 1 | 25 | 11.47 | 11.67 | 11.51 | | 0 |
| | 1 | 49 | 11.32 | 11.46 | 11.52 | | 0 |
| | 25 | 0 | 10.99 | 11.30 | 11.00 | 0-2 | 0 |
| | 25 | 12 | 11.04 | 11.15 | 10.99 | | 0 |
| | 25 | 25 | 11.04 | 11.13 | 11.05 | | 0 |
| | 50 | 0 | 11.08 | 11.17 | 10.99 | | 0 |
| 64QAM | 1 | 0 | 11.45 | 11.58 | 11.37 | 0-2 | 0 |
| | 1 | 25 | 11.48 | 11.69 | 11.42 | | 0 |
| | 1 | 49 | 11.37 | 11.14 | 11.42 | | 0 |
| | 25 | 0 | 10.98 | 11.31 | 10.99 | 0-3 | 0 |
| | 25 | 12 | 11.09 | 11.19 | 11.03 | | 0 |
| | 25 | 25 | 11.05 | 11.14 | 11.06 | | 0 |
| | 50 | 0 | 11.08 | 11.20 | 10.99 | | 0 |

## Table 8-98
## LTE Band 4 Conducted Powers Ant 2b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19975 (1712.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20375 (1752.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.92 | 11.16 | 10.91 | 0 | 0 |
| | 1 | 12 | 10.95 | 11.06 | 10.92 | | 0 |
| | 1 | 24 | 11.02 | 10.98 | 10.92 | | 0 |
| | 12 | 0 | 10.96 | 11.26 | 11.00 | 0-1 | 0 |
| | 12 | 6 | 10.95 | 11.18 | 11.00 | | 0 |
| | 12 | 13 | 11.01 | 11.12 | 10.99 | | 0 |
| | 25 | 0 | 10.98 | 11.17 | 11.00 | | 0 |
| 16QAM | 1 | 0 | 11.06 | 11.54 | 11.01 | 0-1 | 0 |
| | 1 | 12 | 11.11 | 11.39 | 11.02 | | 0 |
| | 1 | 24 | 11.26 | 11.48 | 11.21 | | 0 |
| | 12 | 0 | 11.02 | 11.33 | 11.02 | 0-2 | 0 |
| | 12 | 6 | 10.99 | 11.27 | 11.09 | | 0 |
| | 12 | 13 | 11.05 | 11.21 | 11.04 | | 0 |
| | 25 | 0 | 10.97 | 11.23 | 11.06 | | 0 |
| 64QAM | 1 | 0 | 11.07 | 11.44 | 11.22 | 0-2 | 0 |
| | 1 | 12 | 11.17 | 11.37 | 11.27 | | 0 |
| | 1 | 24 | 11.24 | 11.41 | 11.25 | | 0 |
| | 12 | 0 | 11.00 | 11.31 | 11.02 | 0-3 | 0 |
| | 12 | 6 | 11.03 | 11.25 | 11.04 | | 0 |
| | 12 | 13 | 11.07 | 11.23 | 11.05 | | 0 |
| | 25 | 0 | 10.90 | 11.24 | 10.98 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-99
## LTE Band 4 Conducted Powers Ant 2b - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19965 (1711.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20385 (1753.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.91 | 11.12 | 10.95 | 0 | 0 |
| | 1 | 7 | 10.98 | 11.02 | 10.94 | | 0 |
| | 1 | 14 | 10.90 | 10.94 | 10.91 | | 0 |
| | 8 | 0 | 10.95 | 11.22 | 11.02 | 0-1 | 0 |
| | 8 | 4 | 10.93 | 11.14 | 11.02 | | 0 |
| | 8 | 7 | 10.99 | 11.08 | 11.01 | | 0 |
| | 15 | 0 | 10.97 | 11.13 | 11.02 | | 0 |
| 16QAM | 1 | 0 | 10.94 | 11.50 | 10.99 | 0-1 | 0 |
| | 1 | 7 | 10.99 | 11.34 | 11.00 | | 0 |
| | 1 | 14 | 11.14 | 11.43 | 11.19 | | 0 |
| | 8 | 0 | 10.92 | 11.28 | 11.00 | 0-2 | 0 |
| | 8 | 4 | 10.94 | 11.22 | 11.07 | | 0 |
| | 8 | 7 | 10.92 | 11.16 | 11.02 | | 0 |
| | 15 | 0 | 10.99 | 11.18 | 11.04 | | 0 |
| 64QAM | 1 | 0 | 10.94 | 11.39 | 11.20 | 0-2 | 0 |
| | 1 | 7 | 11.04 | 11.31 | 11.25 | | 0 |
| | 1 | 14 | 11.11 | 11.35 | 11.23 | | 0 |
| | 8 | 0 | 10.94 | 11.25 | 11.00 | 0-3 | 0 |
| | 8 | 4 | 10.90 | 11.19 | 11.02 | | 0 |
| | 8 | 7 | 10.94 | 11.17 | 11.03 | | 0 |
| | 15 | 0 | 10.91 | 11.18 | 10.96 | | 0 |

## Table 8-100
## LTE Band 4 Conducted Powers Ant 2b - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19957 (1710.7 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20393 (1754.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.91 | 11.02 | 10.91 | 0 | 0 |
| | 1 | 2 | 10.92 | 10.92 | 10.92 | | 0 |
| | 1 | 5 | 10.98 | 10.94 | 10.94 | | 0 |
| | 3 | 0 | 10.90 | 11.12 | 11.00 | | 0 |
| | 3 | 2 | 10.91 | 11.04 | 11.00 | | 0 |
| | 3 | 3 | 10.97 | 10.98 | 10.99 | | 0 |
| | 6 | 0 | 10.94 | 11.03 | 11.00 | 0-1 | 0 |
| 16QAM | 1 | 0 | 10.92 | 11.42 | 10.97 | 0-1 | 0 |
| | 1 | 2 | 10.97 | 11.26 | 10.98 | | 0 |
| | 1 | 5 | 11.16 | 11.35 | 11.17 | | 0 |
| | 3 | 0 | 10.91 | 11.20 | 10.94 | | 0 |
| | 3 | 2 | 10.98 | 11.14 | 11.01 | | 0 |
| | 3 | 3 | 10.94 | 11.08 | 10.96 | | 0 |
| | 6 | 0 | 10.96 | 11.10 | 10.98 | 0-2 | 0 |
| 64QAM | 1 | 0 | 10.96 | 11.31 | 11.14 | 0-2 | 0 |
| | 1 | 2 | 11.06 | 11.23 | 11.19 | | 0 |
| | 1 | 5 | 11.13 | 11.27 | 11.17 | | 0 |
| | 3 | 0 | 10.95 | 11.22 | 10.94 | | 0 |
| | 3 | 2 | 10.92 | 11.16 | 10.96 | | 0 |
| | 3 | 3 | 10.96 | 11.14 | 10.97 | | 0 |
| | 6 | 0 | 10.96 | 11.15 | 10.90 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-101
## LTE Band 4 Conducted Powers Ant 4a - 20 MHz Bandwidth

| LTE Band 4 (AWS) 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20175 (1732.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 14.28 | 0 | 0 |
| | 1 | 50 | **14.37** | | 0 |
| | 1 | 99 | 14.15 | | 0 |
| | 50 | 0 | 14.45 | 0-1 | 0 |
| | 50 | 25 | **14.47** | | 0 |
| | 50 | 50 | 14.39 | | 0 |
| | 100 | 0 | 14.36 | | 0 |
| 16QAM | 1 | 0 | 14.31 | 0-1 | 0 |
| | 1 | 50 | 14.32 | | 0 |
| | 1 | 99 | 14.33 | | 0 |
| | 50 | 0 | 14.18 | 0-2 | 0 |
| | 50 | 25 | 14.17 | | 0 |
| | 50 | 50 | 14.16 | | 0 |
| | 100 | 0 | 14.18 | | 0 |
| 64QAM | 1 | 0 | 14.45 | 0-2 | 0 |
| | 1 | 50 | 14.41 | | 0 |
| | 1 | 99 | 14.27 | | 0 |
| | 50 | 0 | 14.16 | 0-3 | 0 |
| | 50 | 25 | 14.15 | | 0 |
| | 50 | 50 | 14.12 | | 0 |
| | 100 | 0 | 14.14 | | 0 |

**Note: LTE Band 4 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-102
## LTE Band 4 Conducted Powers Ant 4a - 15 MHz Bandwidth

| LTE Band 4 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20025 (1717.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20325 (1747.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.93 | 14.00 | 13.91 | 0 | 0 |
| | 1 | 36 | 14.00 | 14.06 | 13.82 | | 0 |
| | 1 | 74 | 13.89 | 14.00 | 13.84 | | 0 |
| | 36 | 0 | 14.00 | 14.15 | 13.91 | 0-1 | 0 |
| | 36 | 18 | 14.11 | 14.16 | 13.94 | | 0 |
| | 36 | 37 | 14.08 | 14.10 | 13.93 | | 0 |
| | 75 | 0 | 14.08 | 14.12 | 13.88 | | 0 |
| 16QAM | 1 | 0 | 14.00 | 13.89 | 14.06 | 0-1 | 0 |
| | 1 | 36 | 14.13 | 14.11 | 14.09 | | 0 |
| | 1 | 74 | 13.81 | 13.90 | 13.92 | | 0 |
| | 36 | 0 | 13.78 | 13.84 | 13.79 | 0-2 | 0 |
| | 36 | 18 | 13.88 | 13.91 | 13.84 | | 0 |
| | 36 | 37 | 13.84 | 13.85 | 13.79 | | 0 |
| | 75 | 0 | 13.83 | 13.83 | 13.77 | | 0 |
| 64QAM | 1 | 0 | 13.87 | 14.01 | 14.00 | 0-2 | 0 |
| | 1 | 36 | 14.00 | 14.11 | 14.07 | | 0 |
| | 1 | 74 | 13.87 | 14.10 | 13.86 | | 0 |
| | 36 | 0 | 13.78 | 13.88 | 13.62 | 0-3 | 0 |
| | 36 | 18 | 13.81 | 13.91 | 13.66 | | 0 |
| | 36 | 37 | 13.81 | 13.91 | 13.69 | | 0 |
| | 75 | 0 | 13.75 | 13.84 | 13.57 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-103
## LTE Band 4 Conducted Powers Ant 4a - 10 MHz Bandwidth

| LTE Band 4 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20000 (1715.0 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20350 (1750.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.96 | 14.02 | 13.86 | 0 | 0 |
| | 1 | 25 | 13.84 | 13.95 | 13.85 | | 0 |
| | 1 | 49 | 13.97 | 13.90 | 13.90 | | 0 |
| | 25 | 0 | 14.02 | 14.07 | 13.93 | 0-1 | 0 |
| | 25 | 12 | 13.92 | 14.05 | 13.93 | | 0 |
| | 25 | 25 | 14.01 | 14.05 | 13.98 | | 0 |
| | 50 | 0 | 13.91 | 14.05 | 13.93 | | 0 |
| 16QAM | 1 | 0 | 13.89 | 13.91 | 14.00 | 0-1 | 0 |
| | 1 | 25 | 13.75 | 13.95 | 13.95 | | 0 |
| | 1 | 49 | 13.81 | 14.06 | 13.96 | | 0 |
| | 25 | 0 | 13.74 | 13.81 | 13.78 | 0-2 | 0 |
| | 25 | 12 | 13.66 | 13.81 | 13.82 | | 0 |
| | 25 | 25 | 13.73 | 13.84 | 13.85 | | 0 |
| | 50 | 0 | 13.65 | 13.86 | 13.77 | | 0 |
| 64QAM | 1 | 0 | 13.88 | 14.06 | 14.20 | 0-2 | 0 |
| | 1 | 25 | 13.81 | 13.99 | 14.48 | | 0 |
| | 1 | 49 | 14.10 | 14.10 | 14.20 | | 0 |
| | 25 | 0 | 13.75 | 13.87 | 13.76 | 0-3 | 0 |
| | 25 | 12 | 13.74 | 13.83 | 13.78 | | 0 |
| | 25 | 25 | 13.74 | 13.83 | 13.87 | | 0 |
| | 50 | 0 | 13.72 | 13.85 | 13.78 | | 0 |

## Table 8-104
## LTE Band 4 Conducted Powers Ant 4a - 5 MHz Bandwidth

| LTE Band 4 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19975 (1712.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20375 (1752.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.75 | 13.91 | 13.71 | 0 | 0 |
| | 1 | 12 | 13.67 | 13.88 | 13.77 | | 0 |
| | 1 | 24 | 13.74 | 13.87 | 13.89 | | 0 |
| | 12 | 0 | 13.93 | 14.00 | 13.92 | 0-1 | 0 |
| | 12 | 6 | 13.93 | 14.02 | 13.98 | | 0 |
| | 12 | 13 | 13.85 | 13.99 | 14.01 | | 0 |
| | 25 | 0 | 13.93 | 14.00 | 14.00 | | 0 |
| 16QAM | 1 | 0 | 14.03 | 13.93 | 13.92 | 0-1 | 0 |
| | 1 | 12 | 13.79 | 13.92 | 14.04 | | 0 |
| | 1 | 24 | 13.81 | 13.89 | 14.00 | | 0 |
| | 12 | 0 | 13.73 | 13.80 | 13.77 | 0-2 | 0 |
| | 12 | 6 | 13.72 | 13.71 | 13.87 | | 0 |
| | 12 | 13 | 13.65 | 13.74 | 13.83 | | 0 |
| | 25 | 0 | 13.69 | 13.74 | 13.85 | | 0 |
| 64QAM | 1 | 0 | 13.82 | 14.11 | 13.85 | 0-2 | 0 |
| | 1 | 12 | 13.77 | 13.90 | 13.91 | | 0 |
| | 1 | 24 | 13.63 | 13.82 | 13.80 | | 0 |
| | 12 | 0 | 13.69 | 13.78 | 13.71 | 0-3 | 0 |
| | 12 | 6 | 13.72 | 13.78 | 13.80 | | 0 |
| | 12 | 13 | 13.63 | 13.70 | 13.77 | | 0 |
| | 25 | 0 | 13.63 | 13.80 | 13.79 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-105
## LTE Band 4 Conducted Powers Ant 4a - 3 MHz Bandwidth

| LTE Band 4 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19965 (1711.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20385 (1753.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.78 | 13.85 | 13.86 | 0 | 0 |
| | 1 | 7 | 13.82 | 13.92 | 13.90 | | 0 |
| | 1 | 14 | 13.76 | 13.85 | 13.84 | | 0 |
| | 8 | 0 | 13.89 | 14.00 | 13.99 | 0-1 | 0 |
| | 8 | 4 | 13.90 | 14.00 | 13.97 | | 0 |
| | 8 | 7 | 13.90 | 14.01 | 13.97 | | 0 |
| | 15 | 0 | 13.92 | 14.01 | 14.01 | | 0 |
| 16QAM | 1 | 0 | 14.02 | 13.94 | 13.87 | 0-1 | 0 |
| | 1 | 7 | 13.76 | 13.91 | 13.99 | | 0 |
| | 1 | 14 | 14.03 | 13.88 | 13.97 | | 0 |
| | 8 | 0 | 13.78 | 13.85 | 13.84 | 0-2 | 0 |
| | 8 | 4 | 13.76 | 13.82 | 13.84 | | 0 |
| | 8 | 7 | 13.78 | 13.85 | 13.79 | | 0 |
| | 15 | 0 | 13.78 | 13.84 | 13.83 | | 0 |
| 64QAM | 1 | 0 | 14.05 | 14.07 | 13.87 | 0-2 | 0 |
| | 1 | 7 | 14.01 | 13.94 | 13.92 | | 0 |
| | 1 | 14 | 13.97 | 13.90 | 13.99 | | 0 |
| | 8 | 0 | 13.78 | 13.78 | 13.77 | 0-3 | 0 |
| | 8 | 4 | 13.77 | 13.76 | 13.77 | | 0 |
| | 8 | 7 | 13.76 | 13.78 | 13.77 | | 0 |
| | 15 | 0 | 13.77 | 13.83 | 13.84 | | 0 |

## Table 8-106
## LTE Band 4 Conducted Powers Ant 4a - 1.4 MHz Bandwidth

| LTE Band 4 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19957 (1710.7 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20393 (1754.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.91 | 14.06 | 14.01 | 0 | 0 |
| | 1 | 2 | 14.03 | 14.06 | 13.99 | | 0 |
| | 1 | 5 | 14.05 | 14.05 | 14.02 | | 0 |
| | 3 | 0 | 14.06 | 14.01 | 13.93 | | 0 |
| | 3 | 2 | 13.98 | 14.02 | 13.93 | | 0 |
| | 3 | 3 | 13.98 | 14.02 | 13.95 | | 0 |
| | 6 | 0 | 13.93 | 14.04 | 13.95 | 0-1 | 0 |
| 16QAM | 1 | 0 | 13.75 | 14.00 | 13.94 | 0-1 | 0 |
| | 1 | 2 | 13.76 | 13.92 | 13.85 | | 0 |
| | 1 | 5 | 13.83 | 14.10 | 13.97 | | 0 |
| | 3 | 0 | 13.83 | 13.93 | 13.90 | | 0 |
| | 3 | 2 | 13.76 | 13.84 | 13.84 | | 0 |
| | 3 | 3 | 13.70 | 13.91 | 13.86 | | 0 |
| | 6 | 0 | 13.70 | 13.90 | 13.83 | 0-2 | 0 |
| 64QAM | 1 | 0 | 13.96 | 13.90 | 14.09 | 0-2 | 0 |
| | 1 | 2 | 13.98 | 14.03 | 13.91 | | 0 |
| | 1 | 5 | 13.92 | 13.91 | 14.07 | | 0 |
| | 3 | 0 | 13.93 | 13.95 | 13.91 | | 0 |
| | 3 | 2 | 13.87 | 14.00 | 13.93 | | 0 |
| | 3 | 3 | 13.89 | 14.00 | 13.98 | | 0 |
| | 6 | 0 | 13.70 | 13.71 | 13.88 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-107
## LTE Band 4 Conducted Powers Ant 4a - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20175 (1732.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 11.35 | 0 | 0 |
| | 1 | 50 | **11.48** | | 0 |
| | 1 | 99 | 11.34 | | 0 |
| | 50 | 0 | 11.38 | 0-1 | 0 |
| | 50 | 25 | **11.39** | | 0 |
| | 50 | 50 | 11.38 | | 0 |
| | 100 | 0 | 11.38 | | 0 |
| 16QAM | 1 | 0 | 11.24 | 0-1 | 0 |
| | 1 | 50 | 11.32 | | 0 |
| | 1 | 99 | 11.12 | | 0 |
| | 50 | 0 | 11.01 | 0-2 | 0 |
| | 50 | 25 | 11.12 | | 0 |
| | 50 | 50 | 11.06 | | 0 |
| | 100 | 0 | 11.10 | | 0 |
| 64QAM | 1 | 0 | 10.92 | 0-2 | 0 |
| | 1 | 50 | 11.07 | | 0 |
| | 1 | 99 | 11.05 | | 0 |
| | 50 | 0 | 11.13 | 0-3 | 0 |
| | 50 | 25 | 11.11 | | 0 |
| | 50 | 50 | 11.09 | | 0 |
| | 100 | 0 | 11.01 | | 0 |

**Note: LTE Band 4 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-108
## LTE Band 4 Conducted Powers Ant 4a - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20025 (1717.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20325 (1747.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.75 | 10.87 | 10.85 | 0 | 0 |
| | 1 | 36 | 10.91 | 11.01 | 10.84 | | 0 |
| | 1 | 74 | 10.82 | 10.79 | 10.78 | | 0 |
| | 36 | 0 | 11.03 | 11.14 | 10.90 | 0-1 | 0 |
| | 36 | 18 | 11.06 | 11.16 | 10.95 | | 0 |
| | 36 | 37 | 11.02 | 11.07 | 10.92 | | 0 |
| | 75 | 0 | 11.03 | 11.14 | 10.96 | | 0 |
| 16QAM | 1 | 0 | 11.12 | 10.98 | 11.17 | 0-1 | 0 |
| | 1 | 36 | 11.17 | 11.50 | 11.25 | | 0 |
| | 1 | 74 | 11.16 | 11.28 | 11.20 | | 0 |
| | 36 | 0 | 10.93 | 11.15 | 10.93 | 0-2 | 0 |
| | 36 | 18 | 11.06 | 11.20 | 10.96 | | 0 |
| | 36 | 37 | 11.05 | 11.09 | 10.94 | | 0 |
| | 75 | 0 | 11.02 | 11.16 | 10.98 | | 0 |
| 64QAM | 1 | 0 | 11.06 | 11.39 | 11.01 | 0-2 | 0 |
| | 1 | 36 | 11.39 | 11.42 | 11.26 | | 0 |
| | 1 | 74 | 11.11 | 11.20 | 11.15 | | 0 |
| | 36 | 0 | 11.02 | 11.16 | 11.02 | 0-3 | 0 |
| | 36 | 18 | 11.04 | 11.18 | 11.04 | | 0 |
| | 36 | 37 | 11.04 | 11.09 | 11.09 | | 0 |
| | 75 | 0 | 11.00 | 11.15 | 11.05 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-109
## LTE Band 4 Conducted Powers Ant 4a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20000 (1715.0 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20350 (1750.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.78 | 11.06 | 10.97 | 0 | 0 |
| | 1 | 25 | 10.87 | 10.98 | 11.05 | | 0 |
| | 1 | 49 | 10.82 | 10.85 | 11.07 | | 0 |
| | 25 | 0 | 10.82 | 11.14 | 11.03 | 0-1 | 0 |
| | 25 | 12 | 10.82 | 11.10 | 11.08 | | 0 |
| | 25 | 25 | 10.80 | 11.08 | 11.07 | | 0 |
| | 50 | 0 | 10.81 | 11.10 | 11.07 | | 0 |
| 16QAM | 1 | 0 | 11.17 | 11.48 | 11.13 | 0-1 | 0 |
| | 1 | 25 | 11.33 | 11.44 | 11.35 | | 0 |
| | 1 | 49 | 11.22 | 11.42 | 11.45 | | 0 |
| | 25 | 0 | 10.83 | 11.16 | 11.04 | 0-2 | 0 |
| | 25 | 12 | 10.80 | 11.07 | 11.10 | | 0 |
| | 25 | 25 | 10.84 | 11.08 | 11.09 | | 0 |
| | 50 | 0 | 10.83 | 11.10 | 11.10 | | 0 |
| 64QAM | 1 | 0 | 10.98 | 11.32 | 11.20 | 0-2 | 0 |
| | 1 | 25 | 10.97 | 11.46 | 11.29 | | 0 |
| | 1 | 49 | 11.04 | 11.34 | 11.38 | | 0 |
| | 25 | 0 | 10.87 | 11.19 | 11.03 | 0-3 | 0 |
| | 25 | 12 | 10.86 | 11.17 | 10.96 | | 0 |
| | 25 | 25 | 10.85 | 11.11 | 10.92 | | 0 |
| | 50 | 0 | 10.95 | 11.05 | 11.04 | | 0 |

## Table 8-110
## LTE Band 4 Conducted Powers Ant 4a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19975 (1712.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20375 (1752.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.77 | 10.98 | 10.94 | 0 | 0 |
| | 1 | 12 | 10.86 | 10.92 | 10.92 | | 0 |
| | 1 | 24 | 10.84 | 10.95 | 10.94 | | 0 |
| | 12 | 0 | 10.80 | 11.06 | 11.02 | 0-1 | 0 |
| | 12 | 6 | 10.85 | 11.06 | 10.98 | | 0 |
| | 12 | 13 | 10.84 | 11.08 | 10.96 | | 0 |
| | 25 | 0 | 10.87 | 11.08 | 11.00 | | 0 |
| 16QAM | 1 | 0 | 10.92 | 11.45 | 11.12 | 0-1 | 0 |
| | 1 | 12 | 11.02 | 11.23 | 11.13 | | 0 |
| | 1 | 24 | 11.09 | 11.35 | 11.11 | | 0 |
| | 12 | 0 | 10.82 | 11.08 | 11.04 | 0-2 | 0 |
| | 12 | 6 | 10.91 | 11.12 | 11.04 | | 0 |
| | 12 | 13 | 10.88 | 11.13 | 11.08 | | 0 |
| | 25 | 0 | 10.93 | 11.11 | 11.00 | | 0 |
| 64QAM | 1 | 0 | 11.11 | 11.37 | 11.25 | 0-2 | 0 |
| | 1 | 12 | 11.31 | 11.46 | 11.43 | | 0 |
| | 1 | 24 | 11.21 | 11.15 | 11.45 | | 0 |
| | 12 | 0 | 10.77 | 11.10 | 11.03 | 0-3 | 0 |
| | 12 | 6 | 10.84 | 11.07 | 11.04 | | 0 |
| | 12 | 13 | 10.88 | 11.08 | 11.05 | | 0 |
| | 25 | 0 | 10.87 | 11.17 | 10.95 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-111
## LTE Band 4 Conducted Powers Ant 4a - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19965 (1711.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20385 (1753.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.66 | 10.99 | 10.98 | 0 | 0 |
| | 1 | 7 | 10.70 | 11.01 | 11.00 | | 0 |
| | 1 | 14 | 10.81 | 10.96 | 10.96 | | 0 |
| | 8 | 0 | 10.77 | 11.03 | 11.02 | 0-1 | 0 |
| | 8 | 4 | 10.75 | 11.02 | 11.00 | | 0 |
| | 8 | 7 | 10.79 | 11.03 | 11.01 | | 0 |
| | 15 | 0 | 10.78 | 11.03 | 11.02 | | 0 |
| 16QAM | 1 | 0 | 10.98 | 11.22 | 11.30 | 0-1 | 0 |
| | 1 | 7 | 10.96 | 11.24 | 11.33 | | 0 |
| | 1 | 14 | 10.97 | 11.20 | 11.25 | | 0 |
| | 8 | 0 | 10.97 | 11.00 | 11.07 | 0-2 | 0 |
| | 8 | 4 | 10.99 | 11.02 | 11.04 | | 0 |
| | 8 | 7 | 10.97 | 11.04 | 11.05 | | 0 |
| | 15 | 0 | 11.01 | 11.02 | 11.04 | | 0 |
| 64QAM | 1 | 0 | 10.74 | 11.17 | 11.20 | 0-2 | 0 |
| | 1 | 7 | 10.85 | 11.20 | 11.23 | | 0 |
| | 1 | 14 | 10.90 | 11.17 | 11.17 | | 0 |
| | 8 | 0 | 10.70 | 11.05 | 11.07 | 0-3 | 0 |
| | 8 | 4 | 10.68 | 11.04 | 11.06 | | 0 |
| | 8 | 7 | 10.73 | 11.05 | 11.07 | | 0 |
| | 15 | 0 | 10.73 | 11.04 | 11.06 | | 0 |

## Table 8-112
## LTE Band 4 Conducted Powers Ant 4a - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19957 (1710.7 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20393 (1754.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.65 | 11.01 | 11.01 | 0 | 0 |
| | 1 | 2 | 10.63 | 10.99 | 10.99 | | 0 |
| | 1 | 5 | 10.66 | 11.00 | 11.03 | | 0 |
| | 3 | 0 | 10.67 | 11.00 | 11.01 | | 0 |
| | 3 | 2 | 10.69 | 11.01 | 11.01 | | 0 |
| | 3 | 3 | 10.70 | 11.02 | 11.01 | | 0 |
| | 6 | 0 | 10.70 | 11.02 | 11.03 | 0-1 | 0 |
| 16QAM | 1 | 0 | 10.97 | 11.34 | 11.34 | 0-1 | 0 |
| | 1 | 2 | 10.96 | 11.27 | 11.36 | | 0 |
| | 1 | 5 | 10.94 | 11.31 | 11.37 | | 0 |
| | 3 | 0 | 10.75 | 11.07 | 11.15 | | 0 |
| | 3 | 2 | 10.78 | 11.07 | 11.15 | | 0 |
| | 3 | 3 | 10.78 | 11.06 | 11.15 | | 0 |
| | 6 | 0 | 10.77 | 11.05 | 11.10 | 0-2 | 0 |
| 64QAM | 1 | 0 | 10.89 | 11.23 | 11.19 | 0-2 | 0 |
| | 1 | 2 | 10.84 | 11.20 | 11.18 | | 0 |
| | 1 | 5 | 10.87 | 11.24 | 11.23 | | 0 |
| | 3 | 0 | 10.82 | 11.13 | 11.10 | | 0 |
| | 3 | 2 | 10.82 | 11.11 | 11.12 | | 0 |
| | 3 | 3 | 10.81 | 11.14 | 11.14 | | 0 |
| | 6 | 0 | 10.77 | 11.07 | 11.05 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-113
## LTE Band 4 Conducted Powers Ant 4b - 20 MHz Bandwidth

| LTE Band 4 (AWS) 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20175 (1732.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 13.59 | 0 | 0 |
| | 1 | 50 | 13.58 | | 0 |
| | 1 | 99 | **13.73** | | 0 |
| | 50 | 0 | **14.01** | 0-1 | 0 |
| | 50 | 25 | 13.89 | | 0 |
| | 50 | 50 | 13.82 | | 0 |
| | 100 | 0 | 13.72 | | 0 |
| 16QAM | 1 | 0 | 13.74 | 0-1 | 0 |
| | 1 | 50 | 13.82 | | 0 |
| | 1 | 99 | 13.93 | | 0 |
| | 50 | 0 | 13.78 | 0-2 | 0 |
| | 50 | 25 | 13.81 | | 0 |
| | 50 | 50 | 13.74 | | 0 |
| | 100 | 0 | 13.78 | | 0 |
| 64QAM | 1 | 0 | 13.81 | 0-2 | 0 |
| | 1 | 50 | 13.89 | | 0 |
| | 1 | 99 | 13.84 | | 0 |
| | 50 | 0 | 13.62 | 0-3 | 0 |
| | 50 | 25 | 13.61 | | 0 |
| | 50 | 50 | 13.50 | | 0 |
| | 100 | 0 | 13.59 | | 0 |

**Note: LTE Band 4 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-114
## LTE Band 4 Conducted Powers Ant 4b - 15 MHz Bandwidth

| LTE Band 4 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20025 (1717.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20325 (1747.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.85 | 13.81 | 13.64 | 0 | 0 |
| | 1 | 36 | 13.83 | 13.89 | 13.74 | | 0 |
| | 1 | 74 | 13.50 | 13.73 | 13.72 | | 0 |
| | 36 | 0 | 14.00 | 13.82 | 13.86 | 0-1 | 0 |
| | 36 | 18 | 13.91 | 13.83 | 13.86 | | 0 |
| | 36 | 37 | 13.74 | 13.72 | 13.80 | | 0 |
| | 75 | 0 | 13.88 | 13.80 | 13.83 | | 0 |
| 16QAM | 1 | 0 | 14.01 | 13.59 | 13.63 | 0-1 | 0 |
| | 1 | 36 | 13.79 | 13.73 | 13.82 | | 0 |
| | 1 | 74 | 13.58 | 13.52 | 13.71 | | 0 |
| | 36 | 0 | 13.73 | 13.50 | 13.58 | 0-2 | 0 |
| | 36 | 18 | 13.62 | 13.50 | 13.62 | | 0 |
| | 36 | 37 | 13.53 | 13.54 | 13.61 | | 0 |
| | 75 | 0 | 13.60 | 13.53 | 13.60 | | 0 |
| 64QAM | 1 | 0 | 13.98 | 13.53 | 13.53 | 0-2 | 0 |
| | 1 | 36 | 13.81 | 13.62 | 13.76 | | 0 |
| | 1 | 74 | 13.55 | 13.50 | 13.72 | | 0 |
| | 36 | 0 | 13.73 | 13.62 | 13.65 | 0-3 | 0 |
| | 36 | 18 | 13.68 | 13.62 | 13.68 | | 0 |
| | 36 | 37 | 13.56 | 13.54 | 13.62 | | 0 |
| | 75 | 0 | 13.59 | 13.54 | 13.60 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-115
## LTE Band 4 Conducted Powers Ant 4b - 10 MHz Bandwidth

| LTE Band 4 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20000 (1715.0 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20350 (1750.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.99 | 13.82 | 13.92 | 0 | 0 |
| | 1 | 25 | 13.89 | 13.76 | 13.86 | | 0 |
| | 1 | 49 | 13.82 | 13.68 | 13.90 | | 0 |
| | 25 | 0 | 14.00 | 13.86 | 13.97 | 0-1 | 0 |
| | 25 | 12 | 13.97 | 13.85 | 13.96 | | 0 |
| | 25 | 25 | 13.90 | 13.84 | 13.99 | | 0 |
| | 50 | 0 | 13.98 | 13.84 | 13.94 | | 0 |
| 16QAM | 1 | 0 | 13.72 | 13.81 | 13.77 | 0-1 | 0 |
| | 1 | 25 | 13.99 | 13.51 | 13.84 | | 0 |
| | 1 | 49 | 13.65 | 13.61 | 13.84 | | 0 |
| | 25 | 0 | 13.68 | 13.58 | 13.55 | 0-2 | 0 |
| | 25 | 12 | 13.60 | 13.54 | 13.54 | | 0 |
| | 25 | 25 | 13.53 | 13.57 | 13.59 | | 0 |
| | 50 | 0 | 13.61 | 13.56 | 13.52 | | 0 |
| 64QAM | 1 | 0 | 13.92 | 13.82 | 13.78 | 0-2 | 0 |
| | 1 | 25 | 13.68 | 13.65 | 13.62 | | 0 |
| | 1 | 49 | 13.72 | 13.54 | 13.67 | | 0 |
| | 25 | 0 | 13.69 | 13.59 | 13.58 | 0-3 | 0 |
| | 25 | 12 | 13.59 | 13.57 | 13.58 | | 0 |
| | 25 | 25 | 13.52 | 13.52 | 13.57 | | 0 |
| | 50 | 0 | 13.59 | 13.55 | 13.59 | | 0 |

## Table 8-116
## LTE Band 4 Conducted Powers Ant 4b - 5 MHz Bandwidth

| LTE Band 4 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19975 (1712.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20375 (1752.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.90 | 13.59 | 13.70 | 0 | 0 |
| | 1 | 12 | 13.86 | 13.58 | 13.76 | | 0 |
| | 1 | 24 | 13.77 | 13.59 | 13.83 | | 0 |
| | 12 | 0 | 13.99 | 13.63 | 13.76 | 0-1 | 0 |
| | 12 | 6 | 14.00 | 13.58 | 13.86 | | 0 |
| | 12 | 13 | 13.90 | 13.62 | 13.84 | | 0 |
| | 25 | 0 | 14.02 | 13.65 | 13.86 | | 0 |
| 16QAM | 1 | 0 | 13.99 | 13.57 | 13.70 | 0-1 | 0 |
| | 1 | 12 | 13.79 | 13.54 | 13.74 | | 0 |
| | 1 | 24 | 13.81 | 13.59 | 13.65 | | 0 |
| | 12 | 0 | 13.68 | 13.54 | 13.56 | 0-2 | 0 |
| | 12 | 6 | 13.74 | 13.59 | 13.58 | | 0 |
| | 12 | 13 | 13.61 | 13.50 | 13.56 | | 0 |
| | 25 | 0 | 13.72 | 13.50 | 13.59 | | 0 |
| 64QAM | 1 | 0 | 13.81 | 13.62 | 13.70 | 0-2 | 0 |
| | 1 | 12 | 13.64 | 13.58 | 13.54 | | 0 |
| | 1 | 24 | 13.82 | 13.75 | 13.59 | | 0 |
| | 12 | 0 | 13.71 | 13.50 | 13.53 | 0-3 | 0 |
| | 12 | 6 | 13.71 | 13.55 | 13.55 | | 0 |
| | 12 | 13 | 13.67 | 13.56 | 13.59 | | 0 |
| | 25 | 0 | 13.69 | 13.57 | 13.55 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-117
## LTE Band 4 Conducted Powers Ant 4b - 3 MHz Bandwidth

| LTE Band 4 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19965 (1711.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20385 (1753.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.77 | 13.59 | 13.72 | 0 | 0 |
| | 1 | 7 | 13.86 | 13.64 | 13.77 | | 0 |
| | 1 | 14 | 13.79 | 13.59 | 13.72 | | 0 |
| | 8 | 0 | 13.90 | 13.68 | 13.86 | 0-1 | 0 |
| | 8 | 4 | 13.92 | 13.68 | 13.86 | | 0 |
| | 8 | 7 | 13.91 | 13.69 | 13.85 | | 0 |
| | 15 | 0 | 13.94 | 13.72 | 13.87 | | 0 |
| 16QAM | 1 | 0 | 13.73 | 13.65 | 13.68 | 0-1 | 0 |
| | 1 | 7 | 13.98 | 13.57 | 13.62 | | 0 |
| | 1 | 14 | 13.80 | 13.51 | 13.75 | | 0 |
| | 8 | 0 | 13.73 | 13.56 | 13.59 | 0-2 | 0 |
| | 8 | 4 | 13.76 | 13.51 | 13.53 | | 0 |
| | 8 | 7 | 13.71 | 13.52 | 13.60 | | 0 |
| | 15 | 0 | 13.72 | 13.52 | 13.55 | | 0 |
| 64QAM | 1 | 0 | 13.71 | 13.54 | 13.61 | 0-2 | 0 |
| | 1 | 7 | 13.93 | 13.56 | 13.81 | | 0 |
| | 1 | 14 | 13.74 | 13.55 | 13.61 | | 0 |
| | 8 | 0 | 13.78 | 13.54 | 13.58 | 0-3 | 0 |
| | 8 | 4 | 13.75 | 13.58 | 13.59 | | 0 |
| | 8 | 7 | 13.76 | 13.53 | 13.59 | | 0 |
| | 15 | 0 | 13.73 | 13.55 | 13.56 | | 0 |

## Table 8-118
## LTE Band 4 Conducted Powers Ant 4b - 1.4 MHz Bandwidth

| LTE Band 4 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19957 (1710.7 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20393 (1754.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.86 | 13.68 | 13.76 | 0 | 0 |
| | 1 | 2 | 13.83 | 13.67 | 13.75 | | 0 |
| | 1 | 5 | 13.86 | 13.71 | 13.78 | | 0 |
| | 3 | 0 | 13.92 | 13.71 | 13.80 | | 0 |
| | 3 | 2 | 13.96 | 13.71 | 13.82 | | 0 |
| | 3 | 3 | 13.94 | 13.72 | 13.81 | | 0 |
| | 6 | 0 | 13.93 | 13.75 | 13.84 | 0-1 | 0 |
| 16QAM | 1 | 0 | 13.86 | 13.56 | 13.73 | 0-1 | 0 |
| | 1 | 2 | 13.80 | 13.62 | 13.71 | | 0 |
| | 1 | 5 | 13.92 | 13.54 | 13.71 | | 0 |
| | 3 | 0 | 13.71 | 13.50 | 13.64 | | 0 |
| | 3 | 2 | 13.73 | 13.51 | 13.72 | | 0 |
| | 3 | 3 | 13.71 | 13.52 | 13.70 | | 0 |
| | 6 | 0 | 13.67 | 13.51 | 13.71 | 0-2 | 0 |
| 64QAM | 1 | 0 | 13.72 | 13.60 | 13.78 | 0-2 | 0 |
| | 1 | 2 | 13.74 | 13.53 | 13.63 | | 0 |
| | 1 | 5 | 13.86 | 13.56 | 13.90 | | 0 |
| | 3 | 0 | 13.73 | 13.56 | 13.79 | | 0 |
| | 3 | 2 | 13.63 | 13.50 | 13.86 | | 0 |
| | 3 | 3 | 13.61 | 13.52 | 13.84 | | 0 |
| | 6 | 0 | 13.61 | 13.52 | 13.63 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-119
## LTE Band 4 Conducted Powers Ant 4b - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 20 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 20175 (1732.5 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 11.05 | 0 | 0 |
| | 1 | 50 | **11.21** | | 0 |
| | 1 | 99 | 11.15 | | 0 |
| | 50 | 0 | 11.33 | 0-1 | 0 |
| | 50 | 25 | **11.37** | | 0 |
| | 50 | 50 | 11.27 | | 0 |
| | 100 | 0 | 11.20 | | 0 |
| 16QAM | 1 | 0 | 11.40 | 0-1 | 0 |
| | 1 | 50 | 11.39 | | 0 |
| | 1 | 99 | 11.42 | | 0 |
| | 50 | 0 | 11.24 | 0-2 | 0 |
| | 50 | 25 | 11.28 | | 0 |
| | 50 | 50 | 11.19 | | 0 |
| | 100 | 0 | 11.24 | | 0 |
| 64QAM | 1 | 0 | 11.36 | 0-2 | 0 |
| | 1 | 50 | 11.33 | | 0 |
| | 1 | 99 | 11.45 | | 0 |
| | 50 | 0 | 11.22 | 0-3 | 0 |
| | 50 | 25 | 11.25 | | 0 |
| | 50 | 50 | 11.19 | | 0 |
| | 100 | 0 | 11.17 | | 0 |

**Note: LTE Band 4 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**

## Table 8-120
## LTE Band 4 Conducted Powers Ant 4b - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20025 (1717.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20325 (1747.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.89 | 11.17 | 11.12 | 0 | 0 |
| | 1 | 36 | 10.92 | 11.33 | 11.18 | | 0 |
| | 1 | 74 | 10.73 | 10.97 | 11.14 | | 0 |
| | 36 | 0 | 11.10 | 11.28 | 11.23 | 0-1 | 0 |
| | 36 | 18 | 11.09 | 11.33 | 11.23 | | 0 |
| | 36 | 37 | 10.96 | 11.19 | 11.15 | | 0 |
| | 75 | 0 | 11.06 | 11.28 | 11.20 | | 0 |
| 16QAM | 1 | 0 | 11.15 | 11.31 | 11.43 | 0-1 | 0 |
| | 1 | 36 | 11.34 | 11.48 | 11.50 | | 0 |
| | 1 | 74 | 11.03 | 11.47 | 11.49 | | 0 |
| | 36 | 0 | 11.10 | 11.33 | 11.25 | 0-2 | 0 |
| | 36 | 18 | 11.10 | 11.40 | 11.23 | | 0 |
| | 36 | 37 | 11.00 | 11.24 | 11.15 | | 0 |
| | 75 | 0 | 11.07 | 11.26 | 11.20 | | 0 |
| 64QAM | 1 | 0 | 11.31 | 11.45 | 11.48 | 0-2 | 0 |
| | 1 | 36 | 11.29 | 11.43 | 11.40 | | 0 |
| | 1 | 74 | 11.20 | 11.43 | 11.42 | | 0 |
| | 36 | 0 | 11.22 | 11.37 | 11.08 | 0-3 | 0 |
| | 36 | 18 | 11.19 | 11.35 | 11.12 | | 0 |
| | 36 | 37 | 10.95 | 11.21 | 11.09 | | 0 |
| | 75 | 0 | 11.15 | 11.32 | 11.10 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-121
## LTE Band 4 Conducted Powers Ant 4b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20000 (1715.0 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20350 (1750.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.12 | 11.17 | 11.13 | 0 | 0 |
| | 1 | 25 | 11.10 | 11.15 | 10.95 | | 0 |
| | 1 | 49 | 11.07 | 11.11 | 11.16 | | 0 |
| | 25 | 0 | 11.11 | 11.14 | 11.00 | 0-1 | 0 |
| | 25 | 12 | 11.03 | 11.16 | 11.01 | | 0 |
| | 25 | 25 | 11.04 | 11.16 | 11.17 | | 0 |
| | 50 | 0 | 11.04 | 11.15 | 11.02 | | 0 |
| 16QAM | 1 | 0 | 11.29 | 11.46 | 11.38 | 0-1 | 0 |
| | 1 | 25 | 11.32 | 11.47 | 11.47 | | 0 |
| | 1 | 49 | 11.37 | 11.50 | 11.49 | | 0 |
| | 25 | 0 | 11.16 | 11.20 | 11.03 | 0-2 | 0 |
| | 25 | 12 | 11.11 | 11.18 | 11.01 | | 0 |
| | 25 | 25 | 11.12 | 11.22 | 11.16 | | 0 |
| | 50 | 0 | 11.08 | 11.21 | 11.01 | | 0 |
| 64QAM | 1 | 0 | 11.29 | 11.49 | 11.34 | 0-2 | 0 |
| | 1 | 25 | 11.24 | 11.42 | 11.33 | | 0 |
| | 1 | 49 | 11.36 | 11.46 | 11.46 | | 0 |
| | 25 | 0 | 11.17 | 11.04 | 10.98 | 0-3 | 0 |
| | 25 | 12 | 11.10 | 10.99 | 11.01 | | 0 |
| | 25 | 25 | 11.12 | 11.03 | 11.16 | | 0 |
| | 50 | 0 | 11.06 | 11.00 | 11.05 | | 0 |

## Table 8-122
## LTE Band 4 Conducted Powers Ant 4b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19975 (1712.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20375 (1752.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.09 | 11.22 | 11.02 | 0 | 0 |
| | 1 | 12 | 11.20 | 11.16 | 11.09 | | 0 |
| | 1 | 24 | 11.18 | 11.12 | 11.09 | | 0 |
| | 12 | 0 | 11.20 | 11.21 | 11.10 | 0-1 | 0 |
| | 12 | 6 | 11.19 | 11.20 | 11.19 | | 0 |
| | 12 | 13 | 11.18 | 11.18 | 11.15 | | 0 |
| | 25 | 0 | 11.25 | 11.19 | 11.20 | | 0 |
| 16QAM | 1 | 0 | 11.43 | 11.50 | 11.34 | 0-1 | 0 |
| | 1 | 12 | 11.38 | 11.43 | 11.38 | | 0 |
| | 1 | 24 | 11.45 | 11.48 | 11.48 | | 0 |
| | 12 | 0 | 11.22 | 11.21 | 11.10 | 0-2 | 0 |
| | 12 | 6 | 11.30 | 11.17 | 11.22 | | 0 |
| | 12 | 13 | 11.13 | 11.24 | 11.22 | | 0 |
| | 25 | 0 | 11.19 | 11.11 | 11.19 | | 0 |
| 64QAM | 1 | 0 | 11.41 | 11.46 | 11.14 | 0-2 | 0 |
| | 1 | 12 | 11.41 | 11.47 | 11.42 | | 0 |
| | 1 | 24 | 11.42 | 11.47 | 11.13 | | 0 |
| | 12 | 0 | 11.17 | 11.20 | 11.11 | 0-3 | 0 |
| | 12 | 6 | 11.24 | 11.19 | 11.23 | | 0 |
| | 12 | 13 | 11.12 | 11.21 | 11.21 | | 0 |
| | 25 | 0 | 11.22 | 11.11 | 11.20 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-123
## LTE Band 4 Conducted Powers Ant 4b - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19965 (1711.5 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20385 (1753.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.09 | 11.15 | 11.07 | 0 | 0 |
| | 1 | 7 | 11.07 | 11.13 | 10.89 | | 0 |
| | 1 | 14 | 11.04 | 11.09 | 11.10 | | 0 |
| | 8 | 0 | 11.08 | 11.12 | 10.94 | 0-1 | 0 |
| | 8 | 4 | 11.00 | 11.14 | 10.95 | | 0 |
| | 8 | 7 | 11.01 | 11.14 | 11.11 | | 0 |
| | 15 | 0 | 11.01 | 11.13 | 10.96 | | 0 |
| 16QAM | 1 | 0 | 11.26 | 11.44 | 11.32 | 0-1 | 0 |
| | 1 | 7 | 11.29 | 11.45 | 11.40 | | 0 |
| | 1 | 14 | 11.34 | 11.48 | 11.47 | | 0 |
| | 8 | 0 | 11.13 | 11.19 | 10.96 | 0-2 | 0 |
| | 8 | 4 | 11.08 | 11.17 | 10.94 | | 0 |
| | 8 | 7 | 11.07 | 11.21 | 11.09 | | 0 |
| | 15 | 0 | 11.03 | 11.00 | 10.94 | | 0 |
| 64QAM | 1 | 0 | 11.24 | 11.48 | 11.27 | 0-2 | 0 |
| | 1 | 7 | 11.19 | 11.41 | 11.26 | | 0 |
| | 1 | 14 | 11.31 | 11.45 | 11.49 | | 0 |
| | 8 | 0 | 11.12 | 11.03 | 10.91 | 0-3 | 0 |
| | 8 | 4 | 11.05 | 10.98 | 10.94 | | 0 |
| | 8 | 7 | 11.07 | 11.02 | 11.09 | | 0 |
| | 15 | 0 | 11.01 | 10.99 | 10.98 | | 0 |

## Table 8-124
## LTE Band 4 Conducted Powers Ant 4b - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 4 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 19957 (1710.7 MHz) | Mid Channel 20175 (1732.5 MHz) | High Channel 20393 (1754.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.07 | 11.23 | 10.96 | 0 | 0 |
| | 1 | 2 | 11.18 | 11.17 | 11.03 | | 0 |
| | 1 | 5 | 11.16 | 11.13 | 11.03 | | 0 |
| | 3 | 0 | 11.18 | 11.22 | 11.04 | | 0 |
| | 3 | 2 | 11.17 | 11.21 | 11.13 | | 0 |
| | 3 | 3 | 11.16 | 11.19 | 11.09 | | 0 |
| | 6 | 0 | 11.23 | 11.15 | 11.14 | 0-1 | 0 |
| 16QAM | 1 | 0 | 11.41 | 11.48 | 11.28 | 0-1 | 0 |
| | 1 | 2 | 11.36 | 11.49 | 11.32 | | 0 |
| | 1 | 5 | 11.43 | 11.34 | 11.42 | | 0 |
| | 3 | 0 | 11.19 | 11.17 | 11.04 | | 0 |
| | 3 | 2 | 11.27 | 11.13 | 11.16 | | 0 |
| | 3 | 3 | 11.10 | 11.20 | 11.17 | | 0 |
| | 6 | 0 | 11.16 | 11.07 | 11.14 | 0-2 | 0 |
| 64QAM | 1 | 0 | 11.38 | 11.42 | 11.09 | 0-2 | 0 |
| | 1 | 2 | 11.38 | 11.43 | 11.37 | | 0 |
| | 1 | 5 | 11.39 | 11.43 | 11.08 | | 0 |
| | 3 | 0 | 11.14 | 11.17 | 11.06 | | 0 |
| | 3 | 2 | 11.21 | 11.16 | 11.18 | | 0 |
| | 3 | 3 | 11.09 | 11.18 | 11.16 | | 0 |
| | 6 | 0 | 11.19 | 11.08 | 11.15 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.8 LTE Band 66

**Table 8-125**
**LTE Band 66 Conducted Powers Ant 2a - 20 MHz Bandwidth**

| LTE Band 66 (AWS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132072 (1720.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132572 (1770.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.00 | 14.35 | 14.03 | 0 | 0 |
| | 1 | 50 | 14.12 | 14.13 | 14.00 | | 0 |
| | 1 | 99 | **14.36** | 14.09 | 14.15 | | 0 |
| | 50 | 0 | 14.29 | 14.10 | 13.84 | 0-1 | 0 |
| | 50 | 25 | 14.28 | 14.09 | 13.83 | | 0 |
| | 50 | 50 | **14.35** | 14.17 | 13.85 | | 0 |
| | 100 | 0 | 14.24 | 14.08 | 13.90 | | 0 |
| 16QAM | 1 | 0 | 14.05 | 14.35 | 13.93 | 0-1 | 0 |
| | 1 | 50 | 14.14 | 14.23 | 13.88 | | 0 |
| | 1 | 99 | 14.31 | 14.21 | 13.89 | | 0 |
| | 50 | 0 | 14.02 | 13.91 | 13.89 | 0-2 | 0 |
| | 50 | 25 | 14.00 | 13.93 | 13.85 | | 0 |
| | 50 | 50 | 14.08 | 13.97 | 13.87 | | 0 |
| | 100 | 0 | 13.98 | 13.91 | 13.81 | | 0 |
| 64QAM | 1 | 0 | 14.35 | 14.33 | 14.04 | 0-2 | 0 |
| | 1 | 50 | 14.40 | 14.17 | 14.00 | | 0 |
| | 1 | 99 | 14.50 | 14.04 | 14.08 | | 0 |
| | 50 | 0 | 14.03 | 13.90 | 13.91 | 0-3 | 0 |
| | 50 | 25 | 13.97 | 13.91 | 13.86 | | 0 |
| | 50 | 50 | 14.05 | 13.92 | 13.87 | | 0 |
| | 100 | 0 | 13.94 | 13.88 | 13.81 | | 0 |

**Table 8-126**
**LTE Band 66 Conducted Powers Ant 2a - 15 MHz Bandwidth**

| LTE Band 66 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132047 (1717.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132597 (1772.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.03 | 14.38 | 13.81 | 0 | 0 |
| | 1 | 36 | 14.04 | 14.14 | 13.87 | | 0 |
| | 1 | 74 | 14.02 | 14.03 | 13.75 | | 0 |
| | 36 | 0 | 14.02 | 14.20 | 13.84 | 0-1 | 0 |
| | 36 | 18 | 14.11 | 14.07 | 13.96 | | 0 |
| | 36 | 37 | 14.14 | 14.07 | 13.83 | | 0 |
| | 75 | 0 | 14.08 | 14.04 | 13.92 | | 0 |
| 16QAM | 1 | 0 | 14.18 | 14.49 | 14.21 | 0-1 | 0 |
| | 1 | 36 | 14.28 | 14.25 | 14.17 | | 0 |
| | 1 | 74 | 14.31 | 14.16 | 13.98 | | 0 |
| | 36 | 0 | 14.00 | 14.22 | 13.89 | 0-2 | 0 |
| | 36 | 18 | 14.04 | 14.06 | 14.02 | | 0 |
| | 36 | 37 | 14.12 | 13.99 | 13.88 | | 0 |
| | 75 | 0 | 14.05 | 14.03 | 13.99 | | 0 |
| 64QAM | 1 | 0 | 14.21 | 14.34 | 14.10 | 0-2 | 0 |
| | 1 | 36 | 14.15 | 14.23 | 14.21 | | 0 |
| | 1 | 74 | 14.15 | 14.07 | 13.90 | | 0 |
| | 36 | 0 | 13.99 | 14.20 | 13.93 | 0-3 | 0 |
| | 36 | 18 | 14.07 | 14.07 | 14.05 | | 0 |
| | 36 | 37 | 14.13 | 14.01 | 13.90 | | 0 |
| | 75 | 0 | 14.03 | 14.02 | 13.98 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-127
## LTE Band 66 Conducted Powers Ant 2a - 10 MHz Bandwidth

| LTE Band 66 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132022 (1715.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132622 (1775.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.11 | 14.24 | 13.78 | 0 | 0 |
| | 1 | 25 | 13.95 | 13.96 | 13.78 | | 0 |
| | 1 | 49 | 14.12 | 13.99 | 13.75 | | 0 |
| | 25 | 0 | 14.12 | 14.17 | 14.00 | 0-1 | 0 |
| | 25 | 12 | 14.03 | 14.04 | 13.88 | | 0 |
| | 25 | 25 | 14.08 | 14.08 | 13.78 | | 0 |
| | 50 | 0 | 14.04 | 14.04 | 13.87 | | 0 |
| 16QAM | 1 | 0 | 14.37 | 14.48 | 14.05 | 0-1 | 0 |
| | 1 | 25 | 14.17 | 14.10 | 13.99 | | 0 |
| | 1 | 49 | 14.34 | 14.18 | 13.88 | | 0 |
| | 25 | 0 | 14.06 | 14.13 | 13.97 | 0-2 | 0 |
| | 25 | 12 | 13.99 | 14.03 | 13.83 | | 0 |
| | 25 | 25 | 14.06 | 14.07 | 13.75 | | 0 |
| | 50 | 0 | 13.99 | 14.01 | 13.83 | | 0 |
| 64QAM | 1 | 0 | 14.22 | 14.43 | 13.90 | 0-2 | 0 |
| | 1 | 25 | 14.16 | 14.11 | 14.18 | | 0 |
| | 1 | 49 | 14.21 | 14.03 | 13.89 | | 0 |
| | 25 | 0 | 14.09 | 14.11 | 13.99 | 0-3 | 0 |
| | 25 | 12 | 13.96 | 14.05 | 13.85 | | 0 |
| | 25 | 25 | 14.05 | 14.07 | 13.78 | | 0 |
| | 50 | 0 | 13.98 | 14.03 | 13.84 | | 0 |

## Table 8-128
## LTE Band 66 Conducted Powers Ant 2a - 5 MHz Bandwidth

| LTE Band 66 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131997 (1712.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132647 (1777.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.24 | 14.06 | 13.75 | 0 | 0 |
| | 1 | 12 | 14.12 | 13.94 | 13.86 | | 0 |
| | 1 | 24 | 14.09 | 14.01 | 13.78 | | 0 |
| | 12 | 0 | 14.13 | 14.01 | 13.85 | 0-1 | 0 |
| | 12 | 6 | 14.12 | 14.00 | 13.75 | | 0 |
| | 12 | 13 | 14.04 | 13.97 | 13.75 | | 0 |
| | 25 | 0 | 14.14 | 14.00 | 13.76 | | 0 |
| 16QAM | 1 | 0 | 14.50 | 14.19 | 14.04 | 0-1 | 0 |
| | 1 | 12 | 14.26 | 14.11 | 13.94 | | 0 |
| | 1 | 24 | 14.38 | 14.13 | 14.04 | | 0 |
| | 12 | 0 | 14.15 | 14.01 | 13.91 | 0-2 | 0 |
| | 12 | 6 | 14.16 | 14.02 | 13.75 | | 0 |
| | 12 | 13 | 14.04 | 13.99 | 13.77 | | 0 |
| | 25 | 0 | 14.10 | 13.97 | 13.80 | | 0 |
| 64QAM | 1 | 0 | 14.31 | 14.17 | 13.95 | 0-2 | 0 |
| | 1 | 12 | 14.11 | 14.07 | 14.13 | | 0 |
| | 1 | 24 | 14.13 | 14.00 | 13.91 | | 0 |
| | 12 | 0 | 14.15 | 14.02 | 13.89 | 0-3 | 0 |
| | 12 | 6 | 14.06 | 14.02 | 13.75 | | 0 |
| | 12 | 13 | 14.00 | 13.93 | 13.79 | | 0 |
| | 25 | 0 | 14.04 | 13.94 | 13.75 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-129
## LTE Band 66 Conducted Powers Ant 2a - 3 MHz Bandwidth

| LTE Band 66 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131987 (1711.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132657 (1778.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.06 | 13.91 | 13.80 | 0 | 0 |
| | 1 | 7 | 14.08 | 13.96 | 13.87 | | 0 |
| | 1 | 14 | 13.97 | 13.88 | 13.87 | | 0 |
| | 8 | 0 | 14.08 | 13.99 | 13.75 | 0-1 | 0 |
| | 8 | 4 | 14.05 | 14.00 | 13.75 | | 0 |
| | 8 | 7 | 14.04 | 13.98 | 13.82 | | 0 |
| | 15 | 0 | 14.06 | 14.03 | 13.75 | | 0 |
| 16QAM | 1 | 0 | 14.20 | 14.09 | 13.81 | 0-1 | 0 |
| | 1 | 7 | 14.25 | 14.07 | 13.76 | | 0 |
| | 1 | 14 | 14.11 | 14.01 | 13.76 | | 0 |
| | 8 | 0 | 14.06 | 14.02 | 13.78 | 0-2 | 0 |
| | 8 | 4 | 14.08 | 13.97 | 13.75 | | 0 |
| | 8 | 7 | 14.09 | 13.98 | 13.82 | | 0 |
| | 15 | 0 | 14.08 | 13.98 | 13.75 | | 0 |
| 64QAM | 1 | 0 | 14.24 | 14.08 | 13.84 | 0-2 | 0 |
| | 1 | 7 | 14.12 | 14.02 | 13.84 | | 0 |
| | 1 | 14 | 14.09 | 14.06 | 13.77 | | 0 |
| | 8 | 0 | 14.10 | 14.01 | 13.76 | 0-3 | 0 |
| | 8 | 4 | 14.06 | 13.98 | 13.78 | | 0 |
| | 8 | 7 | 14.09 | 13.96 | 13.84 | | 0 |
| | 15 | 0 | 14.06 | 13.97 | 13.75 | | 0 |

## Table 8-130
## LTE Band 66 Conducted Powers Ant 2a - 1.4 MHz Bandwidth

| LTE Band 66 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131979 (1710.7 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132665 (1779.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.16 | 14.07 | 13.76 | 0 | 0 |
| | 1 | 2 | 14.04 | 14.04 | 13.75 | | 0 |
| | 1 | 5 | 14.05 | 14.08 | 13.75 | | 0 |
| | 3 | 0 | 14.20 | 13.99 | 13.80 | | 0 |
| | 3 | 2 | 14.12 | 13.98 | 13.80 | | 0 |
| | 3 | 3 | 14.09 | 13.99 | 13.81 | | 0 |
| | 6 | 0 | 14.11 | 14.00 | 13.81 | 0-1 | 0 |
| 16QAM | 1 | 0 | 14.21 | 14.07 | 13.87 | 0-1 | 0 |
| | 1 | 2 | 14.32 | 14.02 | 14.06 | | 0 |
| | 1 | 5 | 14.26 | 14.00 | 14.09 | | 0 |
| | 3 | 0 | 14.27 | 14.06 | 13.96 | | 0 |
| | 3 | 2 | 14.18 | 14.08 | 13.82 | | 0 |
| | 3 | 3 | 14.16 | 14.04 | 13.84 | | 0 |
| | 6 | 0 | 14.15 | 14.00 | 13.82 | 0-2 | 0 |
| 64QAM | 1 | 0 | 14.31 | 13.86 | 14.00 | 0-2 | 0 |
| | 1 | 2 | 14.29 | 14.03 | 13.91 | | 0 |
| | 1 | 5 | 14.28 | 14.12 | 13.94 | | 0 |
| | 3 | 0 | 14.22 | 14.02 | 13.76 | | 0 |
| | 3 | 2 | 14.04 | 14.02 | 13.77 | | 0 |
| | 3 | 3 | 14.20 | 14.00 | 13.84 | | 0 |
| | 6 | 0 | 14.08 | 14.02 | 13.75 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-131
## LTE Band 66 Conducted Powers Ant 2a - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132072 (1720.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132572 (1770.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.11 | **11.50** | 11.36 | 0 | 0 |
| | 1 | 50 | 11.17 | 11.28 | 11.17 | | 0 |
| | 1 | 99 | 11.35 | 11.31 | 11.22 | | 0 |
| | 50 | 0 | 11.26 | 11.29 | 11.22 | 0-1 | 0 |
| | 50 | 25 | 11.31 | 11.22 | 11.18 | | 0 |
| | 50 | 50 | **11.42** | 11.27 | 11.15 | | 0 |
| | 100 | 0 | 11.32 | 11.19 | 11.18 | | 0 |
| 16QAM | 1 | 0 | 11.31 | 11.33 | 11.04 | 0-1 | 0 |
| | 1 | 50 | 11.45 | 11.12 | 10.91 | | 0 |
| | 1 | 99 | 11.50 | 11.20 | 11.11 | | 0 |
| | 50 | 0 | 11.08 | 11.15 | 11.00 | 0-2 | 0 |
| | 50 | 25 | 11.12 | 11.08 | 10.91 | | 0 |
| | 50 | 50 | 11.19 | 11.08 | 10.86 | | 0 |
| | 100 | 0 | 11.12 | 11.05 | 10.89 | | 0 |
| 64QAM | 1 | 0 | 11.06 | 11.42 | 11.20 | 0-2 | 0 |
| | 1 | 50 | 11.20 | 11.29 | 10.88 | | 0 |
| | 1 | 99 | 11.47 | 11.38 | 11.12 | | 0 |
| | 50 | 0 | 11.15 | 11.16 | 10.98 | 0-3 | 0 |
| | 50 | 25 | 11.08 | 11.05 | 10.90 | | 0 |
| | 50 | 50 | 11.15 | 11.02 | 10.85 | | 0 |
| | 100 | 0 | 11.12 | 11.00 | 10.87 | | 0 |

## Table 8-132
## LTE Band 66 Conducted Powers Ant 2a - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132047 (1717.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132597 (1772.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.09 | 11.09 | 10.95 | 0 | 0 |
| | 1 | 36 | 11.26 | 11.05 | 10.84 | | 0 |
| | 1 | 74 | 11.34 | 11.03 | 10.97 | | 0 |
| | 36 | 0 | 11.23 | 11.27 | 11.07 | 0-1 | 0 |
| | 36 | 18 | 11.30 | 11.21 | 10.99 | | 0 |
| | 36 | 37 | 11.31 | 11.19 | 11.03 | | 0 |
| | 75 | 0 | 11.26 | 11.18 | 10.95 | | 0 |
| 16QAM | 1 | 0 | 11.39 | 11.44 | 11.37 | 0-1 | 0 |
| | 1 | 36 | 11.64 | 11.35 | 11.20 | | 0 |
| | 1 | 74 | 11.61 | 11.34 | 11.06 | | 0 |
| | 36 | 0 | 11.26 | 11.31 | 11.11 | 0-2 | 0 |
| | 36 | 18 | 11.34 | 11.25 | 11.01 | | 0 |
| | 36 | 37 | 11.36 | 11.18 | 11.06 | | 0 |
| | 75 | 0 | 11.29 | 11.19 | 10.98 | | 0 |
| 64QAM | 1 | 0 | 11.37 | 11.45 | 11.49 | 0-2 | 0 |
| | 1 | 36 | 11.52 | 11.32 | 10.84 | | 0 |
| | 1 | 74 | 11.70 | 11.46 | 11.30 | | 0 |
| | 36 | 0 | 11.25 | 11.29 | 11.11 | 0-3 | 0 |
| | 36 | 18 | 11.30 | 11.22 | 11.00 | | 0 |
| | 36 | 37 | 11.35 | 11.22 | 11.06 | | 0 |
| | 75 | 0 | 11.29 | 11.20 | 10.97 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-133
## LTE Band 66 Conducted Powers Ant 2a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132022 (1715.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132622 (1775.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.23 | 11.22 | 11.01 | 0 | 0 |
| | 1 | 25 | 11.23 | 11.07 | 10.99 | | 0 |
| | 1 | 49 | 11.33 | 11.04 | 11.13 | | 0 |
| | 25 | 0 | 11.22 | 11.31 | 10.99 | 0-1 | 0 |
| | 25 | 12 | 11.21 | 11.20 | 11.07 | | 0 |
| | 25 | 25 | 11.26 | 11.21 | 11.12 | | 0 |
| | 50 | 0 | 11.23 | 11.20 | 11.09 | | 0 |
| 16QAM | 1 | 0 | 11.25 | 11.65 | 11.28 | 0-1 | 0 |
| | 1 | 25 | 11.27 | 11.53 | 11.26 | | 0 |
| | 1 | 49 | 11.44 | 11.45 | 11.38 | | 0 |
| | 25 | 0 | 11.24 | 11.34 | 10.96 | 0-2 | 0 |
| | 25 | 12 | 11.27 | 11.22 | 11.06 | | 0 |
| | 25 | 25 | 11.30 | 11.25 | 11.13 | | 0 |
| | 50 | 0 | 11.24 | 11.24 | 11.13 | | 0 |
| 64QAM | 1 | 0 | 11.26 | 11.36 | 11.45 | 0-2 | 0 |
| | 1 | 25 | 11.33 | 11.27 | 11.31 | | 0 |
| | 1 | 49 | 11.53 | 11.22 | 11.52 | | 0 |
| | 25 | 0 | 11.25 | 11.34 | 10.99 | 0-3 | 0 |
| | 25 | 12 | 11.25 | 11.24 | 11.06 | | 0 |
| | 25 | 25 | 11.31 | 11.23 | 11.09 | | 0 |
| | 50 | 0 | 11.26 | 11.23 | 11.09 | | 0 |

## Table 8-134
## LTE Band 66 Conducted Powers Ant 2a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131997 (1712.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132647 (1777.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.10 | 11.07 | 10.93 | 0 | 0 |
| | 1 | 12 | 11.05 | 10.93 | 10.98 | | 0 |
| | 1 | 24 | 11.06 | 11.00 | 11.00 | | 0 |
| | 12 | 0 | 11.05 | 11.10 | 10.98 | 0-1 | 0 |
| | 12 | 6 | 11.07 | 11.08 | 11.09 | | 0 |
| | 12 | 13 | 11.07 | 11.06 | 11.07 | | 0 |
| | 25 | 0 | 11.09 | 11.10 | 11.10 | | 0 |
| 16QAM | 1 | 0 | 11.15 | 11.42 | 11.18 | 0-1 | 0 |
| | 1 | 12 | 11.26 | 11.25 | 11.29 | | 0 |
| | 1 | 24 | 11.25 | 11.32 | 11.31 | | 0 |
| | 12 | 0 | 11.12 | 11.04 | 11.02 | 0-2 | 0 |
| | 12 | 6 | 11.11 | 11.13 | 11.13 | | 0 |
| | 12 | 13 | 11.13 | 11.15 | 11.15 | | 0 |
| | 25 | 0 | 11.14 | 11.14 | 11.14 | | 0 |
| 64QAM | 1 | 0 | 11.18 | 11.41 | 10.87 | 0-2 | 0 |
| | 1 | 12 | 11.24 | 11.46 | 11.02 | | 0 |
| | 1 | 24 | 11.24 | 11.44 | 11.26 | | 0 |
| | 12 | 0 | 11.13 | 11.08 | 10.96 | 0-3 | 0 |
| | 12 | 6 | 11.05 | 11.10 | 11.01 | | 0 |
| | 12 | 13 | 11.07 | 11.12 | 11.04 | | 0 |
| | 25 | 0 | 11.07 | 11.09 | 11.06 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-135
## LTE Band 66 Conducted Powers Ant 2a - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131987 (1711.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132657 (1778.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.05 | 11.05 | 10.87 | 0 | 0 |
| | 1 | 7 | 11.00 | 10.91 | 10.92 | | 0 |
| | 1 | 14 | 11.01 | 10.98 | 10.94 | | 0 |
| | 8 | 0 | 11.00 | 11.08 | 10.92 | 0-1 | 0 |
| | 8 | 4 | 11.02 | 11.06 | 11.03 | | 0 |
| | 8 | 7 | 11.02 | 11.04 | 11.01 | | 0 |
| | 15 | 0 | 11.04 | 11.08 | 11.04 | | 0 |
| 16QAM | 1 | 0 | 11.10 | 11.40 | 11.12 | 0-1 | 0 |
| | 1 | 7 | 11.21 | 11.23 | 11.23 | | 0 |
| | 1 | 14 | 11.19 | 11.28 | 11.25 | | 0 |
| | 8 | 0 | 11.06 | 11.00 | 10.96 | 0-2 | 0 |
| | 8 | 4 | 11.05 | 11.09 | 11.07 | | 0 |
| | 8 | 7 | 11.07 | 11.11 | 11.10 | | 0 |
| | 15 | 0 | 11.08 | 11.10 | 11.09 | | 0 |
| 64QAM | 1 | 0 | 11.12 | 11.37 | 10.82 | 0-2 | 0 |
| | 1 | 7 | 11.18 | 11.42 | 10.97 | | 0 |
| | 1 | 14 | 11.18 | 11.43 | 11.21 | | 0 |
| | 8 | 0 | 11.07 | 11.07 | 10.91 | 0-3 | 0 |
| | 8 | 4 | 11.01 | 11.09 | 10.96 | | 0 |
| | 8 | 7 | 11.03 | 11.11 | 10.99 | | 0 |
| | 15 | 0 | 11.03 | 11.08 | 11.01 | | 0 |

## Table 8-136
## LTE Band 66 Conducted Powers Ant 2a - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131979 (1710.7 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132665 (1779.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.22 | 11.19 | 10.96 | 0 | 0 |
| | 1 | 2 | 11.22 | 11.04 | 10.94 | | 0 |
| | 1 | 5 | 11.32 | 11.01 | 11.08 | | 0 |
| | 3 | 0 | 11.21 | 11.28 | 10.94 | | 0 |
| | 3 | 2 | 11.20 | 11.17 | 11.02 | | 0 |
| | 3 | 3 | 11.25 | 11.18 | 11.07 | | 0 |
| | 6 | 0 | 11.22 | 11.17 | 11.04 | 0-1 | 0 |
| 16QAM | 1 | 0 | 11.24 | 11.60 | 11.23 | 0-1 | 0 |
| | 1 | 2 | 11.26 | 11.48 | 11.21 | | 0 |
| | 1 | 5 | 11.41 | 11.40 | 11.32 | | 0 |
| | 3 | 0 | 11.21 | 11.29 | 10.90 | | 0 |
| | 3 | 2 | 11.24 | 11.17 | 11.00 | | 0 |
| | 3 | 3 | 11.27 | 11.20 | 11.07 | | 0 |
| | 6 | 0 | 11.21 | 11.19 | 11.07 | 0-2 | 0 |
| 64QAM | 1 | 0 | 11.23 | 11.31 | 11.39 | 0-2 | 0 |
| | 1 | 2 | 11.31 | 11.22 | 11.35 | | 0 |
| | 1 | 5 | 11.51 | 11.16 | 11.46 | | 0 |
| | 3 | 0 | 11.23 | 11.28 | 10.93 | | 0 |
| | 3 | 2 | 11.23 | 11.18 | 11.00 | | 0 |
| | 3 | 3 | 11.29 | 11.17 | 11.03 | | 0 |
| | 6 | 0 | 11.24 | 11.17 | 11.03 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-137
## LTE Band 66 Conducted Powers Ant 2b - 20 MHz Bandwidth

| LTE Band 66 (AWS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132072 (1720.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132572 (1770.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.16 | 14.18 | 14.16 | 0 | 0 |
| | 1 | 50 | 14.20 | 13.90 | 13.93 | | 0 |
| | 1 | 99 | **14.44** | 13.90 | 13.90 | | 0 |
| | 50 | 0 | **14.20** | 14.19 | 13.93 | 0-1 | 0 |
| | 50 | 25 | 14.19 | 14.05 | 13.91 | | 0 |
| | 50 | 50 | 14.15 | 14.01 | 13.92 | | 0 |
| | 100 | 0 | 14.17 | 14.00 | 13.90 | | 0 |
| 16QAM | 1 | 0 | 14.24 | 14.49 | 14.33 | 0-1 | 0 |
| | 1 | 50 | 14.21 | 14.25 | 14.25 | | 0 |
| | 1 | 99 | 14.47 | 14.25 | 14.14 | | 0 |
| | 50 | 0 | 14.19 | 14.26 | 14.00 | 0-2 | 0 |
| | 50 | 25 | 14.17 | 14.14 | 13.94 | | 0 |
| | 50 | 50 | 14.12 | 14.07 | 13.95 | | 0 |
| | 100 | 0 | 14.15 | 14.05 | 13.91 | | 0 |
| 64QAM | 1 | 0 | 14.36 | 14.55 | 14.28 | 0-2 | 0 |
| | 1 | 50 | 14.53 | 14.33 | 14.40 | | 0 |
| | 1 | 99 | 14.60 | 14.38 | 14.09 | | 0 |
| | 50 | 0 | 14.30 | 14.14 | 13.96 | 0-3 | 0 |
| | 50 | 25 | 14.28 | 14.01 | 13.90 | | 0 |
| | 50 | 50 | 14.23 | 14.04 | 13.96 | | 0 |
| | 100 | 0 | 14.24 | 14.00 | 13.90 | | 0 |

## Table 8-138
## LTE Band 66 Conducted Powers Ant 2b - 15 MHz Bandwidth

| LTE Band 66 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132047 (1717.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132597 (1772.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.16 | 14.41 | 13.92 | 0 | 0 |
| | 1 | 36 | 14.18 | 14.30 | 13.90 | | 0 |
| | 1 | 74 | 14.15 | 14.14 | 13.90 | | 0 |
| | 36 | 0 | 14.10 | 14.26 | 14.00 | 0-1 | 0 |
| | 36 | 18 | 14.27 | 14.20 | 13.99 | | 0 |
| | 36 | 37 | 14.27 | 14.17 | 13.90 | | 0 |
| | 75 | 0 | 14.24 | 14.18 | 13.95 | | 0 |
| 16QAM | 1 | 0 | 14.36 | 14.58 | 14.33 | 0-1 | 0 |
| | 1 | 36 | 14.46 | 14.43 | 14.13 | | 0 |
| | 1 | 74 | 14.50 | 14.44 | 13.99 | | 0 |
| | 36 | 0 | 14.12 | 14.31 | 14.05 | 0-2 | 0 |
| | 36 | 18 | 14.28 | 14.25 | 14.01 | | 0 |
| | 36 | 37 | 14.31 | 14.21 | 13.91 | | 0 |
| | 75 | 0 | 14.27 | 14.18 | 13.97 | | 0 |
| 64QAM | 1 | 0 | 14.56 | 14.27 | 14.19 | 0-2 | 0 |
| | 1 | 36 | 14.47 | 14.29 | 14.16 | | 0 |
| | 1 | 74 | 14.36 | 14.41 | 13.95 | | 0 |
| | 36 | 0 | 14.11 | 14.29 | 14.06 | 0-3 | 0 |
| | 36 | 18 | 14.30 | 14.27 | 14.06 | | 0 |
| | 36 | 37 | 14.32 | 14.22 | 13.94 | | 0 |
| | 75 | 0 | 14.25 | 14.19 | 13.99 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-139
## LTE Band 66 Conducted Powers Ant 2b - 10 MHz Bandwidth

| LTE Band 66 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132022 (1715.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132622 (1775.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.18 | 14.29 | 13.90 | 0 | 0 |
| | 1 | 25 | 14.05 | 14.06 | 13.96 | | 0 |
| | 1 | 49 | 14.18 | 14.06 | 13.92 | | 0 |
| | 25 | 0 | 14.14 | 14.25 | 14.04 | 0-1 | 0 |
| | 25 | 12 | 14.12 | 14.15 | 13.93 | | 0 |
| | 25 | 25 | 14.20 | 14.15 | 13.91 | | 0 |
| | 50 | 0 | 14.14 | 14.15 | 13.94 | | 0 |
| 16QAM | 1 | 0 | 14.48 | 14.50 | 14.20 | 0-1 | 0 |
| | 1 | 25 | 14.31 | 14.26 | 14.10 | | 0 |
| | 1 | 49 | 14.53 | 14.33 | 14.10 | | 0 |
| | 25 | 0 | 14.17 | 14.27 | 13.98 | 0-2 | 0 |
| | 25 | 12 | 14.14 | 14.17 | 13.96 | | 0 |
| | 25 | 25 | 14.24 | 14.17 | 13.92 | | 0 |
| | 50 | 0 | 14.12 | 14.17 | 13.94 | | 0 |
| 64QAM | 1 | 0 | 14.51 | 14.55 | 14.10 | 0-2 | 0 |
| | 1 | 25 | 14.31 | 14.31 | 13.94 | | 0 |
| | 1 | 49 | 14.52 | 14.40 | 13.96 | | 0 |
| | 25 | 0 | 14.17 | 14.26 | 13.99 | 0-3 | 0 |
| | 25 | 12 | 14.14 | 14.22 | 13.99 | | 0 |
| | 25 | 25 | 14.22 | 14.18 | 13.91 | | 0 |
| | 50 | 0 | 14.15 | 14.21 | 13.97 | | 0 |

## Table 8-140
## LTE Band 66 Conducted Powers Ant 2b - 5 MHz Bandwidth

| LTE Band 66 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131997 (1712.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132647 (1777.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.17 | 14.20 | 13.95 | 0 | 0 |
| | 1 | 12 | 14.06 | 14.10 | 13.90 | | 0 |
| | 1 | 24 | 13.92 | 14.12 | 13.92 | | 0 |
| | 12 | 0 | 14.24 | 14.11 | 13.93 | 0-1 | 0 |
| | 12 | 6 | 14.15 | 14.08 | 13.97 | | 0 |
| | 12 | 13 | 14.06 | 14.06 | 13.91 | | 0 |
| | 25 | 0 | 14.17 | 14.12 | 13.90 | | 0 |
| 16QAM | 1 | 0 | 14.44 | 14.39 | 14.14 | 0-1 | 0 |
| | 1 | 12 | 14.36 | 14.53 | 14.02 | | 0 |
| | 1 | 24 | 14.25 | 14.42 | 13.97 | | 0 |
| | 12 | 0 | 14.32 | 14.22 | 14.02 | 0-2 | 0 |
| | 12 | 6 | 14.17 | 14.13 | 13.92 | | 0 |
| | 12 | 13 | 14.11 | 14.17 | 14.00 | | 0 |
| | 25 | 0 | 14.17 | 14.16 | 13.90 | | 0 |
| 64QAM | 1 | 0 | 14.50 | 14.38 | 14.00 | 0-2 | 0 |
| | 1 | 12 | 14.21 | 14.31 | 13.93 | | 0 |
| | 1 | 24 | 14.30 | 14.29 | 13.95 | | 0 |
| | 12 | 0 | 14.26 | 14.18 | 13.92 | 0-3 | 0 |
| | 12 | 6 | 14.15 | 14.14 | 13.93 | | 0 |
| | 12 | 13 | 14.03 | 14.11 | 13.95 | | 0 |
| | 25 | 0 | 14.18 | 14.13 | 13.92 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-141
## LTE Band 66 Conducted Powers Ant 2b - 3 MHz Bandwidth

| LTE Band 66 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131987 (1711.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132657 (1778.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.13 | 14.01 | 13.90 | 0 | 0 |
| | 1 | 7 | 14.11 | 14.07 | 13.98 | | 0 |
| | 1 | 14 | 14.05 | 13.97 | 13.98 | | 0 |
| | 8 | 0 | 14.24 | 14.14 | 13.95 | 0-1 | 0 |
| | 8 | 4 | 14.16 | 14.10 | 13.97 | | 0 |
| | 8 | 7 | 14.16 | 14.10 | 13.99 | | 0 |
| | 15 | 0 | 14.19 | 14.15 | 13.99 | | 0 |
| 16QAM | 1 | 0 | 14.51 | 14.28 | 14.07 | 0-1 | 0 |
| | 1 | 7 | 14.40 | 14.29 | 14.04 | | 0 |
| | 1 | 14 | 14.34 | 14.14 | 14.07 | | 0 |
| | 8 | 0 | 14.29 | 14.21 | 13.98 | 0-2 | 0 |
| | 8 | 4 | 14.21 | 14.16 | 13.95 | | 0 |
| | 8 | 7 | 14.24 | 14.19 | 13.93 | | 0 |
| | 15 | 0 | 14.21 | 14.17 | 13.95 | | 0 |
| 64QAM | 1 | 0 | 14.39 | 14.18 | 13.98 | 0-2 | 0 |
| | 1 | 7 | 14.43 | 14.35 | 14.02 | | 0 |
| | 1 | 14 | 14.32 | 14.26 | 13.99 | | 0 |
| | 8 | 0 | 14.31 | 14.22 | 13.90 | 0-3 | 0 |
| | 8 | 4 | 14.20 | 14.19 | 13.91 | | 0 |
| | 8 | 7 | 14.28 | 14.16 | 13.94 | | 0 |
| | 15 | 0 | 14.23 | 14.17 | 13.91 | | 0 |

## Table 8-142
## LTE Band 66 Conducted Powers Ant 2b - 1.4 MHz Bandwidth

| LTE Band 66 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131979 (1710.7 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132665 (1779.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.18 | 14.58 | 14.02 | 0 | 0 |
| | 1 | 2 | 14.17 | 14.07 | 14.00 | | 0 |
| | 1 | 5 | 14.17 | 14.07 | 14.09 | | 0 |
| | 3 | 0 | 14.24 | 14.12 | 13.96 | | 0 |
| | 3 | 2 | 14.23 | 14.11 | 13.92 | | 0 |
| | 3 | 3 | 14.26 | 14.13 | 13.99 | | 0 |
| | 6 | 0 | 14.24 | 14.13 | 13.95 | 0-1 | 0 |
| 16QAM | 1 | 0 | 14.44 | 14.28 | 14.11 | 0-1 | 0 |
| | 1 | 2 | 14.46 | 14.20 | 14.13 | | 0 |
| | 1 | 5 | 14.52 | 14.33 | 14.21 | | 0 |
| | 3 | 0 | 14.42 | 14.28 | 14.03 | | 0 |
| | 3 | 2 | 14.34 | 14.27 | 14.03 | | 0 |
| | 3 | 3 | 14.41 | 14.30 | 14.14 | | 0 |
| | 6 | 0 | 14.32 | 14.25 | 14.11 | 0-2 | 0 |
| 64QAM | 1 | 0 | 14.50 | 14.40 | 14.20 | 0-2 | 0 |
| | 1 | 2 | 14.49 | 14.34 | 14.03 | | 0 |
| | 1 | 5 | 14.53 | 14.36 | 14.22 | | 0 |
| | 3 | 0 | 14.37 | 14.35 | 14.21 | | 0 |
| | 3 | 2 | 14.30 | 14.32 | 14.19 | | 0 |
| | 3 | 3 | 14.24 | 14.22 | 14.23 | | 0 |
| | 6 | 0 | 14.30 | 14.21 | 13.95 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-143
## LTE Band 66 Conducted Powers Ant 2b - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132072 (1720.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132572 (1770.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.16 | 11.54 | 11.13 | 0 | 0 |
| | 1 | 50 | 11.29 | 11.40 | 10.95 | | 0 |
| | 1 | 99 | **11.58** | 11.52 | 11.06 | | 0 |
| | 50 | 0 | 11.32 | 11.41 | 11.17 | 0-1 | 0 |
| | 50 | 25 | 11.40 | 11.38 | 11.12 | | 0 |
| | 50 | 50 | **11.46** | 11.45 | 11.15 | | 0 |
| | 100 | 0 | 11.45 | 11.43 | 11.15 | | 0 |
| 16QAM | 1 | 0 | 11.58 | 11.82 | 11.55 | 0-1 | 0 |
| | 1 | 50 | 11.78 | 11.52 | 11.40 | | 0 |
| | 1 | 99 | 11.89 | 11.53 | 11.30 | | 0 |
| | 50 | 0 | 11.65 | 11.67 | 11.36 | 0-2 | 0 |
| | 50 | 25 | 11.59 | 11.46 | 11.32 | | 0 |
| | 50 | 50 | 11.59 | 11.52 | 11.29 | | 0 |
| | 100 | 0 | 11.60 | 11.44 | 11.29 | | 0 |
| 64QAM | 1 | 0 | 11.49 | 11.78 | 11.61 | 0-2 | 0 |
| | 1 | 50 | 11.51 | 11.80 | 11.44 | | 0 |
| | 1 | 99 | 11.75 | 11.57 | 11.30 | | 0 |
| | 50 | 0 | 11.66 | 11.71 | 11.39 | 0-3 | 0 |
| | 50 | 25 | 11.64 | 11.48 | 11.31 | | 0 |
| | 50 | 50 | 11.61 | 11.53 | 11.25 | | 0 |
| | 100 | 0 | 11.60 | 11.41 | 11.28 | | 0 |

## Table 8-144
## LTE Band 66 Conducted Powers Ant 2b - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132047 (1717.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132597 (1772.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.31 | 11.45 | 11.09 | 0 | 0 |
| | 1 | 36 | 11.38 | 11.23 | 11.18 | | 0 |
| | 1 | 74 | 11.21 | 11.21 | 10.98 | | 0 |
| | 36 | 0 | 11.54 | 11.48 | 11.17 | 0-1 | 0 |
| | 36 | 18 | 11.47 | 11.38 | 11.24 | | 0 |
| | 36 | 37 | 11.35 | 11.37 | 11.16 | | 0 |
| | 75 | 0 | 11.47 | 11.33 | 11.20 | | 0 |
| 16QAM | 1 | 0 | 11.59 | 11.87 | 11.42 | 0-1 | 0 |
| | 1 | 36 | 11.60 | 11.81 | 11.50 | | 0 |
| | 1 | 74 | 11.49 | 11.38 | 11.42 | | 0 |
| | 36 | 0 | 11.59 | 11.50 | 11.17 | 0-2 | 0 |
| | 36 | 18 | 11.53 | 11.37 | 11.26 | | 0 |
| | 36 | 37 | 11.40 | 11.39 | 11.18 | | 0 |
| | 75 | 0 | 11.52 | 11.33 | 11.21 | | 0 |
| 64QAM | 1 | 0 | 11.66 | 11.89 | 11.40 | 0-2 | 0 |
| | 1 | 36 | 11.67 | 11.32 | 11.61 | | 0 |
| | 1 | 74 | 11.56 | 11.50 | 11.33 | | 0 |
| | 36 | 0 | 11.57 | 11.50 | 11.13 | 0-3 | 0 |
| | 36 | 18 | 11.54 | 11.40 | 11.28 | | 0 |
| | 36 | 37 | 11.44 | 11.38 | 11.18 | | 0 |
| | 75 | 0 | 11.53 | 11.34 | 11.19 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-145
## LTE Band 66 Conducted Powers Ant 2b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132022 (1715.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132622 (1775.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.49 | 11.46 | 11.19 | 0 | 0 |
| | 1 | 25 | 11.58 | 11.23 | 11.08 | | 0 |
| | 1 | 49 | 11.52 | 11.27 | 11.01 | | 0 |
| | 25 | 0 | 11.45 | 11.49 | 11.18 | 0-1 | 0 |
| | 25 | 12 | 11.56 | 11.35 | 11.14 | | 0 |
| | 25 | 25 | 11.51 | 11.38 | 11.08 | | 0 |
| | 50 | 0 | 11.57 | 11.36 | 11.15 | | 0 |
| 16QAM | 1 | 0 | 11.88 | 11.88 | 11.49 | 0-1 | 0 |
| | 1 | 25 | 11.89 | 11.37 | 11.37 | | 0 |
| | 1 | 49 | 11.86 | 11.55 | 11.29 | | 0 |
| | 25 | 0 | 11.49 | 11.51 | 11.20 | 0-2 | 0 |
| | 25 | 12 | 11.60 | 11.36 | 11.17 | | 0 |
| | 25 | 25 | 11.50 | 11.42 | 11.11 | | 0 |
| | 50 | 0 | 11.58 | 11.39 | 11.19 | | 0 |
| 64QAM | 1 | 0 | 11.70 | 11.87 | 11.56 | 0-2 | 0 |
| | 1 | 25 | 11.89 | 11.42 | 11.45 | | 0 |
| | 1 | 49 | 11.63 | 11.79 | 11.36 | | 0 |
| | 25 | 0 | 11.46 | 11.53 | 11.23 | 0-3 | 0 |
| | 25 | 12 | 11.54 | 11.38 | 11.16 | | 0 |
| | 25 | 25 | 11.56 | 11.41 | 11.09 | | 0 |
| | 50 | 0 | 11.61 | 11.37 | 11.15 | | 0 |

## Table 8-146
## LTE Band 66 Conducted Powers Ant 2b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131997 (1712.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132647 (1777.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.38 | 11.27 | 11.04 | 0 | 0 |
| | 1 | 12 | 11.33 | 11.18 | 10.93 | | 0 |
| | 1 | 24 | 11.47 | 11.23 | 10.95 | | 0 |
| | 12 | 0 | 11.38 | 11.38 | 11.12 | 0-1 | 0 |
| | 12 | 6 | 11.41 | 11.36 | 11.02 | | 0 |
| | 12 | 13 | 11.46 | 11.29 | 11.03 | | 0 |
| | 25 | 0 | 11.40 | 11.36 | 11.05 | | 0 |
| 16QAM | 1 | 0 | 11.50 | 11.74 | 11.40 | 0-1 | 0 |
| | 1 | 12 | 11.52 | 11.52 | 11.24 | | 0 |
| | 1 | 24 | 11.67 | 11.65 | 11.25 | | 0 |
| | 12 | 0 | 11.44 | 11.41 | 11.12 | 0-2 | 0 |
| | 12 | 6 | 11.40 | 11.35 | 11.12 | | 0 |
| | 12 | 13 | 11.51 | 11.35 | 11.02 | | 0 |
| | 25 | 0 | 11.42 | 11.35 | 11.04 | | 0 |
| 64QAM | 1 | 0 | 11.50 | 11.87 | 11.38 | 0-2 | 0 |
| | 1 | 12 | 11.54 | 11.56 | 10.95 | | 0 |
| | 1 | 24 | 11.65 | 11.61 | 11.28 | | 0 |
| | 12 | 0 | 11.41 | 11.33 | 11.11 | 0-3 | 0 |
| | 12 | 6 | 11.40 | 11.31 | 10.99 | | 0 |
| | 12 | 13 | 11.52 | 11.29 | 10.97 | | 0 |
| | 25 | 0 | 11.46 | 11.41 | 11.04 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-147
## LTE Band 66 Conducted Powers Ant 2b - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131987 (1711.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132657 (1778.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.33 | 11.22 | 10.99 | 0 | 0 |
| | 1 | 7 | 11.28 | 11.13 | 10.91 | | 0 |
| | 1 | 14 | 11.30 | 11.16 | 10.98 | | 0 |
| | 8 | 0 | 11.44 | 11.31 | 11.05 | 0-1 | 0 |
| | 8 | 4 | 11.35 | 11.29 | 10.95 | | 0 |
| | 8 | 7 | 11.38 | 11.22 | 10.96 | | 0 |
| | 15 | 0 | 11.43 | 11.29 | 10.98 | | 0 |
| 16QAM | 1 | 0 | 11.37 | 11.67 | 11.33 | 0-1 | 0 |
| | 1 | 7 | 11.46 | 11.45 | 11.17 | | 0 |
| | 1 | 14 | 11.61 | 11.58 | 11.18 | | 0 |
| | 8 | 0 | 11.38 | 11.34 | 11.05 | 0-2 | 0 |
| | 8 | 4 | 11.34 | 11.28 | 11.09 | | 0 |
| | 8 | 7 | 11.45 | 11.28 | 10.99 | | 0 |
| | 15 | 0 | 11.36 | 11.28 | 11.01 | | 0 |
| 64QAM | 1 | 0 | 11.44 | 11.80 | 11.35 | 0-2 | 0 |
| | 1 | 7 | 11.48 | 11.49 | 10.92 | | 0 |
| | 1 | 14 | 11.59 | 11.54 | 11.25 | | 0 |
| | 8 | 0 | 11.35 | 11.26 | 11.08 | 0-3 | 0 |
| | 8 | 4 | 11.34 | 11.24 | 10.96 | | 0 |
| | 8 | 7 | 11.46 | 11.22 | 10.94 | | 0 |
| | 15 | 0 | 11.40 | 11.34 | 11.01 | | 0 |

## Table 8-148
## LTE Band 66 Conducted Powers Ant 2b - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131979 (1710.7 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132665 (1779.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.46 | 11.41 | 11.14 | 0 | 0 |
| | 1 | 2 | 11.55 | 11.18 | 11.03 | | 0 |
| | 1 | 5 | 11.49 | 11.22 | 10.96 | | 0 |
| | 3 | 0 | 11.42 | 11.44 | 11.13 | | 0 |
| | 3 | 2 | 11.53 | 11.30 | 11.09 | | 0 |
| | 3 | 3 | 11.43 | 11.33 | 11.03 | | 0 |
| | 6 | 0 | 11.49 | 11.31 | 11.10 | 0-1 | 0 |
| 16QAM | 1 | 0 | 11.80 | 11.87 | 11.43 | 0-1 | 0 |
| | 1 | 2 | 11.88 | 11.32 | 11.31 | | 0 |
| | 1 | 5 | 11.78 | 11.50 | 11.23 | | 0 |
| | 3 | 0 | 11.41 | 11.46 | 11.14 | | 0 |
| | 3 | 2 | 11.52 | 11.31 | 11.11 | | 0 |
| | 3 | 3 | 11.42 | 11.38 | 11.05 | | 0 |
| | 6 | 0 | 11.50 | 11.35 | 11.13 | 0-2 | 0 |
| 64QAM | 1 | 0 | 11.69 | 11.83 | 11.50 | 0-2 | 0 |
| | 1 | 2 | 11.87 | 11.38 | 11.39 | | 0 |
| | 1 | 5 | 11.62 | 11.75 | 11.29 | | 0 |
| | 3 | 0 | 11.45 | 11.49 | 11.16 | | 0 |
| | 3 | 2 | 11.53 | 11.34 | 11.09 | | 0 |
| | 3 | 3 | 11.55 | 11.37 | 11.02 | | 0 |
| | 6 | 0 | 11.60 | 11.33 | 11.08 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-149
## LTE Band 66 Conducted Powers Ant 4a - 20 MHz Bandwidth

| LTE Band 66 (AWS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132072 (1720.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132572 (1770.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.07 | **14.20** | 14.11 | 0 | 0 |
| | 1 | 50 | 14.09 | 14.01 | 13.92 | | 0 |
| | 1 | 99 | 13.94 | 13.98 | 13.87 | | 0 |
| | 50 | 0 | 14.20 | **14.23** | 14.03 | 0-1 | 0 |
| | 50 | 25 | 14.22 | 14.09 | 13.90 | | 0 |
| | 50 | 50 | 14.09 | 14.10 | 13.90 | | 0 |
| | 100 | 0 | 14.19 | 14.05 | 13.95 | | 0 |
| 16QAM | 1 | 0 | 14.32 | 14.44 | 14.41 | 0-1 | 0 |
| | 1 | 50 | 14.49 | 14.34 | 14.18 | | 0 |
| | 1 | 99 | 14.28 | 14.30 | 14.29 | | 0 |
| | 50 | 0 | 14.49 | 14.20 | 14.39 | 0-2 | 0 |
| | 50 | 25 | 14.38 | 14.07 | 13.88 | | 0 |
| | 50 | 50 | 14.26 | 14.04 | 13.95 | | 0 |
| | 100 | 0 | 14.16 | 14.02 | 13.88 | | 0 |
| 64QAM | 1 | 0 | 14.36 | 14.28 | 14.48 | 0-2 | 0 |
| | 1 | 50 | 14.36 | 14.09 | 14.28 | | 0 |
| | 1 | 99 | 14.39 | 14.29 | 14.28 | | 0 |
| | 50 | 0 | 14.03 | 14.13 | 14.02 | 0-3 | 0 |
| | 50 | 25 | 14.13 | 14.00 | 13.88 | | 0 |
| | 50 | 50 | 13.99 | 14.01 | 13.87 | | 0 |
| | 100 | 0 | 14.08 | 13.97 | 13.84 | | 0 |

## Table 8-150
## LTE Band 66 Conducted Powers Ant 4a - 15 MHz Bandwidth

| LTE Band 66 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132047 (1717.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132597 (1772.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.35 | 14.33 | 14.04 | 0 | 0 |
| | 1 | 36 | 14.34 | 14.19 | 13.97 | | 0 |
| | 1 | 74 | 14.26 | 14.15 | 13.86 | | 0 |
| | 36 | 0 | 14.23 | 14.31 | 14.03 | 0-1 | 0 |
| | 36 | 18 | 14.31 | 14.24 | 14.06 | | 0 |
| | 36 | 37 | 14.26 | 14.21 | 14.06 | | 0 |
| | 75 | 0 | 14.29 | 14.22 | 14.06 | | 0 |
| 16QAM | 1 | 0 | 14.13 | 14.35 | 14.19 | 0-1 | 0 |
| | 1 | 36 | 14.24 | 14.17 | 14.10 | | 0 |
| | 1 | 74 | 14.10 | 14.13 | 13.94 | | 0 |
| | 36 | 0 | 13.99 | 14.06 | 13.91 | 0-2 | 0 |
| | 36 | 18 | 14.04 | 14.01 | 13.97 | | 0 |
| | 36 | 37 | 14.02 | 13.97 | 13.92 | | 0 |
| | 75 | 0 | 14.02 | 13.97 | 13.91 | | 0 |
| 64QAM | 1 | 0 | 14.25 | 14.30 | 14.06 | 0-2 | 0 |
| | 1 | 36 | 14.30 | 14.36 | 13.98 | | 0 |
| | 1 | 74 | 14.07 | 14.01 | 13.91 | | 0 |
| | 36 | 0 | 13.98 | 14.02 | 13.80 | 0-3 | 0 |
| | 36 | 18 | 14.06 | 14.01 | 13.88 | | 0 |
| | 36 | 37 | 14.05 | 13.96 | 13.86 | | 0 |
| | 75 | 0 | 13.98 | 13.94 | 13.78 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-151
## LTE Band 66 Conducted Powers Ant 4a - 10 MHz Bandwidth

| LTE Band 66 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132022 (1715.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132622 (1775.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.25 | 14.24 | 13.95 | 0 | 0 |
| | 1 | 25 | 14.23 | 14.18 | 14.01 | | 0 |
| | 1 | 49 | 14.24 | 14.19 | 14.06 | | 0 |
| | 25 | 0 | 14.25 | 14.24 | 14.12 | 0-1 | 0 |
| | 25 | 12 | 14.24 | 14.26 | 14.11 | | 0 |
| | 25 | 25 | 14.25 | 14.26 | 14.13 | | 0 |
| | 50 | 0 | 14.26 | 14.26 | 14.13 | | 0 |
| 16QAM | 1 | 0 | 14.25 | 14.24 | 14.01 | 0-1 | 0 |
| | 1 | 25 | 14.15 | 14.05 | 13.98 | | 0 |
| | 1 | 49 | 14.26 | 14.27 | 13.97 | | 0 |
| | 25 | 0 | 14.11 | 13.99 | 13.92 | 0-2 | 0 |
| | 25 | 12 | 14.06 | 13.90 | 13.87 | | 0 |
| | 25 | 25 | 14.10 | 13.92 | 13.89 | | 0 |
| | 50 | 0 | 14.07 | 13.91 | 13.94 | | 0 |
| 64QAM | 1 | 0 | 14.26 | 14.25 | 14.01 | 0-2 | 0 |
| | 1 | 25 | 14.25 | 14.26 | 14.07 | | 0 |
| | 1 | 49 | 14.24 | 14.21 | 14.15 | | 0 |
| | 25 | 0 | 14.16 | 14.01 | 13.93 | 0-3 | 0 |
| | 25 | 12 | 14.11 | 14.01 | 13.95 | | 0 |
| | 25 | 25 | 14.14 | 13.99 | 13.99 | | 0 |
| | 50 | 0 | 14.05 | 13.94 | 14.00 | | 0 |

## Table 8-152
## LTE Band 66 Conducted Powers Ant 4a - 5 MHz Bandwidth

| LTE Band 66 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131997 (1712.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132647 (1777.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.22 | 14.21 | 14.03 | 0 | 0 |
| | 1 | 12 | 14.11 | 14.14 | 13.99 | | 0 |
| | 1 | 24 | 14.10 | 14.20 | 14.00 | | 0 |
| | 12 | 0 | 14.23 | 14.17 | 14.16 | 0-1 | 0 |
| | 12 | 6 | 14.20 | 14.16 | 14.17 | | 0 |
| | 12 | 13 | 14.16 | 14.16 | 14.17 | | 0 |
| | 25 | 0 | 14.21 | 14.17 | 14.18 | | 0 |
| 16QAM | 1 | 0 | 14.26 | 14.17 | 14.09 | 0-1 | 0 |
| | 1 | 12 | 14.19 | 14.06 | 14.06 | | 0 |
| | 1 | 24 | 14.27 | 14.17 | 14.12 | | 0 |
| | 12 | 0 | 14.11 | 14.03 | 13.83 | 0-2 | 0 |
| | 12 | 6 | 14.10 | 14.03 | 13.80 | | 0 |
| | 12 | 13 | 14.05 | 14.00 | 13.86 | | 0 |
| | 25 | 0 | 14.06 | 14.02 | 13.91 | | 0 |
| 64QAM | 1 | 0 | 14.17 | 14.26 | 13.94 | 0-2 | 0 |
| | 1 | 12 | 14.22 | 14.14 | 14.02 | | 0 |
| | 1 | 24 | 13.86 | 14.12 | 14.11 | | 0 |
| | 12 | 0 | 13.97 | 14.03 | 13.80 | 0-3 | 0 |
| | 12 | 6 | 13.97 | 14.03 | 13.85 | | 0 |
| | 12 | 13 | 13.86 | 14.10 | 13.89 | | 0 |
| | 25 | 0 | 14.01 | 14.04 | 13.88 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-153
## LTE Band 66 Conducted Powers Ant 4a - 3 MHz Bandwidth

| LTE Band 66 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131987 (1711.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132657 (1778.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.24 | 13.96 | 13.93 | 0 | 0 |
| | 1 | 7 | 14.22 | 14.05 | 13.99 | | 0 |
| | 1 | 14 | 14.15 | 14.00 | 13.93 | | 0 |
| | 8 | 0 | 14.24 | 14.07 | 14.08 | 0-1 | 0 |
| | 8 | 4 | 14.24 | 14.07 | 14.06 | | 0 |
| | 8 | 7 | 14.23 | 14.07 | 14.06 | | 0 |
| | 15 | 0 | 14.24 | 14.09 | 14.10 | | 0 |
| 16QAM | 1 | 0 | 14.19 | 14.07 | 13.88 | 0-1 | 0 |
| | 1 | 7 | 14.24 | 14.11 | 13.97 | | 0 |
| | 1 | 14 | 14.19 | 14.01 | 13.89 | | 0 |
| | 8 | 0 | 14.01 | 13.96 | 13.82 | 0-2 | 0 |
| | 8 | 4 | 14.11 | 13.96 | 13.86 | | 0 |
| | 8 | 7 | 14.08 | 13.96 | 13.87 | | 0 |
| | 15 | 0 | 14.08 | 13.94 | 13.87 | | 0 |
| 64QAM | 1 | 0 | 14.24 | 14.01 | 14.14 | 0-2 | 0 |
| | 1 | 7 | 14.23 | 14.20 | 14.11 | | 0 |
| | 1 | 14 | 14.24 | 14.14 | 14.11 | | 0 |
| | 8 | 0 | 14.03 | 13.96 | 13.83 | 0-3 | 0 |
| | 8 | 4 | 14.04 | 13.97 | 13.88 | | 0 |
| | 8 | 7 | 14.03 | 13.98 | 13.90 | | 0 |
| | 15 | 0 | 14.07 | 14.04 | 13.91 | | 0 |

## Table 8-154
## LTE Band 66 Conducted Powers Ant 4a - 1.4 MHz Bandwidth

| LTE Band 66 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131979 (1710.7 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132665 (1779.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.24 | 14.21 | 14.21 | 0 | 0 |
| | 1 | 2 | 14.23 | 14.19 | 14.20 | | 0 |
| | 1 | 5 | 14.22 | 14.20 | 14.20 | | 0 |
| | 3 | 0 | 14.23 | 14.09 | 14.14 | | 0 |
| | 3 | 2 | 14.22 | 14.10 | 14.16 | | 0 |
| | 3 | 3 | 14.23 | 14.09 | 14.13 | | 0 |
| | 6 | 0 | 14.22 | 14.10 | 14.14 | 0-1 | 0 |
| 16QAM | 1 | 0 | 14.20 | 14.09 | 14.20 | 0-1 | 0 |
| | 1 | 2 | 13.99 | 13.92 | 14.03 | | 0 |
| | 1 | 5 | 14.13 | 13.92 | 14.05 | | 0 |
| | 3 | 0 | 14.18 | 14.03 | 14.13 | | 0 |
| | 3 | 2 | 14.03 | 13.90 | 13.93 | | 0 |
| | 3 | 3 | 14.01 | 13.99 | 13.95 | | 0 |
| | 6 | 0 | 14.01 | 13.94 | 13.97 | 0-2 | 0 |
| 64QAM | 1 | 0 | 14.08 | 14.14 | 14.14 | 0-2 | 0 |
| | 1 | 2 | 14.16 | 14.02 | 14.06 | | 0 |
| | 1 | 5 | 14.14 | 14.18 | 14.14 | | 0 |
| | 3 | 0 | 14.18 | 14.25 | 14.09 | | 0 |
| | 3 | 2 | 14.16 | 13.97 | 14.16 | | 0 |
| | 3 | 3 | 14.15 | 13.96 | 14.08 | | 0 |
| | 6 | 0 | 13.98 | 13.89 | 13.88 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-155
## LTE Band 66 Conducted Powers Ant 4a - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132072 (1720.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132572 (1770.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.12 | 11.29 | 11.28 | 0 | 0 |
| | 1 | 50 | 11.34 | 11.07 | 11.29 | | 0 |
| | 1 | 99 | **11.50** | 11.16 | 11.24 | | 0 |
| | 50 | 0 | 11.22 | 11.18 | 11.20 | 0-1 | 0 |
| | 50 | 25 | **11.26** | 11.11 | 11.17 | | 0 |
| | 50 | 50 | 11.14 | 11.14 | 11.14 | | 0 |
| | 100 | 0 | 11.12 | 11.13 | 11.16 | | 0 |
| 16QAM | 1 | 0 | 11.18 | 11.45 | 11.50 | 0-1 | 0 |
| | 1 | 50 | 11.39 | 11.32 | 11.35 | | 0 |
| | 1 | 99 | 11.17 | 11.30 | 11.14 | | 0 |
| | 50 | 0 | 11.02 | 11.28 | 11.08 | 0-2 | 0 |
| | 50 | 25 | 11.13 | 11.16 | 10.97 | | 0 |
| | 50 | 50 | 10.94 | 11.22 | 11.00 | | 0 |
| | 100 | 0 | 11.13 | 11.14 | 10.97 | | 0 |
| 64QAM | 1 | 0 | 11.04 | 11.49 | 11.30 | 0-2 | 0 |
| | 1 | 50 | 11.31 | 11.43 | 11.32 | | 0 |
| | 1 | 99 | 11.03 | 11.49 | 11.24 | | 0 |
| | 50 | 0 | 11.02 | 11.30 | 11.08 | 0-3 | 0 |
| | 50 | 25 | 11.14 | 11.19 | 11.01 | | 0 |
| | 50 | 50 | 10.96 | 11.25 | 11.00 | | 0 |
| | 100 | 0 | 11.14 | 11.12 | 10.96 | | 0 |

## Table 8-156
## LTE Band 66 Conducted Powers Ant 4a - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132047 (1717.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132597 (1772.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.04 | 11.07 | 11.05 | 0 | 0 |
| | 1 | 36 | 11.15 | 11.00 | 10.99 | | 0 |
| | 1 | 74 | 11.09 | 10.93 | 10.77 | | 0 |
| | 36 | 0 | 10.93 | 11.12 | 11.05 | 0-1 | 0 |
| | 36 | 18 | 11.03 | 11.10 | 11.03 | | 0 |
| | 36 | 37 | 11.05 | 11.05 | 10.93 | | 0 |
| | 75 | 0 | 11.03 | 11.04 | 11.01 | | 0 |
| 16QAM | 1 | 0 | 11.15 | 11.36 | 11.27 | 0-1 | 0 |
| | 1 | 36 | 11.19 | 11.27 | 11.23 | | 0 |
| | 1 | 74 | 11.12 | 11.27 | 10.81 | | 0 |
| | 36 | 0 | 10.92 | 11.15 | 11.08 | 0-2 | 0 |
| | 36 | 18 | 11.06 | 11.14 | 11.10 | | 0 |
| | 36 | 37 | 11.05 | 11.05 | 11.00 | | 0 |
| | 75 | 0 | 11.05 | 11.10 | 11.05 | | 0 |
| 64QAM | 1 | 0 | 11.22 | 11.20 | 11.30 | 0-2 | 0 |
| | 1 | 36 | 11.14 | 11.26 | 11.21 | | 0 |
| | 1 | 74 | 11.29 | 11.23 | 10.86 | | 0 |
| | 36 | 0 | 10.95 | 11.18 | 11.07 | 0-3 | 0 |
| | 36 | 18 | 11.05 | 11.10 | 11.06 | | 0 |
| | 36 | 37 | 11.06 | 11.07 | 11.02 | | 0 |
| | 75 | 0 | 11.03 | 11.07 | 11.03 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-157
## LTE Band 66 Conducted Powers Ant 4a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132022 (1715.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132622 (1775.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.89 | 11.09 | 11.01 | 0 | 0 |
| | 1 | 25 | 10.78 | 10.87 | 10.92 | | 0 |
| | 1 | 49 | 10.93 | 10.83 | 10.86 | | 0 |
| | 25 | 0 | 10.95 | 11.12 | 11.03 | 0-1 | 0 |
| | 25 | 12 | 10.89 | 10.98 | 10.97 | | 0 |
| | 25 | 25 | 10.95 | 10.92 | 10.97 | | 0 |
| | 50 | 0 | 10.89 | 10.96 | 10.98 | | 0 |
| 16QAM | 1 | 0 | 10.94 | 11.35 | 11.06 | 0-1 | 0 |
| | 1 | 25 | 10.92 | 11.08 | 11.08 | | 0 |
| | 1 | 49 | 11.07 | 10.95 | 11.09 | | 0 |
| | 25 | 0 | 10.97 | 11.10 | 11.01 | 0-2 | 0 |
| | 25 | 12 | 10.87 | 10.96 | 11.02 | | 0 |
| | 25 | 25 | 10.96 | 10.95 | 11.01 | | 0 |
| | 50 | 0 | 10.91 | 11.02 | 11.02 | | 0 |
| 64QAM | 1 | 0 | 10.96 | 11.32 | 11.08 | 0-2 | 0 |
| | 1 | 25 | 10.84 | 11.04 | 11.13 | | 0 |
| | 1 | 49 | 11.12 | 10.92 | 11.09 | | 0 |
| | 25 | 0 | 10.95 | 11.11 | 11.05 | 0-3 | 0 |
| | 25 | 12 | 10.90 | 10.97 | 11.02 | | 0 |
| | 25 | 25 | 10.93 | 10.94 | 11.01 | | 0 |
| | 50 | 0 | 10.92 | 10.99 | 11.02 | | 0 |

## Table 8-158
## LTE Band 66 Conducted Powers Ant 4a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131997 (1712.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132647 (1777.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.12 | 11.06 | 10.79 | 0 | 0 |
| | 1 | 12 | 11.03 | 10.97 | 10.74 | | 0 |
| | 1 | 24 | 10.84 | 10.93 | 10.75 | | 0 |
| | 12 | 0 | 10.99 | 10.88 | 10.88 | 0-1 | 0 |
| | 12 | 6 | 10.99 | 10.89 | 10.83 | | 0 |
| | 12 | 13 | 10.91 | 10.88 | 10.84 | | 0 |
| | 25 | 0 | 11.01 | 10.88 | 10.87 | | 0 |
| 16QAM | 1 | 0 | 11.26 | 11.21 | 11.11 | 0-1 | 0 |
| | 1 | 12 | 11.14 | 11.12 | 10.93 | | 0 |
| | 1 | 24 | 11.14 | 10.99 | 10.83 | | 0 |
| | 12 | 0 | 11.02 | 10.95 | 10.89 | 0-2 | 0 |
| | 12 | 6 | 11.01 | 10.97 | 10.89 | | 0 |
| | 12 | 13 | 10.93 | 10.96 | 10.85 | | 0 |
| | 25 | 0 | 11.10 | 10.91 | 10.87 | | 0 |
| 64QAM | 1 | 0 | 11.20 | 11.11 | 10.96 | 0-2 | 0 |
| | 1 | 12 | 11.14 | 11.09 | 10.96 | | 0 |
| | 1 | 24 | 11.14 | 11.04 | 11.04 | | 0 |
| | 12 | 0 | 11.07 | 10.92 | 10.85 | 0-3 | 0 |
| | 12 | 6 | 11.11 | 10.97 | 10.86 | | 0 |
| | 12 | 13 | 11.09 | 10.93 | 10.86 | | 0 |
| | 25 | 0 | 11.18 | 10.92 | 10.90 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-159
## LTE Band 66 Conducted Powers Ant 4a - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131987 (1711.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132657 (1778.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.91 | 10.81 | 10.88 | 0 | 0 |
| | 1 | 7 | 10.87 | 10.89 | 10.90 | | 0 |
| | 1 | 14 | 10.83 | 10.78 | 10.84 | | 0 |
| | 8 | 0 | 10.96 | 10.96 | 10.98 | 0-1 | 0 |
| | 8 | 4 | 10.95 | 10.98 | 10.97 | | 0 |
| | 8 | 7 | 10.97 | 10.96 | 10.99 | | 0 |
| | 15 | 0 | 10.96 | 10.95 | 10.97 | | 0 |
| 16QAM | 1 | 0 | 11.00 | 10.96 | 10.88 | 0-1 | 0 |
| | 1 | 7 | 11.06 | 11.23 | 10.97 | | 0 |
| | 1 | 14 | 11.00 | 11.04 | 10.98 | | 0 |
| | 8 | 0 | 11.01 | 10.99 | 11.02 | 0-2 | 0 |
| | 8 | 4 | 11.04 | 11.03 | 10.98 | | 0 |
| | 8 | 7 | 11.01 | 10.96 | 11.01 | | 0 |
| | 15 | 0 | 10.98 | 10.94 | 11.01 | | 0 |
| 64QAM | 1 | 0 | 11.07 | 11.03 | 11.12 | 0-2 | 0 |
| | 1 | 7 | 11.10 | 11.15 | 11.05 | | 0 |
| | 1 | 14 | 10.98 | 11.07 | 10.94 | | 0 |
| | 8 | 0 | 10.98 | 11.01 | 11.05 | 0-3 | 0 |
| | 8 | 4 | 10.99 | 11.07 | 11.01 | | 0 |
| | 8 | 7 | 10.99 | 11.05 | 11.04 | | 0 |
| | 15 | 0 | 10.97 | 10.92 | 11.03 | | 0 |

## Table 8-160
## LTE Band 66 Conducted Powers Ant 4a - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131979 (1710.7 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132665 (1779.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.07 | 11.00 | 10.70 | 0 | 0 |
| | 1 | 2 | 10.98 | 10.91 | 10.65 | | 0 |
| | 1 | 5 | 10.79 | 10.87 | 10.66 | | 0 |
| | 3 | 0 | 10.94 | 10.82 | 10.79 | | 0 |
| | 3 | 2 | 10.94 | 10.83 | 10.74 | | 0 |
| | 3 | 3 | 10.86 | 10.82 | 10.75 | | 0 |
| | 6 | 0 | 10.96 | 10.82 | 10.78 | 0-1 | 0 |
| 16QAM | 1 | 0 | 11.21 | 11.14 | 11.02 | 0-1 | 0 |
| | 1 | 2 | 11.09 | 11.05 | 10.84 | | 0 |
| | 1 | 5 | 11.09 | 10.92 | 10.74 | | 0 |
| | 3 | 0 | 11.01 | 10.88 | 10.82 | | 0 |
| | 3 | 2 | 11.00 | 10.90 | 10.82 | | 0 |
| | 3 | 3 | 10.92 | 10.89 | 10.78 | | 0 |
| | 6 | 0 | 11.09 | 10.84 | 10.80 | 0-2 | 0 |
| 64QAM | 1 | 0 | 11.19 | 11.04 | 10.89 | 0-2 | 0 |
| | 1 | 2 | 11.13 | 11.02 | 10.89 | | 0 |
| | 1 | 5 | 11.13 | 10.97 | 10.97 | | 0 |
| | 3 | 0 | 11.06 | 10.85 | 10.78 | | 0 |
| | 3 | 2 | 11.10 | 10.90 | 10.79 | | 0 |
| | 3 | 3 | 11.08 | 10.90 | 10.79 | | 0 |
| | 6 | 0 | 11.17 | 10.91 | 10.83 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-161
## LTE Band 66 Conducted Powers Ant 4b - 20 MHz Bandwidth

| LTE Band 66 (AWS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132072 (1720.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132572 (1770.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | **14.05** | 14.02 | 13.63 | 0 | 0 |
| | 1 | 50 | 13.74 | 13.72 | 13.52 | | 0 |
| | 1 | 99 | 13.99 | 13.97 | 13.83 | | 0 |
| | 50 | 0 | **13.80** | 13.79 | 13.50 | 0-1 | 0 |
| | 50 | 25 | 13.67 | 13.65 | 13.54 | | 0 |
| | 50 | 50 | 13.71 | 13.69 | 13.70 | | 0 |
| | 100 | 0 | 13.71 | 13.70 | 13.57 | | 0 |
| 16QAM | 1 | 0 | 14.01 | 13.56 | 13.50 | 0-1 | 0 |
| | 1 | 50 | 13.56 | 13.65 | 13.53 | | 0 |
| | 1 | 99 | 13.83 | 13.69 | 13.82 | | 0 |
| | 50 | 0 | 13.57 | 13.60 | 13.51 | 0-2 | 0 |
| | 50 | 25 | 13.55 | 13.65 | 13.58 | | 0 |
| | 50 | 50 | 13.53 | 13.63 | 13.70 | | 0 |
| | 100 | 0 | 13.54 | 13.56 | 13.59 | | 0 |
| 64QAM | 1 | 0 | 13.96 | 13.75 | 13.62 | 0-2 | 0 |
| | 1 | 50 | 13.65 | 13.80 | 13.53 | | 0 |
| | 1 | 99 | 13.68 | 13.82 | 13.78 | | 0 |
| | 50 | 0 | 13.59 | 13.61 | 13.52 | 0-3 | 0 |
| | 50 | 25 | 13.55 | 13.69 | 13.52 | | 0 |
| | 50 | 50 | 13.50 | 13.67 | 13.63 | | 0 |
| | 100 | 0 | 13.51 | 13.66 | 13.60 | | 0 |

## Table 8-162
## LTE Band 66 Conducted Powers Ant 4b - 15 MHz Bandwidth

| LTE Band 66 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132047 (1717.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132597 (1772.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.92 | 13.86 | 13.62 | 0 | 0 |
| | 1 | 36 | 13.87 | 13.99 | 13.87 | | 0 |
| | 1 | 74 | 13.58 | 13.97 | 13.86 | | 0 |
| | 36 | 0 | 13.79 | 13.69 | 13.61 | 0-1 | 0 |
| | 36 | 18 | 13.75 | 13.78 | 13.78 | | 0 |
| | 36 | 37 | 13.59 | 13.77 | 13.77 | | 0 |
| | 75 | 0 | 13.73 | 13.78 | 13.75 | | 0 |
| 16QAM | 1 | 0 | 14.03 | 13.69 | 13.58 | 0-1 | 0 |
| | 1 | 36 | 13.95 | 13.96 | 13.78 | | 0 |
| | 1 | 74 | 13.65 | 13.74 | 13.89 | | 0 |
| | 36 | 0 | 13.74 | 13.55 | 13.62 | 0-2 | 0 |
| | 36 | 18 | 13.63 | 13.69 | 13.64 | | 0 |
| | 36 | 37 | 13.64 | 13.63 | 13.65 | | 0 |
| | 75 | 0 | 13.60 | 13.64 | 13.62 | | 0 |
| 64QAM | 1 | 0 | 13.93 | 13.55 | 13.54 | 0-2 | 0 |
| | 1 | 36 | 13.62 | 13.63 | 13.66 | | 0 |
| | 1 | 74 | 13.51 | 13.57 | 13.71 | | 0 |
| | 36 | 0 | 13.64 | 13.52 | 13.56 | 0-3 | 0 |
| | 36 | 18 | 13.62 | 13.52 | 13.59 | | 0 |
| | 36 | 37 | 13.54 | 13.63 | 13.61 | | 0 |
| | 75 | 0 | 13.58 | 13.60 | 13.50 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-163
## LTE Band 66 Conducted Powers Ant 4b - 10 MHz Bandwidth

| LTE Band 66 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132022 (1715.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132622 (1775.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.00 | 13.84 | 13.78 | 0 | 0 |
| | 1 | 25 | 13.85 | 13.92 | 13.90 | | 0 |
| | 1 | 49 | 13.75 | 13.90 | 14.00 | | 0 |
| | 25 | 0 | 13.81 | 13.74 | 13.76 | 0-1 | 0 |
| | 25 | 12 | 13.72 | 13.80 | 13.80 | | 0 |
| | 25 | 25 | 13.70 | 13.80 | 13.82 | | 0 |
| | 50 | 0 | 13.75 | 13.81 | 13.81 | | 0 |
| 16QAM | 1 | 0 | 13.92 | 13.60 | 13.70 | 0-1 | 0 |
| | 1 | 25 | 13.97 | 13.92 | 13.86 | | 0 |
| | 1 | 49 | 13.78 | 13.80 | 13.79 | | 0 |
| | 25 | 0 | 13.82 | 13.51 | 13.71 | 0-2 | 0 |
| | 25 | 12 | 13.65 | 13.62 | 13.71 | | 0 |
| | 25 | 25 | 13.58 | 13.61 | 13.71 | | 0 |
| | 50 | 0 | 13.69 | 13.67 | 13.68 | | 0 |
| 64QAM | 1 | 0 | 13.86 | 13.53 | 13.68 | 0-2 | 0 |
| | 1 | 25 | 13.85 | 13.55 | 13.63 | | 0 |
| | 1 | 49 | 13.65 | 13.62 | 13.60 | | 0 |
| | 25 | 0 | 13.70 | 13.50 | 13.51 | 0-3 | 0 |
| | 25 | 12 | 13.57 | 13.54 | 13.52 | | 0 |
| | 25 | 25 | 13.52 | 13.52 | 13.51 | | 0 |
| | 50 | 0 | 13.60 | 13.55 | 13.56 | | 0 |

## Table 8-164
## LTE Band 66 Conducted Powers Ant 4b - 5 MHz Bandwidth

| LTE Band 66 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131997 (1712.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132647 (1777.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.98 | 13.65 | 14.00 | 0 | 0 |
| | 1 | 12 | 14.01 | 13.69 | 13.99 | | 0 |
| | 1 | 24 | 13.92 | 13.72 | 14.02 | | 0 |
| | 12 | 0 | 13.80 | 13.66 | 13.76 | 0-1 | 0 |
| | 12 | 6 | 13.78 | 13.66 | 13.76 | | 0 |
| | 12 | 13 | 13.75 | 13.67 | 13.74 | | 0 |
| | 25 | 0 | 13.81 | 13.68 | 13.80 | | 0 |
| 16QAM | 1 | 0 | 13.83 | 13.56 | 13.96 | 0-1 | 0 |
| | 1 | 12 | 14.00 | 13.68 | 13.94 | | 0 |
| | 1 | 24 | 13.74 | 13.68 | 13.98 | | 0 |
| | 12 | 0 | 13.64 | 13.62 | 13.68 | 0-2 | 0 |
| | 12 | 6 | 13.66 | 13.56 | 13.72 | | 0 |
| | 12 | 13 | 13.62 | 13.64 | 13.73 | | 0 |
| | 25 | 0 | 13.64 | 13.66 | 13.71 | | 0 |
| 64QAM | 1 | 0 | 13.88 | 13.58 | 13.70 | 0-2 | 0 |
| | 1 | 12 | 13.70 | 13.75 | 13.75 | | 0 |
| | 1 | 24 | 13.55 | 13.68 | 13.84 | | 0 |
| | 12 | 0 | 13.72 | 13.53 | 13.57 | 0-3 | 0 |
| | 12 | 6 | 13.70 | 13.53 | 13.60 | | 0 |
| | 12 | 13 | 13.61 | 13.51 | 13.59 | | 0 |
| | 25 | 0 | 13.68 | 13.52 | 13.62 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-165
## LTE Band 66 Conducted Powers Ant 4b - 3 MHz Bandwidth

| LTE Band 66 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131987 (1711.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132657 (1778.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.84 | 13.73 | 13.83 | 0 | 0 |
| | 1 | 7 | 13.89 | 13.78 | 13.90 | | 0 |
| | 1 | 14 | 13.86 | 13.71 | 13.81 | | 0 |
| | 8 | 0 | 13.76 | 13.65 | 13.76 | 0-1 | 0 |
| | 8 | 4 | 13.79 | 13.66 | 13.76 | | 0 |
| | 8 | 7 | 13.80 | 13.64 | 13.76 | | 0 |
| | 15 | 0 | 13.78 | 13.66 | 13.77 | | 0 |
| 16QAM | 1 | 0 | 13.94 | 13.73 | 13.81 | 0-1 | 0 |
| | 1 | 7 | 13.77 | 13.82 | 14.01 | | 0 |
| | 1 | 14 | 13.91 | 13.73 | 13.80 | | 0 |
| | 8 | 0 | 13.69 | 13.64 | 13.70 | 0-2 | 0 |
| | 8 | 4 | 13.75 | 13.70 | 13.76 | | 0 |
| | 8 | 7 | 13.73 | 13.63 | 13.75 | | 0 |
| | 15 | 0 | 13.71 | 13.70 | 13.74 | | 0 |
| 64QAM | 1 | 0 | 13.59 | 13.59 | 13.69 | 0-2 | 0 |
| | 1 | 7 | 13.83 | 13.82 | 13.65 | | 0 |
| | 1 | 14 | 13.74 | 13.69 | 13.78 | | 0 |
| | 8 | 0 | 13.63 | 13.60 | 13.54 | 0-3 | 0 |
| | 8 | 4 | 13.62 | 13.55 | 13.56 | | 0 |
| | 8 | 7 | 13.61 | 13.60 | 13.57 | | 0 |
| | 15 | 0 | 13.60 | 13.58 | 13.55 | | 0 |

## Table 8-166
## LTE Band 66 Conducted Powers Ant 4b - 1.4 MHz Bandwidth

| LTE Band 66 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131979 (1710.7 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132665 (1779.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.89 | 13.77 | 13.70 | 0 | 0 |
| | 1 | 2 | 13.86 | 13.75 | 13.76 | | 0 |
| | 1 | 5 | 13.89 | 13.79 | 13.79 | | 0 |
| | 3 | 0 | 13.76 | 13.64 | 13.70 | | 0 |
| | 3 | 2 | 13.78 | 13.63 | 13.71 | | 0 |
| | 3 | 3 | 13.76 | 13.63 | 13.72 | | 0 |
| | 6 | 0 | 13.77 | 13.64 | 13.68 | 0-1 | 0 |
| 16QAM | 1 | 0 | 13.81 | 13.89 | 13.85 | 0-1 | 0 |
| | 1 | 2 | 14.01 | 13.78 | 13.77 | | 0 |
| | 1 | 5 | 13.87 | 13.91 | 13.87 | | 0 |
| | 3 | 0 | 13.79 | 13.77 | 13.73 | | 0 |
| | 3 | 2 | 13.86 | 13.69 | 13.68 | | 0 |
| | 3 | 3 | 13.80 | 13.75 | 13.68 | | 0 |
| | 6 | 0 | 13.77 | 13.70 | 13.68 | 0-2 | 0 |
| 64QAM | 1 | 0 | 13.85 | 13.67 | 13.89 | 0-2 | 0 |
| | 1 | 2 | 13.97 | 13.70 | 13.76 | | 0 |
| | 1 | 5 | 13.83 | 13.73 | 13.80 | | 0 |
| | 3 | 0 | 13.78 | 13.59 | 13.89 | | 0 |
| | 3 | 2 | 13.71 | 13.64 | 13.87 | | 0 |
| | 3 | 3 | 13.74 | 13.62 | 13.86 | | 0 |
| | 6 | 0 | 13.70 | 13.60 | 13.66 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-167
## LTE Band 66 Conducted Powers Ant 4b - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132072 (1720.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132572 (1770.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.09 | 11.39 | 11.01 | 0 | 0 |
| | 1 | 50 | 11.11 | **11.43** | 11.00 | | 0 |
| | 1 | 99 | 11.26 | 11.35 | 11.11 | | 0 |
| | 50 | 0 | 11.19 | 11.26 | 11.06 | 0-1 | 0 |
| | 50 | 25 | 11.15 | **11.32** | 11.02 | | 0 |
| | 50 | 50 | 11.11 | 11.31 | 11.16 | | 0 |
| | 100 | 0 | 11.10 | 11.30 | 10.93 | | 0 |
| 16QAM | 1 | 0 | 11.44 | 11.39 | 11.08 | 0-1 | 0 |
| | 1 | 50 | 11.44 | 11.29 | 11.15 | | 0 |
| | 1 | 99 | 11.35 | 11.14 | 11.33 | | 0 |
| | 50 | 0 | 11.35 | 11.03 | 11.03 | 0-2 | 0 |
| | 50 | 25 | 11.16 | 11.14 | 11.13 | | 0 |
| | 50 | 50 | 10.98 | 11.05 | 11.24 | | 0 |
| | 100 | 0 | 11.09 | 11.09 | 11.09 | | 0 |
| 64QAM | 1 | 0 | 11.41 | 11.31 | 11.14 | 0-2 | 0 |
| | 1 | 50 | 11.42 | 11.22 | 11.25 | | 0 |
| | 1 | 99 | 11.30 | 11.25 | 11.37 | | 0 |
| | 50 | 0 | 11.37 | 11.03 | 11.07 | 0-3 | 0 |
| | 50 | 25 | 11.11 | 11.09 | 11.13 | | 0 |
| | 50 | 50 | 11.03 | 11.07 | 11.23 | | 0 |
| | 100 | 0 | 11.08 | 11.20 | 10.95 | | 0 |

## Table 8-168
## LTE Band 66 Conducted Powers Ant 4b - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132047 (1717.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132597 (1772.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.00 | 10.90 | 10.93 | 0 | 0 |
| | 1 | 36 | 11.08 | 10.97 | 10.99 | | 0 |
| | 1 | 74 | 10.70 | 10.83 | 10.85 | | 0 |
| | 36 | 0 | 11.31 | 11.07 | 10.94 | 0-1 | 0 |
| | 36 | 18 | 11.23 | 11.12 | 11.02 | | 0 |
| | 36 | 37 | 11.02 | 11.02 | 10.96 | | 0 |
| | 75 | 0 | 11.18 | 11.09 | 11.01 | | 0 |
| 16QAM | 1 | 0 | 11.43 | 11.49 | 11.27 | 0-1 | 0 |
| | 1 | 36 | 11.47 | 11.20 | 11.47 | | 0 |
| | 1 | 74 | 11.29 | 11.25 | 11.28 | | 0 |
| | 36 | 0 | 11.33 | 11.27 | 10.99 | 0-2 | 0 |
| | 36 | 18 | 11.26 | 11.27 | 11.04 | | 0 |
| | 36 | 37 | 11.04 | 11.18 | 10.99 | | 0 |
| | 75 | 0 | 11.16 | 11.22 | 11.03 | | 0 |
| 64QAM | 1 | 0 | 11.37 | 11.48 | 11.28 | 0-2 | 0 |
| | 1 | 36 | 11.48 | 11.40 | 11.49 | | 0 |
| | 1 | 74 | 11.23 | 11.46 | 11.29 | | 0 |
| | 36 | 0 | 11.21 | 11.09 | 11.16 | 0-3 | 0 |
| | 36 | 18 | 11.20 | 11.12 | 11.23 | | 0 |
| | 36 | 37 | 11.07 | 11.07 | 11.17 | | 0 |
| | 75 | 0 | 11.15 | 11.11 | 11.21 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-169
## LTE Band 66 Conducted Powers Ant 4b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 132022 (1715.0 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132622 (1775.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.11 | 11.14 | 11.06 | 0 | 0 |
| | 1 | 25 | 11.09 | 11.04 | 10.89 | | 0 |
| | 1 | 49 | 11.06 | 10.91 | 10.91 | | 0 |
| | 25 | 0 | 11.09 | 11.15 | 10.91 | 0-1 | 0 |
| | 25 | 12 | 11.04 | 11.17 | 10.90 | | 0 |
| | 25 | 25 | 11.05 | 11.11 | 10.91 | | 0 |
| | 50 | 0 | 11.04 | 11.17 | 10.92 | | 0 |
| 16QAM | 1 | 0 | 11.35 | 11.49 | 11.17 | 0-1 | 0 |
| | 1 | 25 | 11.37 | 11.39 | 11.25 | | 0 |
| | 1 | 49 | 11.42 | 11.41 | 11.37 | | 0 |
| | 25 | 0 | 11.14 | 11.20 | 11.14 | 0-2 | 0 |
| | 25 | 12 | 11.08 | 11.15 | 11.11 | | 0 |
| | 25 | 25 | 11.13 | 11.09 | 11.11 | | 0 |
| | 50 | 0 | 11.08 | 11.14 | 11.13 | | 0 |
| 64QAM | 1 | 0 | 11.27 | 11.47 | 11.48 | 0-2 | 0 |
| | 1 | 25 | 11.34 | 11.21 | 11.42 | | 0 |
| | 1 | 49 | 11.41 | 11.19 | 11.28 | | 0 |
| | 25 | 0 | 11.15 | 11.21 | 10.92 | 0-3 | 0 |
| | 25 | 12 | 11.08 | 11.20 | 10.90 | | 0 |
| | 25 | 25 | 11.09 | 11.15 | 10.92 | | 0 |
| | 50 | 0 | 11.03 | 11.18 | 10.90 | | 0 |

## Table 8-170
## LTE Band 66 Conducted Powers Ant 4b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131997 (1712.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132647 (1777.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.14 | 11.02 | 11.05 | 0 | 0 |
| | 1 | 12 | 11.14 | 10.96 | 11.11 | | 0 |
| | 1 | 24 | 11.13 | 10.99 | 11.12 | | 0 |
| | 12 | 0 | 11.14 | 11.09 | 11.15 | 0-1 | 0 |
| | 12 | 6 | 11.15 | 11.06 | 11.12 | | 0 |
| | 12 | 13 | 11.11 | 11.08 | 11.13 | | 0 |
| | 25 | 0 | 11.19 | 11.10 | 11.17 | | 0 |
| 16QAM | 1 | 0 | 11.42 | 11.30 | 11.44 | 0-1 | 0 |
| | 1 | 12 | 11.48 | 11.25 | 11.45 | | 0 |
| | 1 | 24 | 11.43 | 11.39 | 11.45 | | 0 |
| | 12 | 0 | 11.20 | 11.21 | 11.18 | 0-2 | 0 |
| | 12 | 6 | 11.27 | 11.20 | 11.19 | | 0 |
| | 12 | 13 | 11.22 | 11.24 | 11.16 | | 0 |
| | 25 | 0 | 11.21 | 11.19 | 11.23 | | 0 |
| 64QAM | 1 | 0 | 11.30 | 11.44 | 11.26 | 0-2 | 0 |
| | 1 | 12 | 11.40 | 11.44 | 11.48 | | 0 |
| | 1 | 24 | 11.43 | 11.35 | 11.30 | | 0 |
| | 12 | 0 | 11.14 | 11.20 | 11.21 | 0-3 | 0 |
| | 12 | 6 | 11.20 | 11.13 | 11.19 | | 0 |
| | 12 | 13 | 11.16 | 11.13 | 11.09 | | 0 |
| | 25 | 0 | 11.22 | 11.12 | 11.08 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-171
## LTE Band 66 Conducted Powers Ant 4b - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131987 (1711.5 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132657 (1778.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.06 | 11.11 | 11.05 | 0 | 0 |
| | 1 | 7 | 11.04 | 11.01 | 10.88 | | 0 |
| | 1 | 14 | 11.01 | 10.88 | 10.90 | | 0 |
| | 8 | 0 | 11.04 | 11.12 | 10.90 | 0-1 | 0 |
| | 8 | 4 | 10.99 | 11.14 | 10.89 | | 0 |
| | 8 | 7 | 11.00 | 11.08 | 10.90 | | 0 |
| | 15 | 0 | 10.99 | 11.14 | 10.91 | | 0 |
| 16QAM | 1 | 0 | 11.30 | 11.46 | 11.16 | 0-1 | 0 |
| | 1 | 7 | 11.32 | 11.44 | 11.24 | | 0 |
| | 1 | 14 | 11.37 | 11.46 | 11.36 | | 0 |
| | 8 | 0 | 11.09 | 11.15 | 11.10 | 0-2 | 0 |
| | 8 | 4 | 11.03 | 11.10 | 11.07 | | 0 |
| | 8 | 7 | 11.11 | 11.04 | 11.07 | | 0 |
| | 15 | 0 | 11.06 | 11.09 | 11.09 | | 0 |
| 64QAM | 1 | 0 | 11.25 | 11.32 | 11.44 | 0-2 | 0 |
| | 1 | 7 | 11.32 | 11.16 | 11.48 | | 0 |
| | 1 | 14 | 11.39 | 11.14 | 11.24 | | 0 |
| | 8 | 0 | 11.13 | 11.16 | 10.88 | 0-3 | 0 |
| | 8 | 4 | 11.06 | 11.15 | 10.86 | | 0 |
| | 8 | 7 | 11.07 | 11.10 | 10.88 | | 0 |
| | 15 | 0 | 11.01 | 11.13 | 10.86 | | 0 |

## Table 8-172
## LTE Band 66 Conducted Powers Ant 4b - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 66 (AWS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 131979 (1710.7 MHz) | Mid Channel 132322 (1745.0 MHz) | High Channel 132665 (1779.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.11 | 11.01 | 10.98 | 0 | 0 |
| | 1 | 2 | 11.11 | 10.95 | 11.04 | | 0 |
| | 1 | 5 | 11.10 | 10.98 | 11.05 | | 0 |
| | 3 | 0 | 11.11 | 11.08 | 11.08 | | 0 |
| | 3 | 2 | 11.12 | 11.05 | 11.05 | | 0 |
| | 3 | 3 | 11.08 | 11.07 | 11.06 | | 0 |
| | 6 | 0 | 11.16 | 11.09 | 11.10 | 0-1 | 0 |
| 16QAM | 1 | 0 | 11.39 | 11.29 | 11.47 | 0-1 | 0 |
| | 1 | 2 | 11.45 | 11.24 | 11.48 | | 0 |
| | 1 | 5 | 11.40 | 11.38 | 11.38 | | 0 |
| | 3 | 0 | 11.16 | 11.20 | 11.14 | | 0 |
| | 3 | 2 | 11.23 | 11.19 | 11.15 | | 0 |
| | 3 | 3 | 11.18 | 11.18 | 11.12 | | 0 |
| | 6 | 0 | 11.17 | 11.13 | 11.19 | 0-2 | 0 |
| 64QAM | 1 | 0 | 11.26 | 11.38 | 11.22 | 0-2 | 0 |
| | 1 | 2 | 11.36 | 11.38 | 11.44 | | 0 |
| | 1 | 5 | 11.39 | 11.29 | 11.26 | | 0 |
| | 3 | 0 | 11.10 | 11.14 | 11.17 | | 0 |
| | 3 | 2 | 11.16 | 11.07 | 11.15 | | 0 |
| | 3 | 3 | 11.12 | 11.07 | 11.05 | | 0 |
| | 6 | 0 | 11.18 | 11.06 | 11.04 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.9 LTE Band 2

**Table 8-173**
**LTE Band 2 Conducted Powers Ant 2a - 20 MHz Bandwidth**

| LTE Band 2 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18700 (1860.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19100 (1900.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.93 | 14.96 | 14.85 | 0 | 0 |
| | 1 | 50 | 15.04 | **15.08** | 14.93 | | 0 |
| | 1 | 99 | 14.85 | 14.93 | 14.94 | | 0 |
| | 50 | 0 | 15.08 | **15.10** | 14.84 | 0-1 | 0 |
| | 50 | 25 | 15.09 | 15.08 | 14.97 | | 0 |
| | 50 | 50 | 15.05 | 15.09 | 15.06 | | 0 |
| | 100 | 0 | 15.05 | 15.07 | 14.98 | | 0 |
| 16QAM | 1 | 0 | 15.04 | 14.95 | 14.88 | 0-1 | 0 |
| | 1 | 50 | 15.10 | 15.10 | 14.99 | | 0 |
| | 1 | 99 | 15.03 | 15.01 | 14.93 | | 0 |
| | 50 | 0 | 14.59 | 14.64 | 14.51 | 0-2 | 0 |
| | 50 | 25 | 14.67 | 14.67 | 14.48 | | 0 |
| | 50 | 50 | 14.61 | 14.65 | 14.52 | | 0 |
| | 100 | 0 | 14.65 | 14.60 | 14.53 | | 0 |
| 64QAM | 1 | 0 | 14.95 | 14.94 | 14.77 | 0-2 | 0 |
| | 1 | 50 | 14.98 | 15.10 | 14.86 | | 0 |
| | 1 | 99 | 14.83 | 14.97 | 14.95 | | 0 |
| | 50 | 0 | 14.56 | 14.63 | 14.43 | 0-3 | 0 |
| | 50 | 25 | 14.67 | 14.66 | 14.54 | | 0 |
| | 50 | 50 | 14.53 | 14.67 | 14.53 | | 0 |
| | 100 | 0 | 14.66 | 14.61 | 14.54 | | 0 |

**Table 8-174**
**LTE Band 2 Conducted Powers Ant 2a - 15 MHz Bandwidth**

| LTE Band 2 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18675 (1857.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19125 (1902.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.72 | 14.87 | 14.72 | 0 | 0 |
| | 1 | 36 | 15.01 | 15.08 | 14.82 | | 0 |
| | 1 | 74 | 14.79 | 14.98 | 14.67 | | 0 |
| | 36 | 0 | 14.83 | 14.94 | 14.83 | 0-1 | 0 |
| | 36 | 18 | 15.06 | 15.04 | 14.90 | | 0 |
| | 36 | 37 | 15.02 | 15.01 | 14.90 | | 0 |
| | 75 | 0 | 15.05 | 14.98 | 14.89 | | 0 |
| 16QAM | 1 | 0 | 14.90 | 14.90 | 14.97 | 0-1 | 0 |
| | 1 | 36 | 15.07 | 15.10 | 15.00 | | 0 |
| | 1 | 74 | 14.98 | 14.96 | 14.85 | | 0 |
| | 36 | 0 | 14.67 | 14.78 | 14.67 | 0-2 | 0 |
| | 36 | 18 | 14.90 | 14.87 | 14.75 | | 0 |
| | 36 | 37 | 14.85 | 14.81 | 14.76 | | 0 |
| | 75 | 0 | 14.89 | 14.76 | 14.72 | | 0 |
| 64QAM | 1 | 0 | 15.07 | 14.66 | 14.83 | 0-2 | 0 |
| | 1 | 36 | 15.04 | 14.98 | 15.02 | | 0 |
| | 1 | 74 | 14.88 | 15.05 | 14.78 | | 0 |
| | 36 | 0 | 14.67 | 14.81 | 14.74 | 0-3 | 0 |
| | 36 | 18 | 14.89 | 14.88 | 14.78 | | 0 |
| | 36 | 37 | 14.83 | 14.81 | 14.81 | | 0 |
| | 75 | 0 | 14.86 | 14.76 | 14.73 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-175
## LTE Band 2 Conducted Powers Ant 2a - 10 MHz Bandwidth

| LTE Band 2 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18650 (1855.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19150 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.80 | 14.85 | 14.86 | 0 | 0 |
| | 1 | 25 | 14.91 | 14.88 | 14.89 | | 0 |
| | 1 | 49 | 15.07 | 15.01 | 14.89 | | 0 |
| | 25 | 0 | 14.82 | 14.96 | 14.92 | 0-1 | 0 |
| | 25 | 12 | 14.93 | 14.99 | 14.97 | | 0 |
| | 25 | 25 | 15.09 | 14.98 | 14.96 | | 0 |
| | 50 | 0 | 14.95 | 14.94 | 14.99 | | 0 |
| 16QAM | 1 | 0 | 15.02 | 14.98 | 15.02 | 0-1 | 0 |
| | 1 | 25 | 14.96 | 14.98 | 15.01 | | 0 |
| | 1 | 49 | 15.10 | 15.04 | 15.03 | | 0 |
| | 25 | 0 | 14.65 | 14.84 | 14.79 | 0-2 | 0 |
| | 25 | 12 | 14.77 | 14.89 | 14.87 | | 0 |
| | 25 | 25 | 14.87 | 14.86 | 14.78 | | 0 |
| | 50 | 0 | 14.72 | 14.81 | 14.83 | | 0 |
| 64QAM | 1 | 0 | 15.10 | 14.81 | 14.97 | 0-2 | 0 |
| | 1 | 25 | 15.04 | 14.90 | 15.03 | | 0 |
| | 1 | 49 | 15.08 | 14.99 | 15.07 | | 0 |
| | 25 | 0 | 14.68 | 14.95 | 14.84 | 0-3 | 0 |
| | 25 | 12 | 14.74 | 14.93 | 14.81 | | 0 |
| | 25 | 25 | 14.88 | 14.88 | 14.81 | | 0 |
| | 50 | 0 | 14.76 | 14.81 | 14.83 | | 0 |

## Table 8-176
## LTE Band 2 Conducted Powers Ant 2a - 5 MHz Bandwidth

| LTE Band 2 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18625 (1852.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19175 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.86 | 14.93 | 14.78 | 0 | 0 |
| | 1 | 12 | 14.91 | 14.88 | 14.75 | | 0 |
| | 1 | 24 | 15.03 | 14.92 | 14.76 | | 0 |
| | 12 | 0 | 14.80 | 14.92 | 14.87 | 0-1 | 0 |
| | 12 | 6 | 14.81 | 14.93 | 14.84 | | 0 |
| | 12 | 13 | 14.84 | 14.90 | 14.80 | | 0 |
| | 25 | 0 | 14.80 | 14.88 | 14.87 | | 0 |
| 16QAM | 1 | 0 | 15.01 | 15.06 | 14.91 | 0-1 | 0 |
| | 1 | 12 | 15.03 | 14.89 | 14.96 | | 0 |
| | 1 | 24 | 14.99 | 14.96 | 14.97 | | 0 |
| | 12 | 0 | 14.73 | 14.89 | 14.72 | 0-2 | 0 |
| | 12 | 6 | 14.76 | 14.88 | 14.68 | | 0 |
| | 12 | 13 | 14.76 | 14.78 | 14.67 | | 0 |
| | 25 | 0 | 14.69 | 14.81 | 14.76 | | 0 |
| 64QAM | 1 | 0 | 14.72 | 15.09 | 14.91 | 0-2 | 0 |
| | 1 | 12 | 14.79 | 15.06 | 14.97 | | 0 |
| | 1 | 24 | 15.06 | 15.01 | 14.80 | | 0 |
| | 12 | 0 | 14.74 | 14.85 | 14.76 | 0-3 | 0 |
| | 12 | 6 | 14.73 | 14.86 | 14.71 | | 0 |
| | 12 | 13 | 14.82 | 14.70 | 14.71 | | 0 |
| | 25 | 0 | 14.71 | 14.78 | 14.71 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-177
## LTE Band 2 Conducted Powers Ant 2a - 3 MHz Bandwidth

| LTE Band 2 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18615 (1851.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19185 (1908.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.68 | 14.82 | 14.64 | 0 | 0 |
| | 1 | 7 | 14.81 | 14.83 | 14.61 | | 0 |
| | 1 | 14 | 14.74 | 14.77 | 14.61 | | 0 |
| | 8 | 0 | 14.78 | 14.88 | 14.77 | 0-1 | 0 |
| | 8 | 4 | 14.78 | 14.82 | 14.70 | | 0 |
| | 8 | 7 | 14.77 | 14.83 | 14.68 | | 0 |
| | 15 | 0 | 14.79 | 14.84 | 14.73 | | 0 |
| 16QAM | 1 | 0 | 14.91 | 15.04 | 14.85 | 0-1 | 0 |
| | 1 | 7 | 15.01 | 14.96 | 14.74 | | 0 |
| | 1 | 14 | 14.75 | 14.67 | 14.86 | | 0 |
| | 8 | 0 | 14.67 | 14.77 | 14.68 | 0-2 | 0 |
| | 8 | 4 | 14.71 | 14.65 | 14.63 | | 0 |
| | 8 | 7 | 14.67 | 14.67 | 14.60 | | 0 |
| | 15 | 0 | 14.65 | 14.65 | 14.60 | | 0 |
| 64QAM | 1 | 0 | 14.96 | 14.93 | 14.84 | 0-2 | 0 |
| | 1 | 7 | 15.03 | 14.76 | 14.86 | | 0 |
| | 1 | 14 | 14.98 | 14.87 | 14.90 | | 0 |
| | 8 | 0 | 14.67 | 14.80 | 14.68 | 0-3 | 0 |
| | 8 | 4 | 14.66 | 14.69 | 14.64 | | 0 |
| | 8 | 7 | 14.68 | 14.69 | 14.55 | | 0 |
| | 15 | 0 | 14.62 | 14.62 | 14.64 | | 0 |

## Table 8-178
## LTE Band 2 Conducted Powers Ant 2a - 1.4 MHz Bandwidth

| LTE Band 2 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18607 (1850.7 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19193 (1909.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.87 | 15.04 | 15.00 | 0 | 0 |
| | 1 | 2 | 14.93 | 15.02 | 14.97 | | 0 |
| | 1 | 5 | 14.97 | 14.98 | 15.08 | | 0 |
| | 3 | 0 | 14.86 | 15.01 | 14.89 | | 0 |
| | 3 | 2 | 14.93 | 14.97 | 14.91 | | 0 |
| | 3 | 3 | 14.95 | 14.96 | 14.97 | | 0 |
| | 6 | 0 | 14.93 | 14.96 | 14.89 | 0-1 | 0 |
| 16QAM | 1 | 0 | 15.07 | 15.06 | 14.86 | 0-1 | 0 |
| | 1 | 2 | 15.06 | 14.90 | 14.82 | | 0 |
| | 1 | 5 | 15.08 | 14.89 | 14.79 | | 0 |
| | 3 | 0 | 14.79 | 14.90 | 14.72 | | 0 |
| | 3 | 2 | 14.81 | 14.83 | 14.66 | | 0 |
| | 3 | 3 | 14.88 | 14.81 | 14.75 | | 0 |
| | 6 | 0 | 14.78 | 14.81 | 14.65 | 0-2 | 0 |
| 64QAM | 1 | 0 | 15.01 | 15.06 | 14.84 | 0-2 | 0 |
| | 1 | 2 | 15.02 | 15.06 | 14.73 | | 0 |
| | 1 | 5 | 15.05 | 14.88 | 14.83 | | 0 |
| | 3 | 0 | 14.75 | 14.91 | 14.85 | | 0 |
| | 3 | 2 | 14.74 | 14.82 | 14.87 | | 0 |
| | 3 | 3 | 14.76 | 14.85 | 14.96 | | 0 |
| | 6 | 0 | 14.73 | 14.78 | 14.60 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-179
## LTE Band 2 Conducted Powers Ant 2a - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18700 (1860.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19100 (1900.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.46 | 11.59 | 11.41 | 0 | 0 |
| | 1 | 50 | 11.54 | **11.76** | 11.73 | | 0 |
| | 1 | 99 | 11.32 | 11.60 | 11.73 | | 0 |
| | 50 | 0 | 11.70 | 11.63 | 11.47 | 0-1 | 0 |
| | 50 | 25 | 11.74 | 11.76 | 11.71 | | 0 |
| | 50 | 50 | 11.52 | **11.80** | 11.68 | | 0 |
| | 100 | 0 | 11.53 | 11.75 | 11.69 | | 0 |
| 16QAM | 1 | 0 | 11.94 | 11.69 | 11.45 | 0-1 | 0 |
| | 1 | 50 | 11.98 | 11.72 | 11.80 | | 0 |
| | 1 | 99 | 11.80 | 11.70 | 11.67 | | 0 |
| | 50 | 0 | 11.75 | 11.63 | 11.48 | 0-2 | 0 |
| | 50 | 25 | 11.81 | 11.74 | 11.65 | | 0 |
| | 50 | 50 | 11.57 | 11.78 | 11.66 | | 0 |
| | 100 | 0 | 11.78 | 11.73 | 11.69 | | 0 |
| 64QAM | 1 | 0 | 11.89 | 11.68 | 11.76 | 0-2 | 0 |
| | 1 | 50 | 11.92 | 11.67 | 11.94 | | 0 |
| | 1 | 99 | 11.49 | 11.47 | 12.05 | | 0 |
| | 50 | 0 | 11.73 | 11.61 | 11.49 | 0-3 | 0 |
| | 50 | 25 | 11.76 | 11.67 | 11.71 | | 0 |
| | 50 | 50 | 11.54 | 11.74 | 11.68 | | 0 |
| | 100 | 0 | 11.78 | 11.69 | 11.73 | | 0 |

## Table 8-180
## LTE Band 2 Conducted Powers Ant 2a - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18675 (1857.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19125 (1902.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.74 | 11.57 | 11.45 | 0 | 0 |
| | 1 | 36 | 11.69 | 11.66 | 11.68 | | 0 |
| | 1 | 74 | 11.51 | 11.63 | 11.41 | | 0 |
| | 36 | 0 | 11.62 | 11.78 | 11.61 | 0-1 | 0 |
| | 36 | 18 | 11.65 | 11.75 | 11.73 | | 0 |
| | 36 | 37 | 11.61 | 11.74 | 11.69 | | 0 |
| | 75 | 0 | 11.64 | 11.67 | 11.69 | | 0 |
| 16QAM | 1 | 0 | 11.67 | 11.77 | 11.77 | 0-1 | 0 |
| | 1 | 36 | 11.64 | 11.96 | 11.99 | | 0 |
| | 1 | 74 | 11.37 | 11.82 | 11.82 | | 0 |
| | 36 | 0 | 11.64 | 11.84 | 11.63 | 0-2 | 0 |
| | 36 | 18 | 11.67 | 11.80 | 11.75 | | 0 |
| | 36 | 37 | 11.63 | 11.77 | 11.69 | | 0 |
| | 75 | 0 | 11.65 | 11.69 | 11.69 | | 0 |
| 64QAM | 1 | 0 | 11.87 | 11.84 | 11.62 | 0-2 | 0 |
| | 1 | 36 | 11.82 | 11.97 | 11.85 | | 0 |
| | 1 | 74 | 11.54 | 11.93 | 11.53 | | 0 |
| | 36 | 0 | 11.65 | 11.83 | 11.62 | 0-3 | 0 |
| | 36 | 18 | 11.65 | 11.78 | 11.74 | | 0 |
| | 36 | 37 | 11.60 | 11.76 | 11.67 | | 0 |
| | 75 | 0 | 11.63 | 11.70 | 11.66 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-181
## LTE Band 2 Conducted Powers Ant 2a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18650 (1855.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19150 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.84 | 11.76 | 11.54 | 0 | 0 |
| | 1 | 25 | 11.77 | 11.60 | 11.62 | | 0 |
| | 1 | 49 | 11.74 | 11.71 | 11.60 | | 0 |
| | 25 | 0 | 11.61 | 11.78 | 11.62 | 0-1 | 0 |
| | 25 | 12 | 11.62 | 11.68 | 11.66 | | 0 |
| | 25 | 25 | 11.69 | 11.68 | 11.67 | | 0 |
| | 50 | 0 | 11.64 | 11.64 | 11.64 | | 0 |
| 16QAM | 1 | 0 | 11.78 | 11.90 | 11.81 | 0-1 | 0 |
| | 1 | 25 | 11.62 | 11.74 | 11.94 | | 0 |
| | 1 | 49 | 11.77 | 11.84 | 11.83 | | 0 |
| | 25 | 0 | 11.65 | 11.74 | 11.62 | 0-2 | 0 |
| | 25 | 12 | 11.64 | 11.71 | 11.64 | | 0 |
| | 25 | 25 | 11.73 | 11.67 | 11.64 | | 0 |
| | 50 | 0 | 11.63 | 11.68 | 11.64 | | 0 |
| 64QAM | 1 | 0 | 11.93 | 11.89 | 11.68 | 0-2 | 0 |
| | 1 | 25 | 11.68 | 11.89 | 11.74 | | 0 |
| | 1 | 49 | 11.90 | 11.91 | 11.57 | | 0 |
| | 25 | 0 | 11.66 | 11.76 | 11.63 | 0-3 | 0 |
| | 25 | 12 | 11.64 | 11.74 | 11.61 | | 0 |
| | 25 | 25 | 11.73 | 11.71 | 11.62 | | 0 |
| | 50 | 0 | 11.66 | 11.66 | 11.67 | | 0 |

## Table 8-182
## LTE Band 2 Conducted Powers Ant 2a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18625 (1852.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19175 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.68 | 11.67 | 11.73 | 0 | 0 |
| | 1 | 12 | 11.69 | 11.54 | 11.67 | | 0 |
| | 1 | 24 | 11.69 | 11.62 | 11.58 | | 0 |
| | 12 | 0 | 11.65 | 11.61 | 11.59 | 0-1 | 0 |
| | 12 | 6 | 11.63 | 11.64 | 11.55 | | 0 |
| | 12 | 13 | 11.68 | 11.62 | 11.39 | | 0 |
| | 25 | 0 | 11.65 | 11.63 | 11.56 | | 0 |
| 16QAM | 1 | 0 | 11.78 | 11.73 | 11.90 | 0-1 | 0 |
| | 1 | 12 | 11.82 | 11.62 | 11.74 | | 0 |
| | 1 | 24 | 11.90 | 11.77 | 11.72 | | 0 |
| | 12 | 0 | 11.71 | 11.69 | 11.62 | 0-2 | 0 |
| | 12 | 6 | 11.67 | 11.70 | 11.59 | | 0 |
| | 12 | 13 | 11.74 | 11.67 | 11.44 | | 0 |
| | 25 | 0 | 11.66 | 11.66 | 11.54 | | 0 |
| 64QAM | 1 | 0 | 11.70 | 12.06 | 11.90 | 0-2 | 0 |
| | 1 | 12 | 11.79 | 11.96 | 11.85 | | 0 |
| | 1 | 24 | 11.73 | 11.88 | 11.90 | | 0 |
| | 12 | 0 | 11.64 | 11.68 | 11.64 | 0-3 | 0 |
| | 12 | 6 | 11.62 | 11.70 | 11.60 | | 0 |
| | 12 | 13 | 11.68 | 11.70 | 11.46 | | 0 |
| | 25 | 0 | 11.61 | 11.66 | 11.58 | | 0 |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-183
## LTE Band 2 Conducted Powers Ant 2a - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18615 (1851.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19185 (1908.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.62 | 11.51 | 11.50 | 0 | 0 |
| | 1 | 7 | 11.74 | 11.52 | 11.37 | | 0 |
| | 1 | 14 | 11.64 | 11.55 | 11.43 | | 0 |
| | 8 | 0 | 11.62 | 11.62 | 11.59 | 0-1 | 0 |
| | 8 | 4 | 11.61 | 11.58 | 11.47 | | 0 |
| | 8 | 7 | 11.61 | 11.59 | 11.58 | | 0 |
| | 15 | 0 | 11.61 | 11.60 | 11.48 | | 0 |
| 16QAM | 1 | 0 | 11.56 | 11.69 | 11.87 | 0-1 | 0 |
| | 1 | 7 | 11.77 | 11.75 | 11.73 | | 0 |
| | 1 | 14 | 11.65 | 11.70 | 11.80 | | 0 |
| | 8 | 0 | 11.64 | 11.64 | 11.61 | 0-2 | 0 |
| | 8 | 4 | 11.65 | 11.62 | 11.45 | | 0 |
| | 8 | 7 | 11.66 | 11.64 | 11.58 | | 0 |
| | 15 | 0 | 11.62 | 11.62 | 11.52 | | 0 |
| 64QAM | 1 | 0 | 11.78 | 11.83 | 11.64 | 0-2 | 0 |
| | 1 | 7 | 11.75 | 11.73 | 11.56 | | 0 |
| | 1 | 14 | 11.72 | 11.90 | 11.68 | | 0 |
| | 8 | 0 | 11.66 | 11.68 | 11.60 | 0-3 | 0 |
| | 8 | 4 | 11.66 | 11.63 | 11.50 | | 0 |
| | 8 | 7 | 11.66 | 11.66 | 11.61 | | 0 |
| | 15 | 0 | 11.62 | 11.61 | 11.53 | | 0 |

## Table 8-184
## LTE Band 2 Conducted Powers Ant 2a - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18607 (1850.7 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19193 (1909.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.65 | 11.65 | 11.67 | 0 | 0 |
| | 1 | 2 | 11.66 | 11.52 | 11.61 | | 0 |
| | 1 | 5 | 11.66 | 11.60 | 11.52 | | 0 |
| | 3 | 0 | 11.62 | 11.59 | 11.53 | | 0 |
| | 3 | 2 | 11.60 | 11.62 | 11.49 | | 0 |
| | 3 | 3 | 11.65 | 11.60 | 11.33 | | 0 |
| | 6 | 0 | 11.62 | 11.61 | 11.50 | 0-1 | 0 |
| 16QAM | 1 | 0 | 11.75 | 11.71 | 11.84 | 0-1 | 0 |
| | 1 | 2 | 11.79 | 11.60 | 11.70 | | 0 |
| | 1 | 5 | 11.87 | 11.73 | 11.68 | | 0 |
| | 3 | 0 | 11.68 | 11.65 | 11.58 | | 0 |
| | 3 | 2 | 11.62 | 11.66 | 11.55 | | 0 |
| | 3 | 3 | 11.69 | 11.63 | 11.40 | | 0 |
| | 6 | 0 | 11.61 | 11.62 | 11.50 | 0-2 | 0 |
| 64QAM | 1 | 0 | 11.65 | 12.02 | 11.86 | 0-2 | 0 |
| | 1 | 2 | 11.74 | 11.92 | 11.81 | | 0 |
| | 1 | 5 | 11.68 | 11.94 | 11.86 | | 0 |
| | 3 | 0 | 11.59 | 11.64 | 11.60 | | 0 |
| | 3 | 2 | 11.57 | 11.66 | 11.56 | | 0 |
| | 3 | 3 | 11.63 | 11.66 | 11.42 | | 0 |
| | 6 | 0 | 11.56 | 11.62 | 11.54 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-185
## LTE Band 2 Conducted Powers Ant 2b - 20 MHz Bandwidth

| LTE Band 2 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18700 (1860.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19100 (1900.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.08 | 13.93 | 13.73 | 0 | 0 |
| | 1 | 50 | **14.10** | 13.95 | 13.83 | | 0 |
| | 1 | 99 | 13.92 | 13.97 | 14.00 | | 0 |
| | 50 | 0 | 14.07 | 13.90 | 13.85 | 0-1 | 0 |
| | 50 | 25 | **14.09** | 14.00 | 14.01 | | 0 |
| | 50 | 50 | 13.90 | 13.92 | 14.07 | | 0 |
| | 100 | 0 | 14.08 | 13.96 | 14.03 | | 0 |
| 16QAM | 1 | 0 | 13.85 | 14.00 | 13.70 | 0-1 | 0 |
| | 1 | 50 | 14.00 | 14.01 | 13.80 | | 0 |
| | 1 | 99 | 13.79 | 14.09 | 13.99 | | 0 |
| | 50 | 0 | 13.88 | 13.71 | 13.61 | 0-2 | 0 |
| | 50 | 25 | 13.95 | 13.76 | 13.73 | | 0 |
| | 50 | 50 | 13.75 | 13.76 | 13.79 | | 0 |
| | 100 | 0 | 13.93 | 13.77 | 13.77 | | 0 |
| 64QAM | 1 | 0 | 13.86 | 13.82 | 14.05 | 0-2 | 0 |
| | 1 | 50 | 13.98 | 13.88 | 14.10 | | 0 |
| | 1 | 99 | 13.70 | 13.93 | 14.10 | | 0 |
| | 50 | 0 | 13.61 | 13.55 | 13.50 | 0-3 | 0 |
| | 50 | 25 | 13.63 | 13.61 | 13.66 | | 0 |
| | 50 | 50 | 13.51 | 13.62 | 13.73 | | 0 |
| | 100 | 0 | 13.65 | 13.61 | 13.71 | | 0 |

## Table 8-186
## LTE Band 2 Conducted Powers Ant 2b - 15 MHz Bandwidth

| LTE Band 2 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18675 (1857.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19125 (1902.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.73 | 13.86 | 13.75 | 0 | 0 |
| | 1 | 36 | 13.90 | 13.91 | 13.91 | | 0 |
| | 1 | 74 | 13.62 | 13.92 | 13.91 | | 0 |
| | 36 | 0 | 13.80 | 13.75 | 13.96 | 0-1 | 0 |
| | 36 | 18 | 13.94 | 13.82 | 14.00 | | 0 |
| | 36 | 37 | 13.90 | 13.85 | 13.98 | | 0 |
| | 75 | 0 | 13.95 | 13.87 | 13.98 | | 0 |
| 16QAM | 1 | 0 | 13.79 | 13.91 | 13.98 | 0-1 | 0 |
| | 1 | 36 | 13.82 | 14.02 | 14.08 | | 0 |
| | 1 | 74 | 13.63 | 14.02 | 14.02 | | 0 |
| | 36 | 0 | 13.52 | 13.60 | 13.78 | 0-2 | 0 |
| | 36 | 18 | 13.70 | 13.66 | 13.89 | | 0 |
| | 36 | 37 | 13.63 | 13.69 | 13.80 | | 0 |
| | 75 | 0 | 13.68 | 13.68 | 13.87 | | 0 |
| 64QAM | 1 | 0 | 13.75 | 13.90 | 13.83 | 0-2 | 0 |
| | 1 | 36 | 13.89 | 13.72 | 14.06 | | 0 |
| | 1 | 74 | 13.62 | 14.01 | 13.99 | | 0 |
| | 36 | 0 | 13.55 | 13.59 | 13.85 | 0-3 | 0 |
| | 36 | 18 | 13.67 | 13.73 | 13.96 | | 0 |
| | 36 | 37 | 13.66 | 13.69 | 13.85 | | 0 |
| | 75 | 0 | 13.65 | 13.73 | 13.85 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-187
## LTE Band 2 Conducted Powers Ant 2b - 10 MHz Bandwidth

| LTE Band 2 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18650 (1855.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19150 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.76 | 13.80 | 13.91 | 0 | 0 |
| | 1 | 25 | 13.79 | 13.87 | 13.83 | | 0 |
| | 1 | 49 | 13.96 | 13.94 | 14.01 | | 0 |
| | 25 | 0 | 13.76 | 13.81 | 13.94 | 0-1 | 0 |
| | 25 | 12 | 13.85 | 13.86 | 13.97 | | 0 |
| | 25 | 25 | 13.97 | 13.98 | 14.01 | | 0 |
| | 50 | 0 | 13.85 | 13.93 | 13.95 | | 0 |
| 16QAM | 1 | 0 | 13.97 | 13.84 | 13.98 | 0-1 | 0 |
| | 1 | 25 | 14.03 | 13.86 | 13.92 | | 0 |
| | 1 | 49 | 14.06 | 13.78 | 14.03 | | 0 |
| | 25 | 0 | 13.54 | 13.58 | 13.79 | 0-2 | 0 |
| | 25 | 12 | 13.66 | 13.59 | 13.74 | | 0 |
| | 25 | 25 | 13.72 | 13.66 | 13.82 | | 0 |
| | 50 | 0 | 13.71 | 13.69 | 13.76 | | 0 |
| 64QAM | 1 | 0 | 13.77 | 13.55 | 13.93 | 0-2 | 0 |
| | 1 | 25 | 13.91 | 13.57 | 13.87 | | 0 |
| | 1 | 49 | 14.06 | 13.69 | 13.99 | | 0 |
| | 25 | 0 | 13.55 | 13.58 | 13.81 | 0-3 | 0 |
| | 25 | 12 | 13.68 | 13.58 | 13.82 | | 0 |
| | 25 | 25 | 13.69 | 13.66 | 13.86 | | 0 |
| | 50 | 0 | 13.64 | 13.65 | 13.81 | | 0 |

## Table 8-188
## LTE Band 2 Conducted Powers Ant 2b - 5 MHz Bandwidth

| LTE Band 2 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18625 (1852.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19175 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.72 | 13.78 | 13.81 | 0 | 0 |
| | 1 | 12 | 13.77 | 13.88 | 13.83 | | 0 |
| | 1 | 24 | 13.87 | 13.94 | 13.96 | | 0 |
| | 12 | 0 | 13.69 | 13.80 | 13.92 | 0-1 | 0 |
| | 12 | 6 | 13.67 | 13.79 | 13.95 | | 0 |
| | 12 | 13 | 13.74 | 13.88 | 14.00 | | 0 |
| | 25 | 0 | 13.69 | 13.87 | 13.97 | | 0 |
| 16QAM | 1 | 0 | 13.65 | 13.74 | 13.96 | 0-1 | 0 |
| | 1 | 12 | 13.68 | 13.98 | 13.91 | | 0 |
| | 1 | 24 | 14.01 | 13.96 | 14.05 | | 0 |
| | 12 | 0 | 13.51 | 13.64 | 13.74 | 0-2 | 0 |
| | 12 | 6 | 13.48 | 13.65 | 13.77 | | 0 |
| | 12 | 13 | 13.59 | 13.73 | 13.80 | | 0 |
| | 25 | 0 | 13.46 | 13.69 | 13.76 | | 0 |
| 64QAM | 1 | 0 | 13.41 | 13.77 | 13.94 | 0-2 | 0 |
| | 1 | 12 | 13.75 | 13.87 | 13.86 | | 0 |
| | 1 | 24 | 13.85 | 13.95 | 14.04 | | 0 |
| | 12 | 0 | 13.49 | 13.68 | 13.71 | 0-3 | 0 |
| | 12 | 6 | 13.47 | 13.62 | 13.79 | | 0 |
| | 12 | 13 | 13.52 | 13.71 | 13.79 | | 0 |
| | 25 | 0 | 13.46 | 13.69 | 13.69 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-189
## LTE Band 2 Conducted Powers Ant 2b - 3 MHz Bandwidth

| LTE Band 2 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18615 (1851.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19185 (1908.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.51 | 13.60 | 13.81 | 0 | 0 |
| | 1 | 7 | 13.62 | 13.74 | 13.85 | | 0 |
| | 1 | 14 | 13.58 | 13.70 | 13.85 | | 0 |
| | 8 | 0 | 13.59 | 13.68 | 13.89 | 0-1 | 0 |
| | 8 | 4 | 13.58 | 13.73 | 13.93 | | 0 |
| | 8 | 7 | 13.59 | 13.73 | 13.92 | | 0 |
| | 15 | 0 | 13.61 | 13.74 | 13.96 | | 0 |
| 16QAM | 1 | 0 | 13.53 | 13.64 | 13.77 | 0-1 | 0 |
| | 1 | 7 | 13.81 | 13.62 | 13.94 | | 0 |
| | 1 | 14 | 13.69 | 13.67 | 13.87 | | 0 |
| | 8 | 0 | 13.50 | 13.48 | 13.71 | 0-2 | 0 |
| | 8 | 4 | 13.49 | 13.52 | 13.68 | | 0 |
| | 8 | 7 | 13.47 | 13.59 | 13.74 | | 0 |
| | 15 | 0 | 13.50 | 13.54 | 13.74 | | 0 |
| 64QAM | 1 | 0 | 13.58 | 13.52 | 13.96 | 0-2 | 0 |
| | 1 | 7 | 13.66 | 13.81 | 13.80 | | 0 |
| | 1 | 14 | 13.59 | 13.64 | 13.91 | | 0 |
| | 8 | 0 | 13.45 | 13.54 | 13.73 | 0-3 | 0 |
| | 8 | 4 | 13.43 | 13.53 | 13.73 | | 0 |
| | 8 | 7 | 13.47 | 13.54 | 13.70 | | 0 |
| | 15 | 0 | 13.44 | 13.53 | 13.76 | | 0 |

## Table 8-190
## LTE Band 2 Conducted Powers Ant 2b - 1.4 MHz Bandwidth

| LTE Band 2 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18607 (1850.7 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19193 (1909.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.68 | 13.67 | 14.00 | 0 | 0 |
| | 1 | 2 | 13.74 | 13.63 | 13.97 | | 0 |
| | 1 | 5 | 13.76 | 13.77 | 14.10 | | 0 |
| | 3 | 0 | 13.61 | 13.66 | 13.88 | | 0 |
| | 3 | 2 | 13.69 | 13.72 | 13.90 | | 0 |
| | 3 | 3 | 13.68 | 13.74 | 13.97 | | 0 |
| | 6 | 0 | 13.68 | 13.73 | 13.88 | 0-1 | 0 |
| 16QAM | 1 | 0 | 13.59 | 13.71 | 14.04 | 0-1 | 0 |
| | 1 | 2 | 13.62 | 13.76 | 14.05 | | 0 |
| | 1 | 5 | 13.73 | 13.87 | 14.00 | | 0 |
| | 3 | 0 | 13.56 | 13.53 | 13.80 | | 0 |
| | 3 | 2 | 13.60 | 13.75 | 13.79 | | 0 |
| | 3 | 3 | 13.67 | 13.76 | 13.85 | | 0 |
| | 6 | 0 | 13.53 | 13.72 | 13.71 | 0-2 | 0 |
| 64QAM | 1 | 0 | 13.79 | 13.68 | 13.92 | 0-2 | 0 |
| | 1 | 2 | 13.70 | 13.79 | 13.93 | | 0 |
| | 1 | 5 | 13.75 | 13.90 | 14.06 | | 0 |
| | 3 | 0 | 13.56 | 13.83 | 13.80 | | 0 |
| | 3 | 2 | 13.65 | 13.96 | 13.76 | | 0 |
| | 3 | 3 | 13.63 | 13.95 | 13.88 | | 0 |
| | 6 | 0 | 13.56 | 13.67 | 13.69 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-191
## LTE Band 2 Conducted Powers Ant 2b - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18700 (1860.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19100 (1900.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.87 | 10.84 | 10.72 | 0 | 0 |
| | 1 | 50 | 10.89 | 10.83 | 11.06 | | 0 |
| | 1 | 99 | 10.70 | 10.76 | **11.07** | | 0 |
| | 50 | 0 | 10.82 | 10.83 | 10.95 | 0-1 | 0 |
| | 50 | 25 | 10.91 | 10.86 | **11.10** | | 0 |
| | 50 | 50 | 10.73 | 10.90 | 11.07 | | 0 |
| | 100 | 0 | 10.93 | 10.88 | 11.06 | | 0 |
| 16QAM | 1 | 0 | 10.66 | 10.93 | 10.84 | 0-1 | 0 |
| | 1 | 50 | 10.84 | 11.00 | 11.10 | | 0 |
| | 1 | 99 | 10.61 | 10.94 | 11.09 | | 0 |
| | 50 | 0 | 10.62 | 10.63 | 10.73 | 0-2 | 0 |
| | 50 | 25 | 10.73 | 10.67 | 10.89 | | 0 |
| | 50 | 50 | 10.56 | 10.69 | 10.82 | | 0 |
| | 100 | 0 | 10.76 | 10.67 | 10.87 | | 0 |
| 64QAM | 1 | 0 | 10.69 | 10.68 | 10.91 | 0-2 | 0 |
| | 1 | 50 | 10.75 | 10.72 | 11.10 | | 0 |
| | 1 | 99 | 10.63 | 10.71 | 11.09 | | 0 |
| | 50 | 0 | 10.59 | 10.61 | 10.71 | 0-3 | 0 |
| | 50 | 25 | 10.72 | 10.65 | 10.88 | | 0 |
| | 50 | 50 | 10.55 | 10.67 | 10.81 | | 0 |
| | 100 | 0 | 10.76 | 10.66 | 10.94 | | 0 |

## Table 8-192
## LTE Band 2 Conducted Powers Ant 2b - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18675 (1857.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19125 (1902.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.69 | 10.70 | 10.94 | 0 | 0 |
| | 1 | 36 | 10.88 | 10.80 | 11.08 | | 0 |
| | 1 | 74 | 10.65 | 10.87 | 11.07 | | 0 |
| | 36 | 0 | 10.88 | 10.81 | 11.01 | 0-1 | 0 |
| | 36 | 18 | 11.08 | 10.93 | 11.09 | | 0 |
| | 36 | 37 | 11.03 | 10.94 | 11.05 | | 0 |
| | 75 | 0 | 11.07 | 10.93 | 11.02 | | 0 |
| 16QAM | 1 | 0 | 10.81 | 10.75 | 11.03 | 0-1 | 0 |
| | 1 | 36 | 10.89 | 10.98 | 11.09 | | 0 |
| | 1 | 74 | 10.67 | 10.78 | 11.08 | | 0 |
| | 36 | 0 | 10.58 | 10.56 | 10.68 | 0-2 | 0 |
| | 36 | 18 | 10.75 | 10.66 | 10.75 | | 0 |
| | 36 | 37 | 10.78 | 10.68 | 10.68 | | 0 |
| | 75 | 0 | 10.79 | 10.63 | 10.73 | | 0 |
| 64QAM | 1 | 0 | 10.75 | 11.00 | 11.09 | 0-2 | 0 |
| | 1 | 36 | 11.03 | 10.70 | 11.05 | | 0 |
| | 1 | 74 | 10.69 | 10.95 | 11.10 | | 0 |
| | 36 | 0 | 10.60 | 10.54 | 10.67 | 0-3 | 0 |
| | 36 | 18 | 10.82 | 10.61 | 10.71 | | 0 |
| | 36 | 37 | 10.75 | 10.67 | 10.68 | | 0 |
| | 75 | 0 | 10.79 | 10.63 | 10.71 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-193
## LTE Band 2 Conducted Powers Ant 2b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18650 (1855.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19150 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.81 | 10.48 | 10.84 | 0 | 0 |
| | 1 | 25 | 10.85 | 10.46 | 10.83 | | 0 |
| | 1 | 49 | 10.89 | 10.51 | 11.06 | | 0 |
| | 25 | 0 | 10.72 | 10.52 | 10.87 | 0-1 | 0 |
| | 25 | 12 | 10.81 | 10.52 | 10.89 | | 0 |
| | 25 | 25 | 10.89 | 10.60 | 11.00 | | 0 |
| | 50 | 0 | 10.81 | 10.60 | 10.90 | | 0 |
| 16QAM | 1 | 0 | 11.05 | 11.09 | 11.07 | 0-1 | 0 |
| | 1 | 25 | 11.04 | 11.05 | 11.05 | | 0 |
| | 1 | 49 | 11.09 | 11.09 | 11.05 | | 0 |
| | 25 | 0 | 10.76 | 10.52 | 10.88 | 0-2 | 0 |
| | 25 | 12 | 10.81 | 10.54 | 10.94 | | 0 |
| | 25 | 25 | 10.93 | 10.65 | 11.03 | | 0 |
| | 50 | 0 | 10.82 | 10.58 | 10.88 | | 0 |
| 64QAM | 1 | 0 | 11.04 | 11.08 | 11.01 | 0-2 | 0 |
| | 1 | 25 | 11.09 | 10.99 | 11.03 | | 0 |
| | 1 | 49 | 11.06 | 11.08 | 11.07 | | 0 |
| | 25 | 0 | 10.74 | 10.52 | 10.89 | 0-3 | 0 |
| | 25 | 12 | 10.82 | 10.56 | 10.90 | | 0 |
| | 25 | 25 | 10.92 | 10.63 | 11.01 | | 0 |
| | 50 | 0 | 10.83 | 10.63 | 10.88 | | 0 |

## Table 8-194
## LTE Band 2 Conducted Powers Ant 2b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18625 (1852.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19175 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.74 | 10.60 | 11.03 | 0 | 0 |
| | 1 | 12 | 10.74 | 10.59 | 11.01 | | 0 |
| | 1 | 24 | 10.81 | 10.66 | 11.03 | | 0 |
| | 12 | 0 | 10.79 | 10.65 | 11.04 | 0-1 | 0 |
| | 12 | 6 | 10.74 | 10.71 | 11.02 | | 0 |
| | 12 | 13 | 10.74 | 10.75 | 11.01 | | 0 |
| | 25 | 0 | 10.75 | 10.76 | 11.10 | | 0 |
| 16QAM | 1 | 0 | 10.78 | 10.77 | 10.86 | 0-1 | 0 |
| | 1 | 12 | 10.82 | 10.83 | 10.85 | | 0 |
| | 1 | 24 | 10.84 | 10.80 | 11.09 | | 0 |
| | 12 | 0 | 10.58 | 10.60 | 10.80 | 0-2 | 0 |
| | 12 | 6 | 10.55 | 10.53 | 10.82 | | 0 |
| | 12 | 13 | 10.55 | 10.60 | 10.79 | | 0 |
| | 25 | 0 | 10.51 | 10.58 | 10.87 | | 0 |
| 64QAM | 1 | 0 | 10.88 | 10.80 | 11.08 | 0-2 | 0 |
| | 1 | 12 | 10.90 | 10.79 | 10.92 | | 0 |
| | 1 | 24 | 10.76 | 10.75 | 11.08 | | 0 |
| | 12 | 0 | 10.63 | 10.54 | 10.84 | 0-3 | 0 |
| | 12 | 6 | 10.59 | 10.53 | 10.94 | | 0 |
| | 12 | 13 | 10.54 | 10.63 | 10.85 | | 0 |
| | 25 | 0 | 10.55 | 10.59 | 10.92 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-195
## LTE Band 2 Conducted Powers Ant 2b - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18615 (1851.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19185 (1908.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.69 | 10.55 | 10.98 | 0 | 0 |
| | 1 | 7 | 10.69 | 10.54 | 10.96 | | 0 |
| | 1 | 14 | 10.76 | 10.61 | 10.98 | | 0 |
| | 8 | 0 | 10.74 | 10.60 | 10.99 | 0-1 | 0 |
| | 8 | 4 | 10.69 | 10.66 | 10.97 | | 0 |
| | 8 | 7 | 10.69 | 10.70 | 10.96 | | 0 |
| | 15 | 0 | 10.70 | 10.71 | 11.06 | | 0 |
| 16QAM | 1 | 0 | 10.71 | 10.73 | 10.84 | 0-1 | 0 |
| | 1 | 7 | 10.75 | 10.79 | 10.83 | | 0 |
| | 1 | 14 | 10.77 | 10.76 | 11.07 | | 0 |
| | 8 | 0 | 10.51 | 10.56 | 10.78 | 0-2 | 0 |
| | 8 | 4 | 10.48 | 10.49 | 10.80 | | 0 |
| | 8 | 7 | 10.48 | 10.56 | 10.77 | | 0 |
| | 15 | 0 | 10.44 | 10.54 | 10.85 | | 0 |
| 64QAM | 1 | 0 | 10.81 | 10.76 | 11.06 | 0-2 | 0 |
| | 1 | 7 | 10.83 | 10.75 | 10.90 | | 0 |
| | 1 | 14 | 10.69 | 10.71 | 11.06 | | 0 |
| | 8 | 0 | 10.56 | 10.50 | 10.82 | 0-3 | 0 |
| | 8 | 4 | 10.55 | 10.49 | 10.90 | | 0 |
| | 8 | 7 | 10.50 | 10.59 | 10.81 | | 0 |
| | 15 | 0 | 10.51 | 10.55 | 10.88 | | 0 |

## Table 8-196
## LTE Band 2 Conducted Powers Ant 2b - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18607 (1850.7 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19193 (1909.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.66 | 10.54 | 10.93 | 0 | 0 |
| | 1 | 2 | 10.66 | 10.53 | 10.91 | | 0 |
| | 1 | 5 | 10.73 | 10.60 | 10.93 | | 0 |
| | 3 | 0 | 10.71 | 10.59 | 10.94 | | 0 |
| | 3 | 2 | 10.66 | 10.65 | 10.92 | | 0 |
| | 3 | 3 | 10.66 | 10.69 | 10.91 | | 0 |
| | 6 | 0 | 10.67 | 10.70 | 11.01 | 0-1 | 0 |
| 16QAM | 1 | 0 | 10.68 | 10.72 | 10.79 | 0-1 | 0 |
| | 1 | 2 | 10.72 | 10.78 | 10.93 | | 0 |
| | 1 | 5 | 10.53 | 10.75 | 10.92 | | 0 |
| | 3 | 0 | 10.46 | 10.52 | 11.02 | | 0 |
| | 3 | 2 | 10.53 | 10.45 | 10.80 | | 0 |
| | 3 | 3 | 10.51 | 10.52 | 10.79 | | 0 |
| | 6 | 0 | 10.76 | 10.50 | 11.03 | 0-2 | 0 |
| 64QAM | 1 | 0 | 10.97 | 10.72 | 10.74 | 0-2 | 0 |
| | 1 | 2 | 10.95 | 10.71 | 10.76 | | 0 |
| | 1 | 5 | 10.94 | 10.67 | 10.73 | | 0 |
| | 3 | 0 | 11.04 | 10.46 | 10.81 | | 0 |
| | 3 | 2 | 10.82 | 10.45 | 11.08 | | 0 |
| | 3 | 3 | 10.81 | 10.55 | 10.86 | | 0 |
| | 6 | 0 | 11.05 | 10.51 | 11.02 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-197
## LTE Band 2 Conducted Powers Ant 4a - 20 MHz Bandwidth

| LTE Band 2 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18700 (1860.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19100 (1900.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.63 | 14.55 | 14.61 | 0 | 0 |
| | 1 | 50 | 14.61 | 14.47 | 14.88 | | 0 |
| | 1 | 99 | 14.60 | 14.55 | **14.89** | | 0 |
| | 50 | 0 | 14.77 | 14.54 | 14.79 | 0-1 | 0 |
| | 50 | 25 | 14.74 | 14.51 | 14.82 | | 0 |
| | 50 | 50 | 14.70 | 14.45 | **14.85** | | 0 |
| | 100 | 0 | 14.71 | 14.47 | 14.74 | | 0 |
| 16QAM | 1 | 0 | 14.69 | 14.47 | 14.44 | 0-1 | 0 |
| | 1 | 50 | 14.57 | 14.37 | 14.69 | | 0 |
| | 1 | 99 | 14.56 | 14.42 | 14.79 | | 0 |
| | 50 | 0 | 14.52 | 14.31 | 14.51 | 0-2 | 0 |
| | 50 | 25 | 14.47 | 14.21 | 14.58 | | 0 |
| | 50 | 50 | 14.42 | 14.20 | 14.60 | | 0 |
| | 100 | 0 | 14.43 | 14.18 | 14.60 | | 0 |
| 64QAM | 1 | 0 | 14.86 | 14.60 | 14.79 | 0-2 | 0 |
| | 1 | 50 | 14.64 | 14.53 | 14.90 | | 0 |
| | 1 | 99 | 14.79 | 14.69 | 14.88 | | 0 |
| | 50 | 0 | 14.20 | 14.12 | 14.47 | 0-3 | 0 |
| | 50 | 25 | 14.26 | 14.06 | 14.51 | | 0 |
| | 50 | 50 | 14.27 | 14.06 | 14.38 | | 0 |
| | 100 | 0 | 14.25 | 14.09 | 14.48 | | 0 |

## Table 8-198
## LTE Band 2 Conducted Powers Ant 4a - 15 MHz Bandwidth

| LTE Band 2 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18675 (1857.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19125 (1902.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.37 | 14.63 | 14.79 | 0 | 0 |
| | 1 | 36 | 14.26 | 14.70 | 14.87 | | 0 |
| | 1 | 74 | 14.28 | 14.61 | 14.71 | | 0 |
| | 36 | 0 | 14.26 | 14.59 | 14.83 | 0-1 | 0 |
| | 36 | 18 | 14.34 | 14.59 | 14.80 | | 0 |
| | 36 | 37 | 14.34 | 14.51 | 14.73 | | 0 |
| | 75 | 0 | 14.32 | 14.49 | 14.74 | | 0 |
| 16QAM | 1 | 0 | 14.45 | 14.58 | 14.63 | 0-1 | 0 |
| | 1 | 36 | 14.31 | 14.77 | 14.86 | | 0 |
| | 1 | 74 | 14.18 | 14.48 | 14.68 | | 0 |
| | 36 | 0 | 14.07 | 14.47 | 14.71 | 0-2 | 0 |
| | 36 | 18 | 14.14 | 14.53 | 14.76 | | 0 |
| | 36 | 37 | 14.16 | 14.39 | 14.64 | | 0 |
| | 75 | 0 | 14.11 | 14.36 | 14.65 | | 0 |
| 64QAM | 1 | 0 | 14.20 | 14.33 | 14.60 | 0-2 | 0 |
| | 1 | 36 | 14.22 | 14.36 | 14.54 | | 0 |
| | 1 | 74 | 14.14 | 14.16 | 14.65 | | 0 |
| | 36 | 0 | 14.04 | 14.11 | 14.42 | 0-3 | 0 |
| | 36 | 18 | 14.08 | 14.18 | 14.37 | | 0 |
| | 36 | 37 | 14.05 | 14.08 | 14.31 | | 0 |
| | 75 | 0 | 14.03 | 14.05 | 14.29 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-199
## LTE Band 2 Conducted Powers Ant 4a - 10 MHz Bandwidth

| LTE Band 2 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18650 (1855.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19150 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.58 | 14.61 | 14.78 | 0 | 0 |
| | 1 | 25 | 14.31 | 14.53 | 14.55 | | 0 |
| | 1 | 49 | 14.36 | 14.56 | 14.77 | | 0 |
| | 25 | 0 | 14.51 | 14.67 | 14.78 | 0-1 | 0 |
| | 25 | 12 | 14.39 | 14.69 | 14.66 | | 0 |
| | 25 | 25 | 14.42 | 14.54 | 14.76 | | 0 |
| | 50 | 0 | 14.39 | 14.57 | 14.69 | | 0 |
| 16QAM | 1 | 0 | 14.59 | 14.49 | 14.72 | 0-1 | 0 |
| | 1 | 25 | 14.24 | 14.44 | 14.58 | | 0 |
| | 1 | 49 | 14.19 | 14.36 | 14.71 | | 0 |
| | 25 | 0 | 14.17 | 14.38 | 14.59 | 0-2 | 0 |
| | 25 | 12 | 14.15 | 14.34 | 14.51 | | 0 |
| | 25 | 25 | 14.15 | 14.25 | 14.58 | | 0 |
| | 50 | 0 | 14.16 | 14.29 | 14.52 | | 0 |
| 64QAM | 1 | 0 | 14.27 | 14.05 | 14.76 | 0-2 | 0 |
| | 1 | 25 | 13.94 | 14.03 | 14.49 | | 0 |
| | 1 | 49 | 14.07 | 14.03 | 14.77 | | 0 |
| | 25 | 0 | 13.98 | 13.95 | 14.38 | 0-3 | 0 |
| | 25 | 12 | 13.91 | 14.04 | 14.25 | | 0 |
| | 25 | 25 | 13.95 | 13.94 | 14.26 | | 0 |
| | 50 | 0 | 13.94 | 13.95 | 14.26 | | 0 |

## Table 8-200
## LTE Band 2 Conducted Powers Ant 4a - 5 MHz Bandwidth

| LTE Band 2 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18625 (1852.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19175 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.63 | 14.44 | 14.55 | 0 | 0 |
| | 1 | 12 | 14.44 | 14.37 | 14.59 | | 0 |
| | 1 | 24 | 14.44 | 14.28 | 14.70 | | 0 |
| | 12 | 0 | 14.46 | 14.49 | 14.74 | 0-1 | 0 |
| | 12 | 6 | 14.32 | 14.48 | 14.68 | | 0 |
| | 12 | 13 | 14.27 | 14.35 | 14.76 | | 0 |
| | 25 | 0 | 14.31 | 14.43 | 14.73 | | 0 |
| 16QAM | 1 | 0 | 14.53 | 14.69 | 14.46 | 0-1 | 0 |
| | 1 | 12 | 14.37 | 14.61 | 14.57 | | 0 |
| | 1 | 24 | 14.24 | 14.41 | 14.70 | | 0 |
| | 12 | 0 | 14.23 | 14.40 | 14.48 | 0-2 | 0 |
| | 12 | 6 | 14.16 | 14.39 | 14.53 | | 0 |
| | 12 | 13 | 14.04 | 14.31 | 14.63 | | 0 |
| | 25 | 0 | 14.13 | 14.34 | 14.50 | | 0 |
| 64QAM | 1 | 0 | 14.20 | 14.13 | 14.67 | 0-2 | 0 |
| | 1 | 12 | 14.05 | 14.10 | 14.76 | | 0 |
| | 1 | 24 | 14.12 | 13.98 | 14.70 | | 0 |
| | 12 | 0 | 14.05 | 14.11 | 14.47 | 0-3 | 0 |
| | 12 | 6 | 14.01 | 14.05 | 14.47 | | 0 |
| | 12 | 13 | 14.00 | 13.95 | 14.55 | | 0 |
| | 25 | 0 | 14.02 | 13.96 | 14.39 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-201
## LTE Band 2 Conducted Powers Ant 4a - 3 MHz Bandwidth

| LTE Band 2 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18615 (1851.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19185 (1908.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.48 | 14.47 | 14.65 | 0 | 0 |
| | 1 | 7 | 14.46 | 14.49 | 14.81 | | 0 |
| | 1 | 14 | 14.34 | 14.37 | 14.68 | | 0 |
| | 8 | 0 | 14.51 | 14.60 | 14.75 | 0-1 | 0 |
| | 8 | 4 | 14.48 | 14.52 | 14.79 | | 0 |
| | 8 | 7 | 14.47 | 14.55 | 14.80 | | 0 |
| | 15 | 0 | 14.42 | 14.48 | 14.78 | | 0 |
| 16QAM | 1 | 0 | 14.44 | 14.27 | 14.67 | 0-1 | 0 |
| | 1 | 7 | 14.40 | 14.34 | 14.76 | | 0 |
| | 1 | 14 | 14.32 | 14.19 | 14.75 | | 0 |
| | 8 | 0 | 14.35 | 14.31 | 14.61 | 0-2 | 0 |
| | 8 | 4 | 14.24 | 14.29 | 14.65 | | 0 |
| | 8 | 7 | 14.29 | 14.25 | 14.63 | | 0 |
| | 15 | 0 | 14.27 | 14.21 | 14.67 | | 0 |
| 64QAM | 1 | 0 | 14.22 | 14.09 | 14.55 | 0-2 | 0 |
| | 1 | 7 | 14.01 | 14.05 | 14.68 | | 0 |
| | 1 | 14 | 14.07 | 14.00 | 14.66 | | 0 |
| | 8 | 0 | 14.04 | 14.05 | 14.38 | 0-3 | 0 |
| | 8 | 4 | 13.95 | 14.00 | 14.34 | | 0 |
| | 8 | 7 | 14.04 | 14.00 | 14.42 | | 0 |
| | 15 | 0 | 13.99 | 13.95 | 14.36 | | 0 |

## Table 8-202
## LTE Band 2 Conducted Powers Ant 4a - 1.4 MHz Bandwidth

| LTE Band 2 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18607 (1850.7 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19193 (1909.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.61 | 14.44 | 14.85 | 0 | 0 |
| | 1 | 2 | 14.51 | 14.43 | 14.80 | | 0 |
| | 1 | 5 | 14.55 | 14.42 | 14.78 | | 0 |
| | 3 | 0 | 14.64 | 14.49 | 14.71 | | 0 |
| | 3 | 2 | 14.58 | 14.46 | 14.72 | | 0 |
| | 3 | 3 | 14.55 | 14.45 | 14.85 | | 0 |
| | 6 | 0 | 14.56 | 14.46 | 14.70 | 0-1 | 0 |
| 16QAM | 1 | 0 | 14.65 | 14.37 | 14.86 | 0-1 | 0 |
| | 1 | 2 | 14.51 | 14.44 | 14.85 | | 0 |
| | 1 | 5 | 14.39 | 14.48 | 14.72 | | 0 |
| | 3 | 0 | 14.55 | 14.42 | 14.71 | | 0 |
| | 3 | 2 | 14.35 | 14.40 | 14.61 | | 0 |
| | 3 | 3 | 14.38 | 14.47 | 14.64 | | 0 |
| | 6 | 0 | 14.32 | 14.31 | 14.56 | 0-2 | 0 |
| 64QAM | 1 | 0 | 14.15 | 14.11 | 14.41 | 0-2 | 0 |
| | 1 | 2 | 14.25 | 14.29 | 14.42 | | 0 |
| | 1 | 5 | 14.06 | 14.14 | 14.48 | | 0 |
| | 3 | 0 | 14.17 | 14.06 | 14.35 | | 0 |
| | 3 | 2 | 14.04 | 14.05 | 14.38 | | 0 |
| | 3 | 3 | 14.09 | 13.99 | 14.37 | | 0 |
| | 6 | 0 | 13.99 | 13.93 | 14.31 | 0-3 | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-203
## LTE Band 2 Conducted Powers Ant 4a - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18700 (1860.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19100 (1900.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.34 | 11.44 | 11.76 | 0 | 0 |
| | 1 | 50 | 11.28 | 11.35 | **11.82** | | 0 |
| | 1 | 99 | 11.35 | 11.36 | 11.56 | | 0 |
| | 50 | 0 | 11.15 | 11.36 | **11.72** | 0-1 | 0 |
| | 50 | 25 | 11.33 | 11.28 | 11.70 | | 0 |
| | 50 | 50 | 11.38 | 11.26 | 11.55 | | 0 |
| | 100 | 0 | 11.22 | 11.27 | 11.64 | | 0 |
| 16QAM | 1 | 0 | 11.51 | 11.20 | 11.72 | 0-1 | 0 |
| | 1 | 50 | 11.21 | 11.00 | 11.89 | | 0 |
| | 1 | 99 | 11.10 | 10.95 | 11.85 | | 0 |
| | 50 | 0 | 11.05 | 11.07 | 11.41 | 0-2 | 0 |
| | 50 | 25 | 11.01 | 11.01 | 11.51 | | 0 |
| | 50 | 50 | 11.00 | 10.94 | 11.33 | | 0 |
| | 100 | 0 | 11.02 | 10.95 | 11.45 | | 0 |
| 64QAM | 1 | 0 | 11.60 | 11.30 | 11.25 | 0-2 | 0 |
| | 1 | 50 | 11.42 | 11.20 | 11.47 | | 0 |
| | 1 | 99 | 11.42 | 11.33 | 11.78 | | 0 |
| | 50 | 0 | 11.05 | 11.08 | 11.31 | 0-3 | 0 |
| | 50 | 25 | 11.03 | 10.92 | 11.41 | | 0 |
| | 50 | 50 | 11.01 | 10.92 | 11.42 | | 0 |
| | 100 | 0 | 11.01 | 10.92 | 11.40 | | 0 |

## Table 8-204
## LTE Band 2 Conducted Powers Ant 4a - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18675 (1857.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19125 (1902.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.48 | 11.15 | 11.31 | 0 | 0 |
| | 1 | 36 | 11.38 | 11.20 | 11.52 | | 0 |
| | 1 | 74 | 11.32 | 11.16 | 11.63 | | 0 |
| | 36 | 0 | 11.18 | 11.27 | 11.53 | 0-1 | 0 |
| | 36 | 18 | 11.17 | 11.17 | 11.59 | | 0 |
| | 36 | 37 | 11.06 | 11.07 | 11.47 | | 0 |
| | 75 | 0 | 11.12 | 11.13 | 11.50 | | 0 |
| 16QAM | 1 | 0 | 11.65 | 11.40 | 11.41 | 0-1 | 0 |
| | 1 | 36 | 11.26 | 11.29 | 11.68 | | 0 |
| | 1 | 74 | 11.24 | 11.18 | 11.64 | | 0 |
| | 36 | 0 | 11.08 | 11.24 | 11.60 | 0-2 | 0 |
| | 36 | 18 | 11.11 | 11.26 | 11.53 | | 0 |
| | 36 | 37 | 11.07 | 11.07 | 11.49 | | 0 |
| | 75 | 0 | 11.12 | 11.14 | 11.52 | | 0 |
| 64QAM | 1 | 0 | 11.54 | 11.46 | 11.70 | 0-2 | 0 |
| | 1 | 36 | 11.05 | 11.30 | 11.79 | | 0 |
| | 1 | 74 | 11.26 | 11.03 | 11.81 | | 0 |
| | 36 | 0 | 11.09 | 11.28 | 11.58 | 0-3 | 0 |
| | 36 | 18 | 11.15 | 11.24 | 11.56 | | 0 |
| | 36 | 37 | 11.06 | 11.09 | 11.51 | | 0 |
| | 75 | 0 | 11.13 | 11.14 | 11.53 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-205
## LTE Band 2 Conducted Powers Ant 4a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18650 (1855.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19150 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.39 | 11.32 | 11.65 | 0 | 0 |
| | 1 | 25 | 11.05 | 11.13 | 11.60 | | 0 |
| | 1 | 49 | 10.99 | 11.07 | 11.71 | | 0 |
| | 25 | 0 | 11.33 | 11.34 | 11.70 | 0-1 | 0 |
| | 25 | 12 | 11.11 | 11.28 | 11.64 | | 0 |
| | 25 | 25 | 11.15 | 11.29 | 11.67 | | 0 |
| | 50 | 0 | 11.13 | 11.22 | 11.63 | | 0 |
| 16QAM | 1 | 0 | 11.17 | 11.23 | 11.71 | 0-1 | 0 |
| | 1 | 25 | 11.26 | 11.14 | 11.43 | | 0 |
| | 1 | 49 | 11.25 | 11.13 | 11.54 | | 0 |
| | 25 | 0 | 11.02 | 11.08 | 11.39 | 0-2 | 0 |
| | 25 | 12 | 10.99 | 11.12 | 11.27 | | 0 |
| | 25 | 25 | 11.00 | 10.96 | 11.31 | | 0 |
| | 50 | 0 | 10.98 | 11.04 | 11.26 | | 0 |
| 64QAM | 1 | 0 | 11.30 | 11.35 | 11.70 | 0-2 | 0 |
| | 1 | 25 | 11.18 | 11.12 | 11.53 | | 0 |
| | 1 | 49 | 11.20 | 11.30 | 11.49 | | 0 |
| | 25 | 0 | 11.07 | 11.11 | 11.44 | 0-3 | 0 |
| | 25 | 12 | 11.03 | 11.10 | 11.29 | | 0 |
| | 25 | 25 | 11.04 | 10.97 | 11.26 | | 0 |
| | 50 | 0 | 11.02 | 11.08 | 11.26 | | 0 |

## Table 8-206
## LTE Band 2 Conducted Powers Ant 4a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18625 (1852.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19175 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.43 | 11.15 | 11.44 | 0 | 0 |
| | 1 | 12 | 11.25 | 11.04 | 11.29 | | 0 |
| | 1 | 24 | 11.17 | 11.02 | 11.38 | | 0 |
| | 12 | 0 | 11.33 | 11.12 | 11.44 | 0-1 | 0 |
| | 12 | 6 | 11.22 | 11.12 | 11.39 | | 0 |
| | 12 | 13 | 11.13 | 11.07 | 11.44 | | 0 |
| | 25 | 0 | 11.19 | 11.14 | 11.42 | | 0 |
| 16QAM | 1 | 0 | 11.67 | 11.31 | 11.51 | 0-1 | 0 |
| | 1 | 12 | 11.30 | 11.18 | 11.44 | | 0 |
| | 1 | 24 | 11.26 | 11.18 | 11.71 | | 0 |
| | 12 | 0 | 11.28 | 11.13 | 11.39 | 0-2 | 0 |
| | 12 | 6 | 11.23 | 11.15 | 11.43 | | 0 |
| | 12 | 13 | 11.12 | 11.16 | 11.50 | | 0 |
| | 25 | 0 | 11.17 | 11.15 | 11.40 | | 0 |
| 64QAM | 1 | 0 | 11.50 | 11.54 | 11.64 | 0-2 | 0 |
| | 1 | 12 | 11.38 | 11.35 | 11.64 | | 0 |
| | 1 | 24 | 11.17 | 11.17 | 11.68 | | 0 |
| | 12 | 0 | 11.42 | 11.16 | 11.39 | 0-3 | 0 |
| | 12 | 6 | 11.27 | 11.19 | 11.39 | | 0 |
| | 12 | 13 | 11.11 | 11.11 | 11.42 | | 0 |
| | 25 | 0 | 11.25 | 11.14 | 11.38 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-207
## LTE Band 2 Conducted Powers Ant 4a - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18615 (1851.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19185 (1908.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.29 | 11.18 | 11.25 | 0 | 0 |
| | 1 | 7 | 11.24 | 11.17 | 11.34 | | 0 |
| | 1 | 14 | 11.09 | 11.09 | 11.37 | | 0 |
| | 8 | 0 | 11.29 | 11.26 | 11.34 | 0-1 | 0 |
| | 8 | 4 | 11.23 | 11.18 | 11.43 | | 0 |
| | 8 | 7 | 11.26 | 11.22 | 11.46 | | 0 |
| | 15 | 0 | 11.26 | 11.22 | 11.42 | | 0 |
| 16QAM | 1 | 0 | 11.46 | 11.34 | 11.39 | 0-1 | 0 |
| | 1 | 7 | 11.53 | 11.24 | 11.55 | | 0 |
| | 1 | 14 | 11.37 | 11.25 | 11.40 | | 0 |
| | 8 | 0 | 11.30 | 11.38 | 11.35 | 0-2 | 0 |
| | 8 | 4 | 11.27 | 11.21 | 11.41 | | 0 |
| | 8 | 7 | 11.32 | 11.22 | 11.46 | | 0 |
| | 15 | 0 | 11.29 | 11.24 | 11.39 | | 0 |
| 64QAM | 1 | 0 | 11.56 | 11.41 | 11.60 | 0-2 | 0 |
| | 1 | 7 | 11.55 | 11.35 | 11.84 | | 0 |
| | 1 | 14 | 11.37 | 11.33 | 11.80 | | 0 |
| | 8 | 0 | 11.35 | 11.36 | 11.41 | 0-3 | 0 |
| | 8 | 4 | 11.24 | 11.23 | 11.47 | | 0 |
| | 8 | 7 | 11.23 | 11.19 | 11.53 | | 0 |
| | 15 | 0 | 11.24 | 11.11 | 11.48 | | 0 |

## Table 8-208
## LTE Band 2 Conducted Powers Ant 4a - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18607 (1850.7 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19193 (1909.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.48 | 11.22 | 11.54 | 0 | 0 |
| | 1 | 2 | 11.37 | 11.17 | 11.47 | | 0 |
| | 1 | 5 | 11.40 | 11.12 | 11.49 | | 0 |
| | 3 | 0 | 11.28 | 11.25 | 11.53 | | 0 |
| | 3 | 2 | 11.20 | 11.19 | 11.52 | | 0 |
| | 3 | 3 | 11.23 | 11.16 | 11.55 | | 0 |
| | 6 | 0 | 11.17 | 11.18 | 11.52 | 0-1 | 0 |
| 16QAM | 1 | 0 | 11.56 | 11.37 | 11.73 | 0-1 | 0 |
| | 1 | 2 | 11.26 | 11.39 | 11.69 | | 0 |
| | 1 | 5 | 11.39 | 11.41 | 11.71 | | 0 |
| | 3 | 0 | 11.29 | 11.33 | 11.64 | | 0 |
| | 3 | 2 | 11.38 | 11.17 | 11.57 | | 0 |
| | 3 | 3 | 11.30 | 11.28 | 11.58 | | 0 |
| | 6 | 0 | 11.24 | 11.24 | 11.58 | 0-2 | 0 |
| 64QAM | 1 | 0 | 11.47 | 11.42 | 11.71 | 0-2 | 0 |
| | 1 | 2 | 11.47 | 11.34 | 11.89 | | 0 |
| | 1 | 5 | 11.48 | 11.37 | 11.71 | | 0 |
| | 3 | 0 | 11.28 | 11.39 | 11.60 | | 0 |
| | 3 | 2 | 11.23 | 11.23 | 11.56 | | 0 |
| | 3 | 3 | 11.38 | 11.26 | 11.57 | | 0 |
| | 6 | 0 | 11.25 | 11.23 | 11.52 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-209
## LTE Band 2 Conducted Powers Ant 4b - 20 MHz Bandwidth

| LTE Band 2 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18700 (1860.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19100 (1900.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | **13.91** | 13.77 | 13.70 | 0 | 0 |
| | 1 | 50 | 13.84 | 13.75 | 13.71 | | 0 |
| | 1 | 99 | 13.70 | 13.73 | 13.82 | | 0 |
| | 50 | 0 | **13.86** | 13.83 | 13.76 | 0-1 | 0 |
| | 50 | 25 | 13.85 | 13.74 | 13.79 | | 0 |
| | 50 | 50 | 13.77 | 13.75 | 13.81 | | 0 |
| | 100 | 0 | 13.83 | 13.75 | 13.76 | | 0 |
| 16QAM | 1 | 0 | 13.90 | 13.90 | 13.78 | 0-1 | 0 |
| | 1 | 50 | 13.90 | 13.89 | 13.82 | | 0 |
| | 1 | 99 | 13.89 | 13.82 | 13.90 | | 0 |
| | 50 | 0 | 13.89 | 13.70 | 13.70 | 0-2 | 0 |
| | 50 | 25 | 13.86 | 13.70 | 13.71 | | 0 |
| | 50 | 50 | 13.72 | 13.75 | 13.72 | | 0 |
| | 100 | 0 | 13.85 | 13.73 | 13.74 | | 0 |
| 64QAM | 1 | 0 | 13.90 | 13.87 | 13.75 | 0-2 | 0 |
| | 1 | 50 | 13.90 | 13.82 | 13.71 | | 0 |
| | 1 | 99 | 13.87 | 13.78 | 13.75 | | 0 |
| | 50 | 0 | 13.74 | 13.72 | 13.70 | 0-3 | 0 |
| | 50 | 25 | 13.72 | 13.75 | 13.70 | | 0 |
| | 50 | 50 | 13.71 | 13.73 | 13.71 | | 0 |
| | 100 | 0 | 13.70 | 13.72 | 13.71 | | 0 |

## Table 8-210
## LTE Band 2 Conducted Powers Ant 4b - 15 MHz Bandwidth

| LTE Band 2 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18675 (1857.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19125 (1902.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.73 | 13.93 | 13.74 | 0 | 0 |
| | 1 | 36 | 13.86 | 13.95 | 13.73 | | 0 |
| | 1 | 74 | 13.72 | 13.77 | 13.70 | | 0 |
| | 36 | 0 | 13.76 | 13.82 | 13.70 | 0-1 | 0 |
| | 36 | 18 | 13.92 | 13.86 | 13.85 | | 0 |
| | 36 | 37 | 13.77 | 13.78 | 13.81 | | 0 |
| | 75 | 0 | 13.87 | 13.81 | 13.82 | | 0 |
| 16QAM | 1 | 0 | 14.08 | 14.03 | 13.90 | 0-1 | 0 |
| | 1 | 36 | 14.08 | 14.05 | 14.09 | | 0 |
| | 1 | 74 | 13.76 | 13.84 | 13.78 | | 0 |
| | 36 | 0 | 14.04 | 13.86 | 13.72 | 0-2 | 0 |
| | 36 | 18 | 14.01 | 13.94 | 13.76 | | 0 |
| | 36 | 37 | 13.97 | 13.79 | 13.80 | | 0 |
| | 75 | 0 | 13.90 | 13.87 | 13.74 | | 0 |
| 64QAM | 1 | 0 | 14.08 | 14.03 | 13.90 | 0-2 | 0 |
| | 1 | 36 | 14.08 | 14.00 | 13.96 | | 0 |
| | 1 | 74 | 13.76 | 13.84 | 13.78 | | 0 |
| | 36 | 0 | 14.04 | 13.86 | 13.72 | 0-3 | 0 |
| | 36 | 18 | 14.01 | 13.94 | 13.76 | | 0 |
| | 36 | 37 | 13.97 | 13.79 | 13.80 | | 0 |
| | 75 | 0 | 13.98 | 13.87 | 13.74 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-211
## LTE Band 2 Conducted Powers Ant 4b - 10 MHz Bandwidth

| LTE Band 2 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18650 (1855.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19150 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.75 | 13.75 | 13.71 | 0 | 0 |
| | 1 | 25 | 13.81 | 13.83 | 13.80 | | 0 |
| | 1 | 49 | 13.84 | 13.81 | 13.70 | | 0 |
| | 25 | 0 | 13.90 | 13.77 | 13.84 | 0-1 | 0 |
| | 25 | 12 | 14.00 | 13.77 | 13.71 | | 0 |
| | 25 | 25 | 14.09 | 13.76 | 13.72 | | 0 |
| | 50 | 0 | 13.88 | 13.78 | 13.71 | | 0 |
| 16QAM | 1 | 0 | 13.88 | 13.80 | 13.95 | 0-1 | 0 |
| | 1 | 25 | 13.89 | 13.80 | 13.93 | | 0 |
| | 1 | 49 | 13.89 | 13.88 | 13.99 | | 0 |
| | 25 | 0 | 13.81 | 13.71 | 13.90 | 0-2 | 0 |
| | 25 | 12 | 13.82 | 13.72 | 13.85 | | 0 |
| | 25 | 25 | 13.89 | 13.70 | 13.88 | | 0 |
| | 50 | 0 | 13.85 | 13.73 | 13.79 | | 0 |
| 64QAM | 1 | 0 | 13.96 | 13.95 | 13.97 | 0-2 | 0 |
| | 1 | 25 | 13.99 | 13.95 | 13.99 | | 0 |
| | 1 | 49 | 13.97 | 13.98 | 13.98 | | 0 |
| | 25 | 0 | 13.96 | 13.91 | 13.77 | 0-3 | 0 |
| | 25 | 12 | 13.91 | 14.00 | 13.80 | | 0 |
| | 25 | 25 | 13.93 | 13.93 | 13.82 | | 0 |
| | 50 | 0 | 13.95 | 13.93 | 13.83 | | 0 |

## Table 8-212
## LTE Band 2 Conducted Powers Ant 4b - 5 MHz Bandwidth

| LTE Band 2 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18625 (1852.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19175 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.84 | 13.89 | 13.71 | 0 | 0 |
| | 1 | 12 | 13.76 | 13.90 | 13.70 | | 0 |
| | 1 | 24 | 13.74 | 13.89 | 13.72 | | 0 |
| | 12 | 0 | 13.78 | 13.89 | 13.76 | 0-1 | 0 |
| | 12 | 6 | 13.71 | 13.90 | 13.72 | | 0 |
| | 12 | 13 | 13.74 | 13.89 | 13.77 | | 0 |
| | 25 | 0 | 13.75 | 13.93 | 13.72 | | 0 |
| 16QAM | 1 | 0 | 14.00 | 13.99 | 13.99 | 0-1 | 0 |
| | 1 | 12 | 14.00 | 13.90 | 14.00 | | 0 |
| | 1 | 24 | 14.00 | 13.93 | 14.00 | | 0 |
| | 12 | 0 | 13.85 | 13.83 | 13.88 | 0-2 | 0 |
| | 12 | 6 | 13.83 | 13.86 | 13.90 | | 0 |
| | 12 | 13 | 13.92 | 13.81 | 13.87 | | 0 |
| | 25 | 0 | 13.84 | 13.82 | 13.88 | | 0 |
| 64QAM | 1 | 0 | 14.00 | 13.99 | 14.00 | 0-2 | 0 |
| | 1 | 12 | 14.00 | 13.90 | 14.00 | | 0 |
| | 1 | 24 | 13.99 | 14.09 | 14.01 | | 0 |
| | 12 | 0 | 13.85 | 13.83 | 13.88 | 0-3 | 0 |
| | 12 | 6 | 13.83 | 13.86 | 13.90 | | 0 |
| | 12 | 13 | 13.92 | 13.81 | 13.87 | | 0 |
| | 25 | 0 | 13.84 | 13.82 | 13.88 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-213
## LTE Band 2 Conducted Powers Ant 4b - 3 MHz Bandwidth

| LTE Band 2 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18615 (1851.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19185 (1908.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.75 | 13.86 | 13.75 | 0 | 0 |
| | 1 | 7 | 13.74 | 13.89 | 13.73 | | 0 |
| | 1 | 14 | 13.84 | 13.84 | 13.70 | | 0 |
| | 8 | 0 | 13.76 | 13.74 | 13.86 | 0-1 | 0 |
| | 8 | 4 | 13.73 | 13.75 | 13.83 | | 0 |
| | 8 | 7 | 13.75 | 13.75 | 13.80 | | 0 |
| | 15 | 0 | 13.75 | 13.76 | 13.84 | | 0 |
| 16QAM | 1 | 0 | 13.84 | 14.01 | 14.04 | 0-1 | 0 |
| | 1 | 7 | 14.06 | 14.05 | 13.93 | | 0 |
| | 1 | 14 | 14.04 | 13.93 | 14.02 | | 0 |
| | 8 | 0 | 13.91 | 13.84 | 13.81 | 0-2 | 0 |
| | 8 | 4 | 13.95 | 13.84 | 13.80 | | 0 |
| | 8 | 7 | 13.92 | 13.85 | 13.76 | | 0 |
| | 15 | 0 | 13.90 | 13.82 | 13.80 | | 0 |
| 64QAM | 1 | 0 | 13.84 | 14.01 | 14.04 | 0-2 | 0 |
| | 1 | 7 | 14.06 | 14.05 | 13.93 | | 0 |
| | 1 | 14 | 14.04 | 13.93 | 14.02 | | 0 |
| | 8 | 0 | 13.91 | 13.84 | 13.81 | 0-3 | 0 |
| | 8 | 4 | 13.95 | 13.84 | 13.80 | | 0 |
| | 8 | 7 | 13.92 | 13.85 | 13.76 | | 0 |
| | 15 | 0 | 13.90 | 13.82 | 13.80 | | 0 |

## Table 8-214
## LTE Band 2 Conducted Powers Ant 4b - 1.4 MHz Bandwidth

| LTE Band 2 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18607 (1850.7 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19193 (1909.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.79 | 13.71 | 13.82 | 0 | 0 |
| | 1 | 2 | 13.82 | 13.70 | 13.78 | | 0 |
| | 1 | 5 | 13.84 | 13.74 | 13.82 | | 0 |
| | 3 | 0 | 13.81 | 13.75 | 13.84 | | 0 |
| | 3 | 2 | 13.86 | 13.77 | 13.84 | | 0 |
| | 3 | 3 | 13.89 | 13.78 | 13.85 | | 0 |
| | 6 | 0 | 13.85 | 13.77 | 13.84 | 0-1 | 0 |
| 16QAM | 1 | 0 | 13.94 | 14.05 | 14.05 | 0-1 | 0 |
| | 1 | 2 | 13.96 | 14.03 | 13.98 | | 0 |
| | 1 | 5 | 14.05 | 14.05 | 13.96 | | 0 |
| | 3 | 0 | 13.99 | 13.83 | 13.86 | | 0 |
| | 3 | 2 | 13.94 | 13.87 | 13.90 | | 0 |
| | 3 | 3 | 14.02 | 14.02 | 13.85 | | 0 |
| | 6 | 0 | 13.92 | 13.92 | 13.84 | 0-2 | 0 |
| 64QAM | 1 | 0 | 13.94 | 14.05 | 14.05 | 0-2 | 0 |
| | 1 | 2 | 13.96 | 14.05 | 13.98 | | 0 |
| | 1 | 5 | 14.05 | 14.07 | 14.05 | | 0 |
| | 3 | 0 | 13.99 | 13.83 | 13.86 | | 0 |
| | 3 | 2 | 13.94 | 13.87 | 13.90 | | 0 |
| | 3 | 3 | 14.02 | 14.02 | 13.85 | | 0 |
| | 6 | 0 | 13.92 | 13.92 | 13.84 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-215
## LTE Band 2 Conducted Powers Ant 4b - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18700 (1860.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19100 (1900.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.09 | 11.27 | 11.01 | 0 | 0 |
| | 1 | 50 | 11.16 | 11.30 | 11.23 | | 0 |
| | 1 | 99 | 11.13 | 11.25 | **11.31** | | 0 |
| | 50 | 0 | 11.22 | 11.24 | 11.18 | 0-1 | 0 |
| | 50 | 25 | 11.26 | 11.24 | 11.24 | | 0 |
| | 50 | 50 | 11.27 | 11.25 | **11.32** | | 0 |
| | 100 | 0 | 11.29 | 11.23 | 11.13 | | 0 |
| 16QAM | 1 | 0 | 11.39 | 11.00 | 11.49 | 0-1 | 0 |
| | 1 | 50 | 11.29 | 11.18 | 11.56 | | 0 |
| | 1 | 99 | 11.15 | 11.31 | 11.55 | | 0 |
| | 50 | 0 | 11.28 | 11.14 | 11.19 | 0-2 | 0 |
| | 50 | 25 | 11.25 | 11.14 | 11.21 | | 0 |
| | 50 | 50 | 11.20 | 11.28 | 11.24 | | 0 |
| | 100 | 0 | 11.24 | 11.23 | 11.21 | | 0 |
| 64QAM | 1 | 0 | 11.45 | 10.95 | 11.32 | 0-2 | 0 |
| | 1 | 50 | 11.38 | 11.18 | 11.34 | | 0 |
| | 1 | 99 | 11.06 | 10.90 | 11.21 | | 0 |
| | 50 | 0 | 11.24 | 11.26 | 11.08 | 0-3 | 0 |
| | 50 | 25 | 11.20 | 11.19 | 11.13 | | 0 |
| | 50 | 50 | 10.93 | 11.01 | 11.13 | | 0 |
| | 100 | 0 | 11.16 | 11.15 | 11.07 | | 0 |

## Table 8-216
## LTE Band 2 Conducted Powers Ant 4b - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18675 (1857.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19125 (1902.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.99 | 10.79 | 10.96 | 0 | 0 |
| | 1 | 36 | 11.08 | 11.01 | 11.00 | | 0 |
| | 1 | 74 | 10.71 | 11.00 | 11.06 | | 0 |
| | 36 | 0 | 11.06 | 10.96 | 10.87 | 0-1 | 0 |
| | 36 | 18 | 11.21 | 11.10 | 11.04 | | 0 |
| | 36 | 37 | 11.06 | 11.11 | 11.10 | | 0 |
| | 75 | 0 | 11.22 | 11.08 | 11.03 | | 0 |
| 16QAM | 1 | 0 | 11.25 | 11.00 | 11.14 | 0-1 | 0 |
| | 1 | 36 | 11.48 | 11.51 | 11.56 | | 0 |
| | 1 | 74 | 10.94 | 11.69 | 11.34 | | 0 |
| | 36 | 0 | 11.10 | 10.95 | 10.88 | 0-2 | 0 |
| | 36 | 18 | 11.30 | 11.13 | 11.14 | | 0 |
| | 36 | 37 | 11.09 | 11.14 | 11.07 | | 0 |
| | 75 | 0 | 11.24 | 11.11 | 11.10 | | 0 |
| 64QAM | 1 | 0 | 11.27 | 11.40 | 11.32 | 0-2 | 0 |
| | 1 | 36 | 11.44 | 11.43 | 11.56 | | 0 |
| | 1 | 74 | 10.74 | 11.31 | 11.53 | | 0 |
| | 36 | 0 | 11.16 | 11.07 | 11.07 | 0-3 | 0 |
| | 36 | 18 | 11.23 | 11.14 | 11.12 | | 0 |
| | 36 | 37 | 10.96 | 11.18 | 11.06 | | 0 |
| | 75 | 0 | 11.23 | 11.11 | 11.08 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-217
## LTE Band 2 Conducted Powers Ant 4b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18650 (1855.0 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19150 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.26 | 10.90 | 11.09 | 0 | 0 |
| | 1 | 25 | 11.33 | 11.00 | 10.95 | | 0 |
| | 1 | 49 | 11.27 | 10.92 | 10.77 | | 0 |
| | 25 | 0 | 11.16 | 11.13 | 11.04 | 0-1 | 0 |
| | 25 | 12 | 11.16 | 11.08 | 10.98 | | 0 |
| | 25 | 25 | 11.27 | 11.05 | 10.94 | | 0 |
| | 50 | 0 | 11.29 | 11.12 | 11.01 | | 0 |
| 16QAM | 1 | 0 | 11.58 | 11.38 | 11.52 | 0-1 | 0 |
| | 1 | 25 | 11.69 | 11.57 | 11.49 | | 0 |
| | 1 | 49 | 11.57 | 11.53 | 11.14 | | 0 |
| | 25 | 0 | 11.17 | 11.16 | 10.96 | 0-2 | 0 |
| | 25 | 12 | 11.15 | 11.11 | 10.99 | | 0 |
| | 25 | 25 | 11.30 | 11.05 | 11.01 | | 0 |
| | 50 | 0 | 11.32 | 11.16 | 10.96 | | 0 |
| 64QAM | 1 | 0 | 11.59 | 11.40 | 11.38 | 0-2 | 0 |
| | 1 | 25 | 11.62 | 11.46 | 11.33 | | 0 |
| | 1 | 49 | 11.47 | 11.13 | 11.35 | | 0 |
| | 25 | 0 | 11.17 | 11.05 | 11.04 | 0-3 | 0 |
| | 25 | 12 | 11.15 | 11.06 | 10.97 | | 0 |
| | 25 | 25 | 11.33 | 11.06 | 10.89 | | 0 |
| | 50 | 0 | 11.32 | 11.06 | 11.01 | | 0 |

## Table 8-218
## LTE Band 2 Conducted Powers Ant 4b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18625 (1852.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19175 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.16 | 10.91 | 11.01 | 0 | 0 |
| | 1 | 12 | 11.16 | 10.96 | 10.97 | | 0 |
| | 1 | 24 | 11.12 | 10.91 | 10.87 | | 0 |
| | 12 | 0 | 11.15 | 11.01 | 11.01 | 0-1 | 0 |
| | 12 | 6 | 11.11 | 11.03 | 10.93 | | 0 |
| | 12 | 13 | 11.12 | 11.09 | 10.97 | | 0 |
| | 25 | 0 | 11.11 | 11.05 | 10.97 | | 0 |
| 16QAM | 1 | 0 | 11.37 | 11.36 | 11.40 | 0-1 | 0 |
| | 1 | 12 | 11.34 | 11.36 | 11.33 | | 0 |
| | 1 | 24 | 11.33 | 11.42 | 10.90 | | 0 |
| | 12 | 0 | 11.17 | 11.06 | 11.04 | 0-2 | 0 |
| | 12 | 6 | 11.13 | 11.04 | 11.02 | | 0 |
| | 12 | 13 | 11.14 | 11.11 | 11.06 | | 0 |
| | 25 | 0 | 11.02 | 11.07 | 11.04 | | 0 |
| 64QAM | 1 | 0 | 11.34 | 11.35 | 11.18 | 0-2 | 0 |
| | 1 | 12 | 11.33 | 11.42 | 11.26 | | 0 |
| | 1 | 24 | 11.37 | 11.39 | 10.87 | | 0 |
| | 12 | 0 | 11.27 | 11.06 | 11.00 | 0-3 | 0 |
| | 12 | 6 | 11.19 | 11.14 | 11.06 | | 0 |
| | 12 | 13 | 11.13 | 11.19 | 11.05 | | 0 |
| | 25 | 0 | 11.09 | 11.14 | 11.01 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-219
## LTE Band 2 Conducted Powers Ant 4b - 3 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18615 (1851.5 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19185 (1908.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.23 | 10.86 | 11.03 | 0 | 0 |
| | 1 | 7 | 11.30 | 10.96 | 10.89 | | 0 |
| | 1 | 14 | 11.24 | 10.88 | 10.71 | | 0 |
| | 8 | 0 | 11.13 | 11.09 | 10.98 | 0-1 | 0 |
| | 8 | 4 | 11.13 | 11.04 | 10.92 | | 0 |
| | 8 | 7 | 11.24 | 11.01 | 10.88 | | 0 |
| | 15 | 0 | 11.26 | 11.08 | 10.95 | | 0 |
| 16QAM | 1 | 0 | 11.55 | 11.34 | 11.46 | 0-1 | 0 |
| | 1 | 7 | 11.69 | 11.53 | 11.43 | | 0 |
| | 1 | 14 | 11.55 | 11.49 | 11.08 | | 0 |
| | 8 | 0 | 11.15 | 11.11 | 10.90 | 0-2 | 0 |
| | 8 | 4 | 11.13 | 11.06 | 10.96 | | 0 |
| | 8 | 7 | 11.28 | 11.00 | 10.98 | | 0 |
| | 15 | 0 | 11.30 | 11.11 | 10.93 | | 0 |
| 64QAM | 1 | 0 | 11.57 | 11.35 | 11.35 | 0-2 | 0 |
| | 1 | 7 | 11.60 | 11.41 | 11.30 | | 0 |
| | 1 | 14 | 11.55 | 11.08 | 11.32 | | 0 |
| | 8 | 0 | 11.15 | 11.00 | 11.01 | 0-3 | 0 |
| | 8 | 4 | 11.13 | 11.01 | 10.94 | | 0 |
| | 8 | 7 | 11.31 | 11.01 | 10.86 | | 0 |
| | 15 | 0 | 11.30 | 11.01 | 10.98 | | 0 |

## Table 8-220
## LTE Band 2 Conducted Powers Ant 4b - 1.4 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 2 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 18607 (1850.7 MHz) | Mid Channel 18900 (1880.0 MHz) | High Channel 19193 (1909.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.15 | 10.89 | 10.95 | 0 | 0 |
| | 1 | 2 | 11.15 | 10.94 | 10.91 | | 0 |
| | 1 | 5 | 11.11 | 10.89 | 10.81 | | 0 |
| | 3 | 0 | 11.14 | 10.99 | 10.95 | | 0 |
| | 3 | 2 | 11.10 | 11.01 | 10.87 | | 0 |
| | 3 | 3 | 11.11 | 11.07 | 10.91 | | 0 |
| | 6 | 0 | 11.10 | 11.03 | 10.91 | 0-1 | 0 |
| 16QAM | 1 | 0 | 11.36 | 11.34 | 11.34 | 0-1 | 0 |
| | 1 | 2 | 11.33 | 11.34 | 11.27 | | 0 |
| | 1 | 5 | 11.32 | 11.41 | 10.84 | | 0 |
| | 3 | 0 | 11.14 | 11.05 | 10.98 | | 0 |
| | 3 | 2 | 11.10 | 11.03 | 10.97 | | 0 |
| | 3 | 3 | 11.11 | 11.10 | 11.01 | | 0 |
| | 6 | 0 | 10.99 | 11.06 | 10.99 | 0-2 | 0 |
| 64QAM | 1 | 0 | 11.31 | 11.34 | 11.13 | 0-2 | 0 |
| | 1 | 2 | 11.30 | 11.41 | 11.21 | | 0 |
| | 1 | 5 | 11.34 | 11.38 | 10.82 | | 0 |
| | 3 | 0 | 11.24 | 11.05 | 10.95 | | 0 |
| | 3 | 2 | 11.16 | 11.13 | 11.01 | | 0 |
| | 3 | 3 | 11.10 | 11.18 | 11.00 | | 0 |
| | 6 | 0 | 11.06 | 11.13 | 10.96 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.10 LTE Band 25

### Table 8-221
### LTE Band 25 Conducted Powers Ant 2a - 20 MHz Bandwidth

| LTE Band 25 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26140 (1860.0 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26590 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.62 | 14.75 | 14.53 | 0 | 0 |
| | 1 | 50 | 14.73 | 14.86 | 14.78 | | 0 |
| | 1 | 99 | 14.62 | 14.63 | **15.03** | | 0 |
| | 50 | 0 | 14.71 | **14.91** | 14.73 | 0-1 | 0 |
| | 50 | 25 | 14.80 | 14.88 | 14.83 | | 0 |
| | 50 | 50 | 14.73 | 14.72 | 14.80 | | 0 |
| | 100 | 0 | 14.78 | 14.84 | 14.89 | | 0 |
| 16QAM | 1 | 0 | 14.74 | 14.69 | 14.65 | 0-1 | 0 |
| | 1 | 50 | 14.77 | 14.94 | 15.06 | | 0 |
| | 1 | 99 | 14.65 | 14.64 | 14.98 | | 0 |
| | 50 | 0 | 14.26 | 14.43 | 14.27 | 0-2 | 0 |
| | 50 | 25 | 14.35 | 14.43 | 14.31 | | 0 |
| | 50 | 50 | 14.25 | 14.32 | 14.28 | | 0 |
| | 100 | 0 | 14.32 | 14.36 | 14.34 | | 0 |
| 64QAM | 1 | 0 | 14.63 | 14.69 | 14.55 | 0-2 | 0 |
| | 1 | 50 | 14.70 | 14.87 | 14.77 | | 0 |
| | 1 | 99 | 14.62 | 14.56 | 14.98 | | 0 |
| | 50 | 0 | 14.22 | 14.43 | 14.28 | 0-3 | 0 |
| | 50 | 25 | 14.32 | 14.35 | 14.35 | | 0 |
| | 50 | 50 | 14.24 | 14.26 | 14.29 | | 0 |
| | 100 | 0 | 14.34 | 14.33 | 14.37 | | 0 |

### Table 8-222
### LTE Band 25 Conducted Powers Ant 2a - 15 MHz Bandwidth

| LTE Band 25 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26115 (1857.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26615 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.66 | 14.95 | 14.69 | 0 | 0 |
| | 1 | 36 | 14.90 | 15.03 | 14.72 | | 0 |
| | 1 | 74 | 14.66 | 14.82 | 14.72 | | 0 |
| | 36 | 0 | 14.75 | 14.91 | 14.83 | 0-1 | 0 |
| | 36 | 18 | 14.97 | 14.93 | 14.83 | | 0 |
| | 36 | 37 | 14.93 | 14.84 | 14.74 | | 0 |
| | 75 | 0 | 14.95 | 14.94 | 14.81 | | 0 |
| 16QAM | 1 | 0 | 14.48 | 14.75 | 14.68 | 0-1 | 0 |
| | 1 | 36 | 14.79 | 14.79 | 14.71 | | 0 |
| | 1 | 74 | 14.49 | 14.61 | 14.77 | | 0 |
| | 36 | 0 | 14.28 | 14.58 | 14.44 | 0-2 | 0 |
| | 36 | 18 | 14.49 | 14.52 | 14.44 | | 0 |
| | 36 | 37 | 14.48 | 14.49 | 14.37 | | 0 |
| | 75 | 0 | 14.49 | 14.55 | 14.42 | | 0 |
| 64QAM | 1 | 0 | 14.61 | 14.65 | 14.56 | 0-2 | 0 |
| | 1 | 36 | 14.69 | 14.77 | 14.60 | | 0 |
| | 1 | 74 | 14.51 | 14.61 | 14.64 | | 0 |
| | 36 | 0 | 14.31 | 14.59 | 14.49 | 0-3 | 0 |
| | 36 | 18 | 14.52 | 14.53 | 14.48 | | 0 |
| | 36 | 37 | 14.49 | 14.46 | 14.40 | | 0 |
| | 75 | 0 | 14.47 | 14.50 | 14.44 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-223
## LTE Band 25 Conducted Powers Ant 2a - 10 MHz Bandwidth

| LTE Band 25 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26090 (1855.0 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26640 (1910.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.72 | 14.88 | 14.69 | 0 | 0 |
| | 1 | 25 | 14.85 | 14.84 | 14.63 | | 0 |
| | 1 | 49 | 14.98 | 14.76 | 14.85 | | 0 |
| | 25 | 0 | 14.75 | 14.88 | 14.76 | 0-1 | 0 |
| | 25 | 12 | 14.89 | 14.89 | 14.74 | | 0 |
| | 25 | 25 | 15.01 | 14.94 | 14.88 | | 0 |
| | 50 | 0 | 14.89 | 14.91 | 14.77 | | 0 |
| 16QAM | 1 | 0 | 14.69 | 14.70 | 14.69 | 0-1 | 0 |
| | 1 | 25 | 14.72 | 14.79 | 14.55 | | 0 |
| | 1 | 49 | 14.76 | 14.65 | 14.85 | | 0 |
| | 25 | 0 | 14.39 | 14.55 | 14.40 | 0-2 | 0 |
| | 25 | 12 | 14.41 | 14.55 | 14.37 | | 0 |
| | 25 | 25 | 14.56 | 14.59 | 14.49 | | 0 |
| | 50 | 0 | 14.48 | 14.55 | 14.38 | | 0 |
| 64QAM | 1 | 0 | 14.75 | 14.77 | 14.52 | 0-2 | 0 |
| | 1 | 25 | 14.77 | 14.82 | 14.52 | | 0 |
| | 1 | 49 | 14.71 | 14.71 | 14.77 | | 0 |
| | 25 | 0 | 14.34 | 14.52 | 14.44 | 0-3 | 0 |
| | 25 | 12 | 14.40 | 14.56 | 14.38 | | 0 |
| | 25 | 25 | 14.56 | 14.62 | 14.50 | | 0 |
| | 50 | 0 | 14.45 | 14.56 | 14.39 | | 0 |

## Table 8-224
## LTE Band 25 Conducted Powers Ant 2a - 5 MHz Bandwidth

| LTE Band 25 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26065 (1852.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26665 (1912.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.83 | 14.81 | 14.60 | 0 | 0 |
| | 1 | 12 | 14.82 | 14.81 | 14.65 | | 0 |
| | 1 | 24 | 14.97 | 14.90 | 14.75 | | 0 |
| | 12 | 0 | 14.72 | 14.82 | 14.75 | 0-1 | 0 |
| | 12 | 6 | 14.70 | 14.82 | 14.77 | | 0 |
| | 12 | 13 | 14.75 | 14.87 | 14.79 | | 0 |
| | 25 | 0 | 14.72 | 14.86 | 14.81 | | 0 |
| 16QAM | 1 | 0 | 14.61 | 14.71 | 14.54 | 0-1 | 0 |
| | 1 | 12 | 14.52 | 14.74 | 14.69 | | 0 |
| | 1 | 24 | 14.71 | 14.77 | 14.72 | | 0 |
| | 12 | 0 | 14.32 | 14.49 | 14.33 | 0-2 | 0 |
| | 12 | 6 | 14.35 | 14.48 | 14.39 | | 0 |
| | 12 | 13 | 14.39 | 14.49 | 14.39 | | 0 |
| | 25 | 0 | 14.31 | 14.46 | 14.41 | | 0 |
| 64QAM | 1 | 0 | 14.27 | 14.59 | 14.66 | 0-2 | 0 |
| | 1 | 12 | 14.51 | 14.60 | 14.73 | | 0 |
| | 1 | 24 | 14.49 | 14.75 | 14.78 | | 0 |
| | 12 | 0 | 14.33 | 14.41 | 14.40 | 0-3 | 0 |
| | 12 | 6 | 14.32 | 14.37 | 14.47 | | 0 |
| | 12 | 13 | 14.36 | 14.45 | 14.41 | | 0 |
| | 25 | 0 | 14.29 | 14.41 | 14.40 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-225
## LTE Band 25 Conducted Powers Ant 2a - 3 MHz Bandwidth

| LTE Band 25 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26055 (1851.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26675 (1913.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.59 | 14.75 | 14.62 | 0 | 0 |
| | 1 | 7 | 14.67 | 14.82 | 14.65 | | 0 |
| | 1 | 14 | 14.61 | 14.79 | 14.61 | | 0 |
| | 8 | 0 | 14.62 | 14.80 | 14.72 | 0-1 | 0 |
| | 8 | 4 | 14.63 | 14.83 | 14.72 | | 0 |
| | 8 | 7 | 14.63 | 14.86 | 14.74 | | 0 |
| | 15 | 0 | 14.68 | 14.85 | 14.76 | | 0 |
| 16QAM | 1 | 0 | 14.46 | 14.68 | 14.72 | 0-1 | 0 |
| | 1 | 7 | 14.58 | 14.56 | 14.73 | | 0 |
| | 1 | 14 | 14.45 | 14.70 | 14.68 | | 0 |
| | 8 | 0 | 14.35 | 14.42 | 14.42 | 0-2 | 0 |
| | 8 | 4 | 14.31 | 14.44 | 14.37 | | 0 |
| | 8 | 7 | 14.35 | 14.45 | 14.39 | | 0 |
| | 15 | 0 | 14.31 | 14.41 | 14.40 | | 0 |
| 64QAM | 1 | 0 | 14.58 | 14.50 | 14.53 | 0-2 | 0 |
| | 1 | 7 | 14.64 | 14.69 | 14.57 | | 0 |
| | 1 | 14 | 14.47 | 14.58 | 14.58 | | 0 |
| | 8 | 0 | 14.33 | 14.41 | 14.42 | 0-3 | 0 |
| | 8 | 4 | 14.34 | 14.46 | 14.35 | | 0 |
| | 8 | 7 | 14.35 | 14.41 | 14.40 | | 0 |
| | 15 | 0 | 14.31 | 14.39 | 14.43 | | 0 |

## Table 8-226
## LTE Band 25 Conducted Powers Ant 2a - 1.4 MHz Bandwidth

| LTE Band 25 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26047 (1850.7 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26683 (1914.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.66 | 14.84 | 14.84 | 0 | 0 |
| | 1 | 2 | 14.63 | 14.82 | 14.81 | | 0 |
| | 1 | 5 | 14.67 | 14.86 | 14.90 | | 0 |
| | 3 | 0 | 14.63 | 14.83 | 14.73 | | 0 |
| | 3 | 2 | 14.65 | 14.83 | 14.74 | | 0 |
| | 3 | 3 | 14.67 | 14.84 | 14.76 | | 0 |
| | 6 | 0 | 14.64 | 14.84 | 14.73 | 0-1 | 0 |
| 16QAM | 1 | 0 | 14.50 | 14.50 | 14.65 | 0-1 | 0 |
| | 1 | 2 | 14.77 | 14.40 | 14.59 | | 0 |
| | 1 | 5 | 14.63 | 14.64 | 14.50 | | 0 |
| | 3 | 0 | 14.37 | 14.47 | 14.54 | | 0 |
| | 3 | 2 | 14.52 | 14.48 | 14.49 | | 0 |
| | 3 | 3 | 14.47 | 14.54 | 14.35 | | 0 |
| | 6 | 0 | 14.40 | 14.50 | 14.43 | 0-2 | 0 |
| 64QAM | 1 | 0 | 14.49 | 14.62 | 14.43 | 0-2 | 0 |
| | 1 | 2 | 14.67 | 14.63 | 14.82 | | 0 |
| | 1 | 5 | 14.72 | 14.71 | 14.62 | | 0 |
| | 3 | 0 | 14.32 | 14.40 | 14.67 | | 0 |
| | 3 | 2 | 14.46 | 14.45 | 14.68 | | 0 |
| | 3 | 3 | 14.45 | 14.48 | 14.64 | | 0 |
| | 6 | 0 | 14.36 | 14.47 | 14.38 | 0-3 | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-227
## LTE Band 25 Conducted Powers Ant 2b - 20 MHz Bandwidth

| LTE Band 25 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26140 (1860.0 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26590 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.53 | 13.72 | 13.66 | 0 | 0 |
| | 1 | 50 | 13.73 | 13.77 | 13.85 | | 0 |
| | 1 | 99 | 13.30 | 13.82 | **14.08** | | 0 |
| | 50 | 0 | 13.79 | 13.78 | 13.77 | 0-1 | 0 |
| | 50 | 25 | 13.75 | 13.74 | 13.82 | | 0 |
| | 50 | 50 | 13.70 | 13.72 | **13.91** | | 0 |
| | 100 | 0 | 13.81 | 13.76 | 13.82 | | 0 |
| 16QAM | 1 | 0 | 13.60 | 13.46 | 13.55 | 0-1 | 0 |
| | 1 | 50 | 13.67 | 13.49 | 13.80 | | 0 |
| | 1 | 99 | 13.56 | 13.49 | 14.03 | | 0 |
| | 50 | 0 | 13.59 | 13.47 | 13.45 | 0-2 | 0 |
| | 50 | 25 | 13.59 | 13.40 | 13.50 | | 0 |
| | 50 | 50 | 13.42 | 13.40 | 13.66 | | 0 |
| | 100 | 0 | 13.58 | 13.41 | 13.52 | | 0 |
| 64QAM | 1 | 0 | 13.80 | 13.50 | 13.62 | 0-2 | 0 |
| | 1 | 50 | 13.84 | 13.75 | 13.72 | | 0 |
| | 1 | 99 | 13.69 | 13.77 | 13.79 | | 0 |
| | 50 | 0 | 13.38 | 13.40 | 13.46 | 0-3 | 0 |
| | 50 | 25 | 13.39 | 13.38 | 13.45 | | 0 |
| | 50 | 50 | 13.24 | 13.33 | 13.48 | | 0 |
| | 100 | 0 | 13.36 | 13.35 | 13.45 | | 0 |

## Table 8-228
## LTE Band 25 Conducted Powers Ant 2b - 15 MHz Bandwidth

| LTE Band 25 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26115 (1857.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26615 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.60 | 13.61 | 13.94 | 0 | 0 |
| | 1 | 36 | 13.79 | 13.77 | 13.90 | | 0 |
| | 1 | 74 | 13.54 | 13.62 | 14.03 | | 0 |
| | 36 | 0 | 13.61 | 13.71 | 13.87 | 0-1 | 0 |
| | 36 | 18 | 13.78 | 13.86 | 14.01 | | 0 |
| | 36 | 37 | 13.76 | 13.78 | 14.00 | | 0 |
| | 75 | 0 | 13.81 | 13.77 | 13.97 | | 0 |
| 16QAM | 1 | 0 | 13.37 | 13.40 | 13.73 | 0-1 | 0 |
| | 1 | 36 | 13.51 | 13.75 | 13.53 | | 0 |
| | 1 | 74 | 13.22 | 13.45 | 13.89 | | 0 |
| | 36 | 0 | 13.29 | 13.39 | 13.51 | 0-2 | 0 |
| | 36 | 18 | 13.40 | 13.55 | 13.57 | | 0 |
| | 36 | 37 | 13.34 | 13.44 | 13.60 | | 0 |
| | 75 | 0 | 13.41 | 13.46 | 13.54 | | 0 |
| 64QAM | 1 | 0 | 13.52 | 13.64 | 13.73 | 0-2 | 0 |
| | 1 | 36 | 13.62 | 13.80 | 13.57 | | 0 |
| | 1 | 74 | 13.14 | 13.72 | 13.86 | | 0 |
| | 36 | 0 | 13.32 | 13.41 | 13.49 | 0-3 | 0 |
| | 36 | 18 | 13.41 | 13.54 | 13.60 | | 0 |
| | 36 | 37 | 13.36 | 13.44 | 13.63 | | 0 |
| | 75 | 0 | 13.39 | 13.44 | 13.55 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-229
## LTE Band 25 Conducted Powers Ant 2b - 10 MHz Bandwidth

| LTE Band 25 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26090 (1855.0 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26640 (1910.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.74 | 13.64 | 13.76 | 0 | 0 |
| | 1 | 25 | 13.77 | 13.68 | 13.83 | | 0 |
| | 1 | 49 | 13.78 | 13.80 | 14.02 | | 0 |
| | 25 | 0 | 13.59 | 13.79 | 13.90 | 0-1 | 0 |
| | 25 | 12 | 13.67 | 13.81 | 13.98 | | 0 |
| | 25 | 25 | 13.76 | 13.82 | 14.06 | | 0 |
| | 50 | 0 | 13.69 | 13.74 | 14.04 | | 0 |
| 16QAM | 1 | 0 | 13.62 | 13.52 | 13.67 | 0-1 | 0 |
| | 1 | 25 | 13.63 | 13.38 | 13.54 | | 0 |
| | 1 | 49 | 13.70 | 13.62 | 14.00 | | 0 |
| | 25 | 0 | 13.23 | 13.36 | 13.46 | 0-2 | 0 |
| | 25 | 12 | 13.31 | 13.40 | 13.56 | | 0 |
| | 25 | 25 | 13.42 | 13.38 | 13.76 | | 0 |
| | 50 | 0 | 13.29 | 13.32 | 13.62 | | 0 |
| 64QAM | 1 | 0 | 13.55 | 13.68 | 13.54 | 0-2 | 0 |
| | 1 | 25 | 13.47 | 13.55 | 13.54 | | 0 |
| | 1 | 49 | 13.50 | 13.72 | 14.08 | | 0 |
| | 25 | 0 | 13.28 | 13.37 | 13.48 | 0-3 | 0 |
| | 25 | 12 | 13.31 | 13.36 | 13.59 | | 0 |
| | 25 | 25 | 13.39 | 13.37 | 13.79 | | 0 |
| | 50 | 0 | 13.29 | 13.33 | 13.60 | | 0 |

## Table 8-230
## LTE Band 25 Conducted Powers Ant 2b - 5 MHz Bandwidth

| LTE Band 25 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26065 (1852.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26665 (1912.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.54 | 13.69 | 13.86 | 0 | 0 |
| | 1 | 12 | 13.56 | 13.63 | 13.94 | | 0 |
| | 1 | 24 | 13.66 | 13.68 | 13.97 | | 0 |
| | 12 | 0 | 13.52 | 13.70 | 13.94 | 0-1 | 0 |
| | 12 | 6 | 13.49 | 13.72 | 13.98 | | 0 |
| | 12 | 13 | 13.53 | 13.70 | 14.06 | | 0 |
| | 25 | 0 | 13.52 | 13.68 | 14.00 | | 0 |
| 16QAM | 1 | 0 | 13.37 | 13.71 | 13.70 | 0-1 | 0 |
| | 1 | 12 | 13.44 | 13.47 | 14.03 | | 0 |
| | 1 | 24 | 13.62 | 13.69 | 13.99 | | 0 |
| | 12 | 0 | 13.20 | 13.45 | 13.73 | 0-2 | 0 |
| | 12 | 6 | 13.21 | 13.42 | 13.72 | | 0 |
| | 12 | 13 | 13.29 | 13.39 | 13.74 | | 0 |
| | 25 | 0 | 13.26 | 13.38 | 13.76 | | 0 |
| 64QAM | 1 | 0 | 13.51 | 13.63 | 13.87 | 0-2 | 0 |
| | 1 | 12 | 13.66 | 13.55 | 13.75 | | 0 |
| | 1 | 24 | 13.70 | 13.61 | 13.82 | | 0 |
| | 12 | 0 | 13.26 | 13.41 | 13.71 | 0-3 | 0 |
| | 12 | 6 | 13.27 | 13.48 | 13.75 | | 0 |
| | 12 | 13 | 13.32 | 13.44 | 13.76 | | 0 |
| | 25 | 0 | 13.20 | 13.36 | 13.77 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-231
## LTE Band 25 Conducted Powers Ant 2b - 3 MHz Bandwidth

| LTE Band 25 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26055 (1851.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26675 (1913.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.46 | 13.62 | 13.93 | 0 | 0 |
| | 1 | 7 | 13.55 | 13.61 | 14.06 | | 0 |
| | 1 | 14 | 13.47 | 13.62 | 14.02 | | 0 |
| | 8 | 0 | 13.45 | 13.70 | 14.07 | 0-1 | 0 |
| | 8 | 4 | 13.42 | 13.63 | 14.00 | | 0 |
| | 8 | 7 | 13.43 | 13.64 | 14.02 | | 0 |
| | 15 | 0 | 13.44 | 13.69 | 13.99 | | 0 |
| 16QAM | 1 | 0 | 13.34 | 13.45 | 13.66 | 0-1 | 0 |
| | 1 | 7 | 13.41 | 13.44 | 13.65 | | 0 |
| | 1 | 14 | 13.38 | 13.47 | 13.85 | | 0 |
| | 8 | 0 | 13.22 | 13.34 | 13.77 | 0-2 | 0 |
| | 8 | 4 | 13.18 | 13.35 | 13.70 | | 0 |
| | 8 | 7 | 13.22 | 13.32 | 13.76 | | 0 |
| | 15 | 0 | 13.17 | 13.27 | 13.70 | | 0 |
| 64QAM | 1 | 0 | 13.33 | 13.51 | 13.78 | 0-2 | 0 |
| | 1 | 7 | 13.53 | 13.50 | 13.83 | | 0 |
| | 1 | 14 | 13.29 | 13.61 | 13.88 | | 0 |
| | 8 | 0 | 13.20 | 13.31 | 13.73 | 0-3 | 0 |
| | 8 | 4 | 13.16 | 13.27 | 13.74 | | 0 |
| | 8 | 7 | 13.15 | 13.33 | 13.72 | | 0 |
| | 15 | 0 | 13.16 | 13.27 | 13.78 | | 0 |

## Table 8-232
## LTE Band 25 Conducted Powers Ant 2b - 1.4 MHz Bandwidth

| LTE Band 25 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26047 (1850.7 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26683 (1914.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.49 | 13.79 | 13.98 | 0 | 0 |
| | 1 | 2 | 13.55 | 13.76 | 13.98 | | 0 |
| | 1 | 5 | 13.62 | 13.75 | 13.96 | | 0 |
| | 3 | 0 | 13.43 | 13.67 | 14.03 | | 0 |
| | 3 | 2 | 13.49 | 13.65 | 14.01 | | 0 |
| | 3 | 3 | 13.51 | 13.64 | 13.98 | | 0 |
| | 6 | 0 | 13.47 | 13.62 | 14.02 | 0-1 | 0 |
| 16QAM | 1 | 0 | 13.49 | 13.41 | 13.96 | 0-1 | 0 |
| | 1 | 2 | 13.60 | 13.36 | 14.04 | | 0 |
| | 1 | 5 | 13.48 | 13.23 | 14.05 | | 0 |
| | 3 | 0 | 13.31 | 13.27 | 13.92 | | 0 |
| | 3 | 2 | 13.39 | 13.24 | 13.92 | | 0 |
| | 3 | 3 | 13.35 | 13.26 | 14.01 | | 0 |
| | 6 | 0 | 13.27 | 13.27 | 13.84 | 0-2 | 0 |
| 64QAM | 1 | 0 | 13.43 | 13.57 | 14.05 | 0-2 | 0 |
| | 1 | 2 | 13.43 | 13.37 | 14.10 | | 0 |
| | 1 | 5 | 13.42 | 13.48 | 13.90 | | 0 |
| | 3 | 0 | 13.20 | 13.36 | 13.90 | | 0 |
| | 3 | 2 | 13.39 | 13.30 | 13.91 | | 0 |
| | 3 | 3 | 13.39 | 13.33 | 13.96 | | 0 |
| | 6 | 0 | 13.23 | 13.17 | 13.85 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-233
## LTE Band 25 Conducted Powers Ant 4a - 20 MHz Bandwidth

| LTE Band 25 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26140 (1860.0 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26590 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.51 | 14.64 | 14.79 | 0 | 0 |
| | 1 | 50 | 14.37 | 14.59 | **14.90** | | 0 |
| | 1 | 99 | 14.34 | 14.69 | 14.89 | | 0 |
| | 50 | 0 | 14.54 | 14.59 | 14.85 | 0-1 | 0 |
| | 50 | 25 | 14.57 | 14.54 | **14.87** | | 0 |
| | 50 | 50 | 14.47 | 14.58 | 14.81 | | 0 |
| | 100 | 0 | 14.49 | 14.55 | 14.84 | | 0 |
| 16QAM | 1 | 0 | 14.74 | 14.69 | 14.63 | 0-1 | 0 |
| | 1 | 50 | 14.61 | 14.59 | 14.78 | | 0 |
| | 1 | 99 | 14.51 | 14.70 | 14.89 | | 0 |
| | 50 | 0 | 14.37 | 14.34 | 14.61 | 0-2 | 0 |
| | 50 | 25 | 14.31 | 14.28 | 14.54 | | 0 |
| | 50 | 50 | 14.28 | 14.27 | 14.51 | | 0 |
| | 100 | 0 | 14.27 | 14.26 | 14.52 | | 0 |
| 64QAM | 1 | 0 | 14.64 | 14.61 | 14.87 | 0-2 | 0 |
| | 1 | 50 | 14.46 | 14.41 | 14.84 | | 0 |
| | 1 | 99 | 14.70 | 14.62 | 14.77 | | 0 |
| | 50 | 0 | 13.94 | 13.94 | 14.48 | 0-3 | 0 |
| | 50 | 25 | 14.02 | 14.02 | 14.37 | | 0 |
| | 50 | 50 | 14.08 | 14.07 | 14.44 | | 0 |
| | 100 | 0 | 14.03 | 14.04 | 14.35 | | 0 |

## Table 8-234
## LTE Band 25 Conducted Powers Ant 4a - 15 MHz Bandwidth

| LTE Band 25 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26115 (1857.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26615 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.57 | 14.81 | 14.88 | 0 | 0 |
| | 1 | 36 | 14.48 | 14.70 | 14.80 | | 0 |
| | 1 | 74 | 14.42 | 14.83 | 14.70 | | 0 |
| | 36 | 0 | 14.45 | 14.70 | 14.82 | 0-1 | 0 |
| | 36 | 18 | 14.52 | 14.59 | 14.88 | | 0 |
| | 36 | 37 | 14.52 | 14.66 | 14.83 | | 0 |
| | 75 | 0 | 14.49 | 14.65 | 14.85 | | 0 |
| 16QAM | 1 | 0 | 14.61 | 14.61 | 14.63 | 0-1 | 0 |
| | 1 | 36 | 14.41 | 14.36 | 14.79 | | 0 |
| | 1 | 74 | 14.39 | 14.66 | 14.39 | | 0 |
| | 36 | 0 | 14.25 | 14.34 | 14.57 | 0-2 | 0 |
| | 36 | 18 | 14.36 | 14.25 | 14.59 | | 0 |
| | 36 | 37 | 14.31 | 14.45 | 14.56 | | 0 |
| | 75 | 0 | 14.27 | 14.39 | 14.58 | | 0 |
| 64QAM | 1 | 0 | 14.78 | 14.33 | 14.88 | 0-2 | 0 |
| | 1 | 36 | 14.43 | 14.31 | 14.75 | | 0 |
| | 1 | 74 | 14.60 | 14.61 | 14.66 | | 0 |
| | 36 | 0 | 14.13 | 14.37 | 14.64 | 0-3 | 0 |
| | 36 | 18 | 14.16 | 14.36 | 14.51 | | 0 |
| | 36 | 37 | 14.20 | 14.43 | 14.55 | | 0 |
| | 75 | 0 | 14.14 | 14.36 | 14.47 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-235
## LTE Band 25 Conducted Powers Ant 4a - 10 MHz Bandwidth

| LTE Band 25 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26090 (1855.0 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26640 (1910.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.65 | 14.61 | 14.73 | 0 | 0 |
| | 1 | 25 | 14.36 | 14.52 | 14.73 | | 0 |
| | 1 | 49 | 14.43 | 14.60 | 14.75 | | 0 |
| | 25 | 0 | 14.57 | 14.58 | 14.80 | 0-1 | 0 |
| | 25 | 12 | 14.47 | 14.50 | 14.87 | | 0 |
| | 25 | 25 | 14.51 | 14.60 | 14.77 | | 0 |
| | 50 | 0 | 14.46 | 14.62 | 14.82 | | 0 |
| 16QAM | 1 | 0 | 14.64 | 14.56 | 14.63 | 0-1 | 0 |
| | 1 | 25 | 14.42 | 14.38 | 14.68 | | 0 |
| | 1 | 49 | 14.24 | 14.50 | 14.56 | | 0 |
| | 25 | 0 | 14.30 | 14.30 | 14.53 | 0-2 | 0 |
| | 25 | 12 | 14.26 | 14.26 | 14.57 | | 0 |
| | 25 | 25 | 14.27 | 14.33 | 14.48 | | 0 |
| | 50 | 0 | 14.25 | 14.35 | 14.57 | | 0 |
| 64QAM | 1 | 0 | 14.50 | 14.54 | 14.66 | 0-2 | 0 |
| | 1 | 25 | 14.18 | 14.31 | 14.70 | | 0 |
| | 1 | 49 | 14.31 | 14.47 | 14.80 | | 0 |
| | 25 | 0 | 14.22 | 14.36 | 14.58 | 0-3 | 0 |
| | 25 | 12 | 14.17 | 14.29 | 14.62 | | 0 |
| | 25 | 25 | 14.17 | 14.36 | 14.51 | | 0 |
| | 50 | 0 | 14.19 | 14.39 | 14.59 | | 0 |

## Table 8-236
## LTE Band 25 Conducted Powers Ant 4a - 5 MHz Bandwidth

| LTE Band 25 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26065 (1852.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26665 (1912.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.59 | 14.58 | 14.77 | 0 | 0 |
| | 1 | 12 | 14.47 | 14.50 | 14.58 | | 0 |
| | 1 | 24 | 14.47 | 14.55 | 14.54 | | 0 |
| | 12 | 0 | 14.49 | 14.48 | 14.79 | 0-1 | 0 |
| | 12 | 6 | 14.40 | 14.48 | 14.69 | | 0 |
| | 12 | 13 | 14.32 | 14.66 | 14.64 | | 0 |
| | 25 | 0 | 14.42 | 14.67 | 14.69 | | 0 |
| 16QAM | 1 | 0 | 14.56 | 14.42 | 14.57 | 0-1 | 0 |
| | 1 | 12 | 14.39 | 14.49 | 14.55 | | 0 |
| | 1 | 24 | 14.36 | 14.42 | 14.75 | | 0 |
| | 12 | 0 | 14.32 | 14.24 | 14.50 | 0-2 | 0 |
| | 12 | 6 | 14.26 | 14.22 | 14.37 | | 0 |
| | 12 | 13 | 14.18 | 14.28 | 14.36 | | 0 |
| | 25 | 0 | 14.21 | 14.35 | 14.40 | | 0 |
| 64QAM | 1 | 0 | 14.54 | 14.47 | 14.80 | 0-2 | 0 |
| | 1 | 12 | 14.27 | 14.31 | 14.67 | | 0 |
| | 1 | 24 | 14.33 | 14.40 | 14.88 | | 0 |
| | 12 | 0 | 14.17 | 14.30 | 14.65 | 0-3 | 0 |
| | 12 | 6 | 14.10 | 14.26 | 14.52 | | 0 |
| | 12 | 13 | 14.01 | 14.34 | 14.49 | | 0 |
| | 25 | 0 | 14.02 | 14.34 | 14.43 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-237
## LTE Band 25 Conducted Powers Ant 4a - 3 MHz Bandwidth

| LTE Band 25 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26055 (1851.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26675 (1913.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.49 | 14.35 | 14.56 | 0 | 0 |
| | 1 | 7 | 14.43 | 14.45 | 14.62 | | 0 |
| | 1 | 14 | 14.37 | 14.41 | 14.61 | | 0 |
| | 8 | 0 | 14.54 | 14.44 | 14.68 | 0-1 | 0 |
| | 8 | 4 | 14.44 | 14.50 | 14.64 | | 0 |
| | 8 | 7 | 14.46 | 14.52 | 14.73 | | 0 |
| | 15 | 0 | 14.46 | 14.52 | 14.66 | | 0 |
| 16QAM | 1 | 0 | 14.55 | 14.18 | 14.45 | 0-1 | 0 |
| | 1 | 7 | 14.48 | 14.41 | 14.45 | | 0 |
| | 1 | 14 | 14.35 | 14.30 | 14.44 | | 0 |
| | 8 | 0 | 14.41 | 14.23 | 14.35 | 0-2 | 0 |
| | 8 | 4 | 14.37 | 14.30 | 14.30 | | 0 |
| | 8 | 7 | 14.34 | 14.28 | 14.34 | | 0 |
| | 15 | 0 | 14.24 | 14.29 | 14.32 | | 0 |
| 64QAM | 1 | 0 | 14.39 | 14.41 | 14.77 | 0-2 | 0 |
| | 1 | 7 | 14.47 | 14.54 | 14.72 | | 0 |
| | 1 | 14 | 14.17 | 14.40 | 14.61 | | 0 |
| | 8 | 0 | 14.18 | 14.29 | 14.48 | 0-3 | 0 |
| | 8 | 4 | 14.18 | 14.38 | 14.46 | | 0 |
| | 8 | 7 | 14.25 | 14.36 | 14.51 | | 0 |
| | 15 | 0 | 14.09 | 14.27 | 14.40 | | 0 |

## Table 8-238
## LTE Band 25 Conducted Powers Ant 4a - 1.4 MHz Bandwidth

| LTE Band 25 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26047 (1850.7 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26683 (1914.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 14.66 | 14.55 | 14.66 | 0 | 0 |
| | 1 | 2 | 14.56 | 14.55 | 14.69 | | 0 |
| | 1 | 5 | 14.57 | 14.55 | 14.66 | | 0 |
| | 3 | 0 | 14.68 | 14.67 | 14.63 | | 0 |
| | 3 | 2 | 14.70 | 14.68 | 14.65 | | 0 |
| | 3 | 3 | 14.70 | 14.69 | 14.66 | | 0 |
| | 6 | 0 | 14.71 | 14.74 | 14.66 | 0-1 | 0 |
| 16QAM | 1 | 0 | 14.68 | 14.18 | 14.55 | 0-1 | 0 |
| | 1 | 2 | 14.56 | 14.16 | 14.57 | | 0 |
| | 1 | 5 | 14.42 | 14.18 | 14.64 | | 0 |
| | 3 | 0 | 14.36 | 14.19 | 14.50 | | 0 |
| | 3 | 2 | 14.31 | 14.23 | 14.49 | | 0 |
| | 3 | 3 | 14.28 | 14.28 | 14.42 | | 0 |
| | 6 | 0 | 14.24 | 14.17 | 14.38 | 0-2 | 0 |
| 64QAM | 1 | 0 | 14.71 | 14.45 | 14.76 | 0-2 | 0 |
| | 1 | 2 | 14.56 | 14.40 | 14.54 | | 0 |
| | 1 | 5 | 14.76 | 14.36 | 14.76 | | 0 |
| | 3 | 0 | 14.33 | 14.30 | 14.45 | | 0 |
| | 3 | 2 | 14.25 | 14.38 | 14.57 | | 0 |
| | 3 | 3 | 14.33 | 14.31 | 14.53 | | 0 |
| | 6 | 0 | 14.20 | 14.42 | 14.42 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-239
## LTE Band 25 Conducted Powers Ant 4b - 20 MHz Bandwidth

| LTE Band 25 (PCS) 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26140 (1860.0 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26590 (1905.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | **13.90** | 13.74 | 13.74 | 0 | 0 |
| | 1 | 50 | 13.83 | 13.70 | 13.82 | | 0 |
| | 1 | 99 | 13.71 | 13.72 | 13.86 | | 0 |
| | 50 | 0 | **13.84** | 13.72 | 13.76 | 0-1 | 0 |
| | 50 | 25 | 13.78 | 13.71 | 13.79 | | 0 |
| | 50 | 50 | 13.74 | 13.70 | 13.72 | | 0 |
| | 100 | 0 | 13.78 | 13.74 | 13.80 | | 0 |
| 16QAM | 1 | 0 | 14.06 | 14.07 | 14.03 | 0-1 | 0 |
| | 1 | 50 | 14.07 | 14.07 | 14.03 | | 0 |
| | 1 | 99 | 14.10 | 13.82 | 13.97 | | 0 |
| | 50 | 0 | 14.03 | 13.86 | 13.78 | 0-2 | 0 |
| | 50 | 25 | 14.01 | 13.79 | 13.92 | | 0 |
| | 50 | 50 | 13.82 | 13.70 | 13.84 | | 0 |
| | 100 | 0 | 14.02 | 13.80 | 13.89 | | 0 |
| 64QAM | 1 | 0 | 14.05 | 13.82 | 13.81 | 0-2 | 0 |
| | 1 | 50 | 14.08 | 13.98 | 13.92 | | 0 |
| | 1 | 99 | 14.09 | 13.90 | 14.09 | | 0 |
| | 50 | 0 | 13.98 | 13.87 | 13.73 | 0-3 | 0 |
| | 50 | 25 | 13.93 | 13.84 | 13.73 | | 0 |
| | 50 | 50 | 13.73 | 13.71 | 13.71 | | 0 |
| | 100 | 0 | 13.90 | 13.86 | 13.80 | | 0 |

## Table 8-240
## LTE Band 25 Conducted Powers Ant 4b - 15 MHz Bandwidth

| LTE Band 25 (PCS) 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26115 (1857.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26615 (1907.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.75 | 13.94 | 13.76 | 0 | 0 |
| | 1 | 36 | 13.95 | 13.91 | 13.83 | | 0 |
| | 1 | 74 | 13.73 | 13.73 | 13.87 | | 0 |
| | 36 | 0 | 13.86 | 13.90 | 13.84 | 0-1 | 0 |
| | 36 | 18 | 13.91 | 13.90 | 13.86 | | 0 |
| | 36 | 37 | 13.86 | 13.72 | 13.89 | | 0 |
| | 75 | 0 | 13.98 | 13.88 | 13.88 | | 0 |
| 16QAM | 1 | 0 | 14.12 | 14.08 | 13.98 | 0-1 | 0 |
| | 1 | 36 | 14.07 | 14.03 | 14.03 | | 0 |
| | 1 | 74 | 13.89 | 13.89 | 14.04 | | 0 |
| | 36 | 0 | 13.94 | 13.97 | 13.84 | 0-2 | 0 |
| | 36 | 18 | 14.06 | 13.95 | 13.85 | | 0 |
| | 36 | 37 | 13.87 | 13.76 | 13.87 | | 0 |
| | 75 | 0 | 14.03 | 13.89 | 13.85 | | 0 |
| 64QAM | 1 | 0 | 14.06 | 13.94 | 13.90 | 0-2 | 0 |
| | 1 | 36 | 14.10 | 14.04 | 14.04 | | 0 |
| | 1 | 74 | 13.86 | 13.75 | 14.11 | | 0 |
| | 36 | 0 | 13.93 | 13.90 | 13.85 | 0-3 | 0 |
| | 36 | 18 | 14.08 | 13.85 | 13.87 | | 0 |
| | 36 | 37 | 13.94 | 13.76 | 13.86 | | 0 |
| | 75 | 0 | 14.01 | 13.77 | 13.78 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-241
## LTE Band 25 Conducted Powers Ant 4b - 10 MHz Bandwidth

| LTE Band 25 (PCS) 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26090 (1855.0 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26640 (1910.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.77 | 13.80 | 13.82 | 0 | 0 |
| | 1 | 25 | 13.76 | 13.76 | 13.78 | | 0 |
| | 1 | 49 | 13.79 | 13.78 | 13.91 | | 0 |
| | 25 | 0 | 13.80 | 13.85 | 13.84 | 0-1 | 0 |
| | 25 | 12 | 13.81 | 13.79 | 13.83 | | 0 |
| | 25 | 25 | 13.88 | 13.79 | 13.98 | | 0 |
| | 50 | 0 | 13.86 | 13.83 | 13.93 | | 0 |
| 16QAM | 1 | 0 | 14.12 | 13.95 | 14.07 | 0-1 | 0 |
| | 1 | 25 | 14.06 | 13.97 | 13.98 | | 0 |
| | 1 | 49 | 14.08 | 13.81 | 14.11 | | 0 |
| | 25 | 0 | 13.91 | 13.92 | 13.76 | 0-2 | 0 |
| | 25 | 12 | 13.90 | 13.87 | 13.75 | | 0 |
| | 25 | 25 | 13.98 | 13.77 | 13.89 | | 0 |
| | 50 | 0 | 14.00 | 13.83 | 13.80 | | 0 |
| 64QAM | 1 | 0 | 14.02 | 14.01 | 14.02 | 0-2 | 0 |
| | 1 | 25 | 14.00 | 14.04 | 13.98 | | 0 |
| | 1 | 49 | 14.01 | 13.97 | 14.03 | | 0 |
| | 25 | 0 | 13.88 | 13.89 | 13.72 | 0-3 | 0 |
| | 25 | 12 | 13.85 | 13.88 | 13.71 | | 0 |
| | 25 | 25 | 13.94 | 13.87 | 13.84 | | 0 |
| | 50 | 0 | 13.96 | 13.85 | 13.73 | | 0 |

## Table 8-242
## LTE Band 25 Conducted Powers Ant 4b - 5 MHz Bandwidth

| LTE Band 25 (PCS) 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26065 (1852.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26665 (1912.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.90 | 13.83 | 13.76 | 0 | 0 |
| | 1 | 12 | 13.89 | 13.83 | 13.81 | | 0 |
| | 1 | 24 | 13.89 | 13.82 | 13.88 | | 0 |
| | 12 | 0 | 13.86 | 13.87 | 13.86 | 0-1 | 0 |
| | 12 | 6 | 13.82 | 13.84 | 13.94 | | 0 |
| | 12 | 13 | 13.86 | 13.77 | 13.95 | | 0 |
| | 25 | 0 | 13.82 | 13.85 | 13.96 | | 0 |
| 16QAM | 1 | 0 | 14.08 | 14.05 | 13.91 | 0-1 | 0 |
| | 1 | 12 | 14.04 | 14.05 | 14.09 | | 0 |
| | 1 | 24 | 14.09 | 13.91 | 14.10 | | 0 |
| | 12 | 0 | 13.85 | 13.83 | 13.82 | 0-2 | 0 |
| | 12 | 6 | 13.84 | 13.86 | 13.88 | | 0 |
| | 12 | 13 | 13.83 | 13.77 | 13.92 | | 0 |
| | 25 | 0 | 13.83 | 13.81 | 13.91 | | 0 |
| 64QAM | 1 | 0 | 14.11 | 13.97 | 13.90 | 0-2 | 0 |
| | 1 | 12 | 13.96 | 14.05 | 13.82 | | 0 |
| | 1 | 24 | 14.01 | 14.01 | 14.11 | | 0 |
| | 12 | 0 | 13.84 | 13.92 | 13.71 | 0-3 | 0 |
| | 12 | 6 | 13.85 | 13.83 | 13.82 | | 0 |
| | 12 | 13 | 13.89 | 13.80 | 13.90 | | 0 |
| | 25 | 0 | 13.82 | 13.89 | 13.82 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-243
## LTE Band 25 Conducted Powers Ant 4b - 3 MHz Bandwidth

| LTE Band 25 (PCS) 3 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26055 (1851.5 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26675 (1913.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.73 | 13.75 | 13.76 | 0 | 0 |
| | 1 | 7 | 13.77 | 13.78 | 13.86 | | 0 |
| | 1 | 14 | 13.70 | 13.72 | 13.84 | | 0 |
| | 8 | 0 | 13.80 | 13.82 | 13.91 | 0-1 | 0 |
| | 8 | 4 | 13.78 | 13.83 | 13.95 | | 0 |
| | 8 | 7 | 13.77 | 13.80 | 13.98 | | 0 |
| | 15 | 0 | 13.80 | 13.81 | 13.94 | | 0 |
| 16QAM | 1 | 0 | 14.04 | 14.03 | 14.09 | 0-1 | 0 |
| | 1 | 7 | 14.10 | 14.03 | 14.07 | | 0 |
| | 1 | 14 | 14.02 | 13.82 | 14.10 | | 0 |
| | 8 | 0 | 13.87 | 13.80 | 13.87 | 0-2 | 0 |
| | 8 | 4 | 13.90 | 13.74 | 13.90 | | 0 |
| | 8 | 7 | 13.87 | 13.79 | 13.85 | | 0 |
| | 15 | 0 | 13.84 | 13.76 | 13.88 | | 0 |
| 64QAM | 1 | 0 | 13.87 | 13.76 | 14.04 | 0-2 | 0 |
| | 1 | 7 | 14.10 | 14.12 | 14.10 | | 0 |
| | 1 | 14 | 14.02 | 13.87 | 14.02 | | 0 |
| | 8 | 0 | 13.80 | 13.75 | 13.76 | 0-3 | 0 |
| | 8 | 4 | 13.85 | 13.70 | 13.82 | | 0 |
| | 8 | 7 | 13.84 | 13.71 | 13.91 | | 0 |
| | 15 | 0 | 13.85 | 13.78 | 13.87 | | 0 |

## Table 8-244
## LTE Band 25 Conducted Powers Ant 4b - 1.4 MHz Bandwidth

| LTE Band 25 (PCS) 1.4 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 26047 (1850.7 MHz) | Mid Channel 26365 (1882.5 MHz) | High Channel 26683 (1914.3 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.74 | 13.71 | 13.92 | 0 | 0 |
| | 1 | 2 | 13.75 | 13.70 | 13.95 | | 0 |
| | 1 | 5 | 13.76 | 13.74 | 13.92 | | 0 |
| | 3 | 0 | 13.77 | 13.75 | 13.83 | | 0 |
| | 3 | 2 | 13.71 | 13.79 | 13.84 | | 0 |
| | 3 | 3 | 13.75 | 13.76 | 13.82 | | 0 |
| | 6 | 0 | 13.71 | 13.77 | 13.83 | 0-1 | 0 |
| 16QAM | 1 | 0 | 14.10 | 14.00 | 14.08 | 0-1 | 0 |
| | 1 | 2 | 14.05 | 13.95 | 14.12 | | 0 |
| | 1 | 5 | 14.01 | 13.90 | 14.12 | | 0 |
| | 3 | 0 | 13.93 | 13.89 | 13.93 | | 0 |
| | 3 | 2 | 13.92 | 13.85 | 14.01 | | 0 |
| | 3 | 3 | 13.94 | 13.80 | 13.93 | | 0 |
| | 6 | 0 | 13.93 | 13.77 | 13.99 | 0-2 | 0 |
| 64QAM | 1 | 0 | 13.98 | 14.10 | 14.12 | 0-2 | 0 |
| | 1 | 2 | 14.09 | 14.01 | 14.10 | | 0 |
| | 1 | 5 | 14.12 | 14.12 | 14.09 | | 0 |
| | 3 | 0 | 14.08 | 14.04 | 14.09 | | 0 |
| | 3 | 2 | 14.09 | 14.03 | 14.12 | | 0 |
| | 3 | 3 | 14.10 | 14.01 | 14.01 | | 0 |
| | 6 | 0 | 13.92 | 13.84 | 13.89 | 0-3 | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.11 LTE Band 30

**Table 8-245**
**LTE Band 30 Conducted Powers Ant 2a - 10 MHz Bandwidth**

| LTE Band 30 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **12.15** | 0 | 0 |
| | 1 | 25 | 12.06 | | 0 |
| | 1 | 49 | 12.01 | | 0 |
| | 25 | 0 | **12.22** | 0-1 | 0 |
| | 25 | 12 | 12.21 | | 0 |
| | 25 | 25 | 12.02 | | 0 |
| | 50 | 0 | 12.14 | | 0 |
| 16QAM | 1 | 0 | 12.23 | 0-1 | 0 |
| | 1 | 25 | 12.19 | | 0 |
| | 1 | 49 | 12.05 | | 0 |
| | 25 | 0 | 12.03 | 0-2 | 0 |
| | 25 | 12 | 12.04 | | 0 |
| | 25 | 25 | 12.01 | | 0 |
| | 50 | 0 | 12.01 | | 0 |
| 64QAM | 1 | 0 | 12.25 | 0-2 | 0 |
| | 1 | 25 | 12.25 | | 0 |
| | 1 | 49 | 12.19 | | 0 |
| | 25 | 0 | 12.02 | 0-3 | 0 |
| | 25 | 12 | 12.03 | | 0 |
| | 25 | 25 | 12.01 | | 0 |
| | 50 | 0 | 12.00 | | 0 |

**Table 8-246**
**LTE Band 30 Conducted Powers Ant 2a - 5 MHz Bandwidth**

| LTE Band 30 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 12.10 | 0 | 0 |
| | 1 | 12 | 12.03 | | 0 |
| | 1 | 24 | 12.07 | | 0 |
| | 12 | 0 | 12.09 | 0-1 | 0 |
| | 12 | 6 | 12.14 | | 0 |
| | 12 | 13 | 12.03 | | 0 |
| | 25 | 0 | 12.15 | | 0 |
| 16QAM | 1 | 0 | 12.20 | 0-1 | 0 |
| | 1 | 12 | 12.26 | | 0 |
| | 1 | 24 | 12.26 | | 0 |
| | 12 | 0 | 12.00 | 0-2 | 0 |
| | 12 | 6 | 12.07 | | 0 |
| | 12 | 13 | 12.05 | | 0 |
| | 25 | 0 | 12.06 | | 0 |
| 64QAM | 1 | 0 | 12.18 | 0-2 | 0 |
| | 1 | 12 | 12.27 | | 0 |
| | 1 | 24 | 12.18 | | 0 |
| | 12 | 0 | 12.03 | 0-3 | 0 |
| | 12 | 6 | 12.12 | | 0 |
| | 12 | 13 | 12.06 | | 0 |
| | 25 | 0 | 12.02 | | 0 |

**Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-247
## LTE Band 30 Conducted Powers Ant 2a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 30 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **9.29** | 0 | 0 |
| | 1 | 25 | 9.20 | | 0 |
| | 1 | 49 | 9.19 | | 0 |
| | 25 | 0 | 9.28 | 0-1 | 0 |
| | 25 | 12 | **9.30** | | 0 |
| | 25 | 25 | 9.15 | | 0 |
| | 50 | 0 | 9.20 | | 0 |
| 16QAM | 1 | 0 | 9.21 | 0-1 | 0 |
| | 1 | 25 | 9.02 | | 0 |
| | 1 | 49 | 9.05 | | 0 |
| | 25 | 0 | 9.05 | 0-2 | 0 |
| | 25 | 12 | 9.03 | | 0 |
| | 25 | 25 | 9.04 | | 0 |
| | 50 | 0 | 9.02 | | 0 |
| 64QAM | 1 | 0 | 9.28 | 0-2 | 0 |
| | 1 | 25 | 9.22 | | 0 |
| | 1 | 49 | 9.02 | | 0 |
| | 25 | 0 | 9.03 | 0-3 | 0 |
| | 25 | 12 | 9.06 | | 0 |
| | 25 | 25 | 9.05 | | 0 |
| | 50 | 0 | 9.07 | | 0 |

## Table 8-248
## LTE Band 30 Conducted Powers Ant 2a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 30 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 9.36 | 0 | 0 |
| | 1 | 12 | 9.31 | | 0 |
| | 1 | 24 | 9.15 | | 0 |
| | 12 | 0 | 9.34 | 0-1 | 0 |
| | 12 | 6 | 9.31 | | 0 |
| | 12 | 13 | 9.10 | | 0 |
| | 25 | 0 | 9.21 | | 0 |
| 16QAM | 1 | 0 | 9.49 | 0-1 | 0 |
| | 1 | 12 | 9.40 | | 0 |
| | 1 | 24 | 9.30 | | 0 |
| | 12 | 0 | 9.34 | 0-2 | 0 |
| | 12 | 6 | 9.32 | | 0 |
| | 12 | 13 | 9.21 | | 0 |
| | 25 | 0 | 9.23 | | 0 |
| 64QAM | 1 | 0 | 9.38 | 0-2 | 0 |
| | 1 | 12 | 9.39 | | 0 |
| | 1 | 24 | 9.28 | | 0 |
| | 12 | 0 | 9.32 | 0-3 | 0 |
| | 12 | 6 | 9.24 | | 0 |
| | 12 | 13 | 9.23 | | 0 |
| | 25 | 0 | 9.18 | | 0 |

**Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-249
## LTE Band 30 Conducted Powers Ant 2b - 10 MHz Bandwidth

| LTE Band 30 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **13.14** | 0 | 0 |
| | 1 | 25 | 13.13 | | 0 |
| | 1 | 49 | 12.96 | | 0 |
| | 25 | 0 | 13.06 | 0-1 | 0 |
| | 25 | 12 | 13.11 | | 0 |
| | 25 | 25 | **13.15** | | 0 |
| | 50 | 0 | 13.07 | | 0 |
| 16QAM | 1 | 0 | 13.13 | 0-1 | 0 |
| | 1 | 25 | 13.04 | | 0 |
| | 1 | 49 | 12.99 | | 0 |
| | 25 | 0 | 12.83 | 0-2 | 0 |
| | 25 | 12 | 12.89 | | 0 |
| | 25 | 25 | 12.89 | | 0 |
| | 50 | 0 | 12.82 | | 0 |
| 64QAM | 1 | 0 | 13.14 | 0-2 | 0 |
| | 1 | 25 | 13.09 | | 0 |
| | 1 | 49 | 13.05 | | 0 |
| | 25 | 0 | 12.82 | 0-3 | 0 |
| | 25 | 12 | 12.92 | | 0 |
| | 25 | 25 | 12.92 | | 0 |
| | 50 | 0 | 12.83 | | 0 |

## Table 8-250
## LTE Band 30 Conducted Powers Ant 2b - 5 MHz Bandwidth

| LTE Band 30 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 13.02 | 0 | 0 |
| | 1 | 12 | 12.94 | | 0 |
| | 1 | 24 | 12.90 | | 0 |
| | 12 | 0 | 13.04 | 0-1 | 0 |
| | 12 | 6 | 13.04 | | 0 |
| | 12 | 13 | 12.92 | | 0 |
| | 25 | 0 | 12.96 | | 0 |
| 16QAM | 1 | 0 | 13.14 | 0-1 | 0 |
| | 1 | 12 | 13.06 | | 0 |
| | 1 | 24 | 13.06 | | 0 |
| | 12 | 0 | 13.04 | 0-2 | 0 |
| | 12 | 6 | 13.03 | | 0 |
| | 12 | 13 | 12.94 | | 0 |
| | 25 | 0 | 12.94 | | 0 |
| 64QAM | 1 | 0 | 13.14 | 0-2 | 0 |
| | 1 | 12 | 13.13 | | 0 |
| | 1 | 24 | 13.11 | | 0 |
| | 12 | 0 | 13.03 | 0-3 | 0 |
| | 12 | 6 | 12.97 | | 0 |
| | 12 | 13 | 12.93 | | 0 |
| | 25 | 0 | 12.95 | | 0 |

**Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-251
## LTE Band 30 Conducted Powers Ant 2b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 30 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | **10.11** | 0 | 0 |
| | 1 | 25 | 9.94 | | 0 |
| | 1 | 49 | 9.78 | | 0 |
| | 25 | 0 | 10.03 | 0-1 | 0 |
| | 25 | 12 | **10.06** | | 0 |
| | 25 | 25 | 9.96 | | 0 |
| | 50 | 0 | 9.98 | | 0 |
| 16QAM | 1 | 0 | 10.31 | 0-1 | 0 |
| | 1 | 25 | 10.28 | | 0 |
| | 1 | 49 | 10.20 | | 0 |
| | 25 | 0 | 10.27 | 0-2 | 0 |
| | 25 | 12 | 10.31 | | 0 |
| | 25 | 25 | 10.13 | | 0 |
| | 50 | 0 | 10.34 | | 0 |
| 64QAM | 1 | 0 | 10.38 | 0-2 | 0 |
| | 1 | 25 | 10.40 | | 0 |
| | 1 | 49 | 10.22 | | 0 |
| | 25 | 0 | 10.25 | 0-3 | 0 |
| | 25 | 12 | 10.32 | | 0 |
| | 25 | 25 | 10.12 | | 0 |
| | 50 | 0 | 10.27 | | 0 |

## Table 8-252
## LTE Band 30 Conducted Powers Ant 2b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 30 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 10.06 | 0 | 0 |
| | 1 | 12 | 10.14 | | 0 |
| | 1 | 24 | 9.95 | | 0 |
| | 12 | 0 | 10.12 | 0-1 | 0 |
| | 12 | 6 | 10.11 | | 0 |
| | 12 | 13 | 9.91 | | 0 |
| | 25 | 0 | 10.16 | | 0 |
| 16QAM | 1 | 0 | 10.38 | 0-1 | 0 |
| | 1 | 12 | 10.26 | | 0 |
| | 1 | 24 | 10.26 | | 0 |
| | 12 | 0 | 10.14 | 0-2 | 0 |
| | 12 | 6 | 10.24 | | 0 |
| | 12 | 13 | 9.99 | | 0 |
| | 25 | 0 | 10.18 | | 0 |
| 64QAM | 1 | 0 | 10.39 | 0-2 | 0 |
| | 1 | 12 | 10.28 | | 0 |
| | 1 | 24 | 10.36 | | 0 |
| | 12 | 0 | 10.17 | 0-3 | 0 |
| | 12 | 6 | 10.21 | | 0 |
| | 12 | 13 | 9.92 | | 0 |
| | 25 | 0 | 10.21 | | 0 |

**Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-253
## LTE Band 30 Conducted Powers Ant 4a - 10 MHz Bandwidth

| LTE Band 30<br>10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel<br>27710<br>(2310.0 MHz)<br>Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 12.55 | 0 | 0 |
| | 1 | 25 | **12.60** | | 0 |
| | 1 | 49 | 12.48 | | 0 |
| | 25 | 0 | 12.54 | 0-1 | 0 |
| | 25 | 12 | 12.53 | | 0 |
| | 25 | 25 | **12.61** | | 0 |
| | 50 | 0 | 12.58 | | 0 |
| 16QAM | 1 | 0 | 12.63 | 0-1 | 0 |
| | 1 | 25 | 12.64 | | 0 |
| | 1 | 49 | 12.51 | | 0 |
| | 25 | 0 | 12.32 | 0-2 | 0 |
| | 25 | 12 | 12.33 | | 0 |
| | 25 | 25 | 12.31 | | 0 |
| | 50 | 0 | 12.34 | | 0 |
| 64QAM | 1 | 0 | 12.67 | 0-2 | 0 |
| | 1 | 25 | 12.68 | | 0 |
| | 1 | 49 | 12.55 | | 0 |
| | 25 | 0 | 12.25 | 0-3 | 0 |
| | 25 | 12 | 12.27 | | 0 |
| | 25 | 25 | 12.34 | | 0 |
| | 50 | 0 | 12.26 | | 0 |

## Table 8-254
## LTE Band 30 Conducted Powers Ant 4a - 5 MHz Bandwidth

| LTE Band 30<br>5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel<br>27710<br>(2310.0 MHz)<br>Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 12.39 | 0 | 0 |
| | 1 | 12 | 12.45 | | 0 |
| | 1 | 24 | 12.45 | | 0 |
| | 12 | 0 | 12.55 | 0-1 | 0 |
| | 12 | 6 | 12.56 | | 0 |
| | 12 | 13 | 12.55 | | 0 |
| | 25 | 0 | 12.56 | | 0 |
| 16QAM | 1 | 0 | 12.53 | 0-1 | 0 |
| | 1 | 12 | 12.61 | | 0 |
| | 1 | 24 | 12.48 | | 0 |
| | 12 | 0 | 12.54 | 0-2 | 0 |
| | 12 | 6 | 12.57 | | 0 |
| | 12 | 13 | 12.57 | | 0 |
| | 25 | 0 | 12.51 | | 0 |
| 64QAM | 1 | 0 | 12.66 | 0-2 | 0 |
| | 1 | 12 | 12.63 | | 0 |
| | 1 | 24 | 12.70 | | 0 |
| | 12 | 0 | 12.55 | 0-3 | 0 |
| | 12 | 6 | 12.58 | | 0 |
| | 12 | 13 | 12.60 | | 0 |
| | 25 | 0 | 12.51 | | 0 |

**Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-255
## LTE Band 30 Conducted Powers Ant 4a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 30 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 9.61 | 0 | 0 |
| | 1 | 25 | **9.80** | | 0 |
| | 1 | 49 | 9.76 | | 0 |
| | 25 | 0 | 9.76 | 0-1 | 0 |
| | 25 | 12 | 9.87 | | 0 |
| | 25 | 25 | **9.95** | | 0 |
| | 50 | 0 | 9.79 | | 0 |
| 16QAM | 1 | 0 | 9.74 | 0-1 | 0 |
| | 1 | 25 | 9.99 | | 0 |
| | 1 | 49 | 10.00 | | 0 |
| | 25 | 0 | 9.77 | 0-2 | 0 |
| | 25 | 12 | 9.86 | | 0 |
| | 25 | 25 | 9.94 | | 0 |
| | 50 | 0 | 9.88 | | 0 |
| 64QAM | 1 | 0 | 9.88 | 0-2 | 0 |
| | 1 | 25 | 9.97 | | 0 |
| | 1 | 49 | 9.90 | | 0 |
| | 25 | 0 | 9.87 | 0-3 | 0 |
| | 25 | 12 | 9.92 | | 0 |
| | 25 | 25 | 9.89 | | 0 |
| | 50 | 0 | 9.91 | | 0 |

## Table 8-256
## LTE Band 30 Conducted Powers Ant 4a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 30 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 9.82 | 0 | 0 |
| | 1 | 12 | 9.81 | | 0 |
| | 1 | 24 | 9.79 | | 0 |
| | 12 | 0 | 9.83 | 0-1 | 0 |
| | 12 | 6 | 9.84 | | 0 |
| | 12 | 13 | 9.86 | | 0 |
| | 25 | 0 | 9.85 | | 0 |
| 16QAM | 1 | 0 | 10.08 | 0-1 | 0 |
| | 1 | 12 | 10.07 | | 0 |
| | 1 | 24 | 10.06 | | 0 |
| | 12 | 0 | 9.79 | 0-2 | 0 |
| | 12 | 6 | 9.80 | | 0 |
| | 12 | 13 | 9.85 | | 0 |
| | 25 | 0 | 9.83 | | 0 |
| 64QAM | 1 | 0 | 9.97 | 0-2 | 0 |
| | 1 | 12 | 9.98 | | 0 |
| | 1 | 24 | 10.00 | | 0 |
| | 12 | 0 | 9.76 | 0-3 | 0 |
| | 12 | 6 | 9.79 | | 0 |
| | 12 | 13 | 9.88 | | 0 |
| | 25 | 0 | 9.81 | | 0 |

**Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-257
## LTE Band 30 Conducted Powers Ant 4b - 10 MHz Bandwidth

| LTE Band 30 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 13.32 | 0 | 0 |
| | 1 | 25 | 13.36 | | 0 |
| | 1 | 49 | **13.39** | | 0 |
| | 25 | 0 | 13.32 | 0-1 | 0 |
| | 25 | 12 | 13.40 | | 0 |
| | 25 | 25 | **13.47** | | 0 |
| | 50 | 0 | 13.38 | | 0 |
| 16QAM | 1 | 0 | 13.46 | 0-1 | 0 |
| | 1 | 25 | 13.36 | | 0 |
| | 1 | 49 | 13.37 | | 0 |
| | 25 | 0 | 13.08 | 0-2 | 0 |
| | 25 | 12 | 13.13 | | 0 |
| | 25 | 25 | 13.18 | | 0 |
| | 50 | 0 | 13.21 | | 0 |
| 64QAM | 1 | 0 | 13.40 | 0-2 | 0 |
| | 1 | 25 | 13.46 | | 0 |
| | 1 | 49 | 13.35 | | 0 |
| | 25 | 0 | 13.12 | 0-3 | 0 |
| | 25 | 12 | 13.20 | | 0 |
| | 25 | 25 | 13.17 | | 0 |
| | 50 | 0 | 13.23 | | 0 |

## Table 8-258
## LTE Band 30 Conducted Powers Ant 4b - 5 MHz Bandwidth

| LTE Band 30 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 13.27 | 0 | 0 |
| | 1 | 12 | 13.31 | | 0 |
| | 1 | 24 | 13.25 | | 0 |
| | 12 | 0 | 13.31 | 0-1 | 0 |
| | 12 | 6 | 13.46 | | 0 |
| | 12 | 13 | 13.44 | | 0 |
| | 25 | 0 | 13.45 | | 0 |
| 16QAM | 1 | 0 | 13.32 | 0-1 | 0 |
| | 1 | 12 | 13.46 | | 0 |
| | 1 | 24 | 13.35 | | 0 |
| | 12 | 0 | 12.98 | 0-2 | 0 |
| | 12 | 6 | 13.19 | | 0 |
| | 12 | 13 | 13.16 | | 0 |
| | 25 | 0 | 13.21 | | 0 |
| 64QAM | 1 | 0 | 12.96 | 0-2 | 0 |
| | 1 | 12 | 13.18 | | 0 |
| | 1 | 24 | 13.23 | | 0 |
| | 12 | 0 | 12.78 | 0-3 | 0 |
| | 12 | 6 | 12.98 | | 0 |
| | 12 | 13 | 12.96 | | 0 |
| | 25 | 0 | 13.01 | | 0 |

**Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-259
## LTE Band 30 Conducted Powers Ant 4b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 30 10 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 10.45 | 0 | 0 |
| | 1 | 25 | **10.47** | | 0 |
| | 1 | 49 | 10.38 | | 0 |
| | 25 | 0 | 10.40 | 0-1 | 0 |
| | 25 | 12 | 10.49 | | 0 |
| | 25 | 25 | **10.56** | | 0 |
| | 50 | 0 | 10.45 | | 0 |
| 16QAM | 1 | 0 | 10.64 | 0-1 | 0 |
| | 1 | 25 | 10.70 | | 0 |
| | 1 | 49 | 10.63 | | 0 |
| | 25 | 0 | 10.44 | 0-2 | 0 |
| | 25 | 12 | 10.53 | | 0 |
| | 25 | 25 | 10.60 | | 0 |
| | 50 | 0 | 10.58 | | 0 |
| 64QAM | 1 | 0 | 10.70 | 0-2 | 0 |
| | 1 | 25 | 10.67 | | 0 |
| | 1 | 49 | 10.35 | | 0 |
| | 25 | 0 | 10.42 | 0-3 | 0 |
| | 25 | 12 | 10.46 | | 0 |
| | 25 | 25 | 10.39 | | 0 |
| | 50 | 0 | 10.47 | | 0 |

## Table 8-260
## LTE Band 30 Conducted Powers Ant 4b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 30 5 MHz Bandwidth | | | | | |
|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm] | MPR Allowed per 3GPP [dB] | MPR [dB] |
| QPSK | 1 | 0 | 10.21 | 0 | 0 |
| | 1 | 12 | 10.33 | | 0 |
| | 1 | 24 | 10.34 | | 0 |
| | 12 | 0 | 10.19 | 0-1 | 0 |
| | 12 | 6 | 10.38 | | 0 |
| | 12 | 13 | 10.40 | | 0 |
| | 25 | 0 | 10.47 | | 0 |
| 16QAM | 1 | 0 | 10.52 | 0-1 | 0 |
| | 1 | 12 | 10.50 | | 0 |
| | 1 | 24 | 10.44 | | 0 |
| | 12 | 0 | 10.14 | 0-2 | 0 |
| | 12 | 6 | 10.33 | | 0 |
| | 12 | 13 | 10.28 | | 0 |
| | 25 | 0 | 10.42 | | 0 |
| 64QAM | 1 | 0 | 10.54 | 0-2 | 0 |
| | 1 | 12 | 10.48 | | 0 |
| | 1 | 24 | 10.49 | | 0 |
| | 12 | 0 | 10.17 | 0-3 | 0 |
| | 12 | 6 | 10.32 | | 0 |
| | 12 | 13 | 10.31 | | 0 |
| | 25 | 0 | 10.40 | | 0 |

**Note: LTE Band 30 at 5 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.**




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.12 LTE Band 7

**Table 8-261**
**LTE Band 7 Conducted Powers Ant 2a - 20 MHz Bandwidth**

| LTE Band 7 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20850 (2510.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21350 (2560.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.00 | 11.78 | 11.85 | 0 | 0 |
| | 1 | 50 | 12.03 | 11.83 | 11.81 | | 0 |
| | 1 | 99 | **12.05** | 12.00 | 11.90 | | 0 |
| | 50 | 0 | 11.97 | 11.80 | 11.86 | 0-1 | 0 |
| | 50 | 25 | 12.07 | 11.92 | 11.84 | | 0 |
| | 50 | 50 | **12.10** | 12.01 | 11.88 | | 0 |
| | 100 | 0 | 12.04 | 11.99 | 11.75 | | 0 |
| 16QAM | 1 | 0 | 12.35 | 11.82 | 11.86 | 0-1 | 0 |
| | 1 | 50 | 12.33 | 11.80 | 11.82 | | 0 |
| | 1 | 99 | 12.25 | 12.01 | 12.14 | | 0 |
| | 50 | 0 | 11.92 | 11.70 | 11.70 | 0-2 | 0 |
| | 50 | 25 | 11.95 | 11.72 | 11.70 | | 0 |
| | 50 | 50 | 11.92 | 11.73 | 11.78 | | 0 |
| | 100 | 0 | 11.96 | 11.76 | 11.70 | | 0 |
| 64QAM | 1 | 0 | 12.25 | 11.78 | 12.02 | 0-2 | 0 |
| | 1 | 50 | 12.44 | 11.76 | 11.91 | | 0 |
| | 1 | 99 | 12.08 | 11.87 | 12.17 | | 0 |
| | 50 | 0 | 11.82 | 11.71 | 11.70 | 0-3 | 0 |
| | 50 | 25 | 11.87 | 11.72 | 11.71 | | 0 |
| | 50 | 50 | 11.88 | 11.76 | 11.73 | | 0 |
| | 100 | 0 | 11.88 | 11.75 | 11.70 | | 0 |

**Table 8-262**
**LTE Band 7 Conducted Powers Ant 2a - 15 MHz Bandwidth**

| LTE Band 7 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20825 (2507.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21375 (2562.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.20 | 11.80 | 11.84 | 0 | 0 |
| | 1 | 36 | 12.12 | 11.91 | 11.86 | | 0 |
| | 1 | 74 | 12.20 | 11.83 | 12.03 | | 0 |
| | 36 | 0 | 12.11 | 11.85 | 11.78 | 0-1 | 0 |
| | 36 | 18 | 12.15 | 11.85 | 11.87 | | 0 |
| | 36 | 37 | 12.20 | 11.88 | 11.98 | | 0 |
| | 75 | 0 | 12.11 | 11.83 | 11.85 | | 0 |
| 16QAM | 1 | 0 | 12.44 | 11.80 | 11.70 | 0-1 | 0 |
| | 1 | 36 | 12.24 | 11.86 | 11.89 | | 0 |
| | 1 | 74 | 12.23 | 11.99 | 12.09 | | 0 |
| | 36 | 0 | 11.87 | 11.72 | 11.71 | 0-2 | 0 |
| | 36 | 18 | 11.93 | 11.77 | 11.73 | | 0 |
| | 36 | 37 | 11.98 | 11.81 | 11.85 | | 0 |
| | 75 | 0 | 11.87 | 11.75 | 11.70 | | 0 |
| 64QAM | 1 | 0 | 12.30 | 11.74 | 11.93 | 0-2 | 0 |
| | 1 | 36 | 12.19 | 11.91 | 12.06 | | 0 |
| | 1 | 74 | 12.22 | 11.93 | 12.24 | | 0 |
| | 36 | 0 | 11.84 | 11.74 | 11.71 | 0-3 | 0 |
| | 36 | 18 | 11.95 | 11.76 | 11.74 | | 0 |
| | 36 | 37 | 11.97 | 11.84 | 11.85 | | 0 |
| | 75 | 0 | 11.88 | 11.77 | 11.70 | | 0 |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-263
## LTE Band 7 Conducted Powers Ant 2a - 10 MHz Bandwidth

| LTE Band 7 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20800 (2505.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21400 (2565.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.20 | 11.84 | 12.00 | 0 | 0 |
| | 1 | 25 | 12.15 | 11.81 | 11.94 | | 0 |
| | 1 | 49 | 12.20 | 11.82 | 12.08 | | 0 |
| | 25 | 0 | 12.17 | 11.77 | 11.85 | 0-1 | 0 |
| | 25 | 12 | 12.12 | 11.83 | 11.98 | | 0 |
| | 25 | 25 | 12.10 | 11.84 | 12.15 | | 0 |
| | 50 | 0 | 12.05 | 11.84 | 12.02 | | 0 |
| 16QAM | 1 | 0 | 12.24 | 11.84 | 11.70 | 0-1 | 0 |
| | 1 | 25 | 11.95 | 11.93 | 11.92 | | 0 |
| | 1 | 49 | 12.11 | 12.08 | 12.09 | | 0 |
| | 25 | 0 | 11.80 | 11.71 | 11.71 | 0-2 | 0 |
| | 25 | 12 | 11.78 | 11.72 | 11.82 | | 0 |
| | 25 | 25 | 11.81 | 11.79 | 12.00 | | 0 |
| | 50 | 0 | 11.78 | 11.71 | 11.87 | | 0 |
| 64QAM | 1 | 0 | 12.44 | 11.71 | 11.89 | 0-2 | 0 |
| | 1 | 25 | 12.10 | 11.84 | 12.07 | | 0 |
| | 1 | 49 | 12.20 | 11.91 | 12.21 | | 0 |
| | 25 | 0 | 11.79 | 11.71 | 11.73 | 0-3 | 0 |
| | 25 | 12 | 11.82 | 11.73 | 11.82 | | 0 |
| | 25 | 25 | 11.86 | 11.76 | 12.02 | | 0 |
| | 50 | 0 | 11.82 | 11.72 | 11.88 | | 0 |

## Table 8-264
## LTE Band 7 Conducted Powers Ant 2a - 5 MHz Bandwidth

| LTE Band 7 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20775 (2502.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21425 (2567.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.10 | 11.77 | 12.18 | 0 | 0 |
| | 1 | 12 | 12.04 | 11.75 | 12.08 | | 0 |
| | 1 | 24 | 12.06 | 11.70 | 12.03 | | 0 |
| | 12 | 0 | 12.16 | 11.75 | 12.04 | 0-1 | 0 |
| | 12 | 6 | 12.11 | 11.73 | 12.14 | | 0 |
| | 12 | 13 | 12.07 | 11.72 | 12.13 | | 0 |
| | 25 | 0 | 12.13 | 11.72 | 12.16 | | 0 |
| 16QAM | 1 | 0 | 12.20 | 11.78 | 12.07 | 0-1 | 0 |
| | 1 | 12 | 12.06 | 11.82 | 12.07 | | 0 |
| | 1 | 24 | 11.95 | 11.99 | 11.88 | | 0 |
| | 12 | 0 | 11.94 | 11.71 | 11.88 | 0-2 | 0 |
| | 12 | 6 | 11.80 | 11.74 | 11.98 | | 0 |
| | 12 | 13 | 11.79 | 11.81 | 11.98 | | 0 |
| | 25 | 0 | 11.80 | 11.70 | 12.00 | | 0 |
| 64QAM | 1 | 0 | 12.06 | 11.88 | 12.21 | 0-2 | 0 |
| | 1 | 12 | 11.97 | 11.77 | 12.29 | | 0 |
| | 1 | 24 | 11.89 | 12.10 | 12.44 | | 0 |
| | 12 | 0 | 11.99 | 11.72 | 11.94 | 0-3 | 0 |
| | 12 | 6 | 11.76 | 11.70 | 11.96 | | 0 |
| | 12 | 13 | 11.74 | 11.74 | 11.96 | | 0 |
| | 25 | 0 | 11.74 | 11.72 | 11.98 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-265
## LTE Band 7 Conducted Powers Ant 2a - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20850 (2510.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21350 (2560.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 9.19 | 8.99 | 9.12 | 0 | 0 |
| | 1 | 50 | 8.95 | 8.84 | 8.87 | | 0 |
| | 1 | 99 | 8.94 | 8.95 | **9.20** | | 0 |
| | 50 | 0 | 9.04 | 8.74 | 9.02 | 0-1 | 0 |
| | 50 | 25 | 9.02 | 8.82 | 8.93 | | 0 |
| | 50 | 50 | 9.05 | 8.88 | **9.10** | | 0 |
| | 100 | 0 | 9.03 | 8.89 | 8.83 | | 0 |
| 16QAM | 1 | 0 | 9.37 | 8.87 | 9.39 | 0-1 | 0 |
| | 1 | 50 | 9.40 | 8.90 | 9.28 | | 0 |
| | 1 | 99 | 9.35 | 9.36 | 9.40 | | 0 |
| | 50 | 0 | 9.13 | 8.85 | 8.96 | 0-2 | 0 |
| | 50 | 25 | 9.21 | 9.02 | 8.89 | | 0 |
| | 50 | 50 | 9.24 | 8.90 | 9.06 | | 0 |
| | 100 | 0 | 9.15 | 8.79 | 8.76 | | 0 |
| 64QAM | 1 | 0 | 9.24 | 9.24 | 9.28 | 0-2 | 0 |
| | 1 | 50 | 9.37 | 9.23 | 9.22 | | 0 |
| | 1 | 99 | 9.21 | 9.33 | 9.21 | | 0 |
| | 50 | 0 | 9.07 | 8.70 | 8.96 | 0-3 | 0 |
| | 50 | 25 | 9.24 | 8.78 | 8.90 | | 0 |
| | 50 | 50 | 9.16 | 8.93 | 8.94 | | 0 |
| | 100 | 0 | 9.17 | 8.85 | 8.88 | | 0 |

## Table 8-266
## LTE Band 7 Conducted Powers Ant 2a - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20825 (2507.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21375 (2562.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 9.36 | 9.10 | 9.21 | 0 | 0 |
| | 1 | 36 | 9.44 | 9.23 | 8.94 | | 0 |
| | 1 | 74 | 9.34 | 9.26 | 9.04 | | 0 |
| | 36 | 0 | 9.22 | 9.20 | 9.00 | 0-1 | 0 |
| | 36 | 18 | 9.34 | 9.27 | 9.04 | | 0 |
| | 36 | 37 | 9.31 | 9.27 | 9.08 | | 0 |
| | 75 | 0 | 9.18 | 9.09 | 9.19 | | 0 |
| 16QAM | 1 | 0 | 9.37 | 9.00 | 9.67 | 0-1 | 0 |
| | 1 | 36 | 9.25 | 9.10 | 9.52 | | 0 |
| | 1 | 74 | 9.14 | 9.27 | 9.46 | | 0 |
| | 36 | 0 | 9.04 | 8.97 | 9.03 | 0-2 | 0 |
| | 36 | 18 | 9.16 | 9.07 | 9.01 | | 0 |
| | 36 | 37 | 9.15 | 9.08 | 9.08 | | 0 |
| | 75 | 0 | 9.14 | 9.07 | 8.98 | | 0 |
| 64QAM | 1 | 0 | 9.51 | 9.08 | 9.35 | 0-2 | 0 |
| | 1 | 36 | 9.31 | 9.17 | 9.16 | | 0 |
| | 1 | 74 | 9.23 | 9.37 | 9.29 | | 0 |
| | 36 | 0 | 9.07 | 8.96 | 8.97 | 0-3 | 0 |
| | 36 | 18 | 9.18 | 9.02 | 9.02 | | 0 |
| | 36 | 37 | 9.14 | 9.08 | 9.06 | | 0 |
| | 75 | 0 | 9.14 | 9.10 | 8.99 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-267
## LTE Band 7 Conducted Powers Ant 2a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20800 (2505.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21400 (2565.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 9.30 | 8.91 | 9.16 | 0 | 0 |
| | 1 | 25 | 9.20 | 8.97 | 9.03 | | 0 |
| | 1 | 49 | 9.37 | 9.10 | 9.10 | | 0 |
| | 25 | 0 | 9.05 | 9.01 | 9.03 | 0-1 | 0 |
| | 25 | 12 | 9.14 | 9.06 | 9.11 | | 0 |
| | 25 | 25 | 9.23 | 9.09 | 9.19 | | 0 |
| | 50 | 0 | 9.15 | 9.08 | 9.11 | | 0 |
| 16QAM | 1 | 0 | 9.47 | 9.03 | 9.36 | 0-1 | 0 |
| | 1 | 25 | 9.19 | 9.15 | 9.36 | | 0 |
| | 1 | 49 | 9.38 | 9.23 | 9.47 | | 0 |
| | 25 | 0 | 9.04 | 8.95 | 9.05 | 0-2 | 0 |
| | 25 | 12 | 9.12 | 9.02 | 9.10 | | 0 |
| | 25 | 25 | 9.24 | 9.08 | 9.18 | | 0 |
| | 50 | 0 | 9.12 | 9.08 | 9.19 | | 0 |
| 64QAM | 1 | 0 | 9.34 | 9.16 | 9.22 | 0-2 | 0 |
| | 1 | 25 | 8.96 | 9.23 | 9.22 | | 0 |
| | 1 | 49 | 9.24 | 9.26 | 9.27 | | 0 |
| | 25 | 0 | 8.88 | 9.00 | 9.02 | 0-3 | 0 |
| | 25 | 12 | 8.96 | 9.06 | 9.10 | | 0 |
| | 25 | 25 | 9.02 | 9.09 | 9.16 | | 0 |
| | 50 | 0 | 8.99 | 9.06 | 9.12 | | 0 |

## Table 8-268
## LTE Band 7 Conducted Powers Ant 2a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20775 (2502.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21425 (2567.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 9.46 | 9.01 | 9.34 | 0 | 0 |
| | 1 | 12 | 9.31 | 9.03 | 9.32 | | 0 |
| | 1 | 24 | 9.25 | 9.06 | 9.49 | | 0 |
| | 12 | 0 | 9.24 | 9.03 | 9.24 | 0-1 | 0 |
| | 12 | 6 | 9.15 | 8.98 | 9.28 | | 0 |
| | 12 | 13 | 9.15 | 9.01 | 9.29 | | 0 |
| | 25 | 0 | 9.12 | 9.04 | 9.28 | | 0 |
| 16QAM | 1 | 0 | 9.50 | 8.97 | 9.49 | 0-1 | 0 |
| | 1 | 12 | 9.44 | 9.10 | 9.57 | | 0 |
| | 1 | 24 | 9.44 | 9.22 | 9.59 | | 0 |
| | 12 | 0 | 9.26 | 8.97 | 9.24 | 0-2 | 0 |
| | 12 | 6 | 9.12 | 9.10 | 9.28 | | 0 |
| | 12 | 13 | 9.08 | 9.04 | 9.31 | | 0 |
| | 25 | 0 | 9.07 | 9.00 | 9.19 | | 0 |
| 64QAM | 1 | 0 | 9.46 | 9.27 | 9.48 | 0-2 | 0 |
| | 1 | 12 | 9.24 | 9.30 | 9.55 | | 0 |
| | 1 | 24 | 9.35 | 9.35 | 9.69 | | 0 |
| | 12 | 0 | 9.20 | 9.02 | 9.22 | 0-3 | 0 |
| | 12 | 6 | 9.10 | 8.99 | 9.26 | | 0 |
| | 12 | 13 | 9.07 | 8.97 | 9.28 | | 0 |
| | 25 | 0 | 9.04 | 9.01 | 9.26 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-269
## LTE Band 7 Conducted Powers Ant 2b - 20 MHz Bandwidth

| LTE Band 7 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20850 (2510.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21350 (2560.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.21 | 12.16 | 11.83 | 0 | 0 |
| | 1 | 50 | 12.14 | 12.05 | 11.81 | | 0 |
| | 1 | 99 | 12.28 | **12.30** | 12.03 | | 0 |
| | 50 | 0 | 11.97 | 11.97 | 11.94 | 0-1 | 0 |
| | 50 | 25 | 12.11 | 11.99 | 11.92 | | 0 |
| | 50 | 50 | 12.17 | **12.27** | 12.07 | | 0 |
| | 100 | 0 | 12.16 | 12.05 | 11.94 | | 0 |
| 16QAM | 1 | 0 | 12.18 | 12.02 | 11.91 | 0-1 | 0 |
| | 1 | 50 | 12.03 | 11.92 | 11.85 | | 0 |
| | 1 | 99 | 12.07 | 12.26 | 12.19 | | 0 |
| | 50 | 0 | 11.75 | 11.66 | 11.63 | 0-2 | 0 |
| | 50 | 25 | 11.82 | 11.72 | 11.67 | | 0 |
| | 50 | 50 | 12.11 | 11.88 | 11.75 | | 0 |
| | 100 | 0 | 11.89 | 11.76 | 11.66 | | 0 |
| 64QAM | 1 | 0 | 12.30 | 12.01 | 12.00 | 0-2 | 0 |
| | 1 | 50 | 12.27 | 11.97 | 11.91 | | 0 |
| | 1 | 99 | 12.27 | 12.17 | 11.94 | | 0 |
| | 50 | 0 | 11.54 | 11.41 | 11.52 | 0-3 | 0 |
| | 50 | 25 | 11.70 | 11.48 | 11.53 | | 0 |
| | 50 | 50 | 11.85 | 11.67 | 11.56 | | 0 |
| | 100 | 0 | 11.70 | 11.55 | 11.52 | | 0 |

## Table 8-270
## LTE Band 7 Conducted Powers Ant 2b - 15 MHz Bandwidth

| LTE Band 7 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20825 (2507.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21375 (2562.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.28 | 11.84 | 11.57 | 0 | 0 |
| | 1 | 36 | 12.05 | 11.96 | 11.87 | | 0 |
| | 1 | 74 | 12.26 | 12.04 | 12.03 | | 0 |
| | 36 | 0 | 12.14 | 11.84 | 11.75 | 0-1 | 0 |
| | 36 | 18 | 12.03 | 11.94 | 11.94 | | 0 |
| | 36 | 37 | 12.15 | 12.06 | 12.03 | | 0 |
| | 75 | 0 | 12.02 | 11.99 | 11.94 | | 0 |
| 16QAM | 1 | 0 | 12.15 | 11.91 | 11.47 | 0-1 | 0 |
| | 1 | 36 | 11.87 | 11.91 | 11.81 | | 0 |
| | 1 | 74 | 12.16 | 11.90 | 11.86 | | 0 |
| | 36 | 0 | 11.77 | 11.67 | 11.48 | 0-2 | 0 |
| | 36 | 18 | 11.68 | 11.77 | 11.63 | | 0 |
| | 36 | 37 | 11.81 | 11.87 | 11.73 | | 0 |
| | 75 | 0 | 11.67 | 11.81 | 11.63 | | 0 |
| 64QAM | 1 | 0 | 12.18 | 12.00 | 11.60 | 0-2 | 0 |
| | 1 | 36 | 11.94 | 12.11 | 11.78 | | 0 |
| | 1 | 74 | 12.23 | 12.11 | 11.88 | | 0 |
| | 36 | 0 | 11.73 | 11.65 | 11.45 | 0-3 | 0 |
| | 36 | 18 | 11.68 | 11.75 | 11.62 | | 0 |
| | 36 | 37 | 11.79 | 11.86 | 11.74 | | 0 |
| | 75 | 0 | 11.68 | 11.80 | 11.61 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-271
## LTE Band 7 Conducted Powers Ant 2b - 10 MHz Bandwidth

| LTE Band 7 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20800 (2505.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21400 (2565.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.27 | 11.86 | 11.77 | 0 | 0 |
| | 1 | 25 | 12.10 | 11.97 | 11.83 | | 0 |
| | 1 | 49 | 12.14 | 12.15 | 11.99 | | 0 |
| | 25 | 0 | 12.14 | 11.84 | 11.94 | 0-1 | 0 |
| | 25 | 12 | 12.01 | 11.94 | 11.95 | | 0 |
| | 25 | 25 | 11.99 | 12.11 | 12.08 | | 0 |
| | 50 | 0 | 12.02 | 12.01 | 11.97 | | 0 |
| 16QAM | 1 | 0 | 12.30 | 11.81 | 11.63 | 0-1 | 0 |
| | 1 | 25 | 12.13 | 11.78 | 11.85 | | 0 |
| | 1 | 49 | 12.21 | 12.25 | 11.95 | | 0 |
| | 25 | 0 | 11.88 | 11.58 | 11.70 | 0-2 | 0 |
| | 25 | 12 | 11.70 | 11.74 | 11.74 | | 0 |
| | 25 | 25 | 11.66 | 11.84 | 11.90 | | 0 |
| | 50 | 0 | 11.72 | 11.75 | 11.76 | | 0 |
| 64QAM | 1 | 0 | 12.25 | 12.01 | 11.74 | 0-2 | 0 |
| | 1 | 25 | 12.04 | 11.92 | 11.79 | | 0 |
| | 1 | 49 | 11.93 | 12.19 | 12.03 | | 0 |
| | 25 | 0 | 11.87 | 11.62 | 11.69 | 0-3 | 0 |
| | 25 | 12 | 11.73 | 11.73 | 11.75 | | 0 |
| | 25 | 25 | 11.71 | 11.84 | 11.91 | | 0 |
| | 50 | 0 | 11.72 | 11.76 | 11.73 | | 0 |

## Table 8-272
## LTE Band 7 Conducted Powers Ant 2b - 5 MHz Bandwidth

| LTE Band 7 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20775 (2502.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21425 (2567.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.29 | 11.79 | 11.97 | 0 | 0 |
| | 1 | 12 | 12.08 | 11.79 | 12.04 | | 0 |
| | 1 | 24 | 11.88 | 11.91 | 12.10 | | 0 |
| | 12 | 0 | 12.10 | 11.80 | 11.89 | 0-1 | 0 |
| | 12 | 6 | 11.99 | 11.76 | 11.92 | | 0 |
| | 12 | 13 | 11.94 | 11.76 | 11.98 | | 0 |
| | 25 | 0 | 12.02 | 11.75 | 11.92 | | 0 |
| 16QAM | 1 | 0 | 12.26 | 11.70 | 12.05 | 0-1 | 0 |
| | 1 | 12 | 12.28 | 11.91 | 12.29 | | 0 |
| | 1 | 24 | 12.14 | 11.95 | 12.17 | | 0 |
| | 12 | 0 | 12.03 | 11.61 | 11.89 | 0-2 | 0 |
| | 12 | 6 | 11.97 | 11.58 | 12.01 | | 0 |
| | 12 | 13 | 11.93 | 11.75 | 11.97 | | 0 |
| | 25 | 0 | 11.98 | 11.69 | 11.94 | | 0 |
| 64QAM | 1 | 0 | 12.26 | 11.77 | 11.96 | 0-2 | 0 |
| | 1 | 12 | 12.25 | 11.99 | 12.22 | | 0 |
| | 1 | 24 | 12.17 | 11.91 | 12.04 | | 0 |
| | 12 | 0 | 12.03 | 11.61 | 11.90 | 0-3 | 0 |
| | 12 | 6 | 12.00 | 11.60 | 12.00 | | 0 |
| | 12 | 13 | 11.88 | 11.75 | 11.95 | | 0 |
| | 25 | 0 | 11.95 | 11.72 | 11.96 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-273
## LTE Band 7 Conducted Powers Ant 2b - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20850 (2510.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21350 (2560.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | **9.30** | 9.06 | 8.77 | 0 | 0 |
| | 1 | 50 | 8.91 | 8.83 | 8.68 | | 0 |
| | 1 | 99 | 9.04 | 8.96 | 8.93 | | 0 |
| | 50 | 0 | 8.84 | 8.81 | 8.70 | 0-1 | 0 |
| | 50 | 25 | 8.86 | 8.82 | 8.71 | | 0 |
| | 50 | 50 | **9.02** | 8.91 | 8.86 | | 0 |
| | 100 | 0 | 8.91 | 8.90 | 8.75 | | 0 |
| 16QAM | 1 | 0 | 9.13 | 8.86 | 9.04 | 0-1 | 0 |
| | 1 | 50 | 9.00 | 8.62 | 8.86 | | 0 |
| | 1 | 99 | 8.70 | 8.84 | 8.83 | | 0 |
| | 50 | 0 | 8.71 | 8.34 | 8.41 | 0-2 | 0 |
| | 50 | 25 | 8.72 | 8.42 | 8.38 | | 0 |
| | 50 | 50 | 8.77 | 8.51 | 8.44 | | 0 |
| | 100 | 0 | 8.70 | 8.47 | 8.39 | | 0 |
| 64QAM | 1 | 0 | 9.11 | 8.85 | 8.75 | 0-2 | 0 |
| | 1 | 50 | 8.86 | 8.71 | 8.65 | | 0 |
| | 1 | 99 | 8.60 | 8.91 | 8.53 | | 0 |
| | 50 | 0 | 8.70 | 8.35 | 8.40 | 0-3 | 0 |
| | 50 | 25 | 8.71 | 8.44 | 8.37 | | 0 |
| | 50 | 50 | 8.73 | 8.54 | 8.41 | | 0 |
| | 100 | 0 | 8.70 | 8.46 | 8.35 | | 0 |

## Table 8-274
## LTE Band 7 Conducted Powers Ant 2b - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20825 (2507.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21375 (2562.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 8.87 | 8.76 | 8.67 | 0 | 0 |
| | 1 | 36 | 8.65 | 8.86 | 8.81 | | 0 |
| | 1 | 74 | 8.82 | 8.96 | 8.77 | | 0 |
| | 36 | 0 | 8.86 | 8.83 | 8.67 | 0-1 | 0 |
| | 36 | 18 | 8.75 | 8.94 | 8.82 | | 0 |
| | 36 | 37 | 8.85 | 9.06 | 8.83 | | 0 |
| | 75 | 0 | 8.76 | 8.98 | 8.80 | | 0 |
| 16QAM | 1 | 0 | 9.25 | 9.10 | 9.16 | 0-1 | 0 |
| | 1 | 36 | 9.02 | 9.29 | 9.21 | | 0 |
| | 1 | 74 | 9.13 | 9.04 | 9.21 | | 0 |
| | 36 | 0 | 8.82 | 8.80 | 8.65 | 0-2 | 0 |
| | 36 | 18 | 8.74 | 8.93 | 8.80 | | 0 |
| | 36 | 37 | 8.84 | 9.06 | 8.80 | | 0 |
| | 75 | 0 | 8.72 | 8.97 | 8.77 | | 0 |
| 64QAM | 1 | 0 | 9.20 | 9.15 | 9.07 | 0-2 | 0 |
| | 1 | 36 | 8.95 | 8.95 | 9.25 | | 0 |
| | 1 | 74 | 9.22 | 9.26 | 9.21 | | 0 |
| | 36 | 0 | 8.81 | 8.84 | 8.65 | 0-3 | 0 |
| | 36 | 18 | 8.72 | 8.96 | 8.78 | | 0 |
| | 36 | 37 | 8.83 | 9.08 | 8.80 | | 0 |
| | 75 | 0 | 8.70 | 8.98 | 8.77 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-275
## LTE Band 7 Conducted Powers Ant 2b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20800 (2505.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21400 (2565.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 8.87 | 8.63 | 8.44 | 0 | 0 |
| | 1 | 25 | 8.60 | 8.66 | 8.57 | | 0 |
| | 1 | 49 | 8.68 | 8.75 | 8.74 | | 0 |
| | 25 | 0 | 8.71 | 8.62 | 8.56 | 0-1 | 0 |
| | 25 | 12 | 8.58 | 8.69 | 8.60 | | 0 |
| | 25 | 25 | 8.54 | 8.81 | 8.73 | | 0 |
| | 50 | 0 | 8.60 | 8.76 | 8.61 | | 0 |
| 16QAM | 1 | 0 | 9.30 | 9.18 | 8.73 | 0-1 | 0 |
| | 1 | 25 | 8.92 | 9.20 | 8.87 | | 0 |
| | 1 | 49 | 9.01 | 9.29 | 9.06 | | 0 |
| | 25 | 0 | 8.67 | 8.64 | 8.53 | 0-2 | 0 |
| | 25 | 12 | 8.54 | 8.66 | 8.60 | | 0 |
| | 25 | 25 | 8.49 | 8.79 | 8.73 | | 0 |
| | 50 | 0 | 8.54 | 8.74 | 8.58 | | 0 |
| 64QAM | 1 | 0 | 9.29 | 9.14 | 8.64 | 0-2 | 0 |
| | 1 | 25 | 9.05 | 9.24 | 8.79 | | 0 |
| | 1 | 49 | 9.13 | 9.26 | 9.09 | | 0 |
| | 25 | 0 | 8.69 | 8.57 | 8.55 | 0-3 | 0 |
| | 25 | 12 | 8.50 | 8.67 | 8.60 | | 0 |
| | 25 | 25 | 8.54 | 8.80 | 8.72 | | 0 |
| | 50 | 0 | 8.52 | 8.74 | 8.61 | | 0 |

## Table 8-276
## LTE Band 7 Conducted Powers Ant 2b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20775 (2502.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21425 (2567.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 8.58 | 8.49 | 8.30 | 0 | 0 |
| | 1 | 12 | 8.45 | 8.54 | 8.48 | | 0 |
| | 1 | 24 | 8.30 | 8.62 | 8.51 | | 0 |
| | 12 | 0 | 8.59 | 8.61 | 8.48 | 0-1 | 0 |
| | 12 | 6 | 8.48 | 8.54 | 8.54 | | 0 |
| | 12 | 13 | 8.40 | 8.63 | 8.54 | | 0 |
| | 25 | 0 | 8.50 | 8.68 | 8.55 | | 0 |
| 16QAM | 1 | 0 | 8.77 | 8.85 | 8.74 | 0-1 | 0 |
| | 1 | 12 | 8.71 | 8.91 | 8.86 | | 0 |
| | 1 | 24 | 8.56 | 9.13 | 8.81 | | 0 |
| | 12 | 0 | 8.53 | 8.62 | 8.45 | 0-2 | 0 |
| | 12 | 6 | 8.45 | 8.64 | 8.61 | | 0 |
| | 12 | 13 | 8.38 | 8.63 | 8.57 | | 0 |
| | 25 | 0 | 8.45 | 8.70 | 8.48 | | 0 |
| 64QAM | 1 | 0 | 8.83 | 8.81 | 8.56 | 0-2 | 0 |
| | 1 | 12 | 8.72 | 8.88 | 8.57 | | 0 |
| | 1 | 24 | 8.44 | 9.04 | 8.82 | | 0 |
| | 12 | 0 | 8.63 | 8.74 | 8.41 | 0-3 | 0 |
| | 12 | 6 | 8.53 | 8.74 | 8.56 | | 0 |
| | 12 | 13 | 8.42 | 8.76 | 8.55 | | 0 |
| | 25 | 0 | 8.47 | 8.74 | 8.51 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-277
## LTE Band 7 Conducted Powers Ant 4a - 20 MHz Bandwidth

| LTE Band 7 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20850 (2510.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21350 (2560.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.20 | **12.50** | 12.28 | 0 | 0 |
| | 1 | 50 | 12.21 | 12.47 | 11.98 | | 0 |
| | 1 | 99 | 12.37 | 12.49 | 12.05 | | 0 |
| | 50 | 0 | 12.18 | **12.43** | 11.90 | 0-1 | 0 |
| | 50 | 25 | 12.23 | 12.42 | 11.82 | | 0 |
| | 50 | 50 | 12.33 | 12.42 | 11.80 | | 0 |
| | 100 | 0 | 12.32 | 12.41 | 11.81 | | 0 |
| 16QAM | 1 | 0 | 12.26 | 12.50 | 12.42 | 0-1 | 0 |
| | 1 | 50 | 12.23 | 12.49 | 11.92 | | 0 |
| | 1 | 99 | 12.50 | 12.47 | 11.97 | | 0 |
| | 50 | 0 | 12.01 | 12.34 | 11.67 | 0-2 | 0 |
| | 50 | 25 | 11.91 | 12.25 | 11.61 | | 0 |
| | 50 | 50 | 11.96 | 12.23 | 11.63 | | 0 |
| | 100 | 0 | 11.97 | 12.22 | 11.62 | | 0 |
| 64QAM | 1 | 0 | 12.20 | 12.50 | 12.49 | 0-2 | 0 |
| | 1 | 50 | 12.40 | 12.44 | 12.37 | | 0 |
| | 1 | 99 | 12.50 | 12.35 | 12.41 | | 0 |
| | 50 | 0 | 11.80 | 11.80 | 11.78 | 0-3 | 0 |
| | 50 | 25 | 11.95 | 11.86 | 11.64 | | 0 |
| | 50 | 50 | 12.00 | 11.85 | 11.70 | | 0 |
| | 100 | 0 | 11.96 | 11.89 | 11.66 | | 0 |

## Table 8-278
## LTE Band 7 Conducted Powers Ant 4a - 15 MHz Bandwidth

| LTE Band 7 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20825 (2507.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21375 (2562.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.15 | 12.15 | 11.74 | 0 | 0 |
| | 1 | 36 | 12.25 | 12.15 | 11.68 | | 0 |
| | 1 | 74 | 12.41 | 12.15 | 11.82 | | 0 |
| | 36 | 0 | 12.04 | 12.20 | 11.69 | 0-1 | 0 |
| | 36 | 18 | 12.13 | 12.18 | 11.78 | | 0 |
| | 36 | 37 | 12.20 | 12.18 | 11.86 | | 0 |
| | 75 | 0 | 12.14 | 12.18 | 11.78 | | 0 |
| 16QAM | 1 | 0 | 12.16 | 12.24 | 11.93 | 0-1 | 0 |
| | 1 | 36 | 12.23 | 12.37 | 11.78 | | 0 |
| | 1 | 74 | 12.41 | 12.33 | 11.93 | | 0 |
| | 36 | 0 | 12.01 | 12.19 | 11.63 | 0-2 | 0 |
| | 36 | 18 | 12.12 | 12.18 | 11.75 | | 0 |
| | 36 | 37 | 12.17 | 12.18 | 11.82 | | 0 |
| | 75 | 0 | 12.10 | 12.17 | 11.74 | | 0 |
| 64QAM | 1 | 0 | 11.99 | 12.36 | 12.15 | 0-2 | 0 |
| | 1 | 36 | 12.10 | 12.41 | 11.98 | | 0 |
| | 1 | 74 | 12.48 | 12.23 | 12.08 | | 0 |
| | 36 | 0 | 12.01 | 12.18 | 11.68 | 0-3 | 0 |
| | 36 | 18 | 12.14 | 12.18 | 11.78 | | 0 |
| | 36 | 37 | 12.21 | 12.20 | 11.88 | | 0 |
| | 75 | 0 | 12.11 | 12.17 | 11.77 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-279
## LTE Band 7 Conducted Powers Ant 4a - 10 MHz Bandwidth

| LTE Band 7 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20800 (2505.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21400 (2565.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 12.06 | 12.14 | 11.68 | 0 | 0 |
| | 1 | 25 | 12.08 | 12.10 | 11.61 | | 0 |
| | 1 | 49 | 12.18 | 12.16 | 11.73 | | 0 |
| | 25 | 0 | 12.14 | 12.15 | 11.69 | 0-1 | 0 |
| | 25 | 12 | 12.12 | 12.11 | 11.70 | | 0 |
| | 25 | 25 | 12.17 | 12.18 | 11.81 | | 0 |
| | 50 | 0 | 12.14 | 12.13 | 11.71 | | 0 |
| 16QAM | 1 | 0 | 12.19 | 12.30 | 11.88 | 0-1 | 0 |
| | 1 | 25 | 12.24 | 12.22 | 11.78 | | 0 |
| | 1 | 49 | 12.34 | 12.28 | 11.93 | | 0 |
| | 25 | 0 | 12.11 | 12.15 | 11.66 | 0-2 | 0 |
| | 25 | 12 | 12.09 | 12.10 | 11.65 | | 0 |
| | 25 | 25 | 12.16 | 12.17 | 11.81 | | 0 |
| | 50 | 0 | 12.15 | 12.13 | 11.67 | | 0 |
| 64QAM | 1 | 0 | 12.24 | 12.26 | 11.74 | 0-2 | 0 |
| | 1 | 25 | 12.28 | 12.29 | 11.68 | | 0 |
| | 1 | 49 | 12.35 | 12.42 | 12.25 | | 0 |
| | 25 | 0 | 12.14 | 12.08 | 11.68 | 0-3 | 0 |
| | 25 | 12 | 12.12 | 12.06 | 11.67 | | 0 |
| | 25 | 25 | 12.20 | 12.13 | 11.77 | | 0 |
| | 50 | 0 | 12.17 | 12.12 | 11.69 | | 0 |

## Table 8-280
## LTE Band 7 Conducted Powers Ant 4a - 5 MHz Bandwidth

| LTE Band 7 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20775 (2502.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21425 (2567.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 11.95 | 12.18 | 11.54 | 0 | 0 |
| | 1 | 12 | 11.97 | 12.13 | 11.63 | | 0 |
| | 1 | 24 | 12.01 | 12.24 | 11.71 | | 0 |
| | 12 | 0 | 11.96 | 12.11 | 11.81 | 0-1 | 0 |
| | 12 | 6 | 11.98 | 12.12 | 11.85 | | 0 |
| | 12 | 13 | 11.99 | 12.12 | 11.85 | | 0 |
| | 25 | 0 | 12.02 | 12.14 | 11.84 | | 0 |
| 16QAM | 1 | 0 | 12.14 | 12.40 | 11.79 | 0-1 | 0 |
| | 1 | 12 | 12.23 | 12.30 | 11.85 | | 0 |
| | 1 | 24 | 12.22 | 12.28 | 11.88 | | 0 |
| | 12 | 0 | 11.94 | 12.19 | 11.81 | 0-2 | 0 |
| | 12 | 6 | 11.95 | 12.19 | 11.83 | | 0 |
| | 12 | 13 | 11.92 | 12.20 | 11.82 | | 0 |
| | 25 | 0 | 12.03 | 12.09 | 11.81 | | 0 |
| 64QAM | 1 | 0 | 12.18 | 12.50 | 12.01 | 0-2 | 0 |
| | 1 | 12 | 12.11 | 12.44 | 12.08 | | 0 |
| | 1 | 24 | 12.24 | 12.46 | 12.10 | | 0 |
| | 12 | 0 | 11.99 | 12.09 | 11.79 | 0-3 | 0 |
| | 12 | 6 | 11.99 | 12.09 | 11.82 | | 0 |
| | 12 | 13 | 11.97 | 12.12 | 11.82 | | 0 |
| | 25 | 0 | 11.97 | 12.10 | 11.78 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-281
## LTE Band 7 Conducted Powers Ant 4a - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20850 (2510.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21350 (2560.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 9.24 | **9.45** | 9.15 | 0 | 0 |
| | 1 | 50 | 8.51 | 9.37 | 8.51 | | 0 |
| | 1 | 99 | 8.71 | 9.11 | 8.90 | | 0 |
| | 50 | 0 | 8.96 | 9.15 | 8.90 | 0-1 | 0 |
| | 50 | 25 | 8.62 | **9.23** | 8.69 | | 0 |
| | 50 | 50 | 8.66 | 9.18 | 8.82 | | 0 |
| | 100 | 0 | 8.68 | 9.22 | 8.73 | | 0 |
| 16QAM | 1 | 0 | 9.08 | 9.38 | 9.20 | 0-1 | 0 |
| | 1 | 50 | 8.93 | 9.37 | 8.50 | | 0 |
| | 1 | 99 | 9.12 | 9.18 | 8.51 | | 0 |
| | 50 | 0 | 8.83 | 9.14 | 8.78 | 0-2 | 0 |
| | 50 | 25 | 9.11 | 9.12 | 8.51 | | 0 |
| | 50 | 50 | 9.06 | 9.09 | 8.52 | | 0 |
| | 100 | 0 | 9.07 | 9.09 | 8.54 | | 0 |
| 64QAM | 1 | 0 | 9.17 | 9.33 | 9.48 | 0-2 | 0 |
| | 1 | 50 | 8.93 | 9.11 | 8.67 | | 0 |
| | 1 | 99 | 9.15 | 9.05 | 8.79 | | 0 |
| | 50 | 0 | 9.00 | 9.06 | 8.73 | 0-3 | 0 |
| | 50 | 25 | 9.08 | 9.05 | 8.52 | | 0 |
| | 50 | 50 | 9.05 | 9.04 | 8.56 | | 0 |
| | 100 | 0 | 9.07 | 9.00 | 8.56 | | 0 |

## Table 8-282
## LTE Band 7 Conducted Powers Ant 4a - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20825 (2507.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21375 (2562.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 8.90 | 9.10 | 8.71 | 0 | 0 |
| | 1 | 36 | 8.86 | 9.21 | 8.60 | | 0 |
| | 1 | 74 | 8.89 | 9.12 | 8.55 | | 0 |
| | 36 | 0 | 8.72 | 9.20 | 8.58 | 0-1 | 0 |
| | 36 | 18 | 8.74 | 9.23 | 8.68 | | 0 |
| | 36 | 37 | 8.75 | 9.20 | 8.68 | | 0 |
| | 75 | 0 | 8.80 | 9.19 | 8.63 | | 0 |
| 16QAM | 1 | 0 | 9.08 | 9.29 | 8.78 | 0-1 | 0 |
| | 1 | 36 | 8.80 | 9.16 | 8.73 | | 0 |
| | 1 | 74 | 8.83 | 9.15 | 8.54 | | 0 |
| | 36 | 0 | 8.69 | 9.03 | 8.53 | 0-2 | 0 |
| | 36 | 18 | 8.70 | 9.02 | 8.63 | | 0 |
| | 36 | 37 | 8.70 | 9.01 | 8.62 | | 0 |
| | 75 | 0 | 8.72 | 9.03 | 8.60 | | 0 |
| 64QAM | 1 | 0 | 8.82 | 9.17 | 9.04 | 0-2 | 0 |
| | 1 | 36 | 8.73 | 9.30 | 8.91 | | 0 |
| | 1 | 74 | 8.91 | 9.19 | 8.89 | | 0 |
| | 36 | 0 | 8.65 | 9.05 | 8.60 | 0-3 | 0 |
| | 36 | 18 | 8.72 | 9.07 | 8.65 | | 0 |
| | 36 | 37 | 8.70 | 9.02 | 8.68 | | 0 |
| | 75 | 0 | 8.70 | 9.02 | 8.62 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-283
## LTE Band 7 Conducted Powers Ant 4a - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20800 (2505.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21400 (2565.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 8.78 | 9.02 | 8.56 | 0 | 0 |
| | 1 | 25 | 8.67 | 9.02 | 8.52 | | 0 |
| | 1 | 49 | 8.90 | 9.13 | 8.56 | | 0 |
| | 25 | 0 | 8.96 | 9.07 | 8.50 | 0-1 | 0 |
| | 25 | 12 | 8.92 | 9.09 | 8.58 | | 0 |
| | 25 | 25 | 8.92 | 9.13 | 8.53 | | 0 |
| | 50 | 0 | 8.91 | 9.09 | 8.53 | | 0 |
| 16QAM | 1 | 0 | 9.02 | 9.24 | 8.78 | 0-1 | 0 |
| | 1 | 25 | 9.03 | 9.05 | 8.50 | | 0 |
| | 1 | 49 | 8.98 | 9.31 | 8.54 | | 0 |
| | 25 | 0 | 8.94 | 9.06 | 8.59 | 0-2 | 0 |
| | 25 | 12 | 8.83 | 9.07 | 8.59 | | 0 |
| | 25 | 25 | 8.91 | 9.11 | 8.53 | | 0 |
| | 50 | 0 | 8.88 | 9.09 | 8.51 | | 0 |
| 64QAM | 1 | 0 | 9.12 | 9.35 | 8.90 | 0-2 | 0 |
| | 1 | 25 | 8.89 | 9.39 | 8.67 | | 0 |
| | 1 | 49 | 8.86 | 9.31 | 8.83 | | 0 |
| | 25 | 0 | 8.79 | 9.02 | 8.53 | 0-3 | 0 |
| | 25 | 12 | 8.70 | 9.08 | 8.51 | | 0 |
| | 25 | 25 | 8.75 | 9.07 | 8.53 | | 0 |
| | 50 | 0 | 8.73 | 9.07 | 8.56 | | 0 |

## Table 8-284
## LTE Band 7 Conducted Powers Ant 4a - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20775 (2502.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21425 (2567.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 8.69 | 8.99 | 8.51 | 0 | 0 |
| | 1 | 12 | 8.79 | 9.03 | 8.60 | | 0 |
| | 1 | 24 | 8.78 | 9.11 | 8.58 | | 0 |
| | 12 | 0 | 8.73 | 8.90 | 8.60 | 0-1 | 0 |
| | 12 | 6 | 8.77 | 8.92 | 8.60 | | 0 |
| | 12 | 13 | 8.74 | 9.01 | 8.59 | | 0 |
| | 25 | 0 | 8.80 | 8.95 | 8.60 | | 0 |
| 16QAM | 1 | 0 | 8.92 | 9.12 | 8.71 | 0-1 | 0 |
| | 1 | 12 | 9.01 | 9.10 | 8.65 | | 0 |
| | 1 | 24 | 8.95 | 9.30 | 8.76 | | 0 |
| | 12 | 0 | 8.67 | 8.99 | 8.65 | 0-2 | 0 |
| | 12 | 6 | 8.72 | 8.99 | 8.57 | | 0 |
| | 12 | 13 | 8.70 | 8.98 | 8.55 | | 0 |
| | 25 | 0 | 8.78 | 8.92 | 8.73 | | 0 |
| 64QAM | 1 | 0 | 8.76 | 9.24 | 8.69 | 0-2 | 0 |
| | 1 | 12 | 8.87 | 9.16 | 8.72 | | 0 |
| | 1 | 24 | 8.90 | 9.22 | 8.78 | | 0 |
| | 12 | 0 | 8.77 | 8.90 | 8.60 | 0-3 | 0 |
| | 12 | 6 | 8.78 | 8.87 | 8.58 | | 0 |
| | 12 | 13 | 8.76 | 8.96 | 8.53 | | 0 |
| | 25 | 0 | 8.78 | 8.91 | 8.54 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-285
## LTE Band 7 Conducted Powers Ant 4b - 20 MHz Bandwidth

| LTE Band 7 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20850 (2510.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21350 (2560.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | **13.23** | 13.07 | 13.21 | 0 | 0 |
| | 1 | 50 | 13.20 | 13.11 | 13.19 | | 0 |
| | 1 | 99 | 13.19 | 13.13 | 13.10 | | 0 |
| | 50 | 0 | 13.14 | **13.22** | 13.07 | 0-1 | 0 |
| | 50 | 25 | 13.15 | 13.21 | 13.14 | | 0 |
| | 50 | 50 | 13.18 | 13.19 | 13.02 | | 0 |
| | 100 | 0 | 13.17 | 13.17 | 13.13 | | 0 |
| 16QAM | 1 | 0 | 13.04 | 13.14 | 13.15 | 0-1 | 0 |
| | 1 | 50 | 13.02 | 13.21 | 13.24 | | 0 |
| | 1 | 99 | 13.14 | 13.29 | 13.21 | | 0 |
| | 50 | 0 | 12.88 | 13.04 | 12.84 | 0-2 | 0 |
| | 50 | 25 | 12.82 | 12.95 | 12.83 | | 0 |
| | 50 | 50 | 12.87 | 12.93 | 12.84 | | 0 |
| | 100 | 0 | 12.86 | 12.97 | 12.86 | | 0 |
| 64QAM | 1 | 0 | 13.20 | 13.11 | 12.86 | 0-2 | 0 |
| | 1 | 50 | 13.23 | 13.04 | 12.90 | | 0 |
| | 1 | 99 | 13.14 | 12.87 | 12.98 | | 0 |
| | 50 | 0 | 13.17 | 13.06 | 12.75 | 0-3 | 0 |
| | 50 | 25 | 13.14 | 13.01 | 12.82 | | 0 |
| | 50 | 50 | 13.19 | 12.86 | 12.87 | | 0 |
| | 100 | 0 | 13.12 | 13.01 | 12.86 | | 0 |

## Table 8-286
## LTE Band 7 Conducted Powers Ant 4b - 15 MHz Bandwidth

| LTE Band 7 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20825 (2507.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21375 (2562.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.20 | 13.10 | 13.07 | 0 | 0 |
| | 1 | 36 | 13.28 | 13.30 | 13.13 | | 0 |
| | 1 | 74 | 13.25 | 13.30 | 13.08 | | 0 |
| | 36 | 0 | 13.26 | 13.26 | 13.21 | 0-1 | 0 |
| | 36 | 18 | 13.26 | 13.19 | 13.19 | | 0 |
| | 36 | 37 | 13.19 | 13.15 | 13.23 | | 0 |
| | 75 | 0 | 13.20 | 13.30 | 13.13 | | 0 |
| 16QAM | 1 | 0 | 13.29 | 13.20 | 12.84 | 0-1 | 0 |
| | 1 | 36 | 13.24 | 13.27 | 12.95 | | 0 |
| | 1 | 74 | 13.28 | 13.10 | 12.98 | | 0 |
| | 36 | 0 | 13.09 | 13.07 | 12.94 | 0-2 | 0 |
| | 36 | 18 | 13.08 | 13.08 | 12.89 | | 0 |
| | 36 | 37 | 13.03 | 12.90 | 12.92 | | 0 |
| | 75 | 0 | 13.04 | 13.01 | 12.88 | | 0 |
| 64QAM | 1 | 0 | 13.30 | 13.15 | 13.13 | 0-2 | 0 |
| | 1 | 36 | 13.27 | 13.14 | 13.16 | | 0 |
| | 1 | 74 | 13.27 | 12.98 | 13.25 | | 0 |
| | 36 | 0 | 13.20 | 13.06 | 12.98 | 0-3 | 0 |
| | 36 | 18 | 13.16 | 13.09 | 12.93 | | 0 |
| | 36 | 37 | 13.11 | 12.91 | 12.95 | | 0 |
| | 75 | 0 | 13.07 | 13.02 | 12.92 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-287
## LTE Band 7 Conducted Powers Ant 4b - 10 MHz Bandwidth

| LTE Band 7 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20800 (2505.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21400 (2565.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.20 | 13.25 | 13.16 | 0 | 0 |
| | 1 | 25 | 13.30 | 13.28 | 13.16 | | 0 |
| | 1 | 49 | 13.19 | 13.30 | 13.27 | | 0 |
| | 25 | 0 | 13.25 | 13.30 | 13.23 | 0-1 | 0 |
| | 25 | 12 | 13.25 | 13.27 | 13.21 | | 0 |
| | 25 | 25 | 13.11 | 13.22 | 13.30 | | 0 |
| | 50 | 0 | 13.24 | 13.19 | 13.25 | | 0 |
| 16QAM | 1 | 0 | 13.21 | 13.29 | 13.09 | 0-1 | 0 |
| | 1 | 25 | 13.24 | 13.18 | 13.26 | | 0 |
| | 1 | 49 | 13.29 | 13.10 | 13.14 | | 0 |
| | 25 | 0 | 13.18 | 13.12 | 12.98 | 0-2 | 0 |
| | 25 | 12 | 13.18 | 13.09 | 13.02 | | 0 |
| | 25 | 25 | 13.10 | 12.99 | 13.18 | | 0 |
| | 50 | 0 | 13.15 | 13.07 | 13.04 | | 0 |
| 64QAM | 1 | 0 | 13.26 | 13.23 | 13.25 | 0-2 | 0 |
| | 1 | 25 | 13.30 | 13.24 | 13.25 | | 0 |
| | 1 | 49 | 13.24 | 13.14 | 13.30 | | 0 |
| | 25 | 0 | 13.09 | 13.12 | 12.99 | 0-3 | 0 |
| | 25 | 12 | 13.14 | 13.11 | 13.07 | | 0 |
| | 25 | 25 | 13.13 | 13.01 | 13.25 | | 0 |
| | 50 | 0 | 13.16 | 13.07 | 13.05 | | 0 |

## Table 8-288
## LTE Band 7 Conducted Powers Ant 4b - 5 MHz Bandwidth

| LTE Band 7 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20775 (2502.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21425 (2567.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 13.21 | 13.30 | 13.16 | 0 | 0 |
| | 1 | 12 | 13.26 | 13.20 | 13.24 | | 0 |
| | 1 | 24 | 13.30 | 13.22 | 13.25 | | 0 |
| | 12 | 0 | 13.15 | 13.25 | 13.25 | 0-1 | 0 |
| | 12 | 6 | 13.17 | 13.25 | 13.27 | | 0 |
| | 12 | 13 | 13.20 | 13.29 | 13.24 | | 0 |
| | 25 | 0 | 13.17 | 13.30 | 13.30 | | 0 |
| 16QAM | 1 | 0 | 13.19 | 13.19 | 13.19 | 0-1 | 0 |
| | 1 | 12 | 13.23 | 13.03 | 13.11 | | 0 |
| | 1 | 24 | 13.18 | 13.12 | 12.95 | | 0 |
| | 12 | 0 | 13.09 | 13.03 | 13.03 | 0-2 | 0 |
| | 12 | 6 | 13.05 | 13.09 | 13.10 | | 0 |
| | 12 | 13 | 13.15 | 13.02 | 13.06 | | 0 |
| | 25 | 0 | 13.02 | 13.02 | 13.07 | | 0 |
| 64QAM | 1 | 0 | 13.30 | 13.14 | 13.30 | 0-2 | 0 |
| | 1 | 12 | 13.10 | 13.13 | 13.30 | | 0 |
| | 1 | 24 | 13.30 | 13.01 | 13.10 | | 0 |
| | 12 | 0 | 13.06 | 13.15 | 12.98 | 0-3 | 0 |
| | 12 | 6 | 13.05 | 13.06 | 13.10 | | 0 |
| | 12 | 13 | 13.07 | 13.03 | 13.03 | | 0 |
| | 25 | 0 | 12.94 | 13.00 | 13.07 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-289
## LTE Band 7 Conducted Powers Ant 4b - 20 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 20 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20850 (2510.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21350 (2560.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | **10.19** | 9.85 | 9.68 | 0 | 0 |
| | 1 | 50 | 10.16 | 10.04 | 9.80 | | 0 |
| | 1 | 99 | 10.04 | 10.16 | 9.94 | | 0 |
| | 50 | 0 | **10.13** | 9.92 | 9.73 | 0-1 | 0 |
| | 50 | 25 | 10.10 | 9.95 | 9.85 | | 0 |
| | 50 | 50 | 10.11 | 9.96 | 9.90 | | 0 |
| | 100 | 0 | 10.07 | 9.94 | 9.87 | | 0 |
| 16QAM | 1 | 0 | 10.21 | 9.88 | 9.70 | 0-1 | 0 |
| | 1 | 50 | 10.24 | 9.98 | 9.81 | | 0 |
| | 1 | 99 | 9.78 | 9.74 | 9.82 | | 0 |
| | 50 | 0 | 9.96 | 9.74 | 9.51 | 0-2 | 0 |
| | 50 | 25 | 9.86 | 9.72 | 9.58 | | 0 |
| | 50 | 50 | 9.74 | 9.61 | 9.65 | | 0 |
| | 100 | 0 | 9.76 | 9.64 | 9.56 | | 0 |
| 64QAM | 1 | 0 | 10.28 | 9.82 | 9.86 | 0-2 | 0 |
| | 1 | 50 | 10.13 | 9.94 | 9.97 | | 0 |
| | 1 | 99 | 9.68 | 9.77 | 10.22 | | 0 |
| | 50 | 0 | 9.89 | 9.75 | 9.45 | 0-3 | 0 |
| | 50 | 25 | 9.84 | 9.73 | 9.55 | | 0 |
| | 50 | 50 | 9.73 | 9.57 | 9.59 | | 0 |
| | 100 | 0 | 9.74 | 9.69 | 9.58 | | 0 |

## Table 8-290
## LTE Band 7 Conducted Powers Ant 4b - 15 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 15 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20825 (2507.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21375 (2562.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.19 | 10.00 | 9.85 | 0 | 0 |
| | 1 | 36 | 10.09 | 10.06 | 9.92 | | 0 |
| | 1 | 74 | 9.83 | 9.80 | 9.72 | | 0 |
| | 36 | 0 | 10.05 | 10.10 | 10.00 | 0-1 | 0 |
| | 36 | 18 | 9.91 | 10.11 | 9.96 | | 0 |
| | 36 | 37 | 9.79 | 9.93 | 9.93 | | 0 |
| | 75 | 0 | 9.88 | 10.02 | 9.90 | | 0 |
| 16QAM | 1 | 0 | 10.30 | 10.26 | 10.10 | 0-1 | 0 |
| | 1 | 36 | 10.11 | 10.13 | 9.92 | | 0 |
| | 1 | 74 | 10.04 | 9.97 | 9.88 | | 0 |
| | 36 | 0 | 9.87 | 10.08 | 9.96 | 0-2 | 0 |
| | 36 | 18 | 9.79 | 10.15 | 9.94 | | 0 |
| | 36 | 37 | 9.74 | 9.88 | 9.87 | | 0 |
| | 75 | 0 | 9.72 | 9.99 | 9.89 | | 0 |
| 64QAM | 1 | 0 | 10.02 | 10.05 | 9.93 | 0-2 | 0 |
| | 1 | 36 | 10.08 | 10.28 | 10.08 | | 0 |
| | 1 | 74 | 9.94 | 9.95 | 9.99 | | 0 |
| | 36 | 0 | 10.00 | 9.94 | 9.89 | 0-3 | 0 |
| | 36 | 18 | 9.89 | 9.96 | 9.93 | | 0 |
| | 36 | 37 | 9.78 | 9.84 | 9.89 | | 0 |
| | 75 | 0 | 9.85 | 9.94 | 9.86 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-291
## LTE Band 7 Conducted Powers Ant 4b - 10 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 10 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20800 (2505.0 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21400 (2565.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 10.16 | 10.04 | 9.91 | 0 | 0 |
| | 1 | 25 | 10.11 | 10.09 | 10.11 | | 0 |
| | 1 | 49 | 9.89 | 10.00 | 10.10 | | 0 |
| | 25 | 0 | 10.09 | 10.18 | 10.08 | 0-1 | 0 |
| | 25 | 12 | 10.04 | 10.21 | 10.08 | | 0 |
| | 25 | 25 | 9.92 | 10.06 | 10.17 | | 0 |
| | 50 | 0 | 10.06 | 10.11 | 10.07 | | 0 |
| 16QAM | 1 | 0 | 10.27 | 10.28 | 10.14 | 0-1 | 0 |
| | 1 | 25 | 10.12 | 10.22 | 10.29 | | 0 |
| | 1 | 49 | 9.92 | 10.18 | 10.24 | | 0 |
| | 25 | 0 | 10.11 | 10.16 | 9.92 | 0-2 | 0 |
| | 25 | 12 | 10.04 | 10.18 | 10.05 | | 0 |
| | 25 | 25 | 9.87 | 10.06 | 10.09 | | 0 |
| | 50 | 0 | 10.05 | 10.12 | 10.00 | | 0 |
| 64QAM | 1 | 0 | 10.28 | 10.26 | 10.09 | 0-2 | 0 |
| | 1 | 25 | 10.20 | 10.25 | 10.24 | | 0 |
| | 1 | 49 | 10.05 | 10.24 | 10.25 | | 0 |
| | 25 | 0 | 10.07 | 10.20 | 9.94 | 0-3 | 0 |
| | 25 | 12 | 10.01 | 10.20 | 10.01 | | 0 |
| | 25 | 25 | 9.88 | 9.97 | 10.08 | | 0 |
| | 50 | 0 | 10.06 | 10.11 | 10.02 | | 0 |

## Table 8-292
## LTE Band 7 Conducted Powers Ant 4b - 5 MHz Bandwidth, Inter-band ULCA Active

| LTE Band 7 5 MHz Bandwidth | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 20775 (2502.5 MHz) | Mid Channel 21100 (2535.0 MHz) | High Channel 21425 (2567.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | |
| QPSK | 1 | 0 | 9.96 | 10.29 | 10.03 | 0 | 0 |
| | 1 | 12 | 10.14 | 10.20 | 10.08 | | 0 |
| | 1 | 24 | 10.22 | 10.16 | 10.07 | | 0 |
| | 12 | 0 | 10.04 | 10.16 | 10.15 | 0-1 | 0 |
| | 12 | 6 | 10.09 | 10.15 | 10.20 | | 0 |
| | 12 | 13 | 10.10 | 10.10 | 10.12 | | 0 |
| | 25 | 0 | 10.09 | 10.12 | 10.19 | | 0 |
| 16QAM | 1 | 0 | 10.19 | 10.24 | 10.17 | 0-1 | 0 |
| | 1 | 12 | 10.29 | 10.27 | 10.23 | | 0 |
| | 1 | 24 | 10.18 | 10.18 | 10.26 | | 0 |
| | 12 | 0 | 10.07 | 10.19 | 9.90 | 0-2 | 0 |
| | 12 | 6 | 10.04 | 10.20 | 10.05 | | 0 |
| | 12 | 13 | 10.03 | 10.07 | 10.10 | | 0 |
| | 25 | 0 | 9.99 | 10.06 | 9.99 | | 0 |
| 64QAM | 1 | 0 | 10.07 | 10.26 | 10.25 | 0-2 | 0 |
| | 1 | 12 | 10.17 | 10.30 | 10.25 | | 0 |
| | 1 | 24 | 10.15 | 10.25 | 10.24 | | 0 |
| | 12 | 0 | 9.98 | 10.13 | 9.93 | 0-3 | 0 |
| | 12 | 6 | 9.95 | 10.14 | 9.98 | | 0 |
| | 12 | 13 | 10.04 | 10.01 | 10.02 | | 0 |
| | 25 | 0 | 10.04 | 10.07 | 10.07 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.13 LTE Band 41

### Table 8-293
### LTE Band 41 Conducted Powers Ant 2a - 20 MHz Bandwidth

| LTE Band 41 20 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 13.99 | 13.70 | 13.95 | 13.73 | 14.00 | 0 | 0 |
| | 1 | 50 | 13.96 | 13.77 | **14.01** | 13.72 | 13.90 | | 0 |
| | 1 | 99 | 13.80 | 13.72 | 13.96 | 13.70 | 13.84 | | 0 |
| | 50 | 0 | 14.01 | 13.76 | 13.98 | 13.73 | 14.04 | 0-1 | 0 |
| | 50 | 25 | 13.90 | 13.78 | **14.05** | 13.72 | 13.94 | | 0 |
| | 50 | 50 | 13.96 | 13.79 | 13.96 | 13.75 | 13.92 | | 0 |
| | 100 | 0 | 13.83 | 13.78 | 13.97 | 13.74 | 13.92 | | 0 |
| 16QAM | 1 | 0 | 14.46 | 14.07 | 14.06 | 13.88 | 13.80 | 0-1 | 0 |
| | 1 | 50 | 14.11 | 13.95 | 14.09 | 13.87 | 13.76 | | 0 |
| | 1 | 99 | 14.09 | 14.00 | 14.10 | 13.91 | 13.70 | | 0 |
| | 50 | 0 | 14.38 | 14.11 | 14.14 | 13.74 | 13.84 | 0-2 | 0 |
| | 50 | 25 | 14.15 | 14.10 | 14.14 | 13.73 | 13.75 | | 0 |
| | 50 | 50 | 14.16 | 14.05 | 14.17 | 13.72 | 13.76 | | 0 |
| | 100 | 0 | 14.11 | 14.12 | 14.13 | 13.75 | 13.72 | | 0 |
| 64QAM | 1 | 0 | 14.45 | 14.09 | 14.20 | 13.82 | 13.89 | 0-2 | 0 |
| | 1 | 50 | 14.27 | 14.11 | 14.10 | 13.78 | 13.85 | | 0 |
| | 1 | 99 | 14.21 | 14.01 | 14.04 | 13.86 | 13.80 | | 0 |
| | 50 | 0 | 14.35 | 14.08 | 14.17 | 13.70 | 13.85 | 0-3 | 0 |
| | 50 | 25 | 14.12 | 14.10 | 14.14 | 13.70 | 13.76 | | 0 |
| | 50 | 50 | 14.13 | 14.05 | 14.15 | 13.71 | 13.74 | | 0 |
| | 100 | 0 | 14.07 | 14.08 | 14.17 | 13.70 | 13.73 | | 0 |

### Table 8-294
### LTE Band 41 Conducted Powers Ant 2a - 15 MHz Bandwidth

| LTE Band 41 15 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.13 | 13.72 | 13.76 | 13.71 | 13.82 | 0 | 0 |
| | 1 | 36 | 13.86 | 13.84 | 13.80 | 13.80 | 13.73 | | 0 |
| | 1 | 74 | 13.78 | 13.77 | 13.73 | 13.71 | 13.71 | | 0 |
| | 36 | 0 | 13.91 | 13.76 | 13.76 | 13.70 | 13.75 | 0-1 | 0 |
| | 36 | 18 | 13.84 | 13.79 | 13.78 | 13.76 | 13.70 | | 0 |
| | 36 | 37 | 13.85 | 13.70 | 13.76 | 13.73 | 13.72 | | 0 |
| | 75 | 0 | 13.72 | 13.77 | 13.77 | 13.72 | 13.73 | | 0 |
| 16QAM | 1 | 0 | 14.42 | 14.15 | 14.24 | 14.03 | 14.17 | 0-1 | 0 |
| | 1 | 36 | 14.41 | 14.18 | 14.34 | 13.95 | 14.21 | | 0 |
| | 1 | 74 | 14.40 | 13.97 | 14.30 | 13.96 | 14.17 | | 0 |
| | 36 | 0 | 14.30 | 14.23 | 14.30 | 13.96 | 14.21 | 0-2 | 0 |
| | 36 | 18 | 14.31 | 14.28 | 14.29 | 13.99 | 14.12 | | 0 |
| | 36 | 37 | 14.22 | 14.24 | 14.29 | 13.98 | 14.00 | | 0 |
| | 75 | 0 | 14.24 | 14.25 | 14.20 | 14.00 | 14.09 | | 0 |
| 64QAM | 1 | 0 | 14.44 | 14.07 | 14.29 | 13.89 | 14.26 | 0-2 | 0 |
| | 1 | 36 | 14.42 | 14.07 | 14.43 | 13.93 | 14.12 | | 0 |
| | 1 | 74 | 14.36 | 14.07 | 14.31 | 14.00 | 14.10 | | 0 |
| | 36 | 0 | 14.29 | 14.22 | 14.29 | 13.98 | 14.22 | 0-3 | 0 |
| | 36 | 18 | 14.27 | 14.25 | 14.30 | 14.01 | 14.10 | | 0 |
| | 36 | 37 | 14.23 | 14.22 | 14.24 | 13.98 | 13.98 | | 0 |
| | 75 | 0 | 14.21 | 14.24 | 14.21 | 13.99 | 14.09 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-295
## LTE Band 41 Conducted Powers Ant 2a - 10 MHz Bandwidth

| LTE Band 41 10 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.43 | 14.17 | 14.40 | 13.98 | 14.09 | 0 | 0 |
| | 1 | 25 | 14.42 | 14.17 | 14.37 | 13.93 | 14.18 | | 0 |
| | 1 | 49 | 14.23 | 14.15 | 14.41 | 13.99 | 14.18 | | 0 |
| | 25 | 0 | 14.17 | 14.16 | 14.27 | 13.95 | 14.13 | 0-1 | 0 |
| | 25 | 12 | 14.26 | 14.21 | 14.26 | 13.95 | 14.08 | | 0 |
| | 25 | 25 | 14.31 | 14.21 | 14.26 | 13.97 | 14.05 | | 0 |
| | 50 | 0 | 14.27 | 14.26 | 14.28 | 13.97 | 14.11 | | 0 |
| 16QAM | 1 | 0 | 14.41 | 14.07 | 14.32 | 13.98 | 14.21 | 0-1 | 0 |
| | 1 | 25 | 14.30 | 14.10 | 14.22 | 13.91 | 14.19 | | 0 |
| | 1 | 49 | 14.33 | 14.01 | 14.32 | 13.90 | 14.07 | | 0 |
| | 25 | 0 | 14.17 | 14.22 | 14.28 | 13.95 | 14.13 | 0-2 | 0 |
| | 25 | 12 | 14.26 | 14.21 | 14.28 | 13.96 | 14.06 | | 0 |
| | 25 | 25 | 14.32 | 14.20 | 14.26 | 13.99 | 14.05 | | 0 |
| | 50 | 0 | 14.25 | 14.25 | 14.30 | 13.98 | 14.11 | | 0 |
| 64QAM | 1 | 0 | 14.40 | 14.03 | 14.36 | 14.00 | 14.29 | 0-2 | 0 |
| | 1 | 25 | 14.39 | 13.97 | 14.29 | 13.89 | 13.96 | | 0 |
| | 1 | 49 | 14.37 | 14.13 | 14.31 | 14.15 | 14.13 | | 0 |
| | 25 | 0 | 14.15 | 14.25 | 14.28 | 14.01 | 14.17 | 0-3 | 0 |
| | 25 | 12 | 14.24 | 14.24 | 14.25 | 13.98 | 14.10 | | 0 |
| | 25 | 25 | 14.28 | 14.23 | 14.26 | 14.04 | 14.04 | | 0 |
| | 50 | 0 | 14.21 | 14.27 | 14.29 | 13.96 | 14.10 | | 0 |

## Table 8-296
## LTE Band 41 Conducted Powers Ant 2a - 5 MHz Bandwidth

| LTE Band 41 5 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 13.76 | 13.70 | 13.70 | 13.84 | 13.72 | 0 | 0 |
| | 1 | 12 | 13.76 | 13.72 | 13.74 | 13.78 | 13.70 | | 0 |
| | 1 | 24 | 13.79 | 13.70 | 13.72 | 13.86 | 13.78 | | 0 |
| | 12 | 0 | 13.72 | 13.73 | 13.79 | 13.82 | 13.75 | 0-1 | 0 |
| | 12 | 6 | 13.78 | 13.72 | 13.79 | 13.80 | 13.71 | | 0 |
| | 12 | 13 | 13.79 | 13.75 | 13.70 | 13.80 | 13.72 | | 0 |
| | 25 | 0 | 13.71 | 13.73 | 13.70 | 13.83 | 13.72 | | 0 |
| 16QAM | 1 | 0 | 14.30 | 14.17 | 14.27 | 13.96 | 14.02 | 0-1 | 0 |
| | 1 | 12 | 14.23 | 14.07 | 14.30 | 14.05 | 13.98 | | 0 |
| | 1 | 24 | 14.30 | 14.16 | 14.26 | 13.93 | 14.05 | | 0 |
| | 12 | 0 | 14.19 | 14.19 | 14.26 | 13.99 | 14.08 | 0-2 | 0 |
| | 12 | 6 | 14.23 | 14.18 | 14.21 | 13.95 | 13.97 | | 0 |
| | 12 | 13 | 14.21 | 14.15 | 14.25 | 13.95 | 13.99 | | 0 |
| | 25 | 0 | 14.26 | 14.20 | 14.28 | 13.99 | 14.04 | | 0 |
| 64QAM | 1 | 0 | 14.20 | 14.03 | 14.29 | 13.94 | 14.08 | 0-2 | 0 |
| | 1 | 12 | 14.27 | 14.31 | 14.28 | 13.84 | 13.97 | | 0 |
| | 1 | 24 | 14.29 | 14.16 | 14.30 | 13.99 | 14.01 | | 0 |
| | 12 | 0 | 14.16 | 14.18 | 14.25 | 14.00 | 14.07 | 0-3 | 0 |
| | 12 | 6 | 14.27 | 14.19 | 14.22 | 13.95 | 14.00 | | 0 |
| | 12 | 13 | 14.24 | 14.16 | 14.24 | 13.95 | 13.99 | | 0 |
| | 25 | 0 | 14.26 | 14.19 | 14.24 | 13.93 | 14.03 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-297
## LTE Band 41 Conducted Powers Ant 2b - 20 MHz Bandwidth

| LTE Band 41 20 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.12 | 13.95 | **14.17** | 13.77 | 13.96 | 0 | 0 |
| | 1 | 50 | 14.15 | 13.92 | 14.16 | 13.65 | 13.80 | | 0 |
| | 1 | 99 | 14.16 | 13.75 | 14.02 | 13.73 | 13.87 | | 0 |
| | 50 | 0 | 14.08 | 13.83 | **14.09** | 13.63 | 13.82 | 0-1 | 0 |
| | 50 | 25 | 14.06 | 13.82 | 14.08 | 13.58 | 13.72 | | 0 |
| | 50 | 50 | 14.02 | 13.73 | 14.05 | 13.57 | 13.81 | | 0 |
| | 100 | 0 | 14.01 | 13.82 | 14.07 | 13.55 | 13.73 | | 0 |
| 16QAM | 1 | 0 | 13.95 | 13.72 | 14.00 | 13.87 | 13.70 | 0-1 | 0 |
| | 1 | 50 | 13.93 | 13.71 | 14.15 | 14.00 | 13.68 | | 0 |
| | 1 | 99 | 13.85 | 13.50 | 13.96 | 13.82 | 13.81 | | 0 |
| | 50 | 0 | 13.85 | 13.71 | 13.85 | 13.65 | 13.62 | 0-2 | 0 |
| | 50 | 25 | 13.89 | 13.71 | 13.91 | 13.75 | 13.55 | | 0 |
| | 50 | 50 | 13.86 | 13.63 | 13.89 | 13.61 | 13.53 | | 0 |
| | 100 | 0 | 13.84 | 13.70 | 13.86 | 13.73 | 13.52 | | 0 |
| 64QAM | 1 | 0 | 14.15 | 14.04 | 14.07 | 13.82 | 14.04 | 0-2 | 0 |
| | 1 | 50 | 14.18 | 13.95 | 14.15 | 13.64 | 13.86 | | 0 |
| | 1 | 99 | 14.08 | 13.80 | 14.11 | 13.62 | 13.87 | | 0 |
| | 50 | 0 | 14.08 | 13.85 | 14.03 | 13.58 | 13.82 | 0-3 | 0 |
| | 50 | 25 | 14.10 | 13.93 | 14.05 | 13.53 | 13.72 | | 0 |
| | 50 | 50 | 14.06 | 13.80 | 14.04 | 13.54 | 13.75 | | 0 |
| | 100 | 0 | 14.04 | 13.87 | 14.03 | 13.54 | 13.73 | | 0 |

## Table 8-298
## LTE Band 41 Conducted Powers Ant 2b - 15 MHz Bandwidth

| LTE Band 41 15 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.08 | 13.96 | 13.79 | 13.60 | 13.56 | 0 | 0 |
| | 1 | 36 | 14.04 | 13.91 | 13.94 | 13.64 | 13.52 | | 0 |
| | 1 | 74 | 13.90 | 13.70 | 13.87 | 13.62 | 13.54 | | 0 |
| | 36 | 0 | 14.11 | 13.98 | 13.97 | 13.60 | 13.59 | 0-1 | 1 |
| | 36 | 18 | 14.10 | 13.93 | 14.02 | 13.63 | 13.61 | | 1 |
| | 36 | 37 | 14.08 | 13.85 | 14.03 | 13.65 | 13.63 | | 1 |
| | 75 | 0 | 14.07 | 13.89 | 13.99 | 13.61 | 13.57 | | 1 |
| 16QAM | 1 | 0 | 14.19 | 14.02 | 13.95 | 13.51 | 13.80 | 0-1 | 1 |
| | 1 | 36 | 14.11 | 13.93 | 14.11 | 13.57 | 13.69 | | 1 |
| | 1 | 74 | 14.04 | 13.93 | 14.02 | 13.52 | 13.68 | | 1 |
| | 36 | 0 | 14.10 | 13.96 | 13.96 | 13.61 | 13.62 | 0-2 | 2 |
| | 36 | 18 | 14.09 | 13.96 | 14.03 | 13.63 | 13.62 | | 2 |
| | 36 | 37 | 14.08 | 13.87 | 14.06 | 13.64 | 13.65 | | 2 |
| | 75 | 0 | 14.06 | 13.89 | 14.03 | 13.60 | 13.58 | | 2 |
| 64QAM | 1 | 0 | 14.13 | 13.83 | 14.00 | 13.53 | 13.70 | 0-2 | 2 |
| | 1 | 36 | 14.14 | 13.89 | 14.12 | 13.68 | 13.69 | | 2 |
| | 1 | 74 | 13.87 | 13.67 | 13.95 | 13.46 | 13.75 | | 2 |
| | 36 | 0 | 14.12 | 13.97 | 13.99 | 13.59 | 13.59 | 0-3 | 3 |
| | 36 | 18 | 14.08 | 13.92 | 14.02 | 13.62 | 13.59 | | 3 |
| | 36 | 37 | 14.10 | 13.87 | 14.07 | 13.66 | 13.64 | | 3 |
| | 75 | 0 | 14.04 | 13.91 | 13.99 | 13.59 | 13.60 | | 3 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-299
## LTE Band 41 Conducted Powers Ant 2b - 10 MHz Bandwidth

| LTE Band 41 10 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.12 | 14.00 | 13.88 | 13.68 | 13.55 | 0 | 0 |
| | 1 | 25 | 13.99 | 13.91 | 13.92 | 13.65 | 13.48 | | 0 |
| | 1 | 49 | 14.04 | 13.86 | 13.94 | 13.73 | 13.52 | | 0 |
| | 25 | 0 | 14.12 | 13.91 | 13.97 | 13.60 | 13.57 | 0-1 | 1 |
| | 25 | 12 | 14.06 | 13.89 | 14.00 | 13.57 | 13.57 | | 1 |
| | 25 | 25 | 14.10 | 13.86 | 14.02 | 13.66 | 13.63 | | 1 |
| | 50 | 0 | 14.08 | 13.90 | 14.00 | 13.60 | 13.58 | | 1 |
| 16QAM | 1 | 0 | 14.20 | 14.13 | 14.07 | 13.54 | 13.64 | 0-1 | 1 |
| | 1 | 25 | 14.12 | 13.97 | 14.11 | 13.58 | 13.61 | | 1 |
| | 1 | 49 | 14.14 | 13.82 | 14.13 | 13.63 | 13.68 | | 1 |
| | 25 | 0 | 14.12 | 13.86 | 13.95 | 13.62 | 13.58 | 0-2 | 2 |
| | 25 | 12 | 14.05 | 13.86 | 13.95 | 13.60 | 13.55 | | 2 |
| | 25 | 25 | 14.05 | 13.90 | 14.04 | 13.69 | 13.62 | | 2 |
| | 50 | 0 | 14.10 | 13.89 | 14.01 | 13.61 | 13.60 | | 2 |
| 64QAM | 1 | 0 | 14.12 | 14.03 | 13.88 | 13.89 | 13.68 | 0-2 | 2 |
| | 1 | 25 | 14.16 | 13.88 | 13.96 | 13.85 | 13.48 | | 2 |
| | 1 | 49 | 14.10 | 13.75 | 14.10 | 13.90 | 13.64 | | 2 |
| | 25 | 0 | 14.13 | 13.89 | 13.95 | 13.62 | 13.56 | 0-3 | 3 |
| | 25 | 12 | 14.11 | 13.90 | 13.99 | 13.55 | 13.59 | | 3 |
| | 25 | 25 | 14.10 | 13.85 | 14.02 | 13.67 | 13.67 | | 3 |
| | 50 | 0 | 14.04 | 13.89 | 14.01 | 13.61 | 13.58 | | 3 |

## Table 8-300
## LTE Band 41 Conducted Powers Ant 2b - 5 MHz Bandwidth

| LTE Band 41 5 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.01 | 13.87 | 13.86 | 13.66 | 13.42 | 0 | 0 |
| | 1 | 12 | 13.92 | 13.81 | 13.88 | 13.62 | 13.39 | | 0 |
| | 1 | 24 | 13.96 | 13.82 | 13.90 | 13.73 | 13.43 | | 0 |
| | 12 | 0 | 14.01 | 13.84 | 13.94 | 13.53 | 13.47 | 0-1 | 1 |
| | 12 | 6 | 14.01 | 13.83 | 13.94 | 13.54 | 13.49 | | 1 |
| | 12 | 13 | 14.01 | 13.80 | 13.97 | 13.55 | 13.48 | | 1 |
| | 25 | 0 | 14.03 | 13.86 | 13.97 | 13.56 | 13.49 | | 1 |
| 16QAM | 1 | 0 | 14.12 | 13.79 | 13.99 | 13.67 | 13.55 | 0-1 | 1 |
| | 1 | 12 | 14.15 | 13.87 | 13.90 | 13.51 | 13.44 | | 1 |
| | 1 | 24 | 14.11 | 13.88 | 14.12 | 13.69 | 13.50 | | 1 |
| | 12 | 0 | 14.03 | 13.85 | 13.94 | 13.60 | 13.49 | 0-2 | 2 |
| | 12 | 6 | 13.99 | 13.85 | 13.94 | 13.55 | 13.49 | | 2 |
| | 12 | 13 | 14.03 | 13.83 | 13.98 | 13.53 | 13.48 | | 2 |
| | 25 | 0 | 14.05 | 13.82 | 13.97 | 13.55 | 13.47 | | 2 |
| 64QAM | 1 | 0 | 14.09 | 13.99 | 14.15 | 13.57 | 13.54 | 0-2 | 2 |
| | 1 | 12 | 14.02 | 13.80 | 14.14 | 13.54 | 13.62 | | 2 |
| | 1 | 24 | 14.08 | 13.88 | 14.07 | 13.64 | 13.81 | | 2 |
| | 12 | 0 | 13.98 | 13.85 | 13.95 | 13.58 | 13.49 | 0-3 | 3 |
| | 12 | 6 | 14.04 | 13.80 | 14.00 | 13.53 | 13.49 | | 3 |
| | 12 | 13 | 14.06 | 13.80 | 13.95 | 13.60 | 13.46 | | 3 |
| | 25 | 0 | 14.02 | 13.89 | 13.96 | 13.59 | 13.49 | | 3 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-301
## LTE Band 41 Conducted Powers Ant 4a - 20 MHz Bandwidth

| LTE Band 41 20 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 13.98 | 13.92 | 13.68 | 13.65 | 13.35 | 0 | 0 |
| | 1 | 50 | 14.02 | **14.04** | 13.79 | 13.49 | 13.51 | | 0 |
| | 1 | 99 | 13.92 | 13.78 | 13.83 | 13.23 | 13.52 | | 0 |
| | 50 | 0 | 13.91 | 13.90 | 13.76 | 13.67 | 13.39 | 0-1 | 0 |
| | 50 | 25 | 13.99 | **14.01** | 13.79 | 13.49 | 13.46 | | 0 |
| | 50 | 50 | 13.94 | 13.82 | 13.80 | 13.32 | 13.41 | | 0 |
| | 100 | 0 | 13.99 | 13.86 | 13.77 | 13.48 | 13.42 | | 0 |
| 16QAM | 1 | 0 | 13.74 | 14.03 | 13.59 | 13.70 | 13.21 | 0-1 | 0 |
| | 1 | 50 | 14.08 | 13.98 | 13.62 | 13.43 | 13.39 | | 0 |
| | 1 | 99 | 13.96 | 13.79 | 13.71 | 13.22 | 13.38 | | 0 |
| | 50 | 0 | 14.04 | 13.93 | 13.75 | 13.59 | 13.35 | 0-2 | 0 |
| | 50 | 25 | 14.07 | 13.88 | 13.80 | 13.51 | 13.47 | | 0 |
| | 50 | 50 | 14.01 | 13.85 | 13.77 | 13.38 | 13.42 | | 0 |
| | 100 | 0 | 14.09 | 13.88 | 13.78 | 13.53 | 13.47 | | 0 |
| 64QAM | 1 | 0 | 13.89 | 13.84 | 13.83 | 13.58 | 13.46 | 0-2 | 0 |
| | 1 | 50 | 14.01 | 13.92 | 13.92 | 13.66 | 13.57 | | 0 |
| | 1 | 99 | 13.96 | 13.66 | 13.94 | 13.21 | 13.65 | | 0 |
| | 50 | 0 | 13.97 | 14.02 | 13.78 | 13.57 | 13.39 | 0-3 | 0 |
| | 50 | 25 | 14.04 | 13.96 | 13.80 | 13.53 | 13.46 | | 0 |
| | 50 | 50 | 14.03 | 13.87 | 13.79 | 13.38 | 13.43 | | 0 |
| | 100 | 0 | 14.04 | 13.90 | 13.79 | 13.48 | 13.47 | | 0 |

## Table 8-302
## LTE Band 41 Conducted Powers Ant 4a - 15 MHz Bandwidth

| LTE Band 41 15 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.15 | 14.04 | 14.07 | 13.82 | 13.60 | 0 | 0 |
| | 1 | 36 | 14.11 | 14.04 | 14.12 | 13.83 | 13.75 | | 0 |
| | 1 | 74 | 14.11 | 13.95 | 14.05 | 13.57 | 13.72 | | 0 |
| | 36 | 0 | 14.07 | 14.04 | 14.05 | 13.75 | 13.61 | 0-1 | 0 |
| | 36 | 18 | 14.06 | 14.02 | 14.07 | 13.77 | 13.72 | | 0 |
| | 36 | 37 | 14.08 | 13.99 | 14.05 | 13.60 | 13.71 | | 0 |
| | 75 | 0 | 14.02 | 14.01 | 14.04 | 13.74 | 13.69 | | 0 |
| 16QAM | 1 | 0 | 14.02 | 13.80 | 13.93 | 13.73 | 13.35 | 0-1 | 0 |
| | 1 | 36 | 14.07 | 14.04 | 13.88 | 13.55 | 13.70 | | 0 |
| | 1 | 74 | 13.96 | 13.82 | 13.90 | 13.42 | 13.56 | | 0 |
| | 36 | 0 | 14.09 | 14.04 | 14.07 | 13.80 | 13.65 | 0-2 | 0 |
| | 36 | 18 | 14.07 | 14.06 | 14.10 | 13.79 | 13.75 | | 0 |
| | 36 | 37 | 14.08 | 14.02 | 14.05 | 13.62 | 13.69 | | 0 |
| | 75 | 0 | 14.04 | 14.00 | 14.05 | 13.75 | 13.70 | | 0 |
| 64QAM | 1 | 0 | 14.06 | 13.93 | 13.96 | 13.77 | 13.55 | 0-2 | 0 |
| | 1 | 36 | 14.10 | 13.99 | 14.02 | 13.81 | 13.56 | | 0 |
| | 1 | 74 | 14.07 | 13.93 | 13.93 | 13.39 | 13.68 | | 0 |
| | 36 | 0 | 14.06 | 14.03 | 14.06 | 13.78 | 13.64 | 0-3 | 0 |
| | 36 | 18 | 14.04 | 14.02 | 14.08 | 13.76 | 13.71 | | 0 |
| | 36 | 37 | 14.06 | 13.99 | 14.07 | 13.63 | 13.69 | | 0 |
| | 75 | 0 | 14.01 | 14.03 | 14.05 | 13.73 | 13.68 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-303
## LTE Band 41 Conducted Powers Ant 4a - 10 MHz Bandwidth

| LTE Band 41 10 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.11 | 13.98 | 14.13 | 13.83 | 13.54 | 0 | 0 |
| | 1 | 25 | 14.09 | 14.04 | 14.10 | 13.56 | 13.57 | | 0 |
| | 1 | 49 | 14.14 | 14.01 | 14.14 | 13.45 | 13.64 | | 0 |
| | 25 | 0 | 14.10 | 14.00 | 14.04 | 13.54 | 13.56 | 0-1 | 0 |
| | 25 | 12 | 14.04 | 13.98 | 14.05 | 13.54 | 13.54 | | 0 |
| | 25 | 25 | 14.10 | 13.99 | 14.03 | 13.44 | 13.57 | | 0 |
| | 50 | 0 | 14.05 | 14.00 | 14.05 | 13.58 | 13.57 | | 0 |
| 16QAM | 1 | 0 | 14.15 | 13.99 | 13.87 | 13.64 | 13.47 | 0-1 | 0 |
| | 1 | 25 | 13.93 | 13.78 | 14.00 | 13.59 | 13.47 | | 0 |
| | 1 | 49 | 14.03 | 13.91 | 13.83 | 13.45 | 13.52 | | 0 |
| | 25 | 0 | 14.08 | 14.00 | 14.01 | 13.71 | 13.66 | 0-2 | 0 |
| | 25 | 12 | 14.04 | 13.98 | 14.03 | 13.71 | 13.63 | | 0 |
| | 25 | 25 | 14.08 | 13.99 | 13.96 | 13.57 | 13.63 | | 0 |
| | 50 | 0 | 14.04 | 13.99 | 14.05 | 13.73 | 13.69 | | 0 |
| 64QAM | 1 | 0 | 14.06 | 13.92 | 14.12 | 13.85 | 13.57 | 0-2 | 0 |
| | 1 | 25 | 13.97 | 13.98 | 13.87 | 13.57 | 13.63 | | 0 |
| | 1 | 49 | 14.10 | 13.88 | 14.06 | 13.59 | 13.66 | | 0 |
| | 25 | 0 | 14.11 | 13.96 | 14.03 | 13.79 | 13.67 | 0-3 | 0 |
| | 25 | 12 | 14.05 | 14.02 | 14.01 | 13.69 | 13.71 | | 0 |
| | 25 | 25 | 14.06 | 14.00 | 13.99 | 13.61 | 13.70 | | 0 |
| | 50 | 0 | 14.02 | 13.98 | 14.06 | 13.76 | 13.68 | | 0 |

## Table 8-304
## LTE Band 41 Conducted Powers Ant 4a - 5 MHz Bandwidth

| LTE Band 41 5 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.00 | 13.84 | 13.96 | 13.63 | 13.53 | 0 | 0 |
| | 1 | 12 | 13.95 | 13.93 | 13.91 | 13.61 | 13.59 | | 0 |
| | 1 | 24 | 14.03 | 13.95 | 13.94 | 13.49 | 13.61 | | 0 |
| | 12 | 0 | 13.88 | 13.86 | 13.87 | 13.57 | 13.51 | 0-1 | 0 |
| | 12 | 6 | 13.92 | 13.86 | 13.86 | 13.55 | 13.52 | | 0 |
| | 12 | 13 | 13.94 | 13.88 | 13.88 | 13.54 | 13.53 | | 0 |
| | 25 | 0 | 13.95 | 13.87 | 13.89 | 13.56 | 13.52 | | 0 |
| 16QAM | 1 | 0 | 13.96 | 13.94 | 14.00 | 13.59 | 13.67 | 0-1 | 0 |
| | 1 | 12 | 13.91 | 13.95 | 13.91 | 13.67 | 13.52 | | 0 |
| | 1 | 24 | 14.05 | 13.91 | 13.92 | 13.38 | 13.63 | | 0 |
| | 12 | 0 | 14.01 | 13.95 | 13.99 | 13.72 | 13.68 | 0-2 | 0 |
| | 12 | 6 | 14.01 | 13.96 | 13.99 | 13.70 | 13.60 | | 0 |
| | 12 | 13 | 13.98 | 13.91 | 13.98 | 13.69 | 13.59 | | 0 |
| | 25 | 0 | 14.01 | 13.94 | 13.96 | 13.70 | 13.67 | | 0 |
| 64QAM | 1 | 0 | 14.10 | 14.00 | 14.07 | 13.90 | 13.65 | 0-2 | 0 |
| | 1 | 12 | 14.02 | 13.90 | 13.91 | 13.97 | 13.74 | | 0 |
| | 1 | 24 | 14.08 | 14.06 | 14.08 | 13.63 | 13.77 | | 0 |
| | 12 | 0 | 14.05 | 14.03 | 13.95 | 13.78 | 13.63 | 0-3 | 0 |
| | 12 | 6 | 14.01 | 13.89 | 14.02 | 13.72 | 13.66 | | 0 |
| | 12 | 13 | 14.03 | 13.94 | 14.03 | 13.75 | 13.60 | | 0 |
| | 25 | 0 | 14.04 | 13.93 | 13.96 | 13.69 | 13.66 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-305
## LTE Band 41 Conducted Powers Ant 4b - 20 MHz Bandwidth

| LTE Band 41 20 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 15.81 | 15.81 | **15.90** | 15.59 | 15.84 | 0 | 0 |
| | 1 | 50 | 15.82 | 15.72 | 15.81 | 15.63 | 15.71 | | 0 |
| | 1 | 99 | 15.83 | 15.74 | 15.84 | 15.64 | 15.72 | | 0 |
| | 50 | 0 | 15.84 | 15.74 | **15.85** | 15.66 | 15.84 | 0-1 | 0 |
| | 50 | 25 | 15.82 | 15.71 | 15.83 | 15.68 | 15.73 | | 0 |
| | 50 | 50 | 15.80 | 15.65 | 15.81 | 15.72 | 15.76 | | 0 |
| | 100 | 0 | 15.81 | 15.66 | 15.83 | 15.69 | 15.71 | | 0 |
| 16QAM | 1 | 0 | 15.81 | 15.74 | 15.90 | 15.68 | 15.81 | 0-1 | 0 |
| | 1 | 50 | 15.83 | 15.55 | 15.88 | 15.69 | 15.49 | | 0 |
| | 1 | 99 | 15.90 | 15.54 | 15.87 | 15.77 | 15.73 | | 0 |
| | 50 | 0 | 15.84 | 15.70 | 15.80 | 15.61 | 15.82 | 0-2 | 0 |
| | 50 | 25 | 15.89 | 15.65 | 15.83 | 15.63 | 15.67 | | 0 |
| | 50 | 50 | 15.90 | 15.64 | 15.81 | 15.71 | 15.72 | | 0 |
| | 100 | 0 | 15.80 | 15.63 | 15.78 | 15.62 | 15.64 | | 0 |
| 64QAM | 1 | 0 | 15.87 | 15.88 | 15.71 | 15.54 | 15.90 | 0-2 | 0 |
| | 1 | 50 | 15.89 | 15.85 | 15.86 | 15.61 | 15.75 | | 0 |
| | 1 | 99 | 15.88 | 15.81 | 15.83 | 15.75 | 15.85 | | 0 |
| | 50 | 0 | 15.83 | 15.74 | 15.84 | 15.59 | 15.82 | 0-3 | 0 |
| | 50 | 25 | 15.89 | 15.70 | 15.86 | 15.61 | 15.67 | | 0 |
| | 50 | 50 | 15.88 | 15.66 | 15.81 | 15.68 | 15.72 | | 0 |
| | 100 | 0 | 15.86 | 15.68 | 15.84 | 15.62 | 15.69 | | 0 |

## Table 8-306
## LTE Band 41 Conducted Powers Ant 4b - 15 MHz Bandwidth

| LTE Band 41 15 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 15.90 | 15.64 | 15.77 | 15.69 | 15.73 | 0 | 0 |
| | 1 | 36 | 15.90 | 15.61 | 15.90 | 15.78 | 15.65 | | 0 |
| | 1 | 74 | 15.87 | 15.55 | 15.85 | 15.70 | 15.58 | | 0 |
| | 36 | 0 | 15.89 | 15.65 | 15.82 | 15.83 | 15.70 | 0-1 | 0 |
| | 36 | 18 | 15.86 | 15.60 | 15.89 | 15.87 | 15.60 | | 0 |
| | 36 | 37 | 15.81 | 15.55 | 15.84 | 15.82 | 15.56 | | 0 |
| | 75 | 0 | 15.83 | 15.58 | 15.86 | 15.79 | 15.59 | | 0 |
| 16QAM | 1 | 0 | 15.90 | 15.40 | 15.79 | 15.90 | 15.81 | 0-1 | 0 |
| | 1 | 36 | 15.88 | 15.52 | 15.90 | 15.89 | 15.75 | | 0 |
| | 1 | 74 | 15.85 | 15.37 | 15.90 | 15.88 | 15.64 | | 0 |
| | 36 | 0 | 15.89 | 15.68 | 15.86 | 15.80 | 15.68 | 0-2 | 0 |
| | 36 | 18 | 15.87 | 15.60 | 15.90 | 15.85 | 15.62 | | 0 |
| | 36 | 37 | 15.84 | 15.55 | 15.90 | 15.81 | 15.55 | | 0 |
| | 75 | 0 | 15.82 | 15.58 | 15.88 | 15.78 | 15.60 | | 0 |
| 64QAM | 1 | 0 | 15.88 | 15.73 | 15.61 | 15.82 | 15.66 | 0-2 | 0 |
| | 1 | 36 | 15.83 | 15.57 | 15.71 | 15.90 | 15.50 | | 0 |
| | 1 | 74 | 15.84 | 15.49 | 15.88 | 15.79 | 15.56 | | 0 |
| | 36 | 0 | 15.90 | 15.64 | 15.85 | 15.79 | 15.76 | 0-3 | 0 |
| | 36 | 18 | 15.88 | 15.61 | 15.90 | 15.80 | 15.62 | | 0 |
| | 36 | 37 | 15.82 | 15.54 | 15.88 | 15.80 | 15.58 | | 0 |
| | 75 | 0 | 15.82 | 15.59 | 15.87 | 15.78 | 15.58 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-307
## LTE Band 41 Conducted Powers Ant 4b - 10 MHz Bandwidth

| LTE Band 41 10 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 15.86 | 15.72 | 15.80 | 15.88 | 15.70 | 0 | 0 |
| | 1 | 25 | 15.87 | 15.57 | 15.78 | 15.90 | 15.55 | | 0 |
| | 1 | 49 | 15.84 | 15.60 | 15.77 | 15.90 | 15.59 | | 0 |
| | 25 | 0 | 15.90 | 15.58 | 15.87 | 15.84 | 15.65 | 0-1 | 0 |
| | 25 | 12 | 15.81 | 15.57 | 15.86 | 15.81 | 15.62 | | 0 |
| | 25 | 25 | 15.82 | 15.56 | 15.87 | 15.83 | 15.60 | | 0 |
| | 50 | 0 | 15.83 | 15.59 | 15.87 | 15.84 | 15.62 | | 0 |
| 16QAM | 1 | 0 | 15.90 | 15.61 | 15.85 | 15.79 | 15.78 | 0-1 | 0 |
| | 1 | 25 | 15.90 | 15.57 | 15.88 | 15.63 | 15.62 | | 0 |
| | 1 | 49 | 15.90 | 15.62 | 15.83 | 15.80 | 15.75 | | 0 |
| | 25 | 0 | 15.82 | 15.66 | 15.85 | 15.89 | 15.65 | 0-2 | 0 |
| | 25 | 12 | 15.83 | 15.62 | 15.84 | 15.84 | 15.64 | | 0 |
| | 25 | 25 | 15.85 | 15.56 | 15.90 | 15.87 | 15.58 | | 0 |
| | 50 | 0 | 15.87 | 15.63 | 15.87 | 15.86 | 15.65 | | 0 |
| 64QAM | 1 | 0 | 15.90 | 15.55 | 15.89 | 15.79 | 15.75 | 0-2 | 0 |
| | 1 | 25 | 15.90 | 15.54 | 15.84 | 15.87 | 15.62 | | 0 |
| | 1 | 49 | 15.88 | 15.41 | 15.90 | 15.68 | 15.57 | | 0 |
| | 25 | 0 | 15.90 | 15.58 | 15.88 | 15.82 | 15.62 | 0-3 | 0 |
| | 25 | 12 | 15.84 | 15.55 | 15.89 | 15.88 | 15.65 | | 0 |
| | 25 | 25 | 15.82 | 15.56 | 15.90 | 15.84 | 15.63 | | 0 |
| | 50 | 0 | 15.88 | 15.63 | 15.88 | 15.87 | 15.62 | | 0 |

## Table 8-308
## LTE Band 41 Conducted Powers Ant 4b - 5 MHz Bandwidth

| LTE Band 41 5 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 15.83 | 15.58 | 15.76 | 15.90 | 15.55 | 0 | 0 |
| | 1 | 12 | 15.85 | 15.53 | 15.73 | 15.87 | 15.50 | | 0 |
| | 1 | 24 | 15.86 | 15.56 | 15.78 | 15.88 | 15.52 | | 0 |
| | 12 | 0 | 15.89 | 15.56 | 15.82 | 15.76 | 15.62 | 0-1 | 0 |
| | 12 | 6 | 15.82 | 15.56 | 15.83 | 15.77 | 15.60 | | 0 |
| | 12 | 13 | 15.88 | 15.56 | 15.82 | 15.79 | 15.58 | | 0 |
| | 25 | 0 | 15.89 | 15.53 | 15.84 | 15.81 | 15.60 | | 0 |
| 16QAM | 1 | 0 | 15.90 | 15.71 | 15.85 | 15.83 | 15.56 | 0-1 | 0 |
| | 1 | 12 | 15.86 | 15.65 | 15.86 | 15.79 | 15.58 | | 0 |
| | 1 | 24 | 15.88 | 15.51 | 15.88 | 15.87 | 15.52 | | 0 |
| | 12 | 0 | 15.82 | 15.60 | 15.86 | 15.82 | 15.62 | 0-2 | 0 |
| | 12 | 6 | 15.84 | 15.54 | 15.86 | 15.79 | 15.59 | | 0 |
| | 12 | 13 | 15.86 | 15.56 | 15.87 | 15.85 | 15.57 | | 0 |
| | 25 | 0 | 15.81 | 15.54 | 15.83 | 15.83 | 15.62 | | 0 |
| 64QAM | 1 | 0 | 15.90 | 15.66 | 15.82 | 15.82 | 15.69 | 0-2 | 0 |
| | 1 | 12 | 15.82 | 15.68 | 15.90 | 15.77 | 15.78 | | 0 |
| | 1 | 24 | 15.86 | 15.61 | 15.85 | 15.88 | 15.88 | | 0 |
| | 12 | 0 | 15.90 | 15.59 | 15.85 | 15.82 | 15.60 | 0-3 | 0 |
| | 12 | 6 | 15.90 | 15.55 | 15.80 | 15.81 | 15.57 | | 0 |
| | 12 | 13 | 15.84 | 15.52 | 15.78 | 15.84 | 15.55 | | 0 |
| | 25 | 0 | 15.85 | 15.57 | 15.85 | 15.80 | 15.57 | | 0 |




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.14 LTE Band 41 PC2

### Table 8-309
### LTE Band 41 PC2 Conducted Powers Ant 2a - 20 MHz Bandwidth

| LTE Band 41 20 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | **14.12** | 13.80 | 13.87 | 13.75 | 14.00 | 0 | 0 |
| | 1 | 50 | 14.00 | 13.75 | 13.97 | 13.75 | 13.85 | | 0 |
| | 1 | 99 | 13.80 | 13.72 | 14.03 | 13.76 | 13.82 | | 0 |
| | 50 | 0 | **14.12** | 13.76 | 14.01 | 13.82 | 14.04 | 0-1 | 0 |
| | 50 | 25 | 13.98 | 13.79 | 14.05 | 13.84 | 13.93 | | 0 |
| | 50 | 50 | 13.96 | 13.81 | 14.02 | 13.83 | 13.88 | | 0 |
| | 100 | 0 | 13.91 | 13.77 | 14.00 | 13.83 | 13.90 | | 0 |
| 16QAM | 1 | 0 | 14.39 | 14.29 | 14.28 | 14.17 | 14.22 | 0-1 | 0 |
| | 1 | 50 | 14.38 | 14.18 | 14.37 | 14.19 | 14.06 | | 0 |
| | 1 | 99 | 14.26 | 14.18 | 14.35 | 14.20 | 14.07 | | 0 |
| | 50 | 0 | 14.37 | 14.09 | 14.14 | 13.75 | 13.83 | 0-2 | 0 |
| | 50 | 25 | 14.12 | 14.10 | 14.13 | 13.70 | 13.70 | | 0 |
| | 50 | 50 | 14.14 | 14.02 | 14.14 | 13.71 | 13.73 | | 0 |
| | 100 | 0 | 14.08 | 14.07 | 14.13 | 13.71 | 13.72 | | 0 |
| 64QAM | 1 | 0 | 14.40 | 14.21 | 14.13 | 14.17 | 14.22 | 0-2 | 0 |
| | 1 | 50 | 14.38 | 14.18 | 14.12 | 14.10 | 14.04 | | 0 |
| | 1 | 99 | 14.20 | 14.13 | 14.15 | 14.23 | 14.04 | | 0 |
| | 50 | 0 | 14.39 | 14.16 | 14.20 | 13.77 | 13.91 | 0-3 | 0 |
| | 50 | 25 | 14.11 | 14.13 | 14.17 | 13.76 | 13.80 | | 0 |
| | 50 | 50 | 14.16 | 14.09 | 14.16 | 13.75 | 13.81 | | 0 |
| | 100 | 0 | 14.07 | 14.10 | 14.17 | 13.76 | 13.79 | | 0 |

### Table 8-310
### LTE Band 41 PC2 Conducted Powers Ant 2a - 15 MHz Bandwidth

| LTE Band 41 15 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.28 | 13.70 | 13.77 | 13.79 | 13.78 | 0 | 0 |
| | 1 | 36 | 13.89 | 13.79 | 13.86 | 13.73 | 13.72 | | 0 |
| | 1 | 74 | 13.78 | 13.71 | 13.79 | 13.77 | 13.70 | | 0 |
| | 36 | 0 | 13.87 | 13.70 | 13.73 | 13.77 | 13.73 | 0-1 | 0 |
| | 36 | 18 | 13.80 | 13.74 | 13.77 | 13.79 | 13.70 | | 0 |
| | 36 | 37 | 13.78 | 13.78 | 13.75 | 13.78 | 13.75 | | 0 |
| | 75 | 0 | 13.70 | 13.71 | 13.76 | 13.77 | 13.70 | | 0 |
| 16QAM | 1 | 0 | 14.41 | 13.90 | 14.06 | 13.75 | 14.02 | 0-1 | 0 |
| | 1 | 36 | 14.12 | 13.89 | 14.19 | 13.74 | 13.82 | | 0 |
| | 1 | 74 | 14.07 | 13.71 | 14.09 | 13.73 | 13.75 | | 0 |
| | 36 | 0 | 14.05 | 13.96 | 14.02 | 13.73 | 13.93 | 0-2 | 0 |
| | 36 | 18 | 13.98 | 14.06 | 14.10 | 13.73 | 13.85 | | 0 |
| | 36 | 37 | 13.98 | 13.97 | 14.03 | 13.75 | 13.78 | | 0 |
| | 75 | 0 | 13.94 | 13.98 | 14.04 | 13.74 | 13.81 | | 0 |
| 64QAM | 1 | 0 | 14.25 | 13.83 | 14.04 | 13.70 | 13.88 | 0-2 | 0 |
| | 1 | 36 | 14.10 | 13.92 | 14.14 | 13.85 | 13.90 | | 0 |
| | 1 | 74 | 14.03 | 13.70 | 14.09 | 13.70 | 13.81 | | 0 |
| | 36 | 0 | 14.04 | 13.98 | 14.05 | 13.73 | 13.93 | 0-3 | 0 |
| | 36 | 18 | 13.99 | 14.02 | 14.07 | 13.74 | 13.87 | | 0 |
| | 36 | 37 | 13.97 | 13.94 | 14.04 | 13.76 | 13.75 | | 0 |
| | 75 | 0 | 13.92 | 14.02 | 14.05 | 13.74 | 13.83 | | 0 |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-311
## LTE Band 41 PC2 Conducted Powers Ant 2a - 10 MHz Bandwidth

| LTE Band 41 10 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.00 | 13.73 | 13.88 | 13.75 | 13.71 | 0 | 0 |
| | 1 | 25 | 13.72 | 13.77 | 13.84 | 13.74 | 13.76 | | 0 |
| | 1 | 49 | 13.78 | 13.76 | 13.87 | 13.74 | 13.78 | | 0 |
| | 25 | 0 | 13.71 | 13.73 | 13.73 | 13.79 | 13.74 | 0-1 | 0 |
| | 25 | 12 | 13.77 | 13.71 | 13.73 | 13.77 | 13.70 | | 0 |
| | 25 | 25 | 13.76 | 13.70 | 13.75 | 13.78 | 13.74 | | 0 |
| | 50 | 0 | 13.71 | 13.73 | 13.75 | 13.78 | 13.73 | | 0 |
| 16QAM | 1 | 0 | 14.26 | 13.82 | 14.14 | 13.79 | 14.03 | 0-1 | 0 |
| | 1 | 25 | 14.07 | 13.80 | 14.07 | 13.84 | 13.90 | | 0 |
| | 1 | 49 | 14.11 | 13.77 | 14.14 | 13.71 | 13.88 | | 0 |
| | 25 | 0 | 13.76 | 13.83 | 13.87 | 13.75 | 13.90 | 0-2 | 0 |
| | 25 | 12 | 13.79 | 13.83 | 13.82 | 13.71 | 13.81 | | 0 |
| | 25 | 25 | 13.84 | 13.77 | 13.85 | 13.71 | 13.83 | | 0 |
| | 50 | 0 | 13.79 | 13.83 | 13.81 | 13.73 | 13.86 | | 0 |
| 64QAM | 1 | 0 | 14.42 | 13.96 | 14.18 | 13.74 | 14.06 | 0-2 | 0 |
| | 1 | 25 | 14.00 | 13.90 | 14.17 | 13.74 | 13.82 | | 0 |
| | 1 | 49 | 14.10 | 13.89 | 14.19 | 13.76 | 13.89 | | 0 |
| | 25 | 0 | 13.74 | 13.86 | 13.90 | 13.72 | 13.88 | 0-3 | 0 |
| | 25 | 12 | 13.80 | 13.86 | 13.90 | 13.73 | 13.82 | | 0 |
| | 25 | 25 | 13.83 | 13.77 | 13.86 | 13.78 | 13.83 | | 0 |
| | 50 | 0 | 13.75 | 13.83 | 13.89 | 13.76 | 13.84 | | 0 |

## Table 8-312
## LTE Band 41 PC2 Conducted Powers Ant 2a - 5 MHz Bandwidth

| LTE Band 41 5 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.00 | 13.90 | 13.98 | 13.70 | 13.73 | 0 | 0 |
| | 1 | 12 | 13.99 | 13.97 | 13.99 | 13.71 | 13.73 | | 0 |
| | 1 | 24 | 14.02 | 13.93 | 14.10 | 13.72 | 13.83 | | 0 |
| | 12 | 0 | 13.87 | 13.90 | 13.94 | 13.74 | 13.70 | 0-1 | 0 |
| | 12 | 6 | 13.93 | 13.89 | 13.93 | 13.70 | 13.72 | | 0 |
| | 12 | 13 | 13.92 | 13.82 | 13.92 | 13.78 | 13.75 | | 0 |
| | 25 | 0 | 13.87 | 13.88 | 13.90 | 13.77 | 13.70 | | 0 |
| 16QAM | 1 | 0 | 13.98 | 13.71 | 13.94 | 13.70 | 13.70 | 0-1 | 0 |
| | 1 | 12 | 14.11 | 13.90 | 13.97 | 13.76 | 13.91 | | 0 |
| | 1 | 24 | 14.07 | 13.82 | 14.03 | 13.74 | 13.90 | | 0 |
| | 12 | 0 | 13.91 | 13.97 | 14.03 | 13.73 | 13.86 | 0-2 | 0 |
| | 12 | 6 | 13.97 | 14.01 | 13.99 | 13.70 | 13.78 | | 0 |
| | 12 | 13 | 13.96 | 13.93 | 14.06 | 13.78 | 13.82 | | 0 |
| | 25 | 0 | 13.93 | 13.99 | 14.01 | 13.74 | 13.82 | | 0 |
| 64QAM | 1 | 0 | 13.97 | 13.91 | 14.04 | 13.72 | 13.86 | 0-2 | 0 |
| | 1 | 12 | 14.12 | 13.76 | 14.06 | 13.74 | 13.92 | | 0 |
| | 1 | 24 | 14.09 | 13.81 | 14.11 | 13.75 | 13.82 | | 0 |
| | 12 | 0 | 13.94 | 14.01 | 14.05 | 13.75 | 13.85 | 0-3 | 0 |
| | 12 | 6 | 13.96 | 13.99 | 14.02 | 13.74 | 13.75 | | 0 |
| | 12 | 13 | 13.99 | 13.92 | 14.03 | 13.79 | 13.86 | | 0 |
| | 25 | 0 | 13.96 | 14.02 | 13.99 | 13.71 | 13.79 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-313
## LTE Band 41 PC2 Conducted Powers Ant 2b - 20 MHz Bandwidth

| LTE Band 41 20 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.02 | 13.90 | 14.00 | 13.54 | 13.75 | 0 | 0 |
| | 1 | 50 | 14.04 | 13.87 | **14.05** | 13.46 | 13.66 | | 0 |
| | 1 | 99 | 13.94 | 13.62 | 13.95 | 13.51 | 13.72 | | 0 |
| | 50 | 0 | 14.04 | 13.95 | 14.03 | 13.55 | 13.80 | 0-1 | 0 |
| | 50 | 25 | 14.07 | 13.90 | 14.05 | 13.50 | 13.71 | | 0 |
| | 50 | 50 | 14.06 | 13.88 | **14.08** | 13.54 | 13.72 | | 0 |
| | 100 | 0 | 14.03 | 13.87 | 14.04 | 13.49 | 13.70 | | 0 |
| 16QAM | 1 | 0 | 14.03 | 13.81 | 13.97 | 13.66 | 14.10 | 0-1 | 0 |
| | 1 | 50 | 14.00 | 13.84 | 14.00 | 13.60 | 13.95 | | 0 |
| | 1 | 99 | 13.90 | 13.60 | 14.03 | 13.50 | 14.05 | | 0 |
| | 50 | 0 | 13.60 | 13.40 | 13.63 | 13.30 | 13.66 | 0-2 | 0 |
| | 50 | 25 | 13.57 | 13.41 | 13.58 | 13.21 | 13.56 | | 0 |
| | 50 | 50 | 13.51 | 13.29 | 13.61 | 13.22 | 13.55 | | 0 |
| | 100 | 0 | 13.53 | 13.35 | 13.60 | 13.20 | 13.46 | | 0 |
| 64QAM | 1 | 0 | 14.14 | 13.85 | 14.01 | 13.64 | 13.80 | 0-2 | 0 |
| | 1 | 50 | 14.13 | 13.81 | 14.09 | 13.61 | 13.80 | | 0 |
| | 1 | 99 | 14.00 | 13.62 | 14.03 | 13.52 | 13.75 | | 0 |
| | 50 | 0 | 13.65 | 13.40 | 13.60 | 13.23 | 13.40 | 0-3 | 0 |
| | 50 | 25 | 13.59 | 13.42 | 13.60 | 13.21 | 13.30 | | 0 |
| | 50 | 50 | 13.59 | 13.30 | 13.57 | 13.20 | 13.24 | | 0 |
| | 100 | 0 | 13.55 | 13.34 | 13.56 | 13.21 | 13.22 | | 0 |

## Table 8-314
## LTE Band 41 PC2 Conducted Powers Ant 2b - 15 MHz Bandwidth

| LTE Band 41 15 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.02 | 13.67 | 13.75 | 13.34 | 13.53 | 0 | 0 |
| | 1 | 36 | 13.95 | 13.67 | 13.86 | 13.38 | 13.45 | | 0 |
| | 1 | 74 | 13.84 | 13.46 | 13.80 | 13.34 | 13.49 | | 0 |
| | 36 | 0 | 13.91 | 13.75 | 13.75 | 13.38 | 13.42 | 0-1 | 0 |
| | 36 | 18 | 13.89 | 13.73 | 13.81 | 13.44 | 13.41 | | 0 |
| | 36 | 37 | 13.90 | 13.63 | 13.81 | 13.44 | 13.43 | | 0 |
| | 75 | 0 | 13.87 | 13.69 | 13.79 | 13.41 | 13.38 | | 0 |
| 16QAM | 1 | 0 | 14.12 | 14.07 | 13.84 | 13.66 | 13.55 | 0-1 | 0 |
| | 1 | 36 | 14.01 | 13.93 | 13.94 | 13.65 | 13.56 | | 0 |
| | 1 | 74 | 13.80 | 13.80 | 13.89 | 13.56 | 13.55 | | 0 |
| | 36 | 0 | 13.96 | 13.79 | 13.75 | 13.46 | 13.44 | 0-2 | 0 |
| | 36 | 18 | 13.91 | 13.72 | 13.87 | 13.46 | 13.44 | | 0 |
| | 36 | 37 | 13.90 | 13.65 | 13.83 | 13.49 | 13.44 | | 0 |
| | 75 | 0 | 13.88 | 13.69 | 13.83 | 13.45 | 13.41 | | 0 |
| 64QAM | 1 | 0 | 14.16 | 14.01 | 13.90 | 13.38 | 13.70 | 0-2 | 0 |
| | 1 | 36 | 14.00 | 14.00 | 14.04 | 13.52 | 13.61 | | 0 |
| | 1 | 74 | 14.06 | 13.77 | 13.91 | 13.57 | 13.51 | | 0 |
| | 36 | 0 | 13.89 | 13.80 | 13.79 | 13.45 | 13.41 | 0-3 | 0 |
| | 36 | 18 | 13.88 | 13.72 | 13.83 | 13.46 | 13.44 | | 0 |
| | 36 | 37 | 13.91 | 13.62 | 13.79 | 13.50 | 13.45 | | 0 |
| | 75 | 0 | 13.87 | 13.67 | 13.79 | 13.43 | 13.39 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-315
## LTE Band 41 PC2 Conducted Powers Ant 2b - 10 MHz Bandwidth

| LTE Band 41 10 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 13.93 | 13.71 | 13.70 | 13.50 | 13.36 | 0 | 0 |
| | 1 | 25 | 13.80 | 13.59 | 13.71 | 13.47 | 13.33 | | 0 |
| | 1 | 49 | 13.85 | 13.57 | 13.75 | 13.52 | 13.34 | | 0 |
| | 25 | 0 | 13.89 | 13.68 | 13.72 | 13.38 | 13.32 | 0-1 | 0 |
| | 25 | 12 | 13.86 | 13.65 | 13.76 | 13.36 | 13.35 | | 0 |
| | 25 | 25 | 13.85 | 13.62 | 13.79 | 13.45 | 13.39 | | 0 |
| | 50 | 0 | 13.84 | 13.68 | 13.74 | 13.38 | 13.36 | | 0 |
| 16QAM | 1 | 0 | 14.18 | 13.88 | 14.07 | 13.51 | 13.66 | 0-1 | 0 |
| | 1 | 25 | 14.08 | 14.03 | 14.01 | 13.38 | 13.54 | | 0 |
| | 1 | 49 | 14.11 | 13.71 | 14.04 | 13.78 | 13.77 | | 0 |
| | 25 | 0 | 13.87 | 13.74 | 13.79 | 13.44 | 13.34 | 0-2 | 0 |
| | 25 | 12 | 13.85 | 13.71 | 13.79 | 13.37 | 13.36 | | 0 |
| | 25 | 25 | 13.89 | 13.64 | 13.80 | 13.46 | 13.39 | | 0 |
| | 50 | 0 | 13.85 | 13.68 | 13.77 | 13.38 | 13.35 | | 0 |
| 64QAM | 1 | 0 | 14.14 | 13.73 | 14.05 | 13.48 | 13.72 | 0-2 | 0 |
| | 1 | 25 | 14.16 | 13.70 | 13.93 | 13.89 | 13.53 | | 0 |
| | 1 | 49 | 14.13 | 13.65 | 14.04 | 13.60 | 13.57 | | 0 |
| | 25 | 0 | 13.93 | 13.69 | 13.76 | 13.43 | 13.36 | 0-3 | 0 |
| | 25 | 12 | 13.85 | 13.63 | 13.76 | 13.39 | 13.36 | | 0 |
| | 25 | 25 | 13.86 | 13.60 | 13.79 | 13.52 | 13.42 | | 0 |
| | 50 | 0 | 13.87 | 13.65 | 13.74 | 13.39 | 13.36 | | 0 |

## Table 8-316
## LTE Band 41 PC2 Conducted Powers Ant 2b - 5 MHz Bandwidth

| LTE Band 41 5 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.03 | 13.63 | 13.83 | 13.45 | 13.45 | 0 | 0 |
| | 1 | 12 | 13.98 | 13.60 | 13.83 | 13.41 | 13.42 | | 0 |
| | 1 | 24 | 14.01 | 13.57 | 13.88 | 13.54 | 13.47 | | 0 |
| | 12 | 0 | 13.81 | 13.62 | 13.71 | 13.40 | 13.29 | 0-1 | 0 |
| | 12 | 6 | 13.81 | 13.61 | 13.69 | 13.38 | 13.30 | | 0 |
| | 12 | 13 | 13.83 | 13.60 | 13.74 | 13.37 | 13.28 | | 0 |
| | 25 | 0 | 13.83 | 13.62 | 13.71 | 13.39 | 13.31 | | 0 |
| 16QAM | 1 | 0 | 14.07 | 13.81 | 13.89 | 13.62 | 13.44 | 0-1 | 0 |
| | 1 | 12 | 14.06 | 13.84 | 13.88 | 13.57 | 13.51 | | 0 |
| | 1 | 24 | 14.05 | 13.78 | 14.01 | 13.82 | 13.63 | | 0 |
| | 12 | 0 | 13.88 | 13.70 | 13.73 | 13.41 | 13.38 | 0-2 | 0 |
| | 12 | 6 | 13.89 | 13.68 | 13.78 | 13.40 | 13.35 | | 0 |
| | 12 | 13 | 13.89 | 13.64 | 13.81 | 13.41 | 13.32 | | 0 |
| | 25 | 0 | 13.83 | 13.63 | 13.75 | 13.37 | 13.33 | | 0 |
| 64QAM | 1 | 0 | 14.16 | 13.98 | 13.98 | 13.67 | 13.55 | 0-2 | 0 |
| | 1 | 12 | 14.09 | 13.87 | 13.82 | 13.65 | 13.55 | | 0 |
| | 1 | 24 | 14.10 | 13.86 | 14.05 | 13.65 | 13.56 | | 0 |
| | 12 | 0 | 13.81 | 13.64 | 13.75 | 13.39 | 13.29 | 0-3 | 0 |
| | 12 | 6 | 13.86 | 13.61 | 13.70 | 13.40 | 13.35 | | 0 |
| | 12 | 13 | 13.88 | 13.60 | 13.79 | 13.41 | 13.33 | | 0 |
| | 25 | 0 | 13.80 | 13.67 | 13.73 | 13.40 | 13.35 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-317
## LTE Band 41 PC2 Conducted Powers Ant 4a - 20 MHz Bandwidth

| LTE Band 41 20 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 13.80 | 14.03 | 13.85 | 13.65 | 13.37 | 0 | 0 |
| | 1 | 50 | **14.11** | 13.94 | 13.96 | 13.49 | 13.51 | | 0 |
| | 1 | 99 | 14.02 | 13.82 | 14.00 | 13.22 | 13.49 | | 0 |
| | 50 | 0 | 14.00 | **14.10** | 13.79 | 13.61 | 13.46 | 0-1 | 0 |
| | 50 | 25 | 14.08 | 13.97 | 13.85 | 13.55 | 13.54 | | 0 |
| | 50 | 50 | 14.07 | 13.88 | 13.82 | 13.39 | 13.50 | | 0 |
| | 100 | 0 | 14.04 | 13.94 | 13.81 | 13.51 | 13.52 | | 0 |
| 16QAM | 1 | 0 | 14.13 | 14.20 | 14.04 | 14.09 | 13.61 | 0-1 | 0 |
| | 1 | 50 | 14.20 | 14.13 | 14.12 | 13.85 | 13.92 | | 0 |
| | 1 | 99 | 14.18 | 14.08 | 14.17 | 13.53 | 13.87 | | 0 |
| | 50 | 0 | 13.85 | 13.78 | 13.56 | 13.32 | 13.23 | 0-2 | 0 |
| | 50 | 25 | 13.95 | 13.77 | 13.57 | 13.21 | 13.31 | | 0 |
| | 50 | 50 | 13.85 | 13.61 | 13.61 | 13.28 | 13.29 | | 0 |
| | 100 | 0 | 13.91 | 13.72 | 13.56 | 13.31 | 13.27 | | 0 |
| 64QAM | 1 | 0 | 14.17 | 14.14 | 13.85 | 13.82 | 13.72 | 0-2 | 0 |
| | 1 | 50 | 14.20 | 14.19 | 13.97 | 13.67 | 13.95 | | 0 |
| | 1 | 99 | 14.19 | 14.02 | 14.00 | 13.31 | 13.89 | | 0 |
| | 50 | 0 | 13.81 | 13.83 | 13.57 | 13.43 | 13.22 | 0-3 | 0 |
| | 50 | 25 | 13.93 | 13.75 | 13.59 | 13.36 | 13.29 | | 0 |
| | 50 | 50 | 13.85 | 13.65 | 13.61 | 13.20 | 13.32 | | 0 |
| | 100 | 0 | 13.88 | 13.70 | 13.60 | 13.29 | 13.29 | | 0 |

## Table 8-318
## LTE Band 41 PC2 Conducted Powers Ant 4a - 15 MHz Bandwidth

| LTE Band 41 15 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.09 | 14.01 | 13.98 | 13.70 | 13.50 | 0 | 0 |
| | 1 | 36 | 14.03 | 14.01 | 13.93 | 13.72 | 13.67 | | 0 |
| | 1 | 74 | 14.04 | 13.92 | 13.84 | 13.47 | 13.64 | | 0 |
| | 36 | 0 | 14.01 | 13.95 | 13.86 | 13.66 | 13.54 | 0-1 | 0 |
| | 36 | 18 | 13.97 | 13.94 | 13.86 | 13.65 | 13.62 | | 0 |
| | 36 | 37 | 13.97 | 13.86 | 13.88 | 13.53 | 13.60 | | 0 |
| | 75 | 0 | 13.96 | 13.89 | 13.89 | 13.64 | 13.60 | | 0 |
| 16QAM | 1 | 0 | 13.68 | 13.97 | 13.34 | 13.46 | 13.30 | 0-1 | 0 |
| | 1 | 36 | 13.89 | 13.93 | 13.50 | 13.29 | 13.30 | | 0 |
| | 1 | 74 | 13.51 | 13.68 | 13.35 | 13.20 | 13.30 | | 0 |
| | 36 | 0 | 13.94 | 13.79 | 13.58 | 13.46 | 13.31 | 0-2 | 0 |
| | 36 | 18 | 13.95 | 13.77 | 13.61 | 13.44 | 13.36 | | 0 |
| | 36 | 37 | 13.83 | 13.64 | 13.61 | 13.27 | 13.29 | | 0 |
| | 75 | 0 | 13.89 | 13.74 | 13.60 | 13.40 | 13.34 | | 0 |
| 64QAM | 1 | 0 | 13.76 | 13.66 | 13.51 | 13.26 | 13.20 | 0-2 | 0 |
| | 1 | 36 | 14.00 | 13.59 | 13.60 | 13.42 | 13.41 | | 0 |
| | 1 | 74 | 13.75 | 13.46 | 13.48 | 13.21 | 13.20 | | 0 |
| | 36 | 0 | 13.89 | 13.78 | 13.58 | 13.45 | 13.25 | 0-3 | 0 |
| | 36 | 18 | 13.93 | 13.87 | 13.58 | 13.42 | 13.33 | | 0 |
| | 36 | 37 | 13.84 | 13.63 | 13.57 | 13.28 | 13.28 | | 0 |
| | 75 | 0 | 13.89 | 13.80 | 13.58 | 13.47 | 13.32 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-319
## LTE Band 41 PC2 Conducted Powers Ant 4a - 10 MHz Bandwidth

| LTE Band 41 10 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.14 | 13.89 | 14.07 | 13.78 | 13.60 | 0 | 0 |
| | 1 | 25 | 13.99 | 13.90 | 14.03 | 13.69 | 13.64 | | 0 |
| | 1 | 49 | 14.06 | 13.91 | 14.05 | 13.58 | 13.69 | | 0 |
| | 25 | 0 | 14.01 | 13.91 | 13.97 | 13.66 | 13.59 | 0-1 | 0 |
| | 25 | 12 | 13.98 | 13.90 | 13.93 | 13.63 | 13.60 | | 0 |
| | 25 | 25 | 14.00 | 13.91 | 13.94 | 13.52 | 13.61 | | 0 |
| | 50 | 0 | 13.95 | 13.91 | 13.96 | 13.65 | 13.61 | | 0 |
| 16QAM | 1 | 0 | 13.41 | 13.29 | 14.12 | 13.69 | 13.98 | 0-1 | 0 |
| | 1 | 25 | 13.45 | 13.33 | 13.55 | 13.90 | 13.94 | | 0 |
| | 1 | 49 | 13.21 | 13.27 | 13.58 | 13.52 | 13.69 | | 0 |
| | 25 | 0 | 13.36 | 13.26 | 13.54 | 13.75 | 13.70 | 0-2 | 0 |
| | 25 | 12 | 13.36 | 13.24 | 13.55 | 13.69 | 13.78 | | 0 |
| | 25 | 25 | 13.35 | 13.23 | 13.59 | 13.64 | 13.65 | | 0 |
| | 50 | 0 | 13.36 | 13.24 | 13.54 | 13.70 | 13.75 | | 0 |
| 64QAM | 1 | 0 | 13.42 | 13.33 | 13.83 | 13.77 | 13.67 | 0-2 | 0 |
| | 1 | 25 | 13.33 | 13.40 | 13.95 | 14.01 | 13.60 | | 0 |
| | 1 | 49 | 13.23 | 13.35 | 13.98 | 13.76 | 13.47 | | 0 |
| | 25 | 0 | 13.38 | 13.25 | 13.55 | 13.90 | 13.59 | 0-3 | 0 |
| | 25 | 12 | 13.37 | 13.27 | 13.57 | 13.74 | 13.68 | | 0 |
| | 25 | 25 | 13.36 | 13.27 | 13.59 | 13.65 | 13.64 | | 0 |
| | 50 | 0 | 13.42 | 13.23 | 13.58 | 13.70 | 13.61 | | 0 |

## Table 8-320
## LTE Band 41 PC2 Conducted Powers Ant 4a - 5 MHz Bandwidth

| LTE Band 41 5 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 14.03 | 13.88 | 14.06 | 13.62 | 13.60 | 0 | 0 |
| | 1 | 12 | 14.00 | 13.89 | 14.01 | 13.57 | 13.60 | | 0 |
| | 1 | 24 | 14.00 | 13.87 | 14.01 | 13.46 | 13.59 | | 0 |
| | 12 | 0 | 13.91 | 13.85 | 13.94 | 13.61 | 13.54 | 0-1 | 0 |
| | 12 | 6 | 13.93 | 13.85 | 13.92 | 13.60 | 13.53 | | 0 |
| | 12 | 13 | 13.94 | 13.84 | 13.94 | 13.59 | 13.55 | | 0 |
| | 25 | 0 | 13.95 | 13.86 | 13.97 | 13.63 | 13.55 | | 0 |
| 16QAM | 1 | 0 | 13.97 | 13.90 | 13.60 | 13.43 | 13.31 | 0-1 | 0 |
| | 1 | 12 | 13.79 | 13.81 | 13.47 | 13.47 | 13.35 | | 0 |
| | 1 | 24 | 13.71 | 13.68 | 13.61 | 13.23 | 13.29 | | 0 |
| | 12 | 0 | 13.84 | 13.71 | 13.52 | 13.38 | 13.28 | 0-2 | 0 |
| | 12 | 6 | 13.81 | 13.74 | 13.51 | 13.38 | 13.26 | | 0 |
| | 12 | 13 | 13.86 | 13.66 | 13.45 | 13.37 | 13.25 | | 0 |
| | 25 | 0 | 13.90 | 13.73 | 13.49 | 13.38 | 13.26 | | 0 |
| 64QAM | 1 | 0 | 14.04 | 13.65 | 13.64 | 13.44 | 13.35 | 0-2 | 0 |
| | 1 | 12 | 13.87 | 13.64 | 13.62 | 13.35 | 13.42 | | 0 |
| | 1 | 24 | 13.87 | 13.48 | 13.58 | 13.21 | 13.37 | | 0 |
| | 12 | 0 | 13.83 | 13.66 | 13.49 | 13.40 | 13.27 | 0-3 | 0 |
| | 12 | 6 | 13.86 | 13.72 | 13.49 | 13.39 | 13.29 | | 0 |
| | 12 | 13 | 13.80 | 13.71 | 13.47 | 13.38 | 13.29 | | 0 |
| | 25 | 0 | 13.88 | 13.73 | 13.54 | 13.44 | 13.21 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-321
## LTE Band 41 PC2 Conducted Powers Ant 4b - 20 MHz Bandwidth

| LTE Band 41 20 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 15.59 | 15.72 | **15.75** | 15.41 | 15.68 | 0 | 0 |
| | 1 | 50 | 15.68 | 15.63 | 15.66 | 15.43 | 15.53 | | 0 |
| | 1 | 99 | 15.66 | 15.66 | 15.67 | 15.52 | 15.55 | | 0 |
| | 50 | 0 | 15.63 | 15.57 | **15.71** | 15.44 | 15.70 | 0-1 | 0 |
| | 50 | 25 | 15.68 | 15.52 | 15.67 | 15.48 | 15.56 | | 0 |
| | 50 | 50 | 15.70 | 15.50 | 15.67 | 15.55 | 15.60 | | 0 |
| | 100 | 0 | 15.64 | 15.49 | 15.64 | 15.46 | 15.58 | | 0 |
| 16QAM | 1 | 0 | 15.89 | 15.81 | 15.90 | 15.76 | 15.83 | 0-1 | 0 |
| | 1 | 50 | 15.85 | 15.71 | 15.90 | 15.71 | 15.82 | | 0 |
| | 1 | 99 | 15.86 | 15.86 | 15.87 | 15.88 | 15.80 | | 0 |
| | 50 | 0 | 15.41 | 15.34 | 15.49 | 15.21 | 15.49 | 0-2 | 0 |
| | 50 | 25 | 15.47 | 15.31 | 15.51 | 15.30 | 15.38 | | 0 |
| | 50 | 50 | 15.47 | 15.27 | 15.41 | 15.33 | 15.38 | | 0 |
| | 100 | 0 | 15.45 | 15.26 | 15.45 | 15.21 | 15.35 | | 0 |
| 64QAM | 1 | 0 | 15.84 | 15.74 | 15.90 | 15.78 | 15.74 | 0-2 | 0 |
| | 1 | 50 | 15.88 | 15.61 | 15.87 | 15.85 | 15.83 | | 0 |
| | 1 | 99 | 15.83 | 15.58 | 15.75 | 15.86 | 15.69 | | 0 |
| | 50 | 0 | 15.40 | 15.27 | 15.42 | 15.20 | 15.43 | 0-3 | 0 |
| | 50 | 25 | 15.45 | 15.23 | 15.40 | 15.21 | 15.27 | | 0 |
| | 50 | 50 | 15.46 | 15.20 | 15.36 | 15.28 | 15.30 | | 0 |
| | 100 | 0 | 15.45 | 15.23 | 15.41 | 15.19 | 15.32 | | 0 |

## Table 8-322
## LTE Band 41 PC2 Conducted Powers Ant 4b - 15 MHz Bandwidth

| LTE Band 41 15 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 15.82 | 15.70 | 15.74 | 15.73 | 15.66 | 0 | 0 |
| | 1 | 36 | 15.85 | 15.64 | 15.83 | 15.81 | 15.59 | | 0 |
| | 1 | 74 | 15.80 | 15.56 | 15.78 | 15.75 | 15.54 | | 0 |
| | 36 | 0 | 15.87 | 15.63 | 15.80 | 15.81 | 15.73 | 0-1 | 0 |
| | 36 | 18 | 15.83 | 15.59 | 15.86 | 15.84 | 15.65 | | 0 |
| | 36 | 37 | 15.82 | 15.53 | 15.86 | 15.83 | 15.60 | | 0 |
| | 75 | 0 | 15.83 | 15.55 | 15.84 | 15.83 | 15.63 | | 0 |
| 16QAM | 1 | 0 | 15.85 | 15.47 | 15.72 | 15.85 | 15.76 | 0-1 | 0 |
| | 1 | 36 | 15.86 | 15.40 | 15.82 | 15.89 | 15.66 | | 0 |
| | 1 | 74 | 15.90 | 15.48 | 15.87 | 15.81 | 15.60 | | 0 |
| | 36 | 0 | 15.77 | 15.39 | 15.61 | 15.57 | 15.49 | 0-2 | 0 |
| | 36 | 18 | 15.76 | 15.37 | 15.67 | 15.63 | 15.41 | | 0 |
| | 36 | 37 | 15.71 | 15.29 | 15.66 | 15.61 | 15.39 | | 0 |
| | 75 | 0 | 15.65 | 15.30 | 15.63 | 15.58 | 15.40 | | 0 |
| 64QAM | 1 | 0 | 15.81 | 15.45 | 15.58 | 15.72 | 15.51 | 0-2 | 0 |
| | 1 | 36 | 15.81 | 15.53 | 15.68 | 15.89 | 15.50 | | 0 |
| | 1 | 74 | 15.85 | 15.35 | 15.67 | 15.81 | 15.46 | | 0 |
| | 36 | 0 | 15.79 | 15.42 | 15.63 | 15.54 | 15.50 | 0-3 | 0 |
| | 36 | 18 | 15.74 | 15.35 | 15.69 | 15.58 | 15.43 | | 0 |
| | 36 | 37 | 15.74 | 15.27 | 15.67 | 15.60 | 15.38 | | 0 |
| | 75 | 0 | 15.71 | 15.30 | 15.64 | 15.58 | 15.39 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-323
## LTE Band 41 PC2 Conducted Powers Ant 4b - 10 MHz Bandwidth

| LTE Band 41 10 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 15.89 | 15.77 | 15.80 | 15.81 | 15.71 | 0 | 0 |
| | 1 | 25 | 15.87 | 15.66 | 15.81 | 15.81 | 15.54 | | 0 |
| | 1 | 49 | 15.89 | 15.66 | 15.82 | 15.81 | 15.63 | | 0 |
| | 25 | 0 | 15.89 | 15.56 | 15.84 | 15.81 | 15.65 | 0-1 | 0 |
| | 25 | 12 | 15.90 | 15.54 | 15.83 | 15.79 | 15.61 | | 0 |
| | 25 | 25 | 15.87 | 15.53 | 15.85 | 15.80 | 15.59 | | 0 |
| | 50 | 0 | 15.90 | 15.56 | 15.85 | 15.81 | 15.63 | | 0 |
| 16QAM | 1 | 0 | 15.90 | 15.67 | 15.86 | 15.67 | 15.79 | 0-1 | 0 |
| | 1 | 25 | 15.83 | 15.59 | 15.87 | 15.64 | 15.62 | | 0 |
| | 1 | 49 | 15.87 | 15.57 | 15.82 | 15.77 | 15.65 | | 0 |
| | 25 | 0 | 15.86 | 15.32 | 15.58 | 15.62 | 15.35 | 0-2 | 0 |
| | 25 | 12 | 15.71 | 15.25 | 15.62 | 15.58 | 15.37 | | 0 |
| | 25 | 25 | 15.69 | 15.24 | 15.64 | 15.60 | 15.32 | | 0 |
| | 50 | 0 | 15.71 | 15.36 | 15.65 | 15.63 | 15.39 | | 0 |
| 64QAM | 1 | 0 | 15.90 | 15.61 | 15.90 | 15.86 | 15.62 | 0-2 | 0 |
| | 1 | 25 | 15.90 | 15.42 | 15.89 | 15.90 | 15.71 | | 0 |
| | 1 | 49 | 15.88 | 15.41 | 15.90 | 15.82 | 15.85 | | 0 |
| | 25 | 0 | 15.80 | 15.31 | 15.67 | 15.61 | 15.44 | 0-3 | 0 |
| | 25 | 12 | 15.77 | 15.32 | 15.66 | 15.62 | 15.39 | | 0 |
| | 25 | 25 | 15.72 | 15.29 | 15.66 | 15.63 | 15.38 | | 0 |
| | 50 | 0 | 15.68 | 15.31 | 15.65 | 15.60 | 15.37 | | 0 |

## Table 8-324
## LTE Band 41 PC2 Conducted Powers Ant 4b - 5 MHz Bandwidth

| LTE Band 41 5 MHz Bandwidth | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 39750 (2506.0 MHz) | 40185 (2549.5 MHz) | 40620 (2593.0 MHz) | 41055 (2636.5 MHz) | 41490 (2680.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | | |
| QPSK | 1 | 0 | 15.84 | 15.62 | 15.79 | 15.87 | 15.53 | 0 | 0 |
| | 1 | 12 | 15.86 | 15.61 | 15.79 | 15.89 | 15.49 | | 0 |
| | 1 | 24 | 15.86 | 15.59 | 15.80 | 15.84 | 15.49 | | 0 |
| | 12 | 0 | 15.87 | 15.54 | 15.81 | 15.75 | 15.53 | 0-1 | 0 |
| | 12 | 6 | 15.90 | 15.53 | 15.79 | 15.75 | 15.51 | | 0 |
| | 12 | 13 | 15.87 | 15.49 | 15.80 | 15.74 | 15.50 | | 0 |
| | 25 | 0 | 15.87 | 15.54 | 15.82 | 15.77 | 15.55 | | 0 |
| 16QAM | 1 | 0 | 15.89 | 15.53 | 15.79 | 15.74 | 15.39 | 0-1 | 0 |
| | 1 | 12 | 15.83 | 15.43 | 15.89 | 15.79 | 15.47 | | 0 |
| | 1 | 24 | 15.90 | 15.48 | 15.84 | 15.81 | 15.51 | | 0 |
| | 12 | 0 | 15.69 | 15.26 | 15.61 | 15.60 | 15.31 | 0-2 | 0 |
| | 12 | 6 | 15.70 | 15.29 | 15.63 | 15.63 | 15.30 | | 0 |
| | 12 | 13 | 15.77 | 15.23 | 15.61 | 15.58 | 15.31 | | 0 |
| | 25 | 0 | 15.70 | 15.24 | 15.61 | 15.57 | 15.30 | | 0 |
| 64QAM | 1 | 0 | 15.90 | 15.53 | 15.90 | 15.76 | 15.72 | 0-2 | 0 |
| | 1 | 12 | 15.82 | 15.45 | 15.89 | 15.76 | 15.81 | | 0 |
| | 1 | 24 | 15.83 | 15.43 | 15.87 | 15.80 | 15.74 | | 0 |
| | 12 | 0 | 15.74 | 15.27 | 15.63 | 15.54 | 15.33 | 0-3 | 0 |
| | 12 | 6 | 15.62 | 15.28 | 15.61 | 15.61 | 15.37 | | 0 |
| | 12 | 13 | 15.64 | 15.25 | 15.61 | 15.59 | 15.32 | | 0 |
| | 25 | 0 | 15.70 | 15.30 | 15.59 | 15.53 | 15.32 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.15 LTE Band 48

**Table 8-325**
**LTE Band 48 Conducted Powers Ant 1 - 20 MHz Bandwidth**

| LTE Band 48 20 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 55340 (3560.0 MHz) | 55773 (3603.3 MHz) | 56207 (3646.7 MHz) | 56640 (3690.0 MHz) | | |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 14.80 | 15.10 | 15.12 | 15.01 | 0 | 0 |
| | 1 | 50 | 14.71 | 15.06 | 14.86 | 14.86 | | 0 |
| | 1 | 99 | 14.83 | **15.26** | 14.89 | 15.09 | | 0 |
| | 50 | 0 | 14.75 | 14.96 | 15.03 | 14.90 | 0-1 | 0 |
| | 50 | 25 | 14.75 | 14.96 | 14.91 | 14.85 | | 0 |
| | 50 | 50 | 14.74 | **15.06** | 14.86 | 14.87 | | 0 |
| | 100 | 0 | 14.84 | 15.04 | 14.95 | 14.93 | | 0 |
| 16QAM | 1 | 0 | 15.05 | 14.99 | 15.28 | 15.11 | 0-1 | 0 |
| | 1 | 50 | 14.86 | 15.02 | 15.11 | 14.83 | | 0 |
| | 1 | 99 | 14.97 | 15.27 | 15.10 | 14.98 | | 0 |
| | 50 | 0 | 14.68 | 14.86 | 14.95 | 14.79 | 0-2 | 0 |
| | 50 | 25 | 14.64 | 14.88 | 14.83 | 14.75 | | 0 |
| | 50 | 50 | 14.64 | 14.98 | 14.75 | 14.77 | | 0 |
| | 100 | 0 | 14.77 | 14.98 | 14.90 | 14.84 | | 0 |
| 64QAM | 1 | 0 | 14.95 | 15.19 | 15.20 | 15.10 | 0-2 | 0 |
| | 1 | 50 | 14.78 | 15.02 | 15.10 | 14.75 | | 0 |
| | 1 | 99 | 14.88 | 15.28 | 14.98 | 14.87 | | 0 |
| | 50 | 0 | 14.62 | 14.83 | 14.90 | 14.79 | 0-3 | 0 |
| | 50 | 25 | 14.65 | 14.87 | 14.79 | 14.75 | | 0 |
| | 50 | 50 | 14.63 | 14.92 | 14.73 | 14.74 | | 0 |
| | 100 | 0 | 14.75 | 14.99 | 14.91 | 14.88 | | 0 |

**Table 8-326**
**LTE Band 48 Conducted Powers Ant 1 - 15 MHz Bandwidth**

| LTE Band 48 15 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel | Low-Mid Channel | Mid-High Channel | High Channel | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | 55315 (3557.5 MHz) | 55765 (3602.5 MHz) | 56215 (3647.5 MHz) | 56665 (3692.5 MHz) | | |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 14.63 | 14.84 | 14.72 | 14.67 | 0 | 0 |
| | 1 | 36 | 14.43 | 14.88 | 14.62 | 14.53 | | 0 |
| | 1 | 74 | 14.58 | 14.95 | 14.60 | 14.64 | | 0 |
| | 36 | 0 | 14.66 | 14.84 | 14.79 | 14.71 | 0-1 | 0 |
| | 36 | 18 | 14.64 | 14.88 | 14.73 | 14.69 | | 0 |
| | 36 | 37 | 14.67 | 14.89 | 14.68 | 14.71 | | 0 |
| | 75 | 0 | 14.67 | 14.94 | 14.76 | 14.71 | | 0 |
| 16QAM | 1 | 0 | 14.77 | 14.52 | 14.77 | 14.68 | 0-1 | 0 |
| | 1 | 36 | 14.51 | 14.68 | 14.79 | 14.43 | | 0 |
| | 1 | 74 | 14.70 | 15.06 | 14.59 | 14.77 | | 0 |
| | 36 | 0 | 14.55 | 14.73 | 14.68 | 14.60 | 0-2 | 0 |
| | 36 | 18 | 14.51 | 14.75 | 14.64 | 14.56 | | 0 |
| | 36 | 37 | 14.57 | 14.79 | 14.58 | 14.59 | | 0 |
| | 75 | 0 | 14.59 | 14.84 | 14.66 | 14.64 | | 0 |
| 64QAM | 1 | 0 | 14.67 | 14.88 | 14.72 | 14.48 | 0-2 | 0 |
| | 1 | 36 | 14.34 | 14.74 | 14.59 | 14.51 | | 0 |
| | 1 | 74 | 14.58 | 15.01 | 14.67 | 14.67 | | 0 |
| | 36 | 0 | 14.51 | 14.67 | 14.69 | 14.57 | 0-3 | 0 |
| | 36 | 18 | 14.44 | 14.73 | 14.62 | 14.51 | | 0 |
| | 36 | 37 | 14.51 | 14.75 | 14.55 | 14.56 | | 0 |
| | 75 | 0 | 14.55 | 14.82 | 14.69 | 14.64 | | 0 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-327
## LTE Band 48 Conducted Powers Ant 1 - 10 MHz Bandwidth

| LTE Band 48 10 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55290 (3555.0 MHz) | Low-Mid Channel 55757 (3601.7 MHz) | Mid-High Channel 56223 (3648.3 MHz) | High Channel 56690 (3695.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 14.81 | 14.94 | 14.73 | 14.73 | 0 | 0 |
| | 1 | 25 | 14.46 | 14.68 | 14.49 | 14.51 | | 0 |
| | 1 | 49 | 14.77 | 15.01 | 14.64 | 14.76 | | 0 |
| | 25 | 0 | 14.65 | 14.86 | 14.72 | 14.65 | 0-1 | 0 |
| | 25 | 12 | 14.55 | 14.81 | 14.64 | 14.64 | | 0 |
| | 25 | 25 | 14.59 | 14.92 | 14.69 | 14.72 | | 0 |
| | 50 | 0 | 14.68 | 14.94 | 14.74 | 14.73 | | 0 |
| 16QAM | 1 | 0 | 14.78 | 14.82 | 14.85 | 14.83 | 0-1 | 0 |
| | 1 | 25 | 14.42 | 14.54 | 14.46 | 14.50 | | 0 |
| | 1 | 49 | 14.60 | 14.77 | 14.48 | 14.91 | | 0 |
| | 25 | 0 | 14.51 | 14.69 | 14.50 | 14.53 | 0-2 | 0 |
| | 25 | 12 | 14.39 | 14.69 | 14.46 | 14.44 | | 0 |
| | 25 | 25 | 14.37 | 14.74 | 14.49 | 14.54 | | 0 |
| | 50 | 0 | 14.59 | 14.83 | 14.64 | 14.68 | | 0 |
| 64QAM | 1 | 0 | 14.58 | 15.15 | 14.85 | 14.88 | 0-2 | 0 |
| | 1 | 25 | 14.32 | 14.90 | 14.68 | 14.53 | | 0 |
| | 1 | 49 | 14.58 | 15.29 | 14.56 | 14.80 | | 0 |
| | 25 | 0 | 14.49 | 14.76 | 14.64 | 14.56 | 0-3 | 0 |
| | 25 | 12 | 14.42 | 14.69 | 14.59 | 14.51 | | 0 |
| | 25 | 25 | 14.45 | 14.77 | 14.60 | 14.62 | | 0 |
| | 50 | 0 | 14.57 | 14.86 | 14.62 | 14.69 | | 0 |

## Table 8-328
## LTE Band 48 Conducted Powers Ant 1 - 5 MHz Bandwidth

| LTE Band 48 5 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55265 (3552.5 MHz) | Low-Mid Channel 55748 (3600.8 MHz) | Mid-High Channel 56232 (3649.2 MHz) | High Channel 56715 (3697.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 14.59 | 14.87 | 14.64 | 14.73 | 0 | 0 |
| | 1 | 12 | 14.35 | 14.79 | 14.61 | 14.43 | | 0 |
| | 1 | 24 | 14.52 | 15.08 | 14.72 | 14.66 | | 0 |
| | 12 | 0 | 14.61 | 14.68 | 14.53 | 14.64 | 0-1 | 0 |
| | 12 | 6 | 14.51 | 14.67 | 14.46 | 14.56 | | 0 |
| | 12 | 13 | 14.58 | 14.79 | 14.55 | 14.64 | | 0 |
| | 25 | 0 | 14.66 | 14.87 | 14.65 | 14.71 | | 0 |
| 16QAM | 1 | 0 | 14.58 | 14.75 | 14.53 | 14.58 | 0-1 | 0 |
| | 1 | 12 | 14.49 | 14.43 | 14.51 | 14.36 | | 0 |
| | 1 | 24 | 14.47 | 14.75 | 14.45 | 14.74 | | 0 |
| | 12 | 0 | 14.39 | 14.41 | 14.49 | 14.31 | 0-2 | 0 |
| | 12 | 6 | 14.31 | 14.50 | 14.32 | 14.34 | | 0 |
| | 12 | 13 | 14.35 | 14.56 | 14.45 | 14.32 | | 0 |
| | 25 | 0 | 14.44 | 14.70 | 14.53 | 14.54 | | 0 |
| 64QAM | 1 | 0 | 14.72 | 14.71 | 14.54 | 14.56 | 0-2 | 0 |
| | 1 | 12 | 14.54 | 14.86 | 14.49 | 14.66 | | 0 |
| | 1 | 24 | 14.59 | 14.66 | 14.33 | 14.90 | | 0 |
| | 12 | 0 | 14.41 | 14.35 | 14.45 | 14.57 | 0-3 | 0 |
| | 12 | 6 | 14.38 | 14.49 | 14.39 | 14.42 | | 0 |
| | 12 | 13 | 14.40 | 14.51 | 14.37 | 14.47 | | 0 |
| | 25 | 0 | 14.53 | 14.77 | 14.57 | 14.53 | | 0 |




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-329
## LTE Band 48 Conducted Powers Ant 3 - 20 MHz Bandwidth

| LTE Band 48 20 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55340 (3560.0 MHz) | Low-Mid Channel 55773 (3603.3 MHz) | Mid-High Channel 56207 (3646.7 MHz) | High Channel 56640 (3690.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 16.05 | 15.74 | **16.06** | 15.75 | 0 | 0 |
| | 1 | 50 | 15.64 | 15.61 | 15.69 | 15.51 | | 0 |
| | 1 | 99 | 15.83 | 15.93 | 15.88 | 15.79 | | 0 |
| | 50 | 0 | 15.58 | 15.62 | **15.76** | 15.55 | 0-1 | 0 |
| | 50 | 25 | 15.53 | 15.60 | 15.70 | 15.50 | | 0 |
| | 50 | 50 | 15.60 | 15.58 | 15.71 | 15.61 | | 0 |
| | 100 | 0 | 15.58 | 15.75 | 15.74 | 15.58 | | 0 |
| 16QAM | 1 | 0 | 15.98 | 16.15 | 16.29 | 16.22 | 0-1 | 0 |
| | 1 | 50 | 15.80 | 15.95 | 16.01 | 15.76 | | 0 |
| | 1 | 99 | 15.99 | 16.11 | 16.05 | 16.04 | | 0 |
| | 50 | 0 | 15.73 | 15.82 | 15.83 | 15.70 | 0-2 | 0 |
| | 50 | 25 | 15.69 | 15.80 | 15.75 | 15.54 | | 0 |
| | 50 | 50 | 15.76 | 15.81 | 15.77 | 15.79 | | 0 |
| | 100 | 0 | 15.75 | 15.86 | 15.86 | 15.76 | | 0 |
| 64QAM | 1 | 0 | 15.97 | 16.15 | 16.40 | 16.16 | 0-2 | 0 |
| | 1 | 50 | 15.79 | 16.07 | 16.04 | 15.89 | | 0 |
| | 1 | 99 | 16.00 | 16.14 | 16.27 | 16.25 | | 0 |
| | 50 | 0 | 15.71 | 15.83 | 15.83 | 15.72 | 0-3 | 0 |
| | 50 | 25 | 15.69 | 15.79 | 15.74 | 15.78 | | 0 |
| | 50 | 50 | 15.65 | 15.91 | 15.73 | 15.77 | | 0 |
| | 100 | 0 | 15.77 | 15.87 | 15.86 | 15.74 | | 0 |

## Table 8-330
## LTE Band 48 Conducted Powers Ant 3 - 15 MHz Bandwidth

| LTE Band 48 15 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55315 (3557.5 MHz) | Low-Mid Channel 55765 (3602.5 MHz) | Mid-High Channel 56215 (3647.5 MHz) | High Channel 56665 (3692.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 16.02 | 16.04 | 16.21 | 16.20 | 0 | 0 |
| | 1 | 36 | 16.03 | 16.08 | 16.09 | 15.97 | | 0 |
| | 1 | 74 | 15.89 | 16.14 | 16.14 | 16.00 | | 0 |
| | 36 | 0 | 15.84 | 15.93 | 16.03 | 15.95 | 0-1 | 0 |
| | 36 | 18 | 15.84 | 16.02 | 16.01 | 15.94 | | 0 |
| | 36 | 37 | 15.85 | 16.02 | 15.99 | 15.94 | | 0 |
| | 75 | 0 | 15.88 | 16.06 | 16.03 | 15.98 | | 0 |
| 16QAM | 1 | 0 | 16.10 | 16.16 | 16.35 | 16.24 | 0-1 | 0 |
| | 1 | 36 | 15.80 | 15.98 | 16.05 | 16.11 | | 0 |
| | 1 | 74 | 15.91 | 16.13 | 16.21 | 16.15 | | 0 |
| | 36 | 0 | 15.84 | 15.95 | 16.04 | 16.09 | 0-2 | 0 |
| | 36 | 18 | 15.84 | 16.00 | 16.06 | 16.01 | | 0 |
| | 36 | 37 | 15.91 | 16.03 | 16.06 | 16.03 | | 0 |
| | 75 | 0 | 15.96 | 16.13 | 16.14 | 16.10 | | 0 |
| 64QAM | 1 | 0 | 15.91 | 15.86 | 16.43 | 16.34 | 0-2 | 0 |
| | 1 | 36 | 15.85 | 16.08 | 16.07 | 16.09 | | 0 |
| | 1 | 74 | 16.16 | 16.23 | 16.10 | 16.36 | | 0 |
| | 36 | 0 | 15.82 | 15.95 | 16.08 | 16.03 | 0-3 | 0 |
| | 36 | 18 | 15.83 | 16.02 | 16.02 | 16.00 | | 0 |
| | 36 | 37 | 15.90 | 16.01 | 16.05 | 16.01 | | 0 |
| | 75 | 0 | 15.93 | 16.08 | 16.12 | 16.06 | | 0 |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-331
## LTE Band 48 Conducted Powers Ant 3 - 10 MHz Bandwidth

| LTE Band 48 10 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55290 (3555.0 MHz) | Low-Mid Channel 55757 (3601.7 MHz) | Mid-High Channel 56223 (3648.3 MHz) | High Channel 56690 (3695.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 16.03 | 16.12 | 16.14 | 16.09 | 0 | 0 |
| | 1 | 25 | 15.70 | 15.91 | 15.91 | 15.99 | | 0 |
| | 1 | 49 | 16.06 | 16.22 | 16.11 | 16.18 | | 0 |
| | 25 | 0 | 15.86 | 16.05 | 16.04 | 15.97 | 0-1 | 0 |
| | 25 | 12 | 15.84 | 16.00 | 15.97 | 15.91 | | 0 |
| | 25 | 25 | 15.88 | 15.97 | 16.04 | 16.08 | | 0 |
| | 50 | 0 | 15.91 | 16.06 | 16.12 | 15.91 | | 0 |
| 16QAM | 1 | 0 | 15.91 | 16.03 | 16.11 | 16.02 | 0-1 | 0 |
| | 1 | 25 | 15.53 | 15.76 | 15.79 | 15.89 | | 0 |
| | 1 | 49 | 16.12 | 16.26 | 16.15 | 16.22 | | 0 |
| | 25 | 0 | 15.79 | 15.96 | 15.92 | 15.99 | 0-2 | 0 |
| | 25 | 12 | 15.78 | 15.94 | 15.87 | 15.88 | | 0 |
| | 25 | 25 | 15.75 | 15.93 | 15.91 | 15.93 | | 0 |
| | 50 | 0 | 15.84 | 16.00 | 16.05 | 15.99 | | 0 |
| 64QAM | 1 | 0 | 15.86 | 15.98 | 16.18 | 16.30 | 0-2 | 0 |
| | 1 | 25 | 15.89 | 15.87 | 16.09 | 16.05 | | 0 |
| | 1 | 49 | 15.81 | 15.97 | 16.09 | 16.04 | | 0 |
| | 25 | 0 | 15.78 | 15.94 | 15.91 | 15.90 | 0-3 | 0 |
| | 25 | 12 | 15.67 | 15.85 | 15.84 | 15.87 | | 0 |
| | 25 | 25 | 15.77 | 15.96 | 15.92 | 15.95 | | 0 |
| | 50 | 0 | 15.81 | 16.00 | 16.04 | 16.00 | | 0 |

## Table 8-332
## LTE Band 48 Conducted Powers Ant 3 - 5 MHz Bandwidth

| LTE Band 48 5 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55265 (3552.5 MHz) | Low-Mid Channel 55748 (3600.8 MHz) | Mid-High Channel 56232 (3649.2 MHz) | High Channel 56715 (3697.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 16.10 | 16.08 | 16.13 | 16.14 | 0 | 0 |
| | 1 | 12 | 15.70 | 15.96 | 16.00 | 15.94 | | 0 |
| | 1 | 24 | 15.82 | 16.26 | 16.31 | 16.23 | | 0 |
| | 12 | 0 | 15.85 | 15.96 | 15.95 | 16.00 | 0-1 | 0 |
| | 12 | 6 | 15.74 | 15.89 | 15.92 | 15.94 | | 0 |
| | 12 | 13 | 15.81 | 15.99 | 16.06 | 16.05 | | 0 |
| | 25 | 0 | 15.94 | 16.07 | 16.13 | 15.99 | | 0 |
| 16QAM | 1 | 0 | 15.74 | 16.05 | 15.96 | 16.02 | 0-1 | 0 |
| | 1 | 12 | 15.59 | 15.76 | 15.60 | 15.59 | | 0 |
| | 1 | 24 | 15.70 | 15.97 | 15.83 | 15.99 | | 0 |
| | 12 | 0 | 15.56 | 15.64 | 15.61 | 15.74 | 0-2 | 0 |
| | 12 | 6 | 15.50 | 15.59 | 15.57 | 15.68 | | 0 |
| | 12 | 13 | 15.53 | 15.69 | 15.60 | 15.65 | | 0 |
| | 25 | 0 | 15.70 | 15.85 | 15.88 | 15.94 | | 0 |
| 64QAM | 1 | 0 | 15.85 | 15.88 | 16.07 | 15.92 | 0-2 | 0 |
| | 1 | 12 | 15.74 | 15.72 | 15.83 | 15.79 | | 0 |
| | 1 | 24 | 15.83 | 15.77 | 16.00 | 16.08 | | 0 |
| | 12 | 0 | 15.50 | 15.55 | 15.60 | 15.65 | 0-3 | 0 |
| | 12 | 6 | 15.60 | 15.56 | 15.62 | 15.63 | | 0 |
| | 12 | 13 | 15.53 | 15.50 | 15.75 | 15.58 | | 0 |
| | 25 | 0 | 15.68 | 15.81 | 15.95 | 15.91 | | 0 |




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-333
## LTE Band 48 Conducted Powers Ant 2b - 20 MHz Bandwidth

| LTE Band 48 20 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55340 (3560.0 MHz) | Low-Mid Channel 55773 (3603.3 MHz) | Mid-High Channel 56207 (3646.7 MHz) | High Channel 56640 (3690.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 14.75 | 14.97 | 15.07 | 15.19 | 0 | 0 |
| | 1 | 50 | 14.81 | 14.85 | 14.91 | 15.12 | | 0 |
| | 1 | 99 | 14.84 | 15.08 | 15.06 | **15.21** | | 0 |
| | 50 | 0 | 14.82 | 14.81 | 15.02 | 15.15 | 0-1 | 0 |
| | 50 | 25 | 14.86 | 14.80 | 14.96 | 15.17 | | 0 |
| | 50 | 50 | 14.76 | 14.88 | 14.93 | **15.23** | | 0 |
| | 100 | 0 | 14.93 | 14.89 | 15.03 | 15.20 | | 0 |
| 16QAM | 1 | 0 | 14.84 | 14.87 | 14.98 | 15.22 | 0-1 | 0 |
| | 1 | 50 | 14.83 | 14.73 | 14.87 | 15.16 | | 0 |
| | 1 | 99 | 14.88 | 15.01 | 14.93 | 15.21 | | 0 |
| | 50 | 0 | 14.76 | 14.72 | 14.93 | 15.09 | 0-2 | 0 |
| | 50 | 25 | 14.79 | 14.53 | 14.87 | 15.12 | | 0 |
| | 50 | 50 | 14.69 | 14.86 | 14.85 | 15.16 | | 0 |
| | 100 | 0 | 14.88 | 14.84 | 14.93 | 15.21 | | 0 |
| 64QAM | 1 | 0 | 14.75 | 14.79 | 15.08 | 14.95 | 0-2 | 0 |
| | 1 | 50 | 14.80 | 14.81 | 14.99 | 15.15 | | 0 |
| | 1 | 99 | 14.85 | 15.07 | 15.14 | 15.18 | | 0 |
| | 50 | 0 | 14.72 | 14.73 | 14.92 | 15.12 | 0-3 | 0 |
| | 50 | 25 | 14.76 | 14.74 | 14.88 | 15.15 | | 0 |
| | 50 | 50 | 14.70 | 14.76 | 14.83 | 15.14 | | 0 |
| | 100 | 0 | 14.85 | 14.86 | 14.96 | 15.20 | | 0 |

## Table 8-334
## LTE Band 48 Conducted Powers Ant 2b - 15 MHz Bandwidth

| LTE Band 48 15 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55315 (3557.5 MHz) | Low-Mid Channel 55765 (3602.5 MHz) | Mid-High Channel 56215 (3647.5 MHz) | High Channel 56665 (3692.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 14.64 | 14.72 | 14.77 | 15.06 | 0 | 0 |
| | 1 | 36 | 14.67 | 14.79 | 14.82 | 15.08 | | 0 |
| | 1 | 74 | 14.59 | 14.68 | 14.80 | 14.90 | | 0 |
| | 36 | 0 | 14.66 | 14.71 | 14.85 | 15.05 | 0-1 | 0 |
| | 36 | 18 | 14.70 | 14.74 | 14.81 | 15.14 | | 0 |
| | 36 | 37 | 14.78 | 14.74 | 14.81 | 15.07 | | 0 |
| | 75 | 0 | 14.74 | 14.79 | 14.85 | 15.16 | | 0 |
| 16QAM | 1 | 0 | 14.51 | 14.71 | 14.68 | 14.84 | 0-1 | 0 |
| | 1 | 36 | 14.51 | 14.59 | 14.61 | 14.88 | | 0 |
| | 1 | 74 | 14.51 | 14.67 | 14.67 | 14.91 | | 0 |
| | 36 | 0 | 14.54 | 14.58 | 14.78 | 14.97 | 0-2 | 0 |
| | 36 | 18 | 14.62 | 14.62 | 14.69 | 15.04 | | 0 |
| | 36 | 37 | 14.66 | 14.63 | 14.73 | 14.99 | | 0 |
| | 75 | 0 | 14.68 | 14.70 | 14.77 | 15.09 | | 0 |
| 64QAM | 1 | 0 | 14.54 | 14.79 | 14.75 | 14.99 | 0-2 | 0 |
| | 1 | 36 | 14.63 | 14.64 | 14.75 | 15.02 | | 0 |
| | 1 | 74 | 14.61 | 14.63 | 14.69 | 15.02 | | 0 |
| | 36 | 0 | 14.49 | 14.54 | 14.73 | 14.93 | 0-3 | 0 |
| | 36 | 18 | 14.58 | 14.59 | 14.68 | 14.99 | | 0 |
| | 36 | 37 | 14.64 | 14.57 | 14.70 | 14.96 | | 0 |
| | 75 | 0 | 14.66 | 14.68 | 14.75 | 15.10 | | 0 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-335
## LTE Band 48 Conducted Powers Ant 2b - 10 MHz Bandwidth

| LTE Band 48 10 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55290 (3555.0 MHz) | Low-Mid Channel 55757 (3601.7 MHz) | Mid-High Channel 56223 (3648.3 MHz) | High Channel 56690 (3695.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 14.60 | 14.78 | 14.85 | 15.17 | 0 | 0 |
| | 1 | 25 | 14.50 | 14.47 | 14.61 | 14.98 | | 0 |
| | 1 | 49 | 14.76 | 14.80 | 14.84 | 14.98 | | 0 |
| | 25 | 0 | 14.55 | 14.71 | 14.80 | 15.16 | 0-1 | 0 |
| | 25 | 12 | 14.56 | 14.66 | 14.74 | 15.02 | | 0 |
| | 25 | 25 | 14.69 | 14.75 | 14.83 | 15.04 | | 0 |
| | 50 | 0 | 14.66 | 14.78 | 14.86 | 15.16 | | 0 |
| 16QAM | 1 | 0 | 14.52 | 14.75 | 14.84 | 15.07 | 0-1 | 0 |
| | 1 | 25 | 14.38 | 14.41 | 14.54 | 14.79 | | 0 |
| | 1 | 49 | 14.66 | 14.70 | 14.88 | 15.02 | | 0 |
| | 25 | 0 | 14.43 | 14.55 | 14.63 | 15.01 | 0-2 | 0 |
| | 25 | 12 | 14.41 | 14.52 | 14.64 | 14.92 | | 0 |
| | 25 | 25 | 14.57 | 14.60 | 14.72 | 14.87 | | 0 |
| | 50 | 0 | 14.58 | 14.68 | 14.76 | 15.06 | | 0 |
| 64QAM | 1 | 0 | 14.84 | 14.64 | 14.84 | 15.12 | 0-2 | 0 |
| | 1 | 25 | 14.32 | 14.55 | 14.66 | 14.79 | | 0 |
| | 1 | 49 | 14.82 | 14.71 | 14.81 | 15.00 | | 0 |
| | 25 | 0 | 14.42 | 14.61 | 14.72 | 14.93 | 0-3 | 0 |
| | 25 | 12 | 14.42 | 14.54 | 14.56 | 14.86 | | 0 |
| | 25 | 25 | 14.54 | 14.61 | 14.64 | 14.93 | | 0 |
| | 50 | 0 | 14.63 | 14.68 | 14.81 | 15.12 | | 0 |

## Table 8-336
## LTE Band 48 Conducted Powers Ant 2b - 5 MHz Bandwidth

| LTE Band 48 5 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55265 (3552.5 MHz) | Low-Mid Channel 55748 (3600.8 MHz) | Mid-High Channel 56232 (3649.2 MHz) | High Channel 56715 (3697.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 14.67 | 14.71 | 14.79 | 15.03 | 0 | 0 |
| | 1 | 12 | 14.49 | 14.61 | 14.68 | 14.91 | | 0 |
| | 1 | 24 | 14.83 | 14.87 | 14.92 | 15.14 | | 0 |
| | 12 | 0 | 14.47 | 14.61 | 14.73 | 14.93 | 0-1 | 0 |
| | 12 | 6 | 14.38 | 14.54 | 14.62 | 14.85 | | 0 |
| | 12 | 13 | 14.54 | 14.61 | 14.70 | 14.92 | | 0 |
| | 25 | 0 | 14.58 | 14.72 | 14.78 | 15.02 | | 0 |
| 16QAM | 1 | 0 | 14.38 | 14.58 | 14.70 | 14.90 | 0-1 | 0 |
| | 1 | 12 | 14.30 | 14.47 | 14.34 | 14.58 | | 0 |
| | 1 | 24 | 14.69 | 14.70 | 14.58 | 14.93 | | 0 |
| | 12 | 0 | 14.30 | 14.35 | 14.46 | 14.74 | 0-2 | 0 |
| | 12 | 6 | 14.34 | 14.31 | 14.38 | 14.67 | | 0 |
| | 12 | 13 | 14.34 | 14.42 | 14.36 | 14.61 | | 0 |
| | 25 | 0 | 14.45 | 14.59 | 14.69 | 14.94 | | 0 |
| 64QAM | 1 | 0 | 14.64 | 14.58 | 14.62 | 14.89 | 0-2 | 0 |
| | 1 | 12 | 14.45 | 14.34 | 14.89 | 14.81 | | 0 |
| | 1 | 24 | 14.58 | 14.75 | 14.41 | 15.07 | | 0 |
| | 12 | 0 | 14.96 | 14.31 | 14.37 | 14.69 | 0-3 | 0 |
| | 12 | 6 | 14.89 | 14.33 | 14.38 | 14.49 | | 0 |
| | 12 | 13 | 14.33 | 14.35 | 14.43 | 14.41 | | 0 |
| | 25 | 0 | 14.35 | 14.67 | 14.63 | 14.93 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-337
## LTE Band 48 Conducted Powers Ant 4b - 20 MHz Bandwidth

| LTE Band 48 20 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55340 (3560.0 MHz) | Low-Mid Channel 55773 (3603.3 MHz) | Mid-High Channel 56207 (3646.7 MHz) | High Channel 56640 (3690.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 16.13 | 16.24 | **16.26** | 16.15 | 0 | 0 |
| | 1 | 50 | 16.15 | 16.00 | 16.13 | 16.02 | | 0 |
| | 1 | 99 | 16.11 | 16.25 | 16.22 | 16.12 | | 0 |
| | 50 | 0 | 16.20 | 16.04 | **16.22** | 16.03 | 0-1 | 0 |
| | 50 | 25 | 16.21 | 16.01 | 16.00 | 15.94 | | 0 |
| | 50 | 50 | 16.13 | 16.06 | 16.05 | 16.02 | | 0 |
| | 100 | 0 | 16.20 | 16.09 | 16.21 | 15.92 | | 0 |
| 16QAM | 1 | 0 | 15.91 | 15.66 | 16.09 | 15.86 | 0-1 | 0 |
| | 1 | 50 | 15.96 | 15.57 | 15.90 | 15.60 | | 0 |
| | 1 | 99 | 15.90 | 15.88 | 16.10 | 15.74 | | 0 |
| | 50 | 0 | 15.66 | 15.46 | 15.60 | 15.41 | 0-2 | 0 |
| | 50 | 25 | 15.70 | 15.42 | 15.55 | 15.35 | | 0 |
| | 50 | 50 | 15.63 | 15.52 | 15.60 | 15.42 | | 0 |
| | 100 | 0 | 15.80 | 15.50 | 15.61 | 15.45 | | 0 |
| 64QAM | 1 | 0 | 16.25 | 15.98 | 16.22 | 16.05 | 0-2 | 0 |
| | 1 | 50 | 16.21 | 15.92 | 16.05 | 15.82 | | 0 |
| | 1 | 99 | 16.13 | 16.12 | 16.12 | 15.93 | | 0 |
| | 50 | 0 | 15.94 | 15.65 | 15.73 | 15.56 | 0-3 | 0 |
| | 50 | 25 | 15.97 | 15.66 | 15.69 | 15.52 | | 0 |
| | 50 | 50 | 15.83 | 15.73 | 15.73 | 15.59 | | 0 |
| | 100 | 0 | 16.08 | 15.77 | 15.79 | 15.64 | | 0 |

## Table 8-338
## LTE Band 48 Conducted Powers Ant 4b - 15 MHz Bandwidth

| LTE Band 48 15 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55315 (3557.5 MHz) | Low-Mid Channel 55765 (3602.5 MHz) | Mid-High Channel 56215 (3647.5 MHz) | High Channel 56665 (3692.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 16.09 | 15.84 | 16.18 | 15.98 | 0 | 0 |
| | 1 | 36 | 16.21 | 15.81 | 16.21 | 15.94 | | 0 |
| | 1 | 74 | 16.27 | 15.92 | 16.20 | 16.06 | | 0 |
| | 36 | 0 | 16.17 | 15.95 | 16.06 | 15.94 | 0-1 | 0 |
| | 36 | 18 | 16.25 | 15.98 | 16.08 | 16.02 | | 0 |
| | 36 | 37 | 16.25 | 16.00 | 16.07 | 15.99 | | 0 |
| | 75 | 0 | 16.29 | 16.06 | 16.16 | 16.06 | | 0 |
| 16QAM | 1 | 0 | 16.12 | 15.67 | 16.12 | 15.82 | 0-1 | 0 |
| | 1 | 36 | 16.14 | 15.56 | 16.06 | 15.89 | | 0 |
| | 1 | 74 | 15.93 | 15.65 | 16.29 | 15.80 | | 0 |
| | 36 | 0 | 15.83 | 15.66 | 15.77 | 15.67 | 0-2 | 0 |
| | 36 | 18 | 15.97 | 15.67 | 15.77 | 15.73 | | 0 |
| | 36 | 37 | 15.92 | 15.69 | 15.75 | 15.72 | | 0 |
| | 75 | 0 | 16.04 | 15.77 | 15.85 | 15.85 | | 0 |
| 64QAM | 1 | 0 | 15.90 | 15.62 | 15.83 | 15.66 | 0-2 | 0 |
| | 1 | 36 | 16.04 | 15.81 | 15.87 | 15.84 | | 0 |
| | 1 | 74 | 15.91 | 15.76 | 15.91 | 15.62 | | 0 |
| | 36 | 0 | 15.82 | 15.64 | 15.76 | 15.68 | 0-3 | 0 |
| | 36 | 18 | 15.91 | 15.59 | 15.78 | 15.71 | | 0 |
| | 36 | 37 | 15.91 | 15.64 | 15.75 | 15.68 | | 0 |
| | 75 | 0 | 16.04 | 15.76 | 15.84 | 15.82 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-339
## LTE Band 48 Conducted Powers Ant 4b - 10 MHz Bandwidth

| LTE Band 48 10 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55290 (3555.0 MHz) | Low-Mid Channel 55757 (3601.7 MHz) | Mid-High Channel 56223 (3648.3 MHz) | High Channel 56690 (3695.0 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 16.29 | 16.04 | 16.18 | 16.10 | 0 | 0 |
| | 1 | 25 | 16.19 | 15.90 | 15.89 | 15.98 | | 0 |
| | 1 | 49 | 16.30 | 16.10 | 16.18 | 16.24 | | 0 |
| | 25 | 0 | 16.11 | 15.97 | 16.14 | 16.07 | 0-1 | 0 |
| | 25 | 12 | 16.11 | 15.91 | 16.05 | 15.98 | | 0 |
| | 25 | 25 | 16.26 | 16.00 | 16.14 | 16.03 | | 0 |
| | 50 | 0 | 16.24 | 16.05 | 16.18 | 16.05 | | 0 |
| 16QAM | 1 | 0 | 16.17 | 15.80 | 16.13 | 15.81 | 0-1 | 0 |
| | 1 | 25 | 15.91 | 15.61 | 15.80 | 15.57 | | 0 |
| | 1 | 49 | 16.20 | 15.84 | 16.12 | 15.98 | | 0 |
| | 25 | 0 | 15.80 | 15.65 | 15.75 | 15.65 | 0-2 | 0 |
| | 25 | 12 | 15.76 | 15.56 | 15.64 | 15.58 | | 0 |
| | 25 | 25 | 15.87 | 15.67 | 15.75 | 15.63 | | 0 |
| | 50 | 0 | 15.92 | 15.73 | 15.84 | 15.79 | | 0 |
| 64QAM | 1 | 0 | 16.01 | 16.08 | 15.99 | 15.70 | 0-2 | 0 |
| | 1 | 25 | 15.92 | 15.77 | 15.80 | 15.60 | | 0 |
| | 1 | 49 | 16.13 | 16.07 | 15.90 | 15.92 | | 0 |
| | 25 | 0 | 15.80 | 15.64 | 15.84 | 15.66 | 0-3 | 0 |
| | 25 | 12 | 15.75 | 15.60 | 15.76 | 15.61 | | 0 |
| | 25 | 25 | 15.90 | 15.67 | 15.78 | 15.64 | | 0 |
| | 50 | 0 | 15.92 | 15.73 | 15.84 | 15.78 | | 0 |

## Table 8-340
## LTE Band 48 Conducted Powers Ant 4b - 5 MHz Bandwidth

| LTE Band 48 5 MHz Bandwidth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Modulation | RB Size | RB Offset | Low Channel 55265 (3552.5 MHz) | Low-Mid Channel 55748 (3600.8 MHz) | Mid-High Channel 56232 (3649.2 MHz) | High Channel 56715 (3697.5 MHz) | MPR Allowed per 3GPP [dB] | MPR [dB] |
| | | | Conducted Power [dBm] | | | | | |
| QPSK | 1 | 0 | 16.09 | 15.98 | 16.15 | 16.05 | 0 | 0 |
| | 1 | 12 | 15.88 | 15.92 | 16.07 | 15.77 | | 0 |
| | 1 | 24 | 16.13 | 16.28 | 16.21 | 15.95 | | 0 |
| | 12 | 0 | 16.07 | 15.89 | 16.02 | 16.03 | 0-1 | 0 |
| | 12 | 6 | 15.98 | 15.75 | 15.98 | 15.93 | | 0 |
| | 12 | 13 | 16.12 | 15.91 | 16.03 | 15.98 | | 0 |
| | 25 | 0 | 16.13 | 16.02 | 16.17 | 16.07 | | 0 |
| 16QAM | 1 | 0 | 16.02 | 15.93 | 15.77 | 15.72 | 0-1 | 0 |
| | 1 | 12 | 15.30 | 15.39 | 15.55 | 15.30 | | 0 |
| | 1 | 24 | 16.12 | 15.70 | 15.76 | 15.31 | | 0 |
| | 12 | 0 | 15.41 | 15.46 | 15.71 | 15.39 | 0-2 | 0 |
| | 12 | 6 | 15.47 | 15.33 | 15.43 | 15.38 | | 0 |
| | 12 | 13 | 15.49 | 15.41 | 15.50 | 15.42 | | 0 |
| | 25 | 0 | 15.72 | 15.67 | 15.76 | 15.67 | | 0 |
| 64QAM | 1 | 0 | 15.73 | 15.63 | 16.06 | 15.81 | 0-2 | 0 |
| | 1 | 12 | 15.72 | 15.30 | 15.86 | 15.46 | | 0 |
| | 1 | 24 | 15.81 | 15.50 | 16.00 | 15.75 | | 0 |
| | 12 | 0 | 15.68 | 15.31 | 15.64 | 15.59 | 0-3 | 0 |
| | 12 | 6 | 15.63 | 15.34 | 15.52 | 15.42 | | 0 |
| | 12 | 13 | 15.75 | 15.32 | 15.66 | 15.51 | | 0 |
| | 25 | 0 | 15.67 | 15.67 | 15.72 | 15.62 | | 0 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.3.16 LTE Uplink Carrier Aggregation Conducted Powers

### Table 8-341
### LTE Uplink Carrier Aggregation Conducted Powers – Antenna 1

| | PCC | | | | | | | | | SCC | | | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC UL Channel | PCC UL Frequency [MHz] | PCC DL Channel | PCC DL Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC UL Channel | SCC UL Frequency [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_5B | LTE B5 | 10 | 20525 | 836.5 | 2525 | 881.5 | QPSK | 1 | 0 | LTE B5 | 5 | 20453 | 829.3 | 2453 | 874.3 | QPSK | 1 | 24 | 20.49 | 20.47 |

### Table 8-342
### LTE Uplink Carrier Aggregation Conducted Powers – Antenna 3

| | PCC | | | | | | | | | SCC | | | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC UL Channel | PCC UL Frequency [MHz] | PCC DL Channel | PCC DL Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC UL Channel | SCC UL Frequency [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_5B | LTE B5 | 10 | 20525 | 836.5 | 2525 | 881.5 | QPSK | 1 | 0 | LTE B5 | 5 | 20453 | 829.3 | 2453 | 874.3 | QPSK | 1 | 24 | 20.19 | 20.19 |

### Table 8-343
### LTE Uplink Carrier Aggregation Conducted Powers – Antenna 2A

| | PCC | | | | | | | | SCC | | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC UL Channel | PCC UL Frequency [MHz] | PCC DL Channel | PCC DL Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC UL Channel | SCC UL Frequency [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_7C | LTE B7 | 20 | 20850 | 2510.0 | 2850 | 2630.0 | QPSK | 1 | 99 | LTE B7 | 20 | 21048 | 2529.8 | 3048 | 2649.8 | QPSK | 1 | 0 | 11.70 | 12.05 |

| | PCC | | | | | | | SCC | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41C | LTE B41 | 20 | 40620 | 2593.0 | QPSK | 50 | 0 | LTE B41 | 20 | 40422 | 2573.2 | QPSK | 50 | 50 | 13.70 | 13.98 |

| | PCC | | | | | | | SCC | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41C | LTE B41 PC2 | 20 | 40620 | 2593.0 | QPSK | 50 | 0 | LTE B41 PC2 | 20 | 40422 | 2573.2 | QPSK | 50 | 50 | 13.70 | 14.01 |

### Table 8-344
### LTE Uplink Carrier Aggregation Conducted Powers – Antenna 2B

| | PCC | | | | | | | | | SCC | | | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC UL Channel | PCC UL Frequency [MHz] | PCC DL Channel | PCC DL Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC UL Channel | SCC UL Frequency [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_7C | LTE B7 | 20 | 21350 | 2560.0 | 3350 | 2680.0 | QPSK | 1 | 0 | LTE B7 | 20 | 21152 | 2540.2 | 3152 | 2660.2 | QPSK | 1 | 99 | 11.72 | 11.83 |

| | PCC | | | | | | | SCC | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41C | LTE B41 | 20 | 41055 | 2636.5 | QPSK | 50 | 0 | LTE B41 | 20 | 40857 | 2616.7 | QPSK | 50 | 50 | 13.25 | 13.63 |

| | PCC | | | | | | | SCC | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41C | LTE B41 PC2 | 20 | 41055 | 2636.5 | QPSK | 50 | 0 | LTE B41 PC2 | 20 | 40857 | 2616.7 | QPSK | 50 | 50 | 13.11 | 13.55 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 8-345
## LTE Uplink Carrier Aggregation Conducted Powers – Antenna 4A

| | PCC | | | | | | | | | SCC | | | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC UL Channel | PCC UL Frequency [MHz] | PCC DL Channel | PCC DL Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC UL Channel | SCC UL Frequency [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_7C | LTE B7 | 20 | 21350 | 2560.0 | 3350 | 2680.0 | QPSK | 50 | 0 | LTE B7 | 20 | 21152 | 2540.2 | 3152 | 2660.2 | QPSK | 50 | 50 | 11.82 | 11.90 |

| | PCC | | | | | | | SCC | | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41C | LTE B41 | 20 | 41055 | 2636.5 | QPSK | 50 | 0 | LTE B41 | 20 | 40857 | 2616.7 | QPSK | 50 | 50 | 13.33 | 13.67 |

| | PCC | | | | | | | SCC | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41C | LTE B41 PC2 | 20 | 41055 | 2636.5 | QPSK | 50 | 0 | LTE B41 PC2 | 20 | 40857 | 2616.7 | QPSK | 50 | 50 | 13.20 | 13.61 |

## Table 8-346
## LTE Uplink Carrier Aggregation Conducted Powers – Antenna 4B

| | PCC | | | | | | | | | SCC | | | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC UL Channel | PCC UL Frequency [MHz] | PCC DL Channel | PCC DL Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC UL Channel | SCC UL Frequency [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_7C | LTE B7 | 20 | 20850 | 2510.0 | 2850 | 2630.0 | QPSK | 1 | 99 | LTE B7 | 20 | 21048 | 2529.8 | 3048 | 2649.8 | QPSK | 1 | 0 | 13.12 | 13.19 |

| | PCC | | | | | | | SCC | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41C | LTE B41 | 20 | 39750 | 2506.0 | QPSK | 1 | 99 | LTE B41 | 20 | 39948 | 2525.8 | QPSK | 1 | 0 | 15.70 | 15.83 |

| | PCC | | | | | | | SCC | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | LTE Tx.Power with UL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41C | LTE B41 PC2 | 20 | 39750 | 2506.0 | QPSK | 1 | 99 | LTE B41 PC2 | 20 | 39948 | 2525.8 | QPSK | 1 | 0 | 15.79 | 15.66 |

Notes:

1. This device supports uplink carrier aggregation for LTE CA_7C, LTE CA_5B and LTE CA_41C with a maximum of two 20 MHz component carriers. For intraband contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when non-contiguous RB allocation is implemented. The conducted powers and MPR settings in this device are permanently implemented per the above 3GPP requirements.
2. Per FCC Guidance, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.




**Figure 8-3**
**Power Measurement Setup**




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.4 WLAN Maximum Conducted Powers

### 8.4.1 Variant 1

**Table 8-347**
**2.4 GHz WLAN Average RF Power – Ant 2A**

| 2.4GHz Conducted Power [dBm] | | | | |
|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | |
| | | 802.11b | 802.11g | 802.11n |
| | | Average | Average | Average |
| 2412 | 1 | 11.80 | 11.84 | 11.87 |
| 2437 | 6 | 11.65 | 11.68 | 11.76 |
| 2462 | 11 | 11.69 | 11.71 | 11.74 |

**Table 8-348**
**2.4 GHz WLAN Average RF Power – Ant 4A**

| 2.4GHz Conducted Power [dBm] | | | | |
|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | |
| | | 802.11b | 802.11g | 802.11n |
| | | Average | Average | Average |
| 2412 | 1 | 11.80 | 11.72 | 11.78 |
| 2437 | 6 | 11.66 | 11.68 | 11.70 |
| 2462 | 11 | 11.67 | 11.68 | 11.74 |

**Table 8-349**
**5 GHz WLAN Maximum Average RF Power – 5GHz ANTlower**

| 5GHz (40MHz) Conducted Power [dBm] | | | | 5GHz (80MHz) Conducted Power [dBm] | | |
|---|---|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | Freq [MHz] | Channel | IEEE Transmission Mode |
| | | 802.11n | 802.11ac | | | 802.11ac |
| | | Average | Average | | | Average |
| 5190 | 38 | 12.62 | 12.60 | 5530 | 106 | 10.67 |
| 5230 | 46 | 15.04 | 15.00 | 5610 | 122 | 15.60 |
| 5270 | 54 | 15.60 | 15.56 | 5690 | 138 | 15.57 |
| 5310 | 62 | 12.51 | 12.44 | 5775 | 155 | 14.50 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-350**
**5 GHz WLAN Maximum Average RF Power – 5GHz ANTupper**

| 5GHz (40MHz) Conducted Power [dBm] | | | | 5GHz (80MHz) Conducted Power [dBm] | | |
|---|---|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | Freq [MHz] | Channel | IEEE Transmission Mode |
| | | 802.11n | 802.11ac | | | 802.11ac |
| | | Average | Average | | | Average |
| 5190 | 38 | 12.55 | 12.61 | 5530 | 106 | 10.50 |
| 5230 | 46 | 15.20 | 15.25 | 5610 | 122 | 14.06 |
| 5270 | 54 | 15.45 | 15.37 | 5690 | 138 | 14.14 |
| 5310 | 62 | 12.61 | 12.55 | 5775 | 155 | 14.60 |

## 8.4.2 Variant 2

**Table 8-351**
**2.4 GHz WLAN Average RF Power – Ant 2A**

| 2.4GHz Conducted Power [dBm] | | | | |
|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | |
| | | 802.11b | 802.11g | 802.11n |
| | | Average | Average | Average |
| 2412 | 1 | 11.53 | 11.44 | 11.52 |
| 2437 | 6 | 11.54 | 11.57 | 11.61 |
| 2462 | 11 | 11.60 | 11.53 | 11.60 |

**Table 8-352**
**2.4 GHz WLAN Average RF Power – Ant 4A**

| 2.4GHz Conducted Power [dBm] | | | | |
|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | |
| | | 802.11b | 802.11g | 802.11n |
| | | Average | Average | Average |
| 2412 | 1 | 11.65 | 11.60 | 11.61 |
| 2437 | 6 | 11.70 | 11.68 | 11.55 |
| 2462 | 11 | 11.66 | 11.66 | 11.57 |



© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-353**
**5 GHz WLAN Average RF Power – 5GHz ANTlower**

| 5GHz (40MHz) Conducted Power [dBm] | | | | 5GHz (80MHz) Conducted Power [dBm] | | |
|---|---|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | Freq [MHz] | Channel | IEEE Transmission Mode |
| | | 802.11n | 802.11ac | | | 802.11ac |
| | | Average | Average | | | Average |
| 5190 | 38 | 12.53 | 12.54 | 5530 | 106 | 10.61 |
| 5230 | 46 | 15.05 | 15.00 | 5610 | 122 | 15.60 |
| 5270 | 54 | 15.35 | 15.28 | 5690 | 138 | 15.55 |
| 5310 | 62 | 12.56 | 12.61 | 5775 | 155 | 14.52 |

**Table 8-354**
**5 GHz WLAN Average RF Power – 5GHz ANTupper**

| 5GHz (40MHz) Conducted Power [dBm] | | | | 5GHz (80MHz) Conducted Power [dBm] | | |
|---|---|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | Freq [MHz] | Channel | IEEE Transmission Mode |
| | | 802.11n | 802.11ac | | | 802.11ac |
| | | Average | Average | | | Average |
| 5190 | 38 | 12.50 | 12.62 | 5530 | 106 | 10.65 |
| 5230 | 46 | 15.08 | 15.05 | 5610 | 122 | 14.18 |
| 5270 | 54 | 15.33 | 15.38 | 5690 | 138 | 14.05 |
| 5310 | 62 | 12.51 | 12.61 | 5775 | 155 | 14.68 |

## 8.5 WLAN Reduced Conducted Powers

### 8.5.1 Variant 1

**Table 8-355**
**2.4 GHz WLAN Average RF Power – Ant 2A**

| 2.4GHz Conducted Power [dBm] | | | | |
|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | |
| | | 802.11b | 802.11g | 802.11n |
| | | Average | Average | Average |
| 2412 | 1 | 5.21 | 5.41 | 5.34 |
| 2437 | 6 | 5.47 | 5.48 | 5.27 |
| 2462 | 11 | 5.49 | 5.42 | 5.32 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-356**
**2.4 GHz WLAN Average RF Power – Ant 4A**

| 2.4GHz Conducted Power [dBm] | | | | |
|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | |
| | | 802.11b | 802.11g | 802.11n |
| | | Average | Average | Average |
| 2412 | 1 | 5.31 | 5.29 | 5.40 |
| 2437 | 6 | 5.49 | 5.56 | 5.51 |
| 2462 | 11 | 5.47 | 5.48 | 5.50 |

**Table 8-357**
**5 GHz WLAN Average RF Power – 5GHz ANTlower**

| 5GHz (40MHz) Conducted Power [dBm] | | | | 5GHz (80MHz) Conducted Power [dBm] | | |
|---|---|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | Freq [MHz] | Channel | IEEE Transmission Mode |
| | | 802.11n | 802.11ac | | | 802.11ac |
| | | Average | Average | | | Average |
| 5190 | 38 | 12.50 | 12.49 | 5530 | 106 | 11.50 |
| 5230 | 46 | 12.40 | 12.42 | 5610 | 122 | 12.49 |
| 5270 | 54 | 12.45 | 12.48 | 5690 | 138 | 12.50 |
| 5310 | 62 | 12.42 | 12.46 | 5775 | 155 | 11.45 |

**Table 8-358**
**5 GHz WLAN Average RF Power – 5GHz ANTupper**

| 5GHz (80MHz) Conducted Power [dBm] | | |
|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode |
| | | 802.11ac |
| | | Average |
| 5210 | 42 | 10.98 |
| 5290 | 58 | 11.13 |
| 5530 | 106 | 9.95 |
| 5610 | 122 | 10.00 |
| 5690 | 138 | 9.99 |
| 5775 | 155 | 10.45 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.5.2 Variant 2

**Table 8-359**
**2.4 GHz WLAN Average RF Power – Ant 2A**

| 2.4GHz Conducted Power [dBm] | | | | |
|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | |
| | | 802.11b | 802.11g | 802.11n |
| | | Average | Average | Average |
| 2412 | 1 | 5.48 | 5.38 | 5.48 |
| 2437 | 6 | 5.30 | 5.33 | 5.40 |
| 2462 | 11 | 5.49 | 5.44 | 5.46 |

**Table 8-360**
**2.4 GHz WLAN Average RF Power – Ant 4A**

| 2.4GHz Conducted Power [dBm] | | | | |
|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | |
| | | 802.11b | 802.11g | 802.11n |
| | | Average | Average | Average |
| 2412 | 1 | 5.27 | 5.30 | 5.24 |
| 2437 | 6 | 5.45 | 5.40 | 5.40 |
| 2462 | 11 | 5.36 | 5.32 | 5.28 |

**Table 8-361**
**5 GHz WLAN Average RF Power – 5GHz ANTlower**

| 5GHz (40MHz) Conducted Power [dBm] | | | | 5GHz (80MHz) Conducted Power [dBm] | | |
|---|---|---|---|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode | | Freq [MHz] | Channel | IEEE Transmission Mode |
| | | 802.11n | 802.11ac | | | 802.11ac |
| | | Average | Average | | | Average |
| 5190 | 38 | 12.32 | 12.30 | 5530 | 106 | 11.42 |
| 5230 | 46 | 12.31 | 12.23 | 5610 | 122 | 12.46 |
| 5270 | 54 | 12.42 | 12.49 | 5690 | 138 | 12.50 |
| 5310 | 62 | 12.35 | 12.44 | 5775 | 155 | 11.49 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-362**
**5 GHz WLAN Average RF Power – 5GHz ANTupper**

| 5GHz (80MHz) Conducted Power [dBm] | | |
|---|---|---|
| Freq [MHz] | Channel | IEEE Transmission Mode |
| | | 802.11ac |
| | | Average |
| 5210 | 42 | 10.96 |
| 5290 | 58 | 11.17 |
| 5530 | 106 | 9.75 |
| 5610 | 122 | 9.85 |
| 5690 | 138 | 10.00 |
| 5775 | 155 | 10.39 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.5.3 WLAN Power Reduction Verification Summary

**Table 8-363**
**WLAN Power Reduction Verification**

| Antenna | Mode/Band | Condition (s) | Maximum Scenario Maximum Allowed Tune Up Power [dBm] | Reduced Scenario Maximum Allowed Tune Up Power [dBm] | Maximum Target Power [dBm] (Tolerance [dB]) | Reduced Target Power [dBm] (Tolerance [dB]) | Maximum Measured Power [dBm] | Reduced Measured Power [dBm] | Verdict |
|---|---|---|---|---|---|---|---|---|---|
| ANT2a | 2.4 GHz WLAN | Main Band 2a/2b ON | 13 | 6 | 11.50 (± 1.5) | 4.50 (± 1.5) | 12.2 | 3.13 | PASS |
| | | Interband ULCA ON | 13 | 6 | 11.50 (± 1.5) | 4.50 (± 1.5) | 11.42 | 4.86 | PASS |
| ANT4a | | Main Band 4a/4b ON | 13 | 6 | 11.50 (± 1.5) | 4.50 (± 1.5) | 11.57 | 4.85 | PASS |
| | | Interband ULCA ON | 13 | 6 | 11.50 (± 1.5) | 4.50 (± 1.5) | 11.57 | 4.95 | PASS |
| 5GHz ANTlower | 5 GHz WLAN | Main Band 2a ON | 16.5 | 12.5 | 15.00 (± 1.5) | 11.00 (± 1.5) | 13.56 | 9.95 | PASS |
| | | Interband ULCA ON | 16.5 | 12.5 | 15.00 (± 1.5) | 11.00 (± 1.5) | 13.62 | 10.11 | PASS |
| 5GHz ANTupper | | Main Band 3 ON | 16.25 | 11.25 | 14.75 (± 1.5) | 9.75 (± 1.5) | 13.3 | 8.3 | PASS |
| | | Interband ULCA ON | 16.25 | 11.25 | 14.75 (± 1.5) | 9.75 (± 1.5) | 13.3 | 10.45 | PASS |

Conducted powers were measured for each Mode/Band and applied condition. All conducted power measurements were verified to be within tolerance.

## 8.5.4 Notes for WLAN

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission modes with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.
- The WLAN chipset in this device is produced by two different suppliers. The electrically identical modules are manufactured with the identical mechanical structure to meet the same specifications and functions. Two device variants are referenced as Variant 1 and Variant 2 in this report.
- The worst case configurations were evaluated for both variant 1 and variant 2. The variant with highest report SAR value was selected for remaining test configurations.

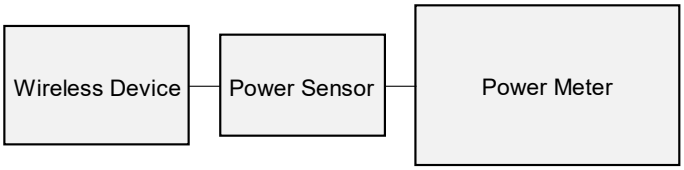



**Figure 8-4**
**Power Measurement Setup**



© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 8.6 Bluetooth Conducted Powers

**Table 8-364**
**Maximum Bluetooth Average RF Power – Ant 4a – Variant 1**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | 13.21 | 20.941 |
| 2441 | GFSK | 1.0 | 39 | 13.43 | 22.029 |
| 2480 | GFSK | 1.0 | 78 | **13.45** | 22.131 |

**Table 8-365**
**Maximum Bluetooth Average RF Power – Ant 2a – Variant 1**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | 13.51 | 22.439 |
| 2441 | GFSK | 1.0 | 39 | **13.69** | 23.388 |
| 2480 | GFSK | 1.0 | 78 | 13.49 | 22.336 |

**Table 8-366**
**Maximum Bluetooth Average RF Power – Ant 4a – Variant 2**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | 13.07 | 20.277 |
| 2441 | GFSK | 1.0 | 39 | 12.94 | 19.679 |
| 2480 | GFSK | 1.0 | 78 | **13.22** | 20.989 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-367**
**Maximum Bluetooth Average RF Power – Ant 2a – Variant 2**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | 13.28 | 21.281 |
| 2441 | GFSK | 1.0 | 39 | 13.37 | 21.727 |
| 2480 | GFSK | 1.0 | 78 | **13.54** | 22.594 |

**Table 8-368**
**Reduced Bluetooth Average RF Power – Ant 4a – Variant 1**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | **6.49** | 4.457 |
| 2441 | GFSK | 1.0 | 39 | 6.10 | 4.074 |
| 2480 | GFSK | 1.0 | 78 | 6.16 | 4.130 |

**Table 8-369**
**Reduced Power Level 1 Bluetooth Average RF Power – Ant 2a – Variant 1**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | 10.23 | 10.544 |
| 2441 | GFSK | 1.0 | 39 | **10.75** | 11.885 |
| 2480 | GFSK | 1.0 | 78 | 10.44 | 11.066 |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-370**
**Reduced Power Level 2 Bluetooth Average RF Power – Ant 2a – Variant 1**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | 6.59 | 4.560 |
| 2441 | GFSK | 1.0 | 39 | 6.71 | 4.688 |
| 2480 | GFSK | 1.0 | 78 | **6.87** | 4.864 |

**Table 8-371**
**Reduced Bluetooth Average RF Power – Ant 4a – Variant 2**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | 5.95 | 3.936 |
| 2441 | GFSK | 1.0 | 39 | 6.19 | 4.159 |
| 2480 | GFSK | 1.0 | 78 | **6.27** | 4.236 |

**Table 8-372**
**Reduced Power Level 1 Bluetooth Average RF Power – Ant 2a – Variant 2**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | 10.75 | 11.885 |
| 2441 | GFSK | 1.0 | 39 | 10.76 | 11.912 |
| 2480 | GFSK | 1.0 | 78 | **10.77** | 11.940 |




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 8-373**
**Reduced Power Level 2 Bluetooth Average RF Power – Ant 2a – Variant 2**

| Frequency [MHz] | Modulation | Data Rate [Mbps] | Channel No. | Avg Conducted Power | |
|---|---|---|---|---|---|
| | | | | [dBm] | [mW] |
| 2402 | GFSK | 1.0 | 0 | 6.59 | 4.560 |
| 2441 | GFSK | 1.0 | 39 | 6.71 | 4.688 |
| 2480 | GFSK | 1.0 | 78 | **6.82** | 4.808 |

Note: The bolded data rates and channel above were tested for SAR.




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

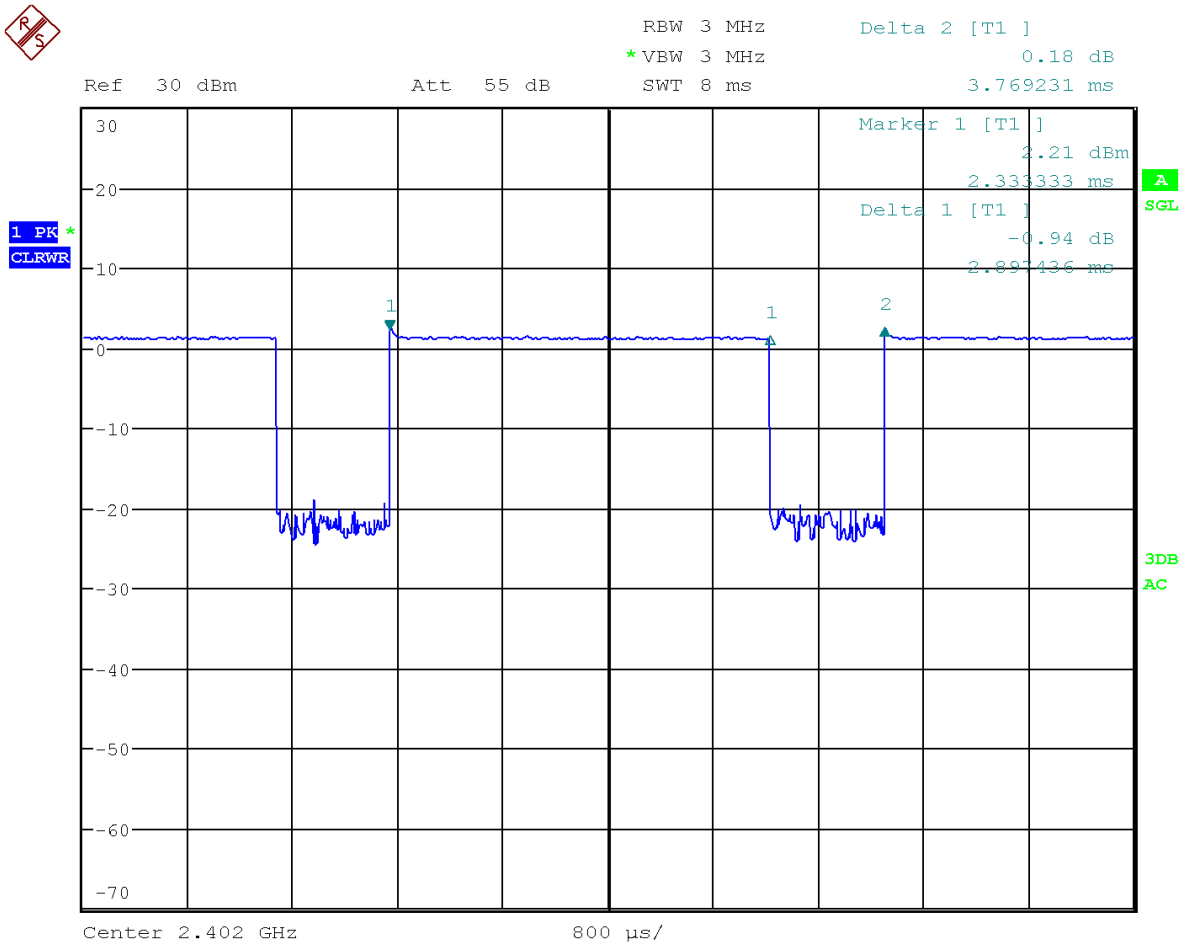



**Figure 8-5**
**Bluetooth Transmission Plot – Ant 4a – Variant 1**

**Equation 8-1**
**Bluetooth Duty Cycle Calculation – Ant 4a – Variant 1**

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.8974ms}{3.7692ms} * 100\% = 76.9\%$$



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

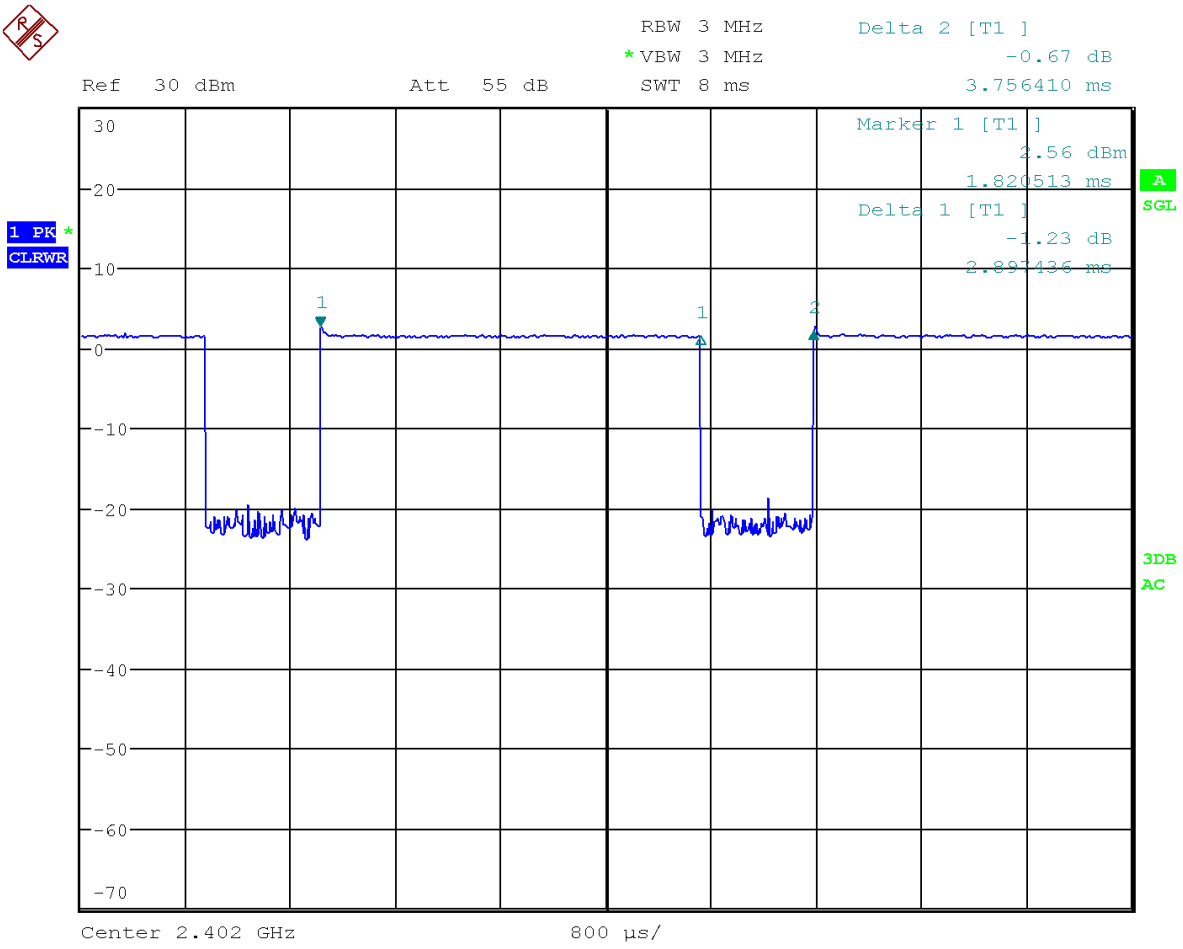



**Figure 8-6**
**Bluetooth Transmission Plot – Ant 2a – Variant 1**

**Equation 8-2**
**Bluetooth Duty Cycle Calculation – Ant 2a – Variant 1**

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.8974ms}{3.7564ms} * 100\% = 77.1\%$$



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

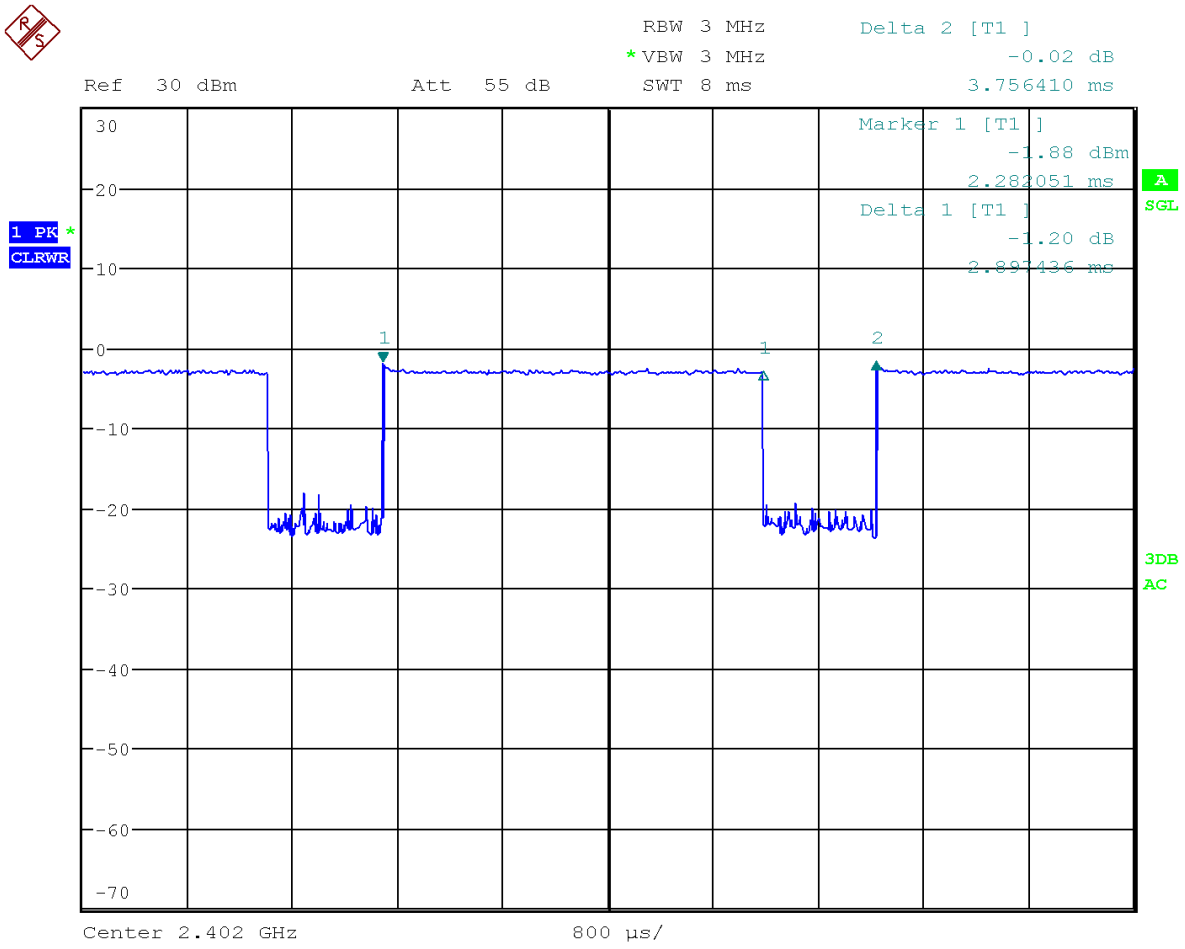



**Figure 8-7**
**Bluetooth Transmission Plot – Ant 4a – Variant 2**

**Equation 8-3**
**Bluetooth Duty Cycle Calculation – Ant 4a – Variant 2**

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.8974ms}{3.7564ms} * 100\% = 77.1\%$$



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

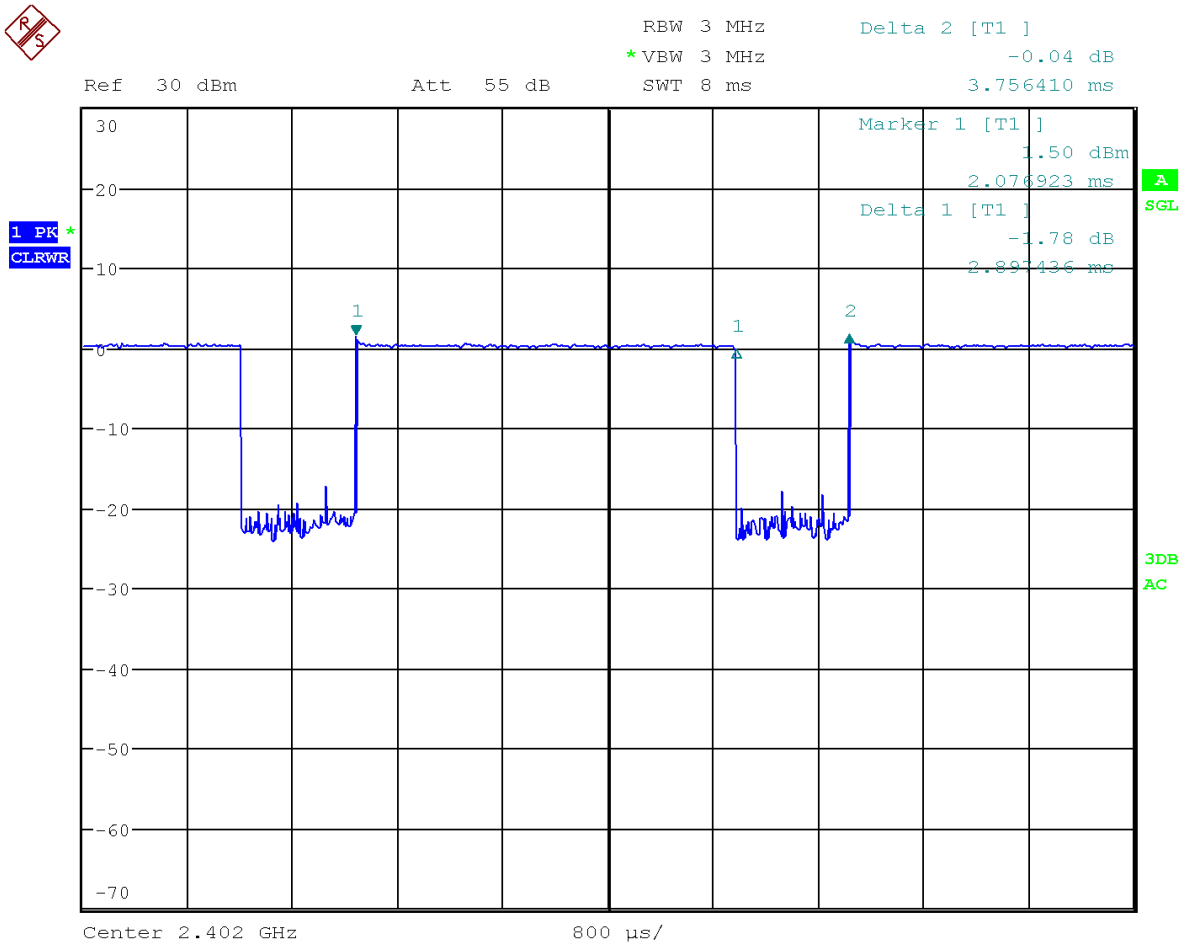



**Figure 8-8**
**Bluetooth Transmission Plot – Ant 2a – Variant 2**

**Equation 8-4**
**Bluetooth Duty Cycle Calculation – Ant 2a – Variant 2**

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.8974ms}{3.7564ms} * 100\% = 77.1\%$$




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

### 8.6.1 Bluetooth Power Reduction Verification Summary

**Table 8-374**
**Bluetooth Power Reduction Verification**

| Antenna | Mode/Band | Condition (s) | Maximum Scenario Maximum Allowed Tune Up Power [dBm] | Reduced Scenario Maximum Allowed Tune Up Power [dBm] | Maximum Target Power [dBm] (Tolerance [dB]) | Reduced Target Power [dBm] (Tolerance [dB]) | Maximum Measured Power [dBm] | Reduced Measured Power [dBm] | Verdict |
|---|---|---|---|---|---|---|---|---|---|
| ANT4a | 2.4 GHz Bluetooth | Main Band ANT3/4a/4b ON | 14 | 7 | 12.50 (+1.5/-2) | 5.50 (+1.5/-2) | 13.11 | 6.61 | PASS |
| | 2.4 GHz Bluetooth | Interband ULCA ON | 14 | 7 | 12.50 (+1.5/-2) | 5.50 (+1.5/-2) | 13.11 | 6.2 | PASS |
| ANT2a | 2.4 GHz Bluetooth | 5 GHz WLAN ON | 14 | 11 | 12.50 (+1.5/-2) | 9.50 (+1.5/-2) | 12.26 | 8.6 | PASS |
| | 2.4 GHz Bluetooth | Main Band ANT1/2a/2b ON | 14 | 7 | 12.50 (+1.5/-2) | 5.50 (+1.5/-2) | 13.25 | 6.92 | PASS |
| | 2.4 GHz Bluetooth | 5 GHz WLAN ON, Main Band ANT1/2a/2b ON | 14 | 7 | 12.50 (+1.5/-2) | 5.50 (+1.5/-2) | 13.33 | 6.9 | PASS |
| | 2.4 GHz Bluetooth | Interband ULCA ON | 14 | 7 | 12.50 (+1.5/-2) | 5.50 (+1.5/-2) | 13.33 | 6.45 | PASS |
| | 2.4 GHz Bluetooth | 5 GHz WLAN ON, Interband ULCA ON | 14 | 7 | 12.50 (+1.5/-2) | 5.50 (+1.5/-2) | 13.33 | 6.62 | PASS |

Conducted powers were measured for each Mode/Band applied condition. All conducted power measurements were verified to be within tolerance.

### 8.6.2 Notes for Bluetooth

- The Bluetooth chipset in this device is produced by two different suppliers. The electrically identical modules are manufactured with the identical mechanical structure to meet the same specifications and functions. Two device variants are referenced as Variant 1 and Variant 2 in this report.
- Bluetooth SAR worst case configuration was evaluated for both Variant 1 and Variant 2. The variant with highest reported SAR value was selected for the remaining test configurations.
- Full power measurements were performed for Variant 1 and Variant 2 per FCC KDB Procedures 248227.

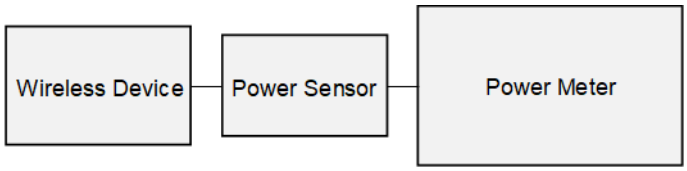



**Figure 8-9**
**Power Measurement Setup**



© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 9 SYSTEM VERIFICATION

## 9.1 Tissue Verification

**Table 9-1**
**Measured Tissue Properties**

| Calibrated for Tests Performed on: | Tissue Type | Tissue Temp During Calibration (°C) | Measured Frequency (MHz) | Measured Conductivity, σ (S/m) | Measured Dielectric Constant, ε | TARGET Conductivity, σ (S/m) | TARGET Dielectric Constant, ε | %dev σ | %dev ε |
|---|---|---|---|---|---|---|---|---|---|
| 1/5/2020 | 750B | 21.5 | 680 | 0.913 | 55.753 | 0.958 | 55.804 | -4.70% | -0.09% |
| | | | 695 | 0.920 | 55.686 | 0.959 | 55.745 | -4.07% | -0.11% |
| | | | 700 | 0.922 | 55.622 | 0.959 | 55.726 | -3.86% | -0.19% |
| | | | 710 | 0.927 | 55.409 | 0.960 | 55.687 | -3.44% | -0.50% |
| | | | 720 | 0.934 | 55.150 | 0.961 | 55.648 | -2.81% | -0.89% |
| | | | 725 | 0.940 | 55.023 | 0.961 | 55.629 | -2.19% | -1.09% |
| | | | 740 | 0.961 | 54.713 | 0.963 | 55.570 | -0.21% | -1.54% |
| | | | 755 | 0.985 | 54.597 | 0.964 | 55.512 | 2.18% | -1.65% |
| | | | 770 | 0.992 | 54.647 | 0.965 | 55.453 | 2.80% | -1.45% |
| | | | 785 | 0.995 | 54.671 | 0.966 | 55.395 | 3.00% | -1.31% |
| | | | 800 | 0.997 | 54.508 | 0.967 | 55.336 | 3.10% | -1.50% |
| 1/7/2020 | 750B | 22.5 | 680 | 0.913 | 55.794 | 0.958 | 55.804 | -4.70% | -0.02% |
| | | | 695 | 0.923 | 55.762 | 0.959 | 55.745 | -3.75% | 0.03% |
| | | | 700 | 0.926 | 55.719 | 0.959 | 55.726 | -3.44% | -0.01% |
| | | | 710 | 0.932 | 55.566 | 0.960 | 55.687 | -2.92% | -0.22% |
| | | | 720 | 0.940 | 55.358 | 0.961 | 55.648 | -2.19% | -0.52% |
| | | | 725 | 0.946 | 55.249 | 0.961 | 55.629 | -1.56% | -0.68% |
| | | | 740 | 0.963 | 54.960 | 0.963 | 55.570 | 0.00% | -1.10% |
| | | | 755 | 0.982 | 54.813 | 0.964 | 55.512 | 1.87% | -1.26% |
| | | | 770 | 0.998 | 54.787 | 0.965 | 55.453 | 3.42% | -1.20% |
| | | | 785 | 1.008 | 54.766 | 0.966 | 55.395 | 4.35% | -1.14% |
| | | | 800 | 1.012 | 54.644 | 0.967 | 55.336 | 4.65% | -1.25% |
| 12/26/2019 | 835B | 19.2 | 820 | 0.998 | 54.505 | 0.969 | 55.258 | 1.96% | -1.36% |
| | | | 835 | 1.002 | 54.270 | 0.970 | 55.200 | 3.30% | -1.68% |
| | | | 850 | 1.020 | 54.079 | 0.988 | 55.154 | 3.24% | -1.95% |
| 12/30/2019 | 835B | 19.1 | 820 | 0.955 | 54.991 | 0.969 | 55.258 | -1.44% | -0.48% |
| | | | 835 | 0.976 | 54.515 | 0.970 | 55.200 | 0.62% | -1.24% |
| | | | 850 | 1.007 | 54.202 | 0.988 | 55.154 | 1.92% | -1.56% |
| 1/9/2020 | 835B | 19.8 | 820 | 0.994 | 56.315 | 0.969 | 55.258 | 2.58% | 1.91% |
| | | | 835 | 1.001 | 56.021 | 0.970 | 55.200 | 3.20% | 1.49% |
| | | | 850 | 1.015 | 55.807 | 0.988 | 55.154 | 2.73% | 1.18% |
| 1/15/2020 | 835B | 18.4 | 800 | 0.959 | 56.349 | 0.967 | 55.336 | -0.87% | 1.83% |
| | | | 820 | 0.969 | 55.925 | 0.969 | 55.258 | 0.00% | 1.21% |
| | | | 835 | 0.969 | 55.563 | 0.970 | 55.200 | 1.96% | 0.66% |
| | | | 850 | 1.015 | 55.369 | 0.988 | 55.154 | 2.73% | 0.39% |
| 1/7/2020 | 1750B | 19.4 | 1710 | 1.474 | 51.639 | 1.463 | 53.537 | 0.75% | -3.55% |
| | | | 1750 | 1.509 | 51.554 | 1.488 | 53.432 | 1.41% | -3.51% |
| | | | 1790 | 1.550 | 51.501 | 1.514 | 53.326 | 2.38% | -3.42% |
| 1/21/2020 | 1750B | 18.4 | 1710 | 1.447 | 52.452 | 1.463 | 53.537 | -1.09% | -2.03% |
| | | | 1750 | 1.484 | 52.302 | 1.488 | 53.432 | -0.27% | -2.11% |
| | | | 1790 | 1.525 | 52.205 | 1.514 | 53.326 | 0.73% | -2.10% |
| 12/30/2019 | 1900B | 18.8 | 1850 | 1.460 | 51.427 | 1.520 | 53.300 | -3.95% | -3.51% |
| | | | 1880 | 1.467 | 51.318 | 1.520 | 53.300 | -3.49% | -3.72% |
| | | | 1910 | 1.503 | 51.149 | 1.520 | 53.300 | -1.12% | -4.04% |
| 1/7/2020 | 1900B | 21.6 | 1850 | 1.506 | 51.740 | 1.520 | 53.300 | -0.92% | -2.93% |
| | | | 1880 | 1.536 | 51.693 | 1.520 | 53.300 | 1.05% | -3.02% |
| | | | 1910 | 1.564 | 51.625 | 1.520 | 53.300 | 2.89% | -3.14% |
| 1/15/2020 | 1900B | 20.5 | 1850 | 1.501 | 52.547 | 1.520 | 53.300 | -1.25% | -1.41% |
| | | | 1880 | 1.528 | 52.437 | 1.520 | 53.300 | 0.53% | -1.62% |
| | | | 1910 | 1.561 | 52.341 | 1.520 | 53.300 | 2.70% | -1.80% |
| 1/18/2020 | 1900B | 21.5 | 1850 | 1.551 | 52.272 | 1.520 | 53.300 | 2.04% | -1.93% |
| | | | 1880 | 1.567 | 52.249 | 1.520 | 53.300 | 3.09% | -1.97% |
| | | | 1910 | 1.587 | 52.218 | 1.520 | 53.300 | 4.41% | -2.03% |
| 1/19/2020 | 2300B | 22.2 | 2300 | 1.849 | 51.290 | 1.809 | 52.900 | 2.21% | -3.04% |
| | | | 2310 | 1.866 | 51.325 | 1.816 | 52.887 | 2.75% | -2.95% |
| | | | 2320 | 1.876 | 51.364 | 1.826 | 52.873 | 2.74% | -2.85% |
| 12/20/2019 | 2450B | 20.7 | 2400 | 1.974 | 51.276 | 1.902 | 52.767 | 3.79% | -2.83% |
| | | | 2450 | 2.036 | 51.076 | 1.950 | 52.700 | 4.41% | -3.08% |
| | | | 2500 | 2.108 | 50.870 | 2.021 | 52.636 | 4.30% | -3.36% |
| 1/14/2020 | 2450B | 23.0 | 2400 | 1.888 | 50.952 | 1.902 | 52.767 | -0.84% | -3.44% |
| | | | 2450 | 1.948 | 50.877 | 1.950 | 52.700 | -0.10% | -3.46% |
| | | | 2500 | 2.022 | 50.697 | 2.021 | 52.636 | 0.05% | -3.87% |
| 12/26/2019 | 2450B-2600B | 22.0 | 2400 | 1.954 | 52.061 | 1.902 | 52.767 | 2.73% | -1.34% |
| | | | 2450 | 2.012 | 51.869 | 1.950 | 52.700 | 3.18% | -1.58% |
| | | | 2500 | 2.094 | 51.672 | 2.021 | 52.636 | 3.61% | -1.83% |
| | | | 2500 | 2.094 | 51.672 | 2.021 | 52.636 | 3.61% | -1.83% |
| | | | 2550 | 2.153 | 51.431 | 2.092 | 52.573 | 2.92% | -2.17% |
| | | | 2600 | 2.236 | 51.259 | 2.163 | 52.509 | 3.37% | -2.38% |
| | | | 2600 | 2.236 | 51.259 | 2.163 | 52.509 | 3.37% | -2.38% |
| | | | 2650 | 2.294 | 51.017 | 2.234 | 52.445 | 2.69% | -2.72% |
| | | | 2700 | 2.374 | 50.852 | 2.305 | 52.382 | 2.99% | -2.92% |
| 1/5/2020 | 2450B-2600B | 22.3 | 2400 | 1.954 | 51.204 | 1.902 | 52.767 | 2.73% | -2.96% |
| | | | 2450 | 2.016 | 51.029 | 1.950 | 52.700 | 3.38% | -3.17% |
| | | | 2500 | 2.090 | 50.834 | 2.021 | 52.636 | 3.41% | -3.42% |
| | | | 2500 | 2.090 | 50.834 | 2.021 | 52.636 | 3.41% | -3.42% |
| | | | 2550 | 2.154 | 50.657 | 2.092 | 52.573 | 2.96% | -3.64% |
| | | | 2600 | 2.233 | 50.441 | 2.163 | 52.509 | 3.24% | -3.94% |
| | | | 2600 | 2.233 | 50.441 | 2.163 | 52.509 | 3.24% | -3.94% |
| | | | 2650 | 2.295 | 50.242 | 2.234 | 52.445 | 2.73% | -4.20% |
| | | | 2700 | 2.375 | 50.034 | 2.305 | 52.382 | 3.04% | -4.48% |
| 1/7/2020 | 3500B-3700B | 22.3 | 3500 | 3.387 | 49.066 | 3.314 | 51.321 | 2.20% | -4.39% |
| | | | 3550 | 3.449 | 48.971 | 3.372 | 51.254 | 2.28% | -4.45% |
| | | | 3600 | 3.524 | 48.797 | 3.431 | 51.186 | 2.71% | -4.67% |
| | | | 3645 | 3.577 | 48.679 | 3.483 | 51.125 | 2.70% | -4.78% |
| | | | 3685 | 3.639 | 48.560 | 3.530 | 51.070 | 3.09% | -4.91% |
| | | | 3725 | 3.689 | 48.471 | 3.577 | 51.016 | 3.13% | -4.99% |
| 12/16/2019 | 5200B-5800B | 19.3 | 5180 | 5.052 | 47.599 | 5.276 | 49.041 | -4.25% | -2.94% |
| | | | 5200 | 5.080 | 47.561 | 5.299 | 49.014 | -4.13% | -2.96% |
| | | | 5220 | 5.107 | 47.557 | 5.323 | 48.987 | -4.06% | -2.92% |
| | | | 5240 | 5.135 | 47.505 | 5.346 | 48.960 | -3.95% | -2.97% |
| | | | 5260 | 5.166 | 47.449 | 5.369 | 48.933 | -3.78% | -3.03% |
| | | | 5280 | 5.194 | 47.397 | 5.393 | 48.906 | -3.69% | -3.09% |
| | | | 5300 | 5.219 | 47.345 | 5.416 | 48.879 | -3.64% | -3.14% |
| | | | 5320 | 5.255 | 47.332 | 5.439 | 48.851 | -3.38% | -3.11% |
| | | | 5500 | 5.500 | 46.988 | 5.650 | 48.607 | -2.65% | -3.33% |
| | | | 5520 | 5.530 | 46.948 | 5.673 | 48.580 | -2.52% | -3.36% |
| | | | 5540 | 5.560 | 46.919 | 5.696 | 48.553 | -2.39% | -3.37% |
| | | | 5560 | 5.582 | 46.885 | 5.720 | 48.526 | -2.41% | -3.38% |
| | | | 5580 | 5.615 | 46.841 | 5.743 | 48.499 | -2.23% | -3.42% |
| | | | 5600 | 5.648 | 46.793 | 5.766 | 48.471 | -2.05% | -3.46% |
| | | | 5620 | 5.678 | 46.752 | 5.790 | 48.444 | -1.93% | -3.49% |
| | | | 5640 | 5.708 | 46.723 | 5.813 | 48.417 | -1.81% | -3.50% |
| | | | 5660 | 5.733 | 46.691 | 5.837 | 48.390 | -1.78% | -3.51% |
| | | | 5680 | 5.763 | 46.652 | 5.860 | 48.363 | -1.66% | -3.54% |
| | | | 5700 | 5.793 | 46.596 | 5.883 | 48.336 | -1.53% | -3.60% |
| | | | 5745 | 5.863 | 46.532 | 5.936 | 48.275 | -1.23% | -3.61% |
| | | | 5765 | 5.889 | 46.498 | 5.959 | 48.248 | -1.17% | -3.63% |
| | | | 5785 | 5.918 | 46.445 | 5.982 | 48.220 | -1.07% | -3.68% |
| | | | 5800 | 5.945 | 46.413 | 6.000 | 48.200 | -0.92% | -3.71% |
| | | | 5805 | 5.954 | 46.398 | 6.006 | 48.193 | -0.87% | -3.72% |
| | | | 5825 | 5.980 | 46.363 | 6.029 | 48.166 | -0.81% | -3.74% |

The above measured tissue parameters were used in the DASY software. The DASY software was used to perform interpolation to determine the dielectric parameters at the SAR test device frequencies (per KDB Publication 865664 D01v01r04 and IEEE 1528-2013 6.6.1.2). The tissue parameters listed in the SAR test plots may slightly differ from the table above due to significant digit rounding in the software.




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 9.2 Test System Verification

Prior to SAR assessment, the system is verified to ±10% of the SAR measurement on the reference dipole at the time of calibration by the calibration facility. Full system validation status and result summary can be found in Appendix D.

**Table 9-2**
**System Verification Results**

| System Verification TARGET & MEASURED | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAR System # | Tissue Frequency (MHz) | Tissue Type | Date | Amb. Temp (°C) | Liquid Temp (°C) | Input Power (W) | Source SN | Probe SN | Measured $SAR_{1g}$ (W/kg) | 1 W Target $SAR_{1g}$ (W/kg) | 1 W Normalized $SAR_{1g}$ (W/kg) | $Deviation_{1g}$ (%) |
| AM1 | 750 | BODY | 01/05/2020 | 20.0 | 21.5 | 0.200 | 1097 | 7421 | 1.770 | 8.560 | 8.850 | 3.39% |
| AM1 | 750 | BODY | 01/07/2020 | 20.5 | 20.5 | 0.200 | 1097 | 7421 | 1.760 | 8.560 | 8.800 | 2.80% |
| AM7 | 835 | BODY | 12/26/2019 | 22.6 | 20.1 | 0.200 | 4d040 | 3837 | 2.040 | 9.530 | 10.200 | 7.03% |
| AM8 | 835 | BODY | 12/30/2019 | 20.0 | 19.1 | 0.200 | 4d040 | 7416 | 1.900 | 9.530 | 9.500 | -0.31% |
| AM8 | 835 | BODY | 01/09/2020 | 22.0 | 19.8 | 0.200 | 4d040 | 7416 | 1.890 | 9.530 | 9.450 | -0.84% |
| AM8 | 835 | BODY | 01/15/2020 | 20.0 | 18.4 | 0.200 | 4d040 | 7416 | 1.810 | 9.530 | 9.050 | -5.04% |
| AM8 | 1750 | BODY | 01/07/2020 | 20.3 | 19.4 | 0.100 | 1083 | 7416 | 3.810 | 37.100 | 38.100 | 2.70% |
| AM6 | 1750 | BODY | 01/21/2020 | 23.8 | 18.4 | 0.100 | 1083 | 7427 | 3.420 | 37.100 | 34.200 | -7.82% |
| AM5 | 1900 | BODY | 12/30/2019 | 21.7 | 19.0 | 0.100 | 5d026 | 7491 | 4.180 | 39.900 | 41.800 | 4.76% |
| AM5 | 1900 | BODY | 01/07/2020 | 21.7 | 20.4 | 0.100 | 5d026 | 7491 | 4.020 | 39.900 | 40.200 | 0.75% |
| AM1 | 1900 | BODY | 01/15/2020 | 21.5 | 19.8 | 0.100 | 5d026 | 7421 | 4.100 | 39.900 | 41.000 | 2.76% |
| AM2 | 1900 | BODY | 01/18/2020 | 19.9 | 20.5 | 0.100 | 5d026 | 7420 | 4.190 | 39.900 | 41.900 | 5.01% |
| AM4 | 2300 | BODY | 01/19/2020 | 22.4 | 20.4 | 0.100 | 1038 | 7532 | 4.450 | 46.700 | 44.500 | -4.71% |
| AM4 | 2450 | BODY | 12/20/2019 | 21.0 | 20.0 | 0.100 | 921 | 7532 | 5.360 | 50.800 | 53.600 | 5.51% |
| AM4 | 2450 | BODY | 12/26/2019 | 21.6 | 20.7 | 0.100 | 921 | 7532 | 5.260 | 50.800 | 52.600 | 3.54% |
| AM4 | 2450 | BODY | 01/05/2020 | 22.2 | 21.0 | 0.100 | 921 | 7532 | 5.260 | 50.800 | 52.600 | 3.54% |
| AM4 | 2450 | BODY | 01/14/2020 | 22.1 | 21.0 | 0.100 | 921 | 7532 | 5.120 | 50.800 | 51.200 | 0.79% |
| AM4 | 2600 | BODY | 12/26/2019 | 21.6 | 20.7 | 0.100 | 1069 | 7532 | 5.610 | 55.300 | 56.100 | 1.45% |
| AM4 | 2600 | BODY | 01/05/2020 | 22.2 | 21.0 | 0.100 | 1069 | 7532 | 5.380 | 55.300 | 53.800 | -2.71% |
| AM3 | 3500 | BODY | 01/07/2020 | 22.3 | 21.0 | 0.100 | 1068 | 3949 | 6.330 | 65.300 | 63.300 | -3.06% |
| AM3 | 3700 | BODY | 01/07/2020 | 22.3 | 21.0 | 0.100 | 1029 | 3949 | 6.390 | 64.900 | 63.900 | -1.54% |
| AM7 | 5250 | BODY | 12/16/2019 | 22.6 | 21.0 | 0.050 | 1123 | 3837 | 3.470 | 74.000 | 69.400 | -6.22% |
| AM7 | 5600 | BODY | 12/16/2019 | 22.6 | 21.0 | 0.050 | 1123 | 3837 | 3.580 | 77.600 | 71.600 | -7.73% |
| AM7 | 5750 | BODY | 12/16/2019 | 22.6 | 21.0 | 0.050 | 1123 | 3837 | 3.520 | 74.700 | 70.400 | -5.76% |

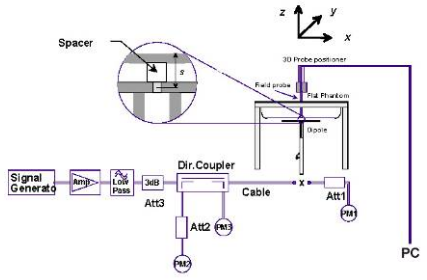



**Figure 9-1**
**System Verification Setup Diagram**



**Figure 9-2**
**System Verification Setup Photo**




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## 10.1 Standalone Body SAR Data

### Table 10-1
### GPRS 850 MHz Ant 1 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | # of Time Slots | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 836.60 | 190 | GSM 850 | GPRS | 26.8 | 26.39 | 0.04 | Body | 0 mm | Ant 1 | DLXZR02WP7GX | 2 | 1:4.15 | back | 0.449 | 1.099 | 0.493 | 0.181 | 0.199 | |
| 836.60 | 190 | GSM 850 | GPRS | 26.8 | 26.39 | -0.02 | Body | 0 mm | Ant 1 | DLXZR02WP7GX | 2 | 1:4.15 | top | 0.042 | 1.099 | 0.046 | 0.021 | 0.023 | |
| 836.60 | 190 | GSM 850 | GPRS | 26.8 | 26.39 | -0.01 | Body | 0 mm | Ant 1 | DLXZR02WP7GX | 2 | 1:4.15 | bottom | 0.365 | 1.099 | 0.401 | 0.140 | 0.154 | |
| 836.60 | 190 | GSM 850 | GPRS | 26.8 | 26.39 | -0.03 | Body | 0 mm | Ant 1 | DLXZR02WP7GX | 2 | 1:4.15 | right | 0.014 | 1.099 | 0.015 | 0.007 | 0.008 | |
| 824.20 | 128 | GSM 850 | GPRS | 26.8 | 26.55 | 0.07 | Body | 0 mm | Ant 1 | DLXZR02WP7GX | 2 | 1:4.15 | left | 1.050 | 1.059 | 1.112 | 0.310 | 0.328 | A1 |
| 836.60 | 190 | GSM 850 | GPRS | 26.8 | 26.39 | -0.18 | Body | 0 mm | Ant 1 | DLXZR02WP7GX | 2 | 1:4.15 | left | 0.663 | 1.099 | 0.729 | 0.235 | 0.258 | |
| 848.80 | 251 | GSM 850 | GPRS | 26.8 | 26.36 | -0.04 | Body | 0 mm | Ant 1 | DLXZR02WP7GX | 2 | 1:4.15 | left | 0.581 | 1.107 | 0.643 | 0.208 | 0.230 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |

### Table 10-2
### GPRS 850 MHz Ant 3 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | # of Time Slots | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 824.20 | 128 | GSM 850 | GPRS | 27.3 | 26.30 | 0.08 | Body | 0 mm | Ant 3 | DLXZR00GP7GX | 2 | 1:4.15 | back | 0.862 | 1.259 | 1.085 | 0.439 | 0.553 | |
| 836.60 | 190 | GSM 850 | GPRS | 27.3 | 26.29 | 0.09 | Body | 0 mm | Ant 3 | DLXZR00GP7GX | 2 | 1:4.15 | back | 0.754 | 1.262 | 0.952 | 0.383 | 0.483 | |
| 848.80 | 251 | GSM 850 | GPRS | 27.3 | 26.21 | -0.09 | Body | 0 mm | Ant 3 | DLXZR00GP7GX | 2 | 1:4.15 | back | 0.683 | 1.285 | 0.878 | 0.347 | 0.446 | |
| 836.60 | 190 | GSM 850 | GPRS | 27.3 | 26.29 | -0.03 | Body | 0 mm | Ant 3 | DLXZR00GP7GX | 2 | 1:4.15 | top | 0.480 | 1.262 | 0.606 | 0.182 | 0.230 | |
| 836.60 | 190 | GSM 850 | GPRS | 27.3 | 26.29 | -0.04 | Body | 0 mm | Ant 3 | DLXZR00GP7GX | 2 | 1:4.15 | bottom | 0.027 | 1.262 | 0.034 | 0.015 | 0.019 | |
| 824.20 | 128 | GSM 850 | GPRS | 27.3 | 26.30 | -0.05 | Body | 0 mm | Ant 3 | DLXZR00GP7GX | 2 | 1:4.15 | right | 0.793 | 1.259 | 0.998 | 0.281 | 0.354 | |
| 836.60 | 190 | GSM 850 | GPRS | 27.3 | 26.29 | 0.00 | Body | 0 mm | Ant 3 | DLXZR00GP7GX | 2 | 1:4.15 | right | 0.659 | 1.262 | 0.832 | 0.223 | 0.281 | |
| 848.80 | 251 | GSM 850 | GPRS | 27.3 | 26.21 | 0.00 | Body | 0 mm | Ant 3 | DLXZR00GP7GX | 2 | 1:4.15 | right | 0.613 | 1.285 | 0.788 | 0.219 | 0.281 | |
| 836.60 | 190 | GSM 850 | GPRS | 27.3 | 26.29 | 0.04 | Body | 0 mm | Ant 3 | DLXZR00GP7GX | 2 | 1:4.15 | left | 0.013 | 1.262 | 0.016 | 0.006 | 0.008 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |

### Table 10-3
### GPRS 1900 MHz Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | # of Time Slots | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1850.20 | 512 | GSM 1900 | GPRS | 21.8 | 21.04 | -0.05 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 2 | 1:4.15 | back | 0.891 | 1.191 | 1.061 | 0.421 | 0.501 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.8 | 20.87 | 0.01 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 2 | 1:4.15 | back | 0.858 | 1.239 | 1.063 | 0.407 | 0.504 | |
| 1909.80 | 810 | GSM 1900 | GPRS | 21.8 | 20.98 | 0.00 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 2 | 1:4.15 | back | 0.864 | 1.208 | 1.044 | 0.404 | 0.488 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.8 | 20.87 | 0.03 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 2 | 1:4.15 | top | 0.017 | 1.239 | 0.021 | 0.007 | 0.009 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.8 | 20.87 | 0.07 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 2 | 1:4.15 | bottom | 0.312 | 1.239 | 0.387 | 0.117 | 0.145 | |
| 1850.20 | 512 | GSM 1900 | GPRS | 21.8 | 21.04 | -0.11 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 2 | 1:4.15 | right | 0.828 | 1.191 | 0.986 | 0.337 | 0.401 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.8 | 20.87 | -0.06 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 2 | 1:4.15 | right | 0.777 | 1.239 | 0.963 | 0.311 | 0.385 | |
| 1909.80 | 810 | GSM 1900 | GPRS | 21.8 | 20.98 | -0.06 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 2 | 1:4.15 | right | 0.796 | 1.208 | 0.962 | 0.318 | 0.384 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.8 | 20.87 | -0.06 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 2 | 1:4.15 | left | 0.001 | 1.239 | 0.001 | 0.000 | 0.000 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-4
## GPRS 1900 MHz Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | # of Time Slots | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1850.20 | 512 | GSM 1900 | GPRS | 20.5 | 19.82 | -0.02 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 2 | 1:4.15 | back | 0.854 | 1.169 | 0.998 | 0.350 | 0.409 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.5 | 19.56 | 0.04 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 2 | 1:4.15 | back | 0.873 | 1.242 | 1.084 | 0.356 | 0.442 | |
| 1909.80 | 810 | GSM 1900 | GPRS | 20.5 | 19.74 | -0.04 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 2 | 1:4.15 | back | 0.817 | 1.191 | 0.973 | 0.343 | 0.409 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.5 | 19.56 | 0.03 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 2 | 1:4.15 | top | 0.002 | 1.242 | 0.002 | 0.001 | 0.001 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.5 | 19.56 | -0.04 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 2 | 1:4.15 | bottom | 0.522 | 1.242 | 0.648 | 0.211 | 0.262 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.5 | 19.56 | 0.04 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 2 | 1:4.15 | right | 0.031 | 1.242 | 0.039 | 0.014 | 0.017 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.5 | 19.56 | 0.03 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 2 | 1:4.15 | left | 0.004 | 1.242 | 0.005 | 0.001 | 0.001 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |

## Table 10-5
## GPRS 1900 MHz Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | # of Time Slots | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1850.20 | 512 | GSM 1900 | GPRS | 20.9 | 20.87 | -0.08 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 2 | 1:4.15 | back | 0.982 | 1.007 | 0.989 | 0.483 | 0.486 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.9 | 20.73 | -0.07 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 2 | 1:4.15 | back | 0.983 | 1.040 | 1.022 | 0.480 | 0.499 | |
| 1909.80 | 810 | GSM 1900 | GPRS | 20.9 | 20.88 | -0.05 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 2 | 1:4.15 | back | 1.020 | 1.005 | 1.025 | 0.493 | 0.495 | A2 |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.9 | 20.73 | -0.03 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 2 | 1:4.15 | top | 0.319 | 1.040 | 0.332 | 0.121 | 0.126 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.9 | 20.73 | 0.12 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 2 | 1:4.15 | bottom | 0.016 | 1.040 | 0.017 | 0.007 | 0.007 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.9 | 20.73 | 0.07 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 2 | 1:4.15 | right | 0.000 | 1.040 | 0.000 | 0.000 | 0.000 | |
| 1850.20 | 512 | GSM 1900 | GPRS | 20.9 | 20.87 | -0.04 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 2 | 1:4.15 | left | 0.858 | 1.007 | 0.864 | 0.356 | 0.358 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 20.9 | 20.73 | -0.06 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 2 | 1:4.15 | left | 0.804 | 1.040 | 0.836 | 0.340 | 0.354 | |
| 1909.80 | 810 | GSM 1900 | GPRS | 20.9 | 20.88 | -0.19 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 2 | 1:4.15 | left | 0.949 | 1.005 | 0.954 | 0.380 | 0.382 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |

## Table 10-6
## GPRS 1900 MHz Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | # of Time Slots | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1850.20 | 512 | GSM 1900 | GPRS | 21.0 | 19.88 | 0.00 | Body | 0 mm | Ant 4b | DLXZR00GP7GX | 2 | 1:4.15 | back | 0.742 | 1.294 | 0.960 | 0.307 | 0.397 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.0 | 19.64 | 0.02 | Body | 0 mm | Ant 4b | DLXZR00GP7GX | 2 | 1:4.15 | back | 0.709 | 1.368 | 0.970 | 0.292 | 0.399 | |
| 1909.80 | 810 | GSM 1900 | GPRS | 21.0 | 19.57 | 0.04 | Body | 0 mm | Ant 4b | DLXZR00GP7GX | 2 | 1:4.15 | back | 0.767 | 1.390 | 1.066 | 0.311 | 0.432 | |
| 1850.20 | 512 | GSM 1900 | GPRS | 21.0 | 19.88 | -0.02 | Body | 0 mm | Ant 4b | DLXZR00GP7GX | 2 | 1:4.15 | top | 0.535 | 1.294 | 0.692 | 0.214 | 0.277 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.0 | 19.64 | 0.00 | Body | 0 mm | Ant 4b | DLXZR00GP7GX | 2 | 1:4.15 | top | 0.621 | 1.368 | 0.850 | 0.243 | 0.332 | |
| 1909.80 | 810 | GSM 1900 | GPRS | 21.0 | 19.57 | -0.05 | Body | 0 mm | Ant 4b | DLXZR00GP7GX | 2 | 1:4.15 | top | 0.552 | 1.390 | 0.767 | 0.220 | 0.306 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.0 | 19.64 | 0.06 | Body | 0 mm | Ant 4b | DLXZR00GP7GX | 2 | 1:4.15 | bottom | 0.005 | 1.368 | 0.007 | 0.001 | 0.001 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.0 | 19.64 | 0.07 | Body | 0 mm | Ant 4b | DLXZR00GP7GX | 2 | 1:4.15 | right | 0.009 | 1.368 | 0.012 | 0.003 | 0.004 | |
| 1880.00 | 661 | GSM 1900 | GPRS | 21.0 | 19.64 | 0.09 | Body | 0 mm | Ant 4b | DLXZR00GP7GX | 2 | 1:4.15 | left | 0.046 | 1.368 | 0.063 | 0.019 | 0.026 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |

## Table 10-7
## UMTS 850 MHz Ant 1 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 836.60 | 4183 | UMTS 850 | RMC | 20.6 | 20.60 | -0.05 | Body | 0 mm | Ant 1 | DLXZR00TP7GX | 1:1 | back | 0.459 | 1.000 | 0.459 | 0.187 | 0.187 | |
| 836.60 | 4183 | UMTS 850 | RMC | 20.6 | 20.60 | 0.06 | Body | 0 mm | Ant 1 | DLXZR00TP7GX | 1:1 | top | 0.034 | 1.000 | 0.034 | 0.019 | 0.019 | |
| 836.60 | 4183 | UMTS 850 | RMC | 20.6 | 20.60 | 0.06 | Body | 0 mm | Ant 1 | DLXZR00TP7GX | 1:1 | bottom | 0.492 | 1.000 | 0.492 | 0.185 | 0.185 | |
| 836.60 | 4183 | UMTS 850 | RMC | 20.6 | 20.60 | -0.02 | Body | 0 mm | Ant 1 | DLXZR00TP7GX | 1:1 | right | 0.010 | 1.000 | 0.010 | 0.005 | 0.005 | |
| 826.40 | 4132 | UMTS 850 | RMC | 20.6 | 20.57 | 0.13 | Body | 0 mm | Ant 1 | DLXZR00TP7GX | 1:1 | left | 1.160 | 1.007 | 1.168 | 0.327 | 0.329 | A3 |
| 836.60 | 4183 | UMTS 850 | RMC | 20.6 | 20.60 | -0.16 | Body | 0 mm | Ant 1 | DLXZR00TP7GX | 1:1 | left | 0.767 | 1.000 | 0.767 | 0.272 | 0.272 | |
| 846.60 | 4233 | UMTS 850 | RMC | 20.6 | 20.59 | -0.18 | Body | 0 mm | Ant 1 | DLXZR00TP7GX | 1:1 | left | 0.721 | 1.002 | 0.722 | 0.254 | 0.255 | |
| 826.40 | 4132 | UMTS 850 | RMC | 20.6 | 20.57 | -0.17 | Body | 0 mm | Ant 1 | DLXZR00TP7GX | 1:1 | left | 1.050 | 1.007 | 1.057 | 0.339 | 0.341 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

Note: Blue entry represents variability measurement.




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-8
## UMTS 850 MHz Ant 3 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 826.40 | 4132 | UMTS 850 | RMC | 20.3 | 20.07 | 0.06 | Body | 0 mm | Ant 3 | DLXZR032P7GX | 1:1 | back | 0.950 | 1.054 | 1.001 | 0.483 | 0.509 | |
| 836.60 | 4183 | UMTS 850 | RMC | 20.3 | 20.15 | 0.10 | Body | 0 mm | Ant 3 | DLXZR032P7GX | 1:1 | back | 0.845 | 1.035 | 0.875 | 0.426 | 0.441 | |
| 846.60 | 4233 | UMTS 850 | RMC | 20.3 | 20.03 | 0.11 | Body | 0 mm | Ant 3 | DLXZR032P7GX | 1:1 | back | 0.803 | 1.064 | 0.854 | 0.420 | 0.447 | |
| 836.60 | 4183 | UMTS 850 | RMC | 20.3 | 20.15 | 0.07 | Body | 0 mm | Ant 3 | DLXZR032P7GX | 1:1 | top | 0.536 | 1.035 | 0.555 | 0.207 | 0.214 | |
| 836.60 | 4183 | UMTS 850 | RMC | 20.3 | 20.15 | -0.04 | Body | 0 mm | Ant 3 | DLXZR032P7GX | 1:1 | bottom | 0.000 | 1.035 | 0.000 | 0.000 | 0.000 | |
| 836.60 | 4183 | UMTS 850 | RMC | 20.3 | 20.15 | 0.02 | Body | 0 mm | Ant 3 | DLXZR032P7GX | 1:1 | right | 0.729 | 1.035 | 0.755 | 0.261 | 0.270 | |
| 836.60 | 4183 | UMTS 850 | RMC | 20.3 | 20.15 | -0.01 | Body | 0 mm | Ant 3 | DLXZR032P7GX | 1:1 | left | 0.010 | 1.035 | 0.010 | 0.005 | 0.005 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

## Table 10-9
## UMTS 1750 MHz Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1712.40 | 1312 | UMTS 1750 | RMC | 14.75 | 14.17 | -0.02 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 1:1 | back | 0.903 | 1.143 | 1.032 | 0.443 | 0.506 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.75 | 14.39 | -0.06 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 1:1 | back | 0.905 | 1.086 | 0.983 | 0.437 | 0.475 | |
| 1752.60 | 1513 | UMTS 1750 | RMC | 14.75 | 13.93 | -0.07 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 1:1 | back | 0.898 | 1.208 | 1.085 | 0.430 | 0.519 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.75 | 14.39 | 0.05 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 1:1 | top | 0.009 | 1.086 | 0.010 | 0.004 | 0.004 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.75 | 14.39 | -0.02 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 1:1 | bottom | 0.242 | 1.086 | 0.263 | 0.097 | 0.105 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.75 | 14.39 | 0.04 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 1:1 | right | 0.684 | 1.086 | 0.743 | 0.275 | 0.299 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.75 | 14.39 | -0.05 | Body | 0 mm | Ant 2a | DLXZR00TP7GX | 1:1 | left | 0.001 | 1.086 | 0.001 | 0.000 | 0.000 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

## Table 10-10
## UMTS 1750 MHz Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1712.40 | 1312 | UMTS 1750 | RMC | 14.9 | 14.47 | -0.02 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | back | 0.951 | 1.104 | 1.050 | 0.391 | 0.432 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.9 | 14.49 | -0.01 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | back | 0.922 | 1.099 | 1.013 | 0.381 | 0.419 | |
| 1752.60 | 1513 | UMTS 1750 | RMC | 14.9 | 14.27 | 0.00 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | back | 0.954 | 1.156 | 1.103 | 0.396 | 0.458 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.9 | 14.49 | 0.02 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | top | 0.001 | 1.099 | 0.001 | 0.001 | 0.001 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.9 | 14.49 | -0.02 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | bottom | 0.597 | 1.099 | 0.656 | 0.238 | 0.262 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.9 | 14.49 | 0.00 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | right | 0.045 | 1.099 | 0.049 | 0.019 | 0.021 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.9 | 14.49 | 0.03 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | left | 0.008 | 1.099 | 0.009 | 0.004 | 0.004 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

## Table 10-11
## UMTS 1750 MHz Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1712.40 | 1312 | UMTS 1750 | RMC | 14.5 | 14.33 | 0.01 | Body | 0 mm | Ant 4a | DLXZR009P7GX | 1:1 | back | 0.926 | 1.040 | 0.963 | 0.437 | 0.454 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.29 | 0.01 | Body | 0 mm | Ant 4a | DLXZR009P7GX | 1:1 | back | 0.964 | 1.050 | 1.012 | 0.455 | 0.478 | A4 |
| 1752.60 | 1513 | UMTS 1750 | RMC | 14.5 | 14.02 | 0.01 | Body | 0 mm | Ant 4a | DLXZR009P7GX | 1:1 | back | 0.924 | 1.117 | 1.032 | 0.434 | 0.485 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.29 | -0.04 | Body | 0 mm | Ant 4a | DLXZR009P7GX | 1:1 | top | 0.220 | 1.050 | 0.231 | 0.085 | 0.089 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.29 | 0.02 | Body | 0 mm | Ant 4a | DLXZR009P7GX | 1:1 | bottom | 0.012 | 1.050 | 0.013 | 0.005 | 0.005 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.29 | 0.00 | Body | 0 mm | Ant 4a | DLXZR009P7GX | 1:1 | right | 0.000 | 1.050 | 0.000 | 0.000 | 0.000 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.29 | -0.05 | Body | 0 mm | Ant 4a | DLXZR009P7GX | 1:1 | left | 0.724 | 1.050 | 0.760 | 0.291 | 0.306 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-12
## UMTS 1750 MHz Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1712.40 | 1312 | UMTS 1750 | RMC | 14.5 | 14.04 | -0.05 | Body | 0 mm | Ant 4b | DLXZR00TP7GX | 1:1 | back | 0.898 | 1.112 | 0.999 | 0.377 | 0.419 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.00 | -0.05 | Body | 0 mm | Ant 4b | DLXZR00TP7GX | 1:1 | back | 0.871 | 1.122 | 0.977 | 0.365 | 0.410 | |
| 1752.60 | 1513 | UMTS 1750 | RMC | 14.5 | 13.85 | -0.05 | Body | 0 mm | Ant 4b | DLXZR00TP7GX | 1:1 | back | 0.865 | 1.161 | 1.004 | 0.362 | 0.420 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.00 | 0.03 | Body | 0 mm | Ant 4b | DLXZR00TP7GX | 1:1 | top | 0.506 | 1.122 | 0.568 | 0.203 | 0.228 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.00 | 0.17 | Body | 0 mm | Ant 4b | DLXZR00TP7GX | 1:1 | bottom | 0.002 | 1.122 | 0.002 | 0.001 | 0.001 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.00 | 0.05 | Body | 0 mm | Ant 4b | DLXZR00TP7GX | 1:1 | right | 0.009 | 1.122 | 0.010 | 0.004 | 0.004 | |
| 1732.40 | 1412 | UMTS 1750 | RMC | 14.5 | 14.00 | 0.12 | Body | 0 mm | Ant 4b | DLXZR00TP7GX | 1:1 | left | 0.044 | 1.122 | 0.049 | 0.019 | 0.021 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

## Table 10-13
## UMTS 1900 MHz Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1852.40 | 9262 | UMTS 1900 | RMC | 15.1 | 14.93 | 0.02 | Body | 0 mm | Ant 2a | DLXZR02WP7GX | 1:1 | back | 1.000 | 1.040 | 1.040 | 0.491 | 0.511 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 15.1 | 15.01 | 0.03 | Body | 0 mm | Ant 2a | DLXZR02WP7GX | 1:1 | back | 0.995 | 1.021 | 1.016 | 0.487 | 0.497 | |
| 1907.60 | 9538 | UMTS 1900 | RMC | 15.1 | 15.02 | 0.01 | Body | 0 mm | Ant 2a | DLXZR02WP7GX | 1:1 | back | 0.996 | 1.019 | 1.015 | 0.462 | 0.471 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 15.1 | 15.01 | 0.03 | Body | 0 mm | Ant 2a | DLXZR02WP7GX | 1:1 | top | 0.021 | 1.021 | 0.021 | 0.010 | 0.010 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 15.1 | 15.01 | -0.11 | Body | 0 mm | Ant 2a | DLXZR02WP7GX | 1:1 | bottom | 0.384 | 1.021 | 0.392 | 0.147 | 0.150 | |
| 1852.40 | 9262 | UMTS 1900 | RMC | 15.1 | 14.93 | 0.00 | Body | 0 mm | Ant 2a | DLXZR02WP7GX | 1:1 | right | 0.833 | 1.040 | 0.866 | 0.340 | 0.354 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 15.1 | 15.01 | -0.06 | Body | 0 mm | Ant 2a | DLXZR02WP7GX | 1:1 | right | 0.828 | 1.021 | 0.845 | 0.334 | 0.341 | |
| 1907.60 | 9538 | UMTS 1900 | RMC | 15.1 | 15.02 | 0.01 | Body | 0 mm | Ant 2a | DLXZR02WP7GX | 1:1 | right | 0.819 | 1.019 | 0.835 | 0.331 | 0.337 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 15.1 | 15.01 | 0.14 | Body | 0 mm | Ant 2a | DLXZR02WP7GX | 1:1 | left | 0.006 | 1.021 | 0.006 | 0.003 | 0.003 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

## Table 10-14
## UMTS 1900 MHz Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1852.40 | 9262 | UMTS 1900 | RMC | 14.1 | 13.80 | 0.00 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | back | 1.010 | 1.072 | 1.083 | 0.412 | 0.442 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.1 | 13.81 | 0.01 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | back | 1.080 | 1.069 | 1.155 | 0.437 | 0.467 | A5 |
| 1907.60 | 9538 | UMTS 1900 | RMC | 14.1 | 14.09 | 0.01 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | back | 1.070 | 1.002 | 1.072 | 0.431 | 0.432 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.1 | 13.81 | -0.06 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | top | 0.005 | 1.069 | 0.005 | 0.003 | 0.003 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.1 | 13.81 | -0.01 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | bottom | 0.702 | 1.069 | 0.750 | 0.283 | 0.303 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.1 | 13.81 | 0.08 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | right | 0.048 | 1.069 | 0.051 | 0.020 | 0.021 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.1 | 13.81 | 0.08 | Body | 0 mm | Ant 2b | DLXZR00TP7GX | 1:1 | left | 0.012 | 1.069 | 0.013 | 0.006 | 0.006 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

## Table 10-15
## UMTS 1900 MHz Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1852.40 | 9262 | UMTS 1900 | RMC | 14.9 | 14.73 | -0.01 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 1:1 | back | 1.010 | 1.040 | 1.050 | 0.507 | 0.527 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.9 | 14.58 | -0.02 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 1:1 | back | 1.060 | 1.076 | 1.141 | 0.499 | 0.537 | |
| 1907.60 | 9538 | UMTS 1900 | RMC | 14.9 | 14.82 | 0.01 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 1:1 | back | 1.030 | 1.019 | 1.050 | 0.514 | 0.524 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.9 | 14.58 | -0.12 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 1:1 | top | 0.402 | 1.076 | 0.433 | 0.153 | 0.165 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.9 | 14.58 | 0.03 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 1:1 | bottom | 0.017 | 1.076 | 0.018 | 0.008 | 0.009 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.9 | 14.58 | 0.17 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 1:1 | right | 0.002 | 1.076 | 0.002 | 0.001 | 0.001 | |
| 1852.40 | 9262 | UMTS 1900 | RMC | 14.9 | 14.73 | 0.06 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 1:1 | left | 0.997 | 1.040 | 1.037 | 0.393 | 0.409 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.9 | 14.58 | -0.06 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 1:1 | left | 1.000 | 1.076 | 1.076 | 0.396 | 0.426 | |
| 1907.60 | 9538 | UMTS 1900 | RMC | 14.9 | 14.82 | -0.20 | Body | 0 mm | Ant 4a | DLXZR00TP7GX | 1:1 | left | 0.992 | 1.019 | 1.011 | 0.400 | 0.408 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-16
## UMTS 1900 MHz Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Position | Spacing | Antenna Config. | Device Serial Number | Duty Cycle | Side | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1852.40 | 9262 | UMTS 1900 | RMC | 14.7 | 13.96 | -0.02 | Body | 0 mm | Ant 4b | DLXZR02WP7GX | 1:1 | back | 0.828 | 1.186 | 0.982 | 0.341 | 0.404 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.7 | 13.93 | -0.02 | Body | 0 mm | Ant 4b | DLXZR02WP7GX | 1:1 | back | 0.851 | 1.194 | 1.016 | 0.351 | 0.419 | |
| 1907.60 | 9538 | UMTS 1900 | RMC | 14.7 | 13.82 | -0.16 | Body | 0 mm | Ant 4b | DLXZR02WP7GX | 1:1 | back | 0.880 | 1.225 | 1.078 | 0.357 | 0.437 | |
| 1852.40 | 9262 | UMTS 1900 | RMC | 14.7 | 13.96 | -0.06 | Body | 0 mm | Ant 4b | DLXZR02WP7GX | 1:1 | top | 0.678 | 1.186 | 0.804 | 0.272 | 0.323 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.7 | 13.93 | -0.04 | Body | 0 mm | Ant 4b | DLXZR02WP7GX | 1:1 | top | 0.702 | 1.194 | 0.838 | 0.283 | 0.338 | |
| 1907.60 | 9538 | UMTS 1900 | RMC | 14.7 | 13.82 | -0.05 | Body | 0 mm | Ant 4b | DLXZR02WP7GX | 1:1 | top | 0.686 | 1.225 | 0.840 | 0.272 | 0.333 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.7 | 13.93 | 0.19 | Body | 0 mm | Ant 4b | DLXZR02WP7GX | 1:1 | bottom | 0.007 | 1.194 | 0.008 | 0.004 | 0.005 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.7 | 13.93 | 0.02 | Body | 0 mm | Ant 4b | DLXZR02WP7GX | 1:1 | right | 0.014 | 1.194 | 0.017 | 0.007 | 0.008 | |
| 1880.00 | 9400 | UMTS 1900 | RMC | 14.7 | 13.93 | 0.12 | Body | 0 mm | Ant 4b | DLXZR02WP7GX | 1:1 | left | 0.062 | 1.194 | 0.074 | 0.024 | 0.029 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | |

## Table 10-17
## LTE Band 71 Ant 1 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.80 | -0.06 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.553 | 1.047 | 0.579 | 0.274 | 0.287 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.62 | -0.03 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.588 | 1.091 | 0.642 | 0.292 | 0.319 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.80 | 0.03 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.020 | 1.047 | 0.021 | 0.010 | 0.010 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.62 | 0.10 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 25 | 0 mm | top | 1:1 | 0.017 | 1.091 | 0.019 | 0.008 | 0.009 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.80 | -0.05 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | bottom | 1:1 | 0.405 | 1.047 | 0.424 | 0.142 | 0.149 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.62 | -0.04 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 25 | 0 mm | bottom | 1:1 | 0.403 | 1.091 | 0.440 | 0.140 | 0.153 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.80 | 0.09 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.008 | 1.047 | 0.008 | 0.004 | 0.004 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.62 | -0.07 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 25 | 0 mm | right | 1:1 | 0.007 | 1.091 | 0.008 | 0.003 | 0.003 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.80 | -0.03 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | left | 1:1 | 1.020 | 1.047 | 1.068 | 0.246 | 0.258 | A6 |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.62 | -0.10 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 25 | 0 mm | left | 1:1 | 0.740 | 1.091 | 0.807 | 0.219 | 0.239 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 20.0 | 19.60 | -0.09 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 100 | 0 | 0 mm | left | 1:1 | 0.756 | 1.096 | 0.829 | 0.222 | 0.243 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |

## Table 10-18
## LTE Band 71 Ant 3 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.84 | -0.01 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.986 | 1.038 | 1.023 | 0.502 | 0.521 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.68 | 0.00 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.840 | 1.076 | 0.904 | 0.426 | 0.458 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.56 | -0.01 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.912 | 1.107 | 1.010 | 0.462 | 0.511 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.84 | 0.03 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.559 | 1.038 | 0.580 | 0.209 | 0.217 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.68 | -0.02 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | top | 1:1 | 0.546 | 1.076 | 0.587 | 0.204 | 0.220 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.84 | 0.04 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.019 | 1.038 | 0.020 | 0.010 | 0.010 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.68 | 0.03 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | bottom | 1:1 | 0.014 | 1.076 | 0.015 | 0.008 | 0.009 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.84 | 0.09 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.671 | 1.038 | 0.696 | 0.226 | 0.235 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.68 | 0.02 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.557 | 1.076 | 0.599 | 0.188 | 0.202 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.84 | 0.04 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.012 | 1.038 | 0.012 | 0.007 | 0.007 | |
| 680.50 | 133297 | Mid | LTE Band 71 | 20 | 22.0 | 21.68 | 0.03 | 0 | Ant 3 | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | left | 1:1 | 0.011 | 1.076 | 0.012 | 0.005 | 0.005 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-19
## LTE Band 12 Ant 1 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.49 | -0.07 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.720 | 1.002 | 0.721 | 0.327 | 0.328 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.35 | -0.08 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 0 | 0 mm | back | 1:1 | 0.711 | 1.035 | 0.736 | 0.318 | 0.329 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.49 | -0.02 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.036 | 1.002 | 0.036 | 0.018 | 0.018 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.35 | 0.03 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 0 | 0 mm | top | 1:1 | 0.037 | 1.035 | 0.038 | 0.018 | 0.019 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.49 | -0.02 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.590 | 1.002 | 0.591 | 0.233 | 0.233 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.35 | 0.00 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 0 | 0 mm | bottom | 1:1 | 0.588 | 1.035 | 0.609 | 0.232 | 0.240 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.49 | 0.06 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.010 | 1.002 | 0.010 | 0.005 | 0.005 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.35 | 0.02 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 0 | 0 mm | right | 1:1 | 0.009 | 1.035 | 0.009 | 0.004 | 0.004 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.49 | 0.14 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 1.120 | 1.002 | 1.122 | 0.310 | 0.311 | A7 |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.35 | -0.12 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 0 | 0 mm | left | 1:1 | 0.849 | 1.035 | 0.879 | 0.273 | 0.283 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.30 | -0.13 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.808 | 1.047 | 0.846 | 0.264 | 0.276 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 18.5 | 18.21 | -0.01 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.457 | 1.069 | 0.489 | 0.144 | 0.154 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 18.5 | 18.20 | -0.01 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 12 | 0 mm | left | 1:1 | 0.393 | 1.072 | 0.421 | 0.126 | 0.135 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 21.5 | 21.49 | -0.01 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 1.070 | 1.002 | 1.072 | 0.316 | 0.317 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |

Note: Blue entry represents variability measurement.

## Table 10-20
## LTE Band 12 Ant 3 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.71 | -0.11 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 49 | 0 mm | back | 1:1 | 1.040 | 1.069 | 1.112 | 0.511 | 0.546 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.64 | -0.12 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 1.030 | 1.086 | 1.119 | 0.505 | 0.548 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.61 | -0.12 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.030 | 1.094 | 1.127 | 0.504 | 0.551 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 17.0 | 16.65 | -0.01 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.542 | 1.084 | 0.588 | 0.274 | 0.297 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 17.0 | 16.63 | -0.01 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 0 | 0 mm | back | 1:1 | 0.514 | 1.089 | 0.560 | 0.259 | 0.282 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.71 | -0.04 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 49 | 0 mm | top | 1:1 | 0.416 | 1.069 | 0.445 | 0.151 | 0.161 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.64 | -0.02 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | top | 1:1 | 0.431 | 1.086 | 0.468 | 0.158 | 0.172 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.71 | 0.15 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 49 | 0 mm | bottom | 1:1 | 0.054 | 1.069 | 0.058 | 0.033 | 0.035 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.64 | 0.18 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | bottom | 1:1 | 0.059 | 1.086 | 0.064 | 0.037 | 0.040 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.71 | -0.13 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 49 | 0 mm | right | 1:1 | 0.665 | 1.069 | 0.711 | 0.239 | 0.255 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.64 | 0.04 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | right | 1:1 | 0.887 | 1.086 | 0.963 | 0.280 | 0.304 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.61 | -0.10 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.776 | 1.094 | 0.849 | 0.273 | 0.299 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 17.0 | 16.65 | -0.05 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.442 | 1.084 | 0.479 | 0.152 | 0.165 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 17.0 | 16.63 | -0.06 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 0 | 0 mm | right | 1:1 | 0.418 | 1.089 | 0.455 | 0.143 | 0.156 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.71 | 0.06 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 49 | 0 mm | left | 1:1 | 0.008 | 1.069 | 0.009 | 0.003 | 0.003 | |
| 707.50 | 23095 | Mid | LTE Band 12 | 10 | 20.0 | 19.64 | 0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.006 | 1.086 | 0.007 | 0.002 | 0.002 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |

## Table 10-21
## LTE Band 13 Ant 1 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 21.26 | -0.20 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.581 | 1.057 | 0.614 | 0.235 | 0.248 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 20.95 | -0.03 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 25 | 0 | 0 mm | back | 1:1 | 0.558 | 1.135 | 0.633 | 0.226 | 0.257 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 21.26 | -0.01 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.040 | 1.057 | 0.042 | 0.022 | 0.023 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 20.95 | 0.16 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 25 | 0 | 0 mm | top | 1:1 | 0.033 | 1.135 | 0.037 | 0.019 | 0.022 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 21.26 | 0.03 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.583 | 1.057 | 0.616 | 0.215 | 0.227 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 20.95 | 0.01 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 25 | 0 | 0 mm | bottom | 1:1 | 0.525 | 1.135 | 0.596 | 0.193 | 0.219 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 21.26 | 0.08 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.012 | 1.057 | 0.013 | 0.007 | 0.007 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 20.95 | 0.01 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 25 | 0 | 0 mm | right | 1:1 | 0.012 | 1.135 | 0.014 | 0.006 | 0.007 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 21.26 | -0.07 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 1.010 | 1.057 | 1.068 | 0.331 | 0.350 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 20.95 | 0.04 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 25 | 0 | 0 mm | left | 1:1 | 0.964 | 1.135 | 1.094 | 0.283 | 0.321 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 21.5 | 20.94 | 0.06 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.988 | 1.138 | 1.124 | 0.289 | 0.329 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 18.5 | 18.19 | 0.04 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.480 | 1.074 | 0.516 | 0.156 | 0.168 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 18.5 | 18.11 | 0.02 | 0 | Ant 1 | DLXZR02WP7GX | QPSK | 25 | 12 | 0 mm | left | 1:1 | 0.415 | 1.094 | 0.454 | 0.135 | 0.148 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-22
## LTE Band 13 Ant 3 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.77 | 0.00 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 1.010 | 1.130 | 1.141 | 0.520 | 0.588 | A8 |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.80 | 0.01 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 12 | 0 mm | back | 1:1 | 0.888 | 1.122 | 0.996 | 0.455 | 0.511 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.76 | 0.01 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.904 | 1.132 | 1.023 | 0.464 | 0.525 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 17.3 | 16.62 | 0.00 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.458 | 1.169 | 0.535 | 0.235 | 0.275 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 17.3 | 16.60 | 0.19 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 12 | 0 mm | back | 1:1 | 0.404 | 1.175 | 0.475 | 0.208 | 0.244 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.77 | -0.06 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.561 | 1.130 | 0.634 | 0.227 | 0.257 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.80 | -0.04 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 12 | 0 mm | top | 1:1 | 0.544 | 1.122 | 0.610 | 0.204 | 0.229 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.77 | 0.20 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.027 | 1.130 | 0.031 | 0.016 | 0.018 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.80 | 0.03 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 12 | 0 mm | bottom | 1:1 | 0.025 | 1.122 | 0.028 | 0.015 | 0.017 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.77 | 0.00 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.715 | 1.130 | 0.808 | 0.256 | 0.289 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.80 | 0.02 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 12 | 0 mm | right | 1:1 | 0.654 | 1.122 | 0.734 | 0.234 | 0.263 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 17.3 | 16.62 | -0.05 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.391 | 1.169 | 0.457 | 0.131 | 0.153 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 17.3 | 16.60 | 0.02 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 12 | 0 mm | right | 1:1 | 0.323 | 1.175 | 0.380 | 0.109 | 0.128 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.76 | -0.08 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.611 | 1.132 | 0.692 | 0.219 | 0.248 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.77 | 0.08 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.009 | 1.130 | 0.010 | 0.004 | 0.005 | |
| 782.00 | 23230 | Mid | LTE Band 13 | 10 | 20.3 | 19.80 | 0.02 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 12 | 0 mm | left | 1:1 | 0.009 | 1.122 | 0.010 | 0.004 | 0.004 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

## Table 10-23
## LTE Band 14 Ant 1 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 21.20 | 0.02 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 49 | 0 mm | back | 1:1 | 0.629 | 1.072 | 0.674 | 0.331 | 0.355 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 20.99 | 0.03 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.671 | 1.125 | 0.755 | 0.353 | 0.397 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 21.20 | 0.13 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 49 | 0 mm | top | 1:1 | 0.037 | 1.072 | 0.040 | 0.020 | 0.021 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 20.99 | 0.04 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 25 | 0 mm | top | 1:1 | 0.046 | 1.125 | 0.052 | 0.024 | 0.027 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 21.20 | -0.08 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 49 | 0 mm | bottom | 1:1 | 0.563 | 1.072 | 0.604 | 0.216 | 0.232 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 20.99 | -0.06 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 25 | 0 mm | bottom | 1:1 | 0.574 | 1.125 | 0.646 | 0.217 | 0.244 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 21.20 | 0.16 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 49 | 0 mm | right | 1:1 | 0.011 | 1.072 | 0.012 | 0.006 | 0.006 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 20.99 | -0.14 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 25 | 0 mm | right | 1:1 | 0.014 | 1.125 | 0.016 | 0.007 | 0.008 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 21.20 | -0.02 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 49 | 0 mm | left | 1:1 | 0.606 | 1.072 | 0.650 | 0.212 | 0.227 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 20.99 | -0.03 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.659 | 1.125 | 0.741 | 0.230 | 0.259 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 21.5 | 20.92 | -0.03 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.975 | 1.143 | 1.114 | 0.270 | 0.309 | A9 |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 18.5 | 18.20 | 0.05 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.426 | 1.072 | 0.457 | 0.137 | 0.147 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 18.5 | 18.28 | 0.03 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.401 | 1.052 | 0.422 | 0.131 | 0.138 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

## Table 10-24
## LTE Band 14 Ant 3 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.87 | 0.00 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 49 | 0 mm | back | 1:1 | 0.761 | 1.104 | 0.840 | 0.394 | 0.435 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.89 | -0.01 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.776 | 1.099 | 0.853 | 0.402 | 0.442 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.77 | 0.00 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.779 | 1.130 | 0.880 | 0.399 | 0.451 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 17.3 | 16.71 | 0.00 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.407 | 1.146 | 0.466 | 0.210 | 0.241 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 17.3 | 16.68 | 0.00 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.384 | 1.153 | 0.443 | 0.197 | 0.227 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.87 | 0.05 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 49 | 0 mm | top | 1:1 | 0.519 | 1.104 | 0.573 | 0.205 | 0.226 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.89 | 0.00 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 25 | 0 mm | top | 1:1 | 0.516 | 1.099 | 0.567 | 0.202 | 0.222 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.87 | 0.05 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 49 | 0 mm | bottom | 1:1 | 0.023 | 1.104 | 0.025 | 0.010 | 0.011 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.89 | 0.03 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 25 | 0 mm | bottom | 1:1 | 0.025 | 1.099 | 0.027 | 0.010 | 0.011 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.87 | -0.08 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 49 | 0 mm | right | 1:1 | 0.579 | 1.104 | 0.639 | 0.210 | 0.232 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.89 | -0.08 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 25 | 0 mm | right | 1:1 | 0.612 | 1.099 | 0.673 | 0.219 | 0.241 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.87 | -0.13 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 1 | 49 | 0 mm | left | 1:1 | 0.012 | 1.104 | 0.013 | 0.005 | 0.006 | |
| 793.00 | 23330 | Mid | LTE Band 14 | 10 | 20.3 | 19.89 | 0.14 | 0 | Ant 3 | DLXZG001P7GP | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.012 | 1.099 | 0.013 | 0.006 | 0.007 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-25
## LTE Band 26 Ant 1 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.6 | 20.55 | 0.04 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.579 | 1.012 | 0.586 | 0.245 | 0.248 | |
| 844.00 | 26990 | High | LTE Band 26 (Cell) | 10 | 20.6 | 20.49 | -0.01 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 0 | 0 mm | back | 1:1 | 0.511 | 1.026 | 0.524 | 0.219 | 0.225 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.6 | 20.55 | 0.11 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.040 | 1.012 | 0.040 | 0.021 | 0.021 | |
| 844.00 | 26990 | High | LTE Band 26 (Cell) | 10 | 20.6 | 20.49 | -0.04 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 0 | 0 mm | top | 1:1 | 0.050 | 1.026 | 0.051 | 0.026 | 0.027 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.6 | 20.55 | -0.04 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.491 | 1.012 | 0.497 | 0.178 | 0.180 | |
| 844.00 | 26990 | High | LTE Band 26 (Cell) | 10 | 20.6 | 20.49 | -0.04 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 0 | 0 mm | bottom | 1:1 | 0.530 | 1.026 | 0.544 | 0.203 | 0.208 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.6 | 20.55 | 0.16 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.010 | 1.012 | 0.010 | 0.006 | 0.006 | |
| 844.00 | 26990 | High | LTE Band 26 (Cell) | 10 | 20.6 | 20.49 | -0.03 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 0 | 0 mm | right | 1:1 | 0.013 | 1.026 | 0.013 | 0.008 | 0.008 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.6 | 20.55 | 0.07 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 1.020 | 1.012 | 1.032 | 0.340 | 0.344 | |
| 831.50 | 26865 | Mid | LTE Band 26 (Cell) | 10 | 20.6 | 20.33 | -0.01 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 49 | 0 mm | left | 1:1 | 0.742 | 1.064 | 0.789 | 0.263 | 0.280 | |
| 844.00 | 26990 | High | LTE Band 26 (Cell) | 10 | 20.6 | 20.49 | -0.02 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.893 | 1.026 | 0.916 | 0.262 | 0.269 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.6 | 20.32 | 0.00 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 0 | 0 mm | left | 1:1 | 0.887 | 1.067 | 0.946 | 0.317 | 0.338 | |
| 831.50 | 26865 | Mid | LTE Band 26 (Cell) | 10 | 20.6 | 20.36 | 0.00 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 0 | 0 mm | left | 1:1 | 0.864 | 1.057 | 0.913 | 0.307 | 0.324 | |
| 844.00 | 26990 | High | LTE Band 26 (Cell) | 10 | 20.6 | 20.49 | 0.01 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 25 | 0 | 0 mm | left | 1:1 | 0.733 | 1.026 | 0.752 | 0.260 | 0.267 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.6 | 20.36 | -0.03 | 0 | Ant 1 | DLXZR00FP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.918 | 1.057 | 0.970 | 0.322 | 0.340 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |

## Table 10-26
## LTE Band 26 Ant 3 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.29 | 0.02 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 1 | 49 | 0 mm | back | 1:1 | 1.030 | 1.002 | 1.032 | 0.522 | 0.523 | |
| 831.50 | 26865 | Mid | LTE Band 26 (Cell) | 10 | 20.3 | 20.23 | 0.02 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 1 | 49 | 0 mm | back | 1:1 | 0.891 | 1.016 | 0.905 | 0.452 | 0.459 | |
| 844.00 | 26990 | High | LTE Band 26 (Cell) | 10 | 20.3 | 20.27 | -0.19 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.924 | 1.007 | 0.930 | 0.467 | 0.470 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.30 | 0.02 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 1.000 | 1.000 | 1.000 | 0.509 | 0.509 | |
| 831.50 | 26865 | Mid | LTE Band 26 (Cell) | 10 | 20.3 | 20.27 | -0.02 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 25 | 0 | 0 mm | back | 1:1 | 1.010 | 1.007 | 1.017 | 0.501 | 0.505 | |
| 844.00 | 26990 | High | LTE Band 26 (Cell) | 10 | 20.3 | 20.28 | -0.19 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 25 | 0 | 0 mm | back | 1:1 | 1.030 | 1.005 | 1.035 | 0.510 | 0.513 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.26 | 0.01 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.030 | 1.009 | 1.039 | 0.519 | 0.524 | A10 |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.29 | 0.03 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 1 | 49 | 0 mm | top | 1:1 | 0.540 | 1.002 | 0.541 | 0.207 | 0.207 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.30 | 0.05 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | top | 1:1 | 0.559 | 1.000 | 0.559 | 0.212 | 0.212 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.29 | 0.06 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 1 | 49 | 0 mm | bottom | 1:1 | 0.027 | 1.002 | 0.027 | 0.016 | 0.016 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.30 | 0.02 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | bottom | 1:1 | 0.025 | 1.000 | 0.025 | 0.015 | 0.015 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.29 | 0.04 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 1 | 49 | 0 mm | right | 1:1 | 0.706 | 1.002 | 0.707 | 0.279 | 0.280 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.30 | 0.04 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | right | 1:1 | 0.768 | 1.000 | 0.768 | 0.292 | 0.292 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.29 | 0.12 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 1 | 49 | 0 mm | left | 1:1 | 0.008 | 1.002 | 0.008 | 0.004 | 0.004 | |
| 819.00 | 26740 | Low | LTE Band 26 (Cell) | 10 | 20.3 | 20.30 | 0.02 | 0 | Ant 3 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.009 | 1.000 | 0.009 | 0.004 | 0.004 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |

## Table 10-27
## LTE Band 5 Ant 1 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink | Component Carrier | FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | | | | | | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.47 | 0.12 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.462 | 1.030 | 0.476 | 0.199 | 0.205 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.49 | 0.04 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.452 | 1.026 | 0.464 | 0.196 | 0.201 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.47 | -0.11 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.037 | 1.030 | 0.038 | 0.019 | 0.020 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.49 | 0.02 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | top | 1:1 | 0.034 | 1.026 | 0.035 | 0.018 | 0.018 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.47 | 0.02 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.477 | 1.030 | 0.491 | 0.180 | 0.185 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.49 | 0.00 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | bottom | 1:1 | 0.478 | 1.026 | 0.490 | 0.181 | 0.186 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.47 | 0.03 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.016 | 1.030 | 0.016 | 0.008 | 0.008 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.49 | 0.02 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | right | 1:1 | 0.014 | 1.026 | 0.014 | 0.007 | 0.007 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.47 | -0.02 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.973 | 1.030 | 1.002 | 0.304 | 0.313 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.49 | -0.02 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.873 | 1.026 | 0.896 | 0.300 | 0.308 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.46 | 0.02 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.886 | 1.033 | 0.915 | 0.306 | 0.316 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 17.6 | 17.32 | -0.04 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 49 | 0 mm | left | 1:1 | 0.369 | 1.067 | 0.394 | 0.132 | 0.141 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 17.6 | 17.42 | -0.01 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.365 | 1.042 | 0.380 | 0.131 | 0.137 | |
| 2 CC Uplink | PCC | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.6 | 20.49 | 0.10 | 0 | Ant 1 | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.943 | 1.026 | 0.968 | 0.331 | 0.340 | |
| 2 CC Uplink | SCC | 829.30 | 20453 | Mid | LTE Band 5 (Cell) | 5 | | | | | | | 1 | 24 | | | | | | | | | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-28
## LTE Band 5 Ant 3 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink | Component Carrier | FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | | | | | | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.19 | 0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.982 | 1.026 | 1.008 | 0.496 | 0.509 | A11 |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.28 | 0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.956 | 1.005 | 0.961 | 0.481 | 0.483 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.18 | 0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.964 | 1.028 | 0.991 | 0.486 | 0.500 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 17.3 | 17.29 | 0.06 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.493 | 1.002 | 0.494 | 0.246 | 0.246 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 17.3 | 17.23 | 0.00 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 12 | 0 mm | back | 1:1 | 0.480 | 1.016 | 0.488 | 0.240 | 0.244 | |
| 2 CC Uplink | PCC | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.19 | 0.01 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.978 | 1.026 | 1.003 | 0.495 | 0.508 | |
| 2 CC Uplink | SCC | 829.30 | 20453 | Mid | LTE Band 5 (Cell) | 5 | | | | | | | | 1 | 24 | | | | | | | | | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.19 | -0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.591 | 1.026 | 0.606 | 0.226 | 0.232 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.28 | -0.04 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | top | 1:1 | 0.546 | 1.005 | 0.549 | 0.208 | 0.209 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.19 | 0.02 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.037 | 1.026 | 0.038 | 0.020 | 0.021 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.28 | 0.06 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | bottom | 1:1 | 0.036 | 1.005 | 0.036 | 0.020 | 0.020 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.19 | -0.01 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.687 | 1.026 | 0.705 | 0.272 | 0.279 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.28 | -0.01 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | right | 1:1 | 0.614 | 1.005 | 0.617 | 0.247 | 0.248 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.19 | 0.05 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.007 | 1.026 | 0.007 | 0.004 | 0.004 | |
| 1 CC Uplink | N/A | 836.50 | 20525 | Mid | LTE Band 5 (Cell) | 10 | 20.3 | 20.28 | -0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.008 | 1.005 | 0.008 | 0.004 | 0.004 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |

## Table 10-29
## LTE Band 4 Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.36 | -0.08 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.951 | 1.094 | 1.040 | 0.443 | 0.485 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.41 | -0.06 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.959 | 1.081 | 1.037 | 0.445 | 0.481 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.29 | -0.05 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.981 | 1.112 | 1.091 | 0.460 | 0.512 | A12 |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 11.75 | 11.25 | -0.03 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.442 | 1.122 | 0.496 | 0.214 | 0.240 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 11.75 | 11.45 | -0.02 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.440 | 1.072 | 0.472 | 0.213 | 0.228 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.36 | 0.12 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | top | 1:1 | 0.010 | 1.094 | 0.011 | 0.005 | 0.005 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.41 | 0.04 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.011 | 1.081 | 0.012 | 0.005 | 0.005 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.36 | -0.13 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | bottom | 1:1 | 0.258 | 1.094 | 0.282 | 0.104 | 0.114 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.41 | -0.04 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.255 | 1.081 | 0.276 | 0.104 | 0.112 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.36 | 0.02 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.729 | 1.094 | 0.798 | 0.299 | 0.327 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.41 | -0.04 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.732 | 1.081 | 0.791 | 0.300 | 0.324 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.36 | -0.02 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | left | 1:1 | 0.001 | 1.094 | 0.001 | 0.000 | 0.000 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.41 | -0.07 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.001 | 1.081 | 0.001 | 0.000 | 0.000 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.75 | 14.29 | -0.05 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.964 | 1.112 | 1.072 | 0.449 | 0.499 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

Note: Blue entry represents variability measurement.

## Table 10-30
## LTE Band 4 Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.30 | -0.02 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.869 | 1.148 | 0.998 | 0.369 | 0.424 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.31 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.939 | 1.146 | 1.076 | 0.389 | 0.446 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.29 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.907 | 1.151 | 1.044 | 0.382 | 0.440 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 11.9 | 11.41 | -0.03 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.398 | 1.119 | 0.445 | 0.167 | 0.187 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 11.9 | 11.54 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.402 | 1.086 | 0.437 | 0.169 | 0.184 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.30 | 0.03 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | top | 1:1 | 0.001 | 1.148 | 0.001 | 0.000 | 0.000 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.31 | 0.13 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.001 | 1.146 | 0.001 | 0.000 | 0.000 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.30 | 0.10 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | bottom | 1:1 | 0.559 | 1.148 | 0.642 | 0.237 | 0.272 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.31 | 0.04 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.583 | 1.146 | 0.668 | 0.247 | 0.283 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.30 | 0.07 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.047 | 1.148 | 0.054 | 0.020 | 0.023 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.31 | 0.06 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.048 | 1.146 | 0.055 | 0.020 | 0.023 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.30 | -0.07 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | left | 1:1 | 0.009 | 1.148 | 0.010 | 0.004 | 0.005 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.9 | 14.31 | 0.03 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.010 | 1.146 | 0.011 | 0.004 | 0.005 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-31
## LTE Band 4 Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.37 | 0.00 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.935 | 1.030 | 0.963 | 0.427 | 0.440 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.47 | -0.02 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.948 | 1.007 | 0.955 | 0.431 | 0.434 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.36 | -0.02 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.969 | 1.033 | 1.001 | 0.440 | 0.455 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 11.5 | 11.48 | -0.12 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.453 | 1.005 | 0.455 | 0.213 | 0.214 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 11.5 | 11.39 | 0.10 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.450 | 1.026 | 0.462 | 0.212 | 0.218 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.37 | -0.01 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 1 | 50 | 0 mm | top | 1:1 | 0.247 | 1.030 | 0.254 | 0.099 | 0.102 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.47 | -0.03 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 50 | 25 | 0 mm | top | 1:1 | 0.244 | 1.007 | 0.246 | 0.099 | 0.100 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.37 | -0.10 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 1 | 50 | 0 mm | bottom | 1:1 | 0.012 | 1.030 | 0.012 | 0.005 | 0.005 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.47 | -0.03 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 50 | 25 | 0 mm | bottom | 1:1 | 0.013 | 1.007 | 0.013 | 0.005 | 0.005 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.37 | 0.00 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.000 | 1.030 | 0.000 | 0.000 | 0.000 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.47 | 0.00 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 50 | 25 | 0 mm | right | 1:1 | 0.000 | 1.007 | 0.000 | 0.000 | 0.000 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.37 | -0.13 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 1 | 50 | 0 mm | left | 1:1 | 0.745 | 1.030 | 0.767 | 0.296 | 0.305 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.47 | -0.03 | 0 | Ant 4a | DLXZR032P7GX | QPSK | 50 | 25 | 0 mm | left | 1:1 | 0.734 | 1.007 | 0.739 | 0.293 | 0.295 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | |

## Table 10-32
## LTE Band 4 Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 13.73 | -0.18 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.845 | 1.194 | 1.009 | 0.345 | 0.412 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.01 | 0.00 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.753 | 1.119 | 0.843 | 0.321 | 0.359 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 13.72 | 0.09 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.723 | 1.197 | 0.865 | 0.316 | 0.378 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 11.5 | 11.21 | -0.03 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.413 | 1.069 | 0.441 | 0.174 | 0.186 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 11.5 | 11.37 | -0.04 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.426 | 1.030 | 0.439 | 0.177 | 0.182 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 13.73 | -0.10 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.526 | 1.194 | 0.628 | 0.212 | 0.253 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.01 | -0.02 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.511 | 1.119 | 0.572 | 0.205 | 0.229 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 13.73 | 0.04 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 1 | 99 | 0 mm | bottom | 1:1 | 0.003 | 1.194 | 0.004 | 0.001 | 0.001 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.01 | -0.13 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.002 | 1.119 | 0.002 | 0.001 | 0.001 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 13.73 | 0.04 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.010 | 1.194 | 0.012 | 0.005 | 0.006 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.01 | 0.02 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.011 | 1.119 | 0.012 | 0.006 | 0.007 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 13.73 | 0.16 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.047 | 1.194 | 0.056 | 0.021 | 0.025 | |
| 1732.50 | 20175 | Mid | LTE Band 4 (AWS) | 20 | 14.5 | 14.01 | 0.13 | 0 | Ant 4b | DLXZR032P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.047 | 1.119 | 0.053 | 0.020 | 0.022 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | |

## Table 10-33
## LTE Band 66 Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.36 | -0.07 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.862 | 1.094 | 0.943 | 0.395 | 0.432 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.75 | 14.35 | -0.06 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.880 | 1.096 | 0.964 | 0.404 | 0.443 | |
| 1770.00 | 132572 | High | LTE Band 66 (AWS) | 20 | 14.75 | 14.15 | 0.04 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.828 | 1.148 | 0.951 | 0.397 | 0.456 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.35 | -0.05 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.845 | 1.096 | 0.926 | 0.385 | 0.422 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.75 | 14.17 | -0.04 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.836 | 1.143 | 0.956 | 0.381 | 0.435 | |
| 1770.00 | 132572 | High | LTE Band 66 (AWS) | 20 | 14.75 | 13.85 | -0.06 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.864 | 1.230 | 1.063 | 0.408 | 0.502 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.24 | -0.05 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.847 | 1.125 | 0.953 | 0.388 | 0.437 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 11.75 | 11.50 | -0.04 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.448 | 1.059 | 0.474 | 0.216 | 0.229 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 11.75 | 11.42 | -0.04 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.430 | 1.079 | 0.464 | 0.208 | 0.224 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.36 | 0.12 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.008 | 1.094 | 0.009 | 0.004 | 0.004 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.35 | 0.03 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 50 | 50 | 0 mm | top | 1:1 | 0.005 | 1.096 | 0.005 | 0.002 | 0.002 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.36 | 0.00 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 1 | 99 | 0 mm | bottom | 1:1 | 0.230 | 1.094 | 0.252 | 0.092 | 0.101 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.35 | -0.02 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 50 | 50 | 0 mm | bottom | 1:1 | 0.215 | 1.096 | 0.236 | 0.086 | 0.094 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.36 | 0.02 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.678 | 1.094 | 0.742 | 0.275 | 0.301 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.35 | 0.02 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.653 | 1.096 | 0.716 | 0.264 | 0.289 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.36 | -0.05 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.001 | 1.094 | 0.001 | 0.000 | 0.000 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.75 | 14.35 | -0.05 | 0 | Ant 2a | DLXZR02WP7GX | QPSK | 50 | 50 | 0 mm | left | 1:1 | 0.001 | 1.096 | 0.001 | 0.000 | 0.000 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-34
## LTE Band 66 Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.44 | 0.01 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.859 | 1.112 | 0.955 | 0.348 | 0.387 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.9 | 14.18 | -0.01 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.838 | 1.180 | 0.989 | 0.341 | 0.402 | |
| 1770.00 | 132572 | High | LTE Band 66 (AWS) | 20 | 14.9 | 14.16 | 0.01 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.813 | 1.186 | 0.964 | 0.340 | 0.403 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.20 | 0.02 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.840 | 1.175 | 0.987 | 0.340 | 0.400 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.9 | 14.19 | 0.04 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.841 | 1.178 | 0.991 | 0.339 | 0.399 | |
| 1770.00 | 132572 | High | LTE Band 66 (AWS) | 20 | 14.9 | 13.93 | -0.09 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.858 | 1.250 | 1.073 | 0.344 | 0.430 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.17 | 0.01 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.839 | 1.183 | 0.993 | 0.340 | 0.402 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 11.9 | 11.58 | -0.03 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.436 | 1.076 | 0.469 | 0.184 | 0.198 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 11.9 | 11.46 | -0.03 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.427 | 1.107 | 0.473 | 0.181 | 0.200 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.44 | -0.17 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.004 | 1.112 | 0.004 | 0.002 | 0.002 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.20 | -0.04 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.003 | 1.175 | 0.004 | 0.001 | 0.001 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.44 | 0.06 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | bottom | 1:1 | 0.567 | 1.112 | 0.631 | 0.225 | 0.250 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.20 | 0.03 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.537 | 1.175 | 0.631 | 0.213 | 0.250 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.44 | 0.14 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.042 | 1.112 | 0.047 | 0.017 | 0.019 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.20 | -0.03 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.042 | 1.175 | 0.049 | 0.018 | 0.021 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.44 | -0.09 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.007 | 1.112 | 0.008 | 0.004 | 0.004 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.9 | 14.20 | -0.12 | 0 | Ant 2b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.008 | 1.175 | 0.009 | 0.004 | 0.005 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | |

## Table 10-35
## LTE Band 66 Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 14.09 | -0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.924 | 1.099 | 1.015 | 0.449 | 0.493 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.20 | 0.06 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.953 | 1.072 | 1.022 | 0.462 | 0.495 | A13 |
| 1770.00 | 132572 | High | LTE Band 66 (AWS) | 20 | 14.5 | 14.11 | 0.00 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.904 | 1.094 | 0.989 | 0.438 | 0.479 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 14.22 | 0.00 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.906 | 1.067 | 0.967 | 0.440 | 0.469 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.23 | 0.01 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.944 | 1.064 | 1.004 | 0.456 | 0.485 | |
| 1770.00 | 132572 | High | LTE Band 66 (AWS) | 20 | 14.5 | 14.03 | -0.01 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.898 | 1.114 | 1.000 | 0.434 | 0.483 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 14.19 | -0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.931 | 1.074 | 1.000 | 0.451 | 0.484 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 11.5 | 11.50 | 0.03 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.480 | 1.000 | 0.480 | 0.227 | 0.227 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 11.5 | 11.26 | 0.17 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.453 | 1.057 | 0.479 | 0.216 | 0.228 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.20 | -0.06 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.257 | 1.072 | 0.276 | 0.099 | 0.106 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.23 | -0.07 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.256 | 1.064 | 0.272 | 0.097 | 0.103 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.20 | 0.13 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.016 | 1.072 | 0.017 | 0.007 | 0.008 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.23 | -0.05 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.016 | 1.064 | 0.017 | 0.007 | 0.007 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.20 | 0.00 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.000 | 1.072 | 0.000 | 0.000 | 0.000 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.23 | 0.00 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.000 | 1.064 | 0.000 | 0.000 | 0.000 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.20 | -0.11 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.734 | 1.072 | 0.787 | 0.297 | 0.318 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.23 | -0.05 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.720 | 1.064 | 0.766 | 0.290 | 0.309 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | |

## Table 10-36
## LTE Band 66 Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 14.05 | 0.01 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.874 | 1.109 | 0.969 | 0.362 | 0.401 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 14.02 | 0.01 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.848 | 1.117 | 0.947 | 0.353 | 0.394 | |
| 1770.00 | 132572 | High | LTE Band 66 (AWS) | 20 | 14.5 | 13.83 | -0.01 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.805 | 1.167 | 0.939 | 0.332 | 0.387 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 13.80 | -0.01 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.839 | 1.175 | 0.986 | 0.350 | 0.411 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 14.5 | 13.79 | 0.02 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.836 | 1.178 | 0.985 | 0.350 | 0.412 | |
| 1770.00 | 132572 | High | LTE Band 66 (AWS) | 20 | 14.5 | 13.70 | 0.01 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.812 | 1.202 | 0.976 | 0.334 | 0.401 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 13.71 | 0.01 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.839 | 1.199 | 1.006 | 0.349 | 0.418 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 11.5 | 11.43 | -0.03 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.444 | 1.016 | 0.451 | 0.186 | 0.189 | |
| 1745.00 | 132322 | Mid | LTE Band 66 (AWS) | 20 | 11.5 | 11.32 | -0.04 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.442 | 1.042 | 0.461 | 0.185 | 0.193 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 14.05 | -0.01 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.474 | 1.109 | 0.526 | 0.193 | 0.214 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 13.80 | 0.03 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.470 | 1.175 | 0.552 | 0.191 | 0.224 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 14.05 | 0.15 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.002 | 1.109 | 0.002 | 0.001 | 0.001 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 13.80 | -0.06 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.002 | 1.175 | 0.002 | 0.001 | 0.001 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 14.05 | 0.06 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.007 | 1.109 | 0.008 | 0.004 | 0.004 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 13.80 | 0.04 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.007 | 1.175 | 0.008 | 0.004 | 0.005 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 14.05 | 0.20 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.039 | 1.109 | 0.043 | 0.016 | 0.018 | |
| 1720.00 | 132072 | Low | LTE Band 66 (AWS) | 20 | 14.5 | 13.80 | 0.03 | 0 | Ant 4b | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.036 | 1.175 | 0.042 | 0.016 | 0.019 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-37
## LTE Band 2 Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | | | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 15.1 | 15.04 | -0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 1.030 | 1.014 | 1.044 | 0.515 | 0.522 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.08 | -0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.975 | 1.005 | 0.980 | 0.486 | 0.488 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 15.1 | 14.94 | -0.02 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.964 | 1.038 | 1.001 | 0.452 | 0.469 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 15.1 | 15.09 | -0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 1.030 | 1.002 | 1.032 | 0.516 | 0.517 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.10 | 0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.020 | 1.000 | 1.020 | 0.479 | 0.479 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 15.1 | 15.06 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.971 | 1.009 | 0.980 | 0.455 | 0.459 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.07 | 0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.976 | 1.007 | 0.983 | 0.487 | 0.490 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 12.1 | 11.76 | -0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.502 | 1.081 | 0.543 | 0.240 | 0.259 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 12.1 | 11.80 | -0.04 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.495 | 1.072 | 0.531 | 0.236 | 0.253 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.08 | 0.16 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | top | 1:1 | 0.019 | 1.005 | 0.019 | 0.009 | 0.009 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.10 | 0.10 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.020 | 1.000 | 0.020 | 0.010 | 0.010 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.08 | -0.04 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | bottom | 1:1 | 0.376 | 1.005 | 0.378 | 0.139 | 0.140 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.10 | 0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.391 | 1.000 | 0.391 | 0.144 | 0.144 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 15.1 | 15.04 | -0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.878 | 1.014 | 0.890 | 0.348 | 0.353 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.08 | 0.02 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.851 | 1.005 | 0.855 | 0.336 | 0.338 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 15.1 | 14.94 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.870 | 1.038 | 0.903 | 0.344 | 0.357 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 15.1 | 15.09 | 0.02 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | right | 1:1 | 0.895 | 1.002 | 0.897 | 0.351 | 0.352 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.10 | -0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.892 | 1.000 | 0.892 | 0.349 | 0.349 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 15.1 | 15.06 | 0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.885 | 1.009 | 0.893 | 0.344 | 0.347 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.07 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | right | 1:1 | 0.870 | 1.007 | 0.876 | 0.339 | 0.341 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 12.1 | 11.76 | -0.06 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.398 | 1.081 | 0.430 | 0.159 | 0.172 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 12.1 | 11.80 | -0.05 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.393 | 1.072 | 0.421 | 0.156 | 0.167 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.08 | 0.12 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | left | 1:1 | 0.002 | 1.005 | 0.002 | 0.001 | 0.001 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 15.1 | 15.10 | 0.08 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.002 | 1.000 | 0.002 | 0.001 | 0.001 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | | | |

## Table 10-38
## LTE Band 2 Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | | | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.10 | 0.01 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 1.130 | 1.000 | 1.130 | 0.464 | 0.464 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.1 | 13.97 | -0.01 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.130 | 1.030 | 1.164 | 0.459 | 0.473 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.1 | 14.00 | -0.01 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.080 | 1.023 | 1.105 | 0.453 | 0.463 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.09 | 0.00 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 1.130 | 1.002 | 1.132 | 0.468 | 0.469 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.1 | 14.00 | -0.18 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 1.160 | 1.023 | **1.187** | 0.481 | 0.492 | A14 |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.1 | 14.07 | -0.05 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 1.090 | 1.007 | 1.098 | 0.453 | 0.456 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.08 | -0.02 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 1.090 | 1.005 | 1.095 | 0.461 | 0.463 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.1 | 11.07 | -0.03 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.529 | 1.007 | 0.533 | 0.228 | 0.230 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.1 | 11.10 | -0.20 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.515 | 1.000 | 0.515 | 0.222 | 0.222 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.10 | 0.07 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | top | 1:1 | 0.004 | 1.000 | 0.004 | 0.002 | 0.002 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.09 | 0.08 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | top | 1:1 | 0.005 | 1.002 | 0.005 | 0.003 | 0.003 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.10 | 0.08 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | bottom | 1:1 | 0.675 | 1.000 | 0.675 | 0.273 | 0.273 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.09 | 0.00 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | bottom | 1:1 | 0.679 | 1.002 | 0.680 | 0.275 | 0.276 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.10 | 0.17 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.044 | 1.000 | 0.044 | 0.020 | 0.020 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.09 | 0.02 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | right | 1:1 | 0.046 | 1.002 | 0.046 | 0.017 | 0.017 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.10 | 0.00 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | left | 1:1 | 0.011 | 1.000 | 0.011 | 0.006 | 0.006 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.1 | 14.09 | 0.05 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | left | 1:1 | 0.011 | 1.002 | 0.011 | 0.005 | 0.005 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.1 | 14.00 | -0.02 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 1.140 | 1.023 | 1.166 | 0.472 | 0.483 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | | | |

Note: Blue entry represents variability measurement.




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-39
## LTE Band 2 Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.9 | 14.63 | 0.00 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 1.060 | 1.064 | 1.128 | 0.534 | 0.568 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.9 | 14.55 | 0.00 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 1.040 | 1.084 | 1.127 | 0.498 | 0.540 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.89 | 0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.050 | 1.002 | 1.052 | 0.500 | 0.501 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.9 | 14.77 | 0.00 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.020 | 1.030 | 1.051 | 0.483 | 0.497 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.9 | 14.54 | -0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.020 | 1.086 | 1.108 | 0.489 | 0.531 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.85 | 0.02 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 1.070 | 1.012 | 1.083 | 0.508 | 0.514 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.74 | 0.02 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 1.090 | 1.038 | 1.131 | 0.546 | 0.567 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.9 | 11.82 | -0.06 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.608 | 1.019 | 0.620 | 0.296 | 0.302 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.9 | 11.72 | 0.09 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.575 | 1.042 | 0.599 | 0.279 | 0.291 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.89 | -0.06 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.340 | 1.002 | 0.341 | 0.130 | 0.130 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.85 | -0.02 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | top | 1:1 | 0.354 | 1.012 | 0.358 | 0.135 | 0.137 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.89 | 0.11 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | bottom | 1:1 | 0.018 | 1.002 | 0.018 | 0.008 | 0.008 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.85 | 0.05 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | bottom | 1:1 | 0.016 | 1.012 | 0.016 | 0.007 | 0.007 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.89 | 0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.002 | 1.002 | 0.002 | 0.001 | 0.001 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.85 | 0.18 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.002 | 1.012 | 0.002 | 0.001 | 0.001 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.9 | 14.63 | 0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.961 | 1.064 | 1.023 | 0.380 | 0.404 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.9 | 14.55 | -0.11 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.990 | 1.084 | 1.073 | 0.387 | 0.420 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.89 | 0.13 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.992 | 1.002 | 0.994 | 0.383 | 0.384 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.9 | 14.77 | 0.07 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.938 | 1.030 | 0.966 | 0.370 | 0.381 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.9 | 14.54 | -0.04 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 1.010 | 1.086 | 1.097 | 0.394 | 0.428 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.85 | 0.07 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | left | 1:1 | 1.010 | 1.012 | 1.022 | 0.392 | 0.397 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.9 | 14.74 | -0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | left | 1:1 | 1.050 | 1.038 | 1.090 | 0.409 | 0.425 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.9 | 11.82 | -0.10 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | left | 1:1 | 0.499 | 1.019 | 0.508 | 0.199 | 0.203 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.9 | 11.72 | -0.02 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.515 | 1.042 | 0.537 | 0.206 | 0.215 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | |

## Table 10-40
## LTE Band 2 Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.91 | 0.01 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.784 | 1.199 | 0.940 | 0.335 | 0.402 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.7 | 13.77 | 0.03 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.794 | 1.239 | 0.984 | 0.349 | 0.432 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.7 | 13.82 | -0.01 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.774 | 1.225 | 0.948 | 0.328 | 0.402 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.86 | 0.00 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.818 | 1.213 | 0.992 | 0.349 | 0.423 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.7 | 13.83 | 0.00 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.791 | 1.222 | 0.967 | 0.347 | 0.424 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.7 | 13.81 | 0.02 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.799 | 1.227 | 0.980 | 0.338 | 0.415 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.83 | 0.00 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.838 | 1.222 | 1.024 | 0.345 | 0.422 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.7 | 11.31 | -0.13 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.506 | 1.094 | 0.554 | 0.213 | 0.233 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.7 | 11.32 | -0.12 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.497 | 1.091 | 0.542 | 0.208 | 0.227 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.91 | -0.01 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.684 | 1.199 | 0.820 | 0.271 | 0.325 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.7 | 13.77 | -0.06 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.640 | 1.239 | 0.793 | 0.256 | 0.317 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.7 | 13.82 | -0.07 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.655 | 1.225 | 0.802 | 0.261 | 0.320 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.86 | -0.01 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.693 | 1.213 | 0.841 | 0.274 | 0.332 | |
| 1880.00 | 18900 | Mid | LTE Band 2 (PCS) | 20 | 14.7 | 13.83 | -0.04 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.651 | 1.222 | 0.796 | 0.260 | 0.318 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 14.7 | 13.81 | -0.03 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | top | 1:1 | 0.677 | 1.227 | 0.831 | 0.268 | 0.329 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.83 | -0.05 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | top | 1:1 | 0.648 | 1.222 | 0.792 | 0.259 | 0.316 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.7 | 11.31 | -0.17 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.426 | 1.094 | 0.466 | 0.168 | 0.184 | |
| 1900.00 | 19100 | High | LTE Band 2 (PCS) | 20 | 11.7 | 11.32 | -0.12 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | top | 1:1 | 0.415 | 1.091 | 0.453 | 0.163 | 0.178 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.91 | -0.02 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.006 | 1.199 | 0.007 | 0.002 | 0.002 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.86 | 0.16 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.008 | 1.213 | 0.010 | 0.002 | 0.002 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.91 | 0.03 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.011 | 1.199 | 0.013 | 0.003 | 0.004 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.86 | 0.19 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.010 | 1.213 | 0.012 | 0.003 | 0.004 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.91 | 0.02 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.064 | 1.199 | 0.077 | 0.027 | 0.032 | |
| 1860.00 | 18700 | Low | LTE Band 2 (PCS) | 20 | 14.7 | 13.86 | 0.19 | 0 | Ant 4b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.064 | 1.213 | 0.078 | 0.026 | 0.032 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-41
## LTE Band 25 Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 15.1 | 14.73 | -0.01 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 1.020 | 1.089 | 1.111 | 0.504 | 0.549 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 15.1 | 14.86 | 0.00 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.908 | 1.057 | 0.960 | 0.459 | 0.485 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 15.1 | 15.03 | -0.01 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.883 | 1.016 | 0.897 | 0.444 | 0.451 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 15.1 | 14.80 | -0.01 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 1.000 | 1.072 | 1.072 | 0.507 | 0.544 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 15.1 | 14.91 | -0.02 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.934 | 1.045 | 0.976 | 0.474 | 0.495 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 15.1 | 14.83 | 0.00 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.866 | 1.064 | 0.921 | 0.438 | 0.466 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 15.1 | 14.89 | 0.00 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.865 | 1.050 | 0.908 | 0.438 | 0.460 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 15.1 | 15.03 | 0.07 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.017 | 1.016 | 0.017 | 0.008 | 0.008 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 15.1 | 14.91 | 0.04 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.018 | 1.045 | 0.019 | 0.008 | 0.008 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 15.1 | 15.03 | 0.00 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | bottom | 1:1 | 0.370 | 1.016 | 0.376 | 0.137 | 0.139 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 15.1 | 14.91 | 0.00 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.352 | 1.045 | 0.368 | 0.130 | 0.136 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 15.1 | 14.73 | 0.05 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.830 | 1.089 | 0.904 | 0.337 | 0.367 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 15.1 | 14.86 | -0.01 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.777 | 1.057 | 0.821 | 0.314 | 0.332 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 15.1 | 15.03 | 0.07 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.834 | 1.016 | 0.847 | 0.334 | 0.339 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 15.1 | 14.80 | 0.02 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | right | 1:1 | 0.832 | 1.072 | 0.892 | 0.336 | 0.360 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 15.1 | 14.91 | 0.02 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.817 | 1.045 | 0.854 | 0.329 | 0.344 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 15.1 | 14.83 | 0.02 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | right | 1:1 | 0.802 | 1.064 | 0.853 | 0.321 | 0.342 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 15.1 | 14.89 | -0.01 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | right | 1:1 | 0.811 | 1.050 | 0.852 | 0.326 | 0.342 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 15.1 | 15.03 | -0.10 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.002 | 1.016 | 0.002 | 0.001 | 0.001 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 15.1 | 14.91 | 0.01 | 0 | Ant 2a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.002 | 1.045 | 0.002 | 0.001 | 0.001 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |

## Table 10-42
## LTE Band 25 Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.1 | 13.73 | -0.02 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 1.020 | 1.089 | 1.111 | 0.427 | 0.465 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.1 | 13.82 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.964 | 1.067 | 1.029 | 0.401 | 0.428 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 14.08 | -0.03 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.050 | 1.005 | 1.055 | 0.435 | 0.437 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.1 | 13.79 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.050 | 1.074 | 1.128 | 0.436 | 0.468 | A15 |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.1 | 13.78 | 0.00 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.030 | 1.076 | 1.108 | 0.429 | 0.462 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 13.91 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | back | 1:1 | 1.050 | 1.045 | 1.097 | 0.434 | 0.454 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 13.82 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 1.050 | 1.067 | 1.120 | 0.436 | 0.465 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 14.08 | 0.02 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.003 | 1.005 | 0.003 | 0.001 | 0.001 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 13.91 | 0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | top | 1:1 | 0.003 | 1.045 | 0.003 | 0.002 | 0.002 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 14.08 | -0.04 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | bottom | 1:1 | 0.686 | 1.005 | 0.689 | 0.272 | 0.273 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 13.91 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | bottom | 1:1 | 0.672 | 1.045 | 0.702 | 0.266 | 0.278 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 14.08 | 0.14 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.045 | 1.005 | 0.045 | 0.021 | 0.021 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 13.91 | 0.06 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.043 | 1.045 | 0.045 | 0.019 | 0.020 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 14.08 | -0.13 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.013 | 1.005 | 0.013 | 0.006 | 0.006 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.1 | 13.91 | 0.05 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | left | 1:1 | 0.012 | 1.045 | 0.013 | 0.006 | 0.006 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |

## Table 10-43
## LTE Band 25 Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.9 | 14.51 | -0.03 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.997 | 1.094 | 1.091 | 0.501 | 0.548 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.9 | 14.69 | -0.03 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.864 | 1.050 | 0.907 | 0.428 | 0.449 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.90 | 0.12 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1 | 0.948 | 1.000 | 0.948 | 0.465 | 0.465 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.9 | 14.57 | 0.00 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.879 | 1.079 | 0.948 | 0.433 | 0.467 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.9 | 14.59 | 0.00 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.895 | 1.074 | 0.961 | 0.439 | 0.471 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.87 | 0.00 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.926 | 1.007 | 0.932 | 0.454 | 0.457 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.84 | 0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1 | 1.030 | 1.014 | 1.044 | 0.514 | 0.521 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.90 | -0.09 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | top | 1:1 | 0.356 | 1.000 | 0.356 | 0.141 | 0.141 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.87 | -0.11 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | top | 1:1 | 0.356 | 1.007 | 0.358 | 0.140 | 0.141 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.90 | 0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | bottom | 1:1 | 0.014 | 1.000 | 0.014 | 0.007 | 0.007 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.87 | 0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | bottom | 1:1 | 0.014 | 1.007 | 0.014 | 0.006 | 0.006 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.90 | -0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | right | 1:1 | 0.002 | 1.000 | 0.002 | 0.001 | 0.001 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.87 | 0.11 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | right | 1:1 | 0.002 | 1.007 | 0.002 | 0.001 | 0.001 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.9 | 14.51 | -0.05 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.912 | 1.094 | 0.998 | 0.370 | 0.405 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.9 | 14.69 | -0.09 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.954 | 1.050 | 1.002 | 0.382 | 0.401 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.90 | 0.00 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | left | 1:1 | 0.965 | 1.000 | 0.965 | 0.386 | 0.386 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.9 | 14.57 | 0.11 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | left | 1:1 | 0.894 | 1.079 | 0.965 | 0.359 | 0.387 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.9 | 14.59 | 0.05 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.952 | 1.074 | 1.022 | 0.383 | 0.411 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.87 | 0.05 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | left | 1:1 | 0.972 | 1.007 | 0.979 | 0.389 | 0.392 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.9 | 14.84 | -0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | left | 1:1 | 0.981 | 1.014 | 0.995 | 0.391 | 0.396 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | |




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-44
## LTE Band 25 Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.90 | 0.03 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.834 | 1.202 | 1.002 | 0.346 | 0.416 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.7 | 13.74 | 0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.788 | 1.247 | 0.983 | 0.331 | 0.413 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.7 | 13.86 | 0.06 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.769 | 1.213 | 0.933 | 0.322 | 0.391 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.84 | -0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.807 | 1.219 | 0.984 | 0.338 | 0.412 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.7 | 13.72 | -0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.794 | 1.253 | 0.995 | 0.332 | 0.416 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.7 | 13.79 | 0.09 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.792 | 1.233 | 0.977 | 0.330 | 0.407 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.7 | 13.80 | -0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.788 | 1.230 | 0.969 | 0.332 | 0.408 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.90 | -0.05 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.666 | 1.202 | 0.801 | 0.269 | 0.323 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.7 | 13.74 | -0.11 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.637 | 1.247 | 0.794 | 0.255 | 0.318 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.7 | 13.86 | -0.12 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.659 | 1.213 | 0.799 | 0.262 | 0.318 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.84 | -0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.674 | 1.219 | 0.822 | 0.271 | 0.330 | |
| 1882.50 | 26365 | Mid | LTE Band 25 (PCS) | 20 | 14.7 | 13.72 | -0.11 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.635 | 1.253 | 0.796 | 0.253 | 0.317 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.7 | 13.79 | -0.11 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 25 | 0 mm | top | 1:1 | 0.658 | 1.233 | 0.811 | 0.261 | 0.322 | |
| 1905.00 | 26590 | High | LTE Band 25 (PCS) | 20 | 14.7 | 13.80 | -0.10 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 100 | 0 | 0 mm | top | 1:1 | 0.676 | 1.230 | 0.831 | 0.269 | 0.331 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.90 | 0.07 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.006 | 1.202 | 0.007 | 0.002 | 0.002 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.84 | -0.08 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.006 | 1.219 | 0.007 | 0.002 | 0.002 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.90 | 0.06 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.006 | 1.202 | 0.007 | 0.002 | 0.002 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.84 | 0.03 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.009 | 1.219 | 0.011 | 0.003 | 0.004 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.90 | 0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.065 | 1.202 | 0.078 | 0.026 | 0.031 | |
| 1860.00 | 26140 | Low | LTE Band 25 (PCS) | 20 | 14.7 | 13.84 | -0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.061 | 1.219 | 0.074 | 0.025 | 0.030 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |

## Table 10-45
## LTE Band 30 Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.15 | 0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.822 | 1.216 | 1.000 | 0.358 | 0.435 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.22 | -0.05 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 25 | 0 | 0 mm | back | 1:1 | 0.787 | 1.197 | 0.942 | 0.344 | 0.412 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.14 | 0.13 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.796 | 1.219 | 0.970 | 0.350 | 0.427 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.0 | 9.29 | 0.04 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.337 | 1.178 | 0.397 | 0.151 | 0.178 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.0 | 9.30 | -0.08 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 25 | 12 | 0 mm | back | 1:1 | 0.360 | 1.175 | 0.423 | 0.161 | 0.189 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.15 | 0.15 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.014 | 1.216 | 0.017 | 0.005 | 0.006 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.22 | 0.15 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 25 | 0 | 0 mm | top | 1:1 | 0.012 | 1.197 | 0.014 | 0.005 | 0.006 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.15 | -0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.291 | 1.216 | 0.354 | 0.091 | 0.111 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.22 | 0.00 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 25 | 0 | 0 mm | bottom | 1:1 | 0.285 | 1.197 | 0.341 | 0.089 | 0.107 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.15 | 0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.598 | 1.216 | 0.727 | 0.217 | 0.264 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.22 | 0.03 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 25 | 0 | 0 mm | right | 1:1 | 0.592 | 1.197 | 0.709 | 0.214 | 0.256 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.15 | 0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.000 | 1.216 | 0.000 | 0.000 | 0.000 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.0 | 12.22 | -0.03 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 25 | 0 | 0 mm | left | 1:1 | 0.000 | 1.197 | 0.000 | 0.000 | 0.000 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |

## Table 10-46
## LTE Band 30 Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.14 | -0.03 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 1.030 | 1.062 | 1.094 | 0.406 | 0.431 | A16 |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.15 | 0.03 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.992 | 1.059 | 1.051 | 0.395 | 0.418 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.07 | -0.02 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.010 | 1.079 | 1.090 | 0.398 | 0.429 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.4 | 10.11 | -0.02 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.497 | 1.069 | 0.531 | 0.200 | 0.214 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.4 | 10.06 | -0.07 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 25 | 12 | 0 mm | back | 1:1 | 0.493 | 1.081 | 0.533 | 0.199 | 0.215 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.14 | 0.02 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.001 | 1.062 | 0.001 | 0.001 | 0.001 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.15 | 0.05 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | top | 1:1 | 0.000 | 1.059 | 0.000 | 0.000 | 0.000 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.14 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.679 | 1.062 | 0.721 | 0.242 | 0.257 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.15 | -0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | bottom | 1:1 | 0.688 | 1.059 | 0.729 | 0.245 | 0.259 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.14 | 0.05 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.038 | 1.062 | 0.040 | 0.018 | 0.019 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.15 | 0.03 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | right | 1:1 | 0.037 | 1.059 | 0.039 | 0.017 | 0.018 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.14 | 0.08 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.020 | 1.062 | 0.021 | 0.009 | 0.010 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.15 | 0.02 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.022 | 1.059 | 0.023 | 0.010 | 0.011 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.4 | 13.14 | 0.01 | 0 | Ant 2b | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1 | 1.020 | 1.062 | 1.083 | 0.405 | 0.430 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | |

Note: Blue entry represents variability measurement.




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-47
## LTE Band 30 Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.60 | -0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 25 | 0 mm | back | 1:1 | 0.957 | 1.148 | 1.099 | 0.406 | 0.466 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.61 | -0.05 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.983 | 1.146 | 1.127 | 0.420 | 0.481 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.58 | -0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.958 | 1.153 | 1.105 | 0.406 | 0.468 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.2 | 9.80 | 0.06 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 25 | 0 mm | back | 1:1 | 0.500 | 1.096 | 0.548 | 0.215 | 0.236 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.2 | 9.95 | -0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.518 | 1.059 | 0.549 | 0.222 | 0.235 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.60 | -0.05 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 25 | 0 mm | top | 1:1 | 0.319 | 1.148 | 0.366 | 0.101 | 0.116 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.61 | 0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | top | 1:1 | 0.309 | 1.146 | 0.354 | 0.098 | 0.112 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.60 | 0.10 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 25 | 0 mm | bottom | 1:1 | 0.017 | 1.148 | 0.020 | 0.009 | 0.010 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.61 | 0.08 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | bottom | 1:1 | 0.015 | 1.146 | 0.017 | 0.008 | 0.009 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.60 | 0.08 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 25 | 0 mm | right | 1:1 | 0.002 | 1.148 | 0.002 | 0.001 | 0.001 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.61 | 0.00 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | right | 1:1 | 0.002 | 1.146 | 0.002 | 0.001 | 0.001 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.60 | -0.01 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 25 | 0 mm | left | 1:1 | 0.718 | 1.148 | 0.824 | 0.262 | 0.301 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.61 | -0.05 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.721 | 1.146 | 0.826 | 0.262 | 0.300 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.2 | 12.58 | 0.02 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.736 | 1.153 | 0.849 | 0.267 | 0.308 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.2 | 9.80 | -0.04 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 1 | 25 | 0 mm | left | 1:1 | 0.336 | 1.096 | 0.368 | 0.132 | 0.145 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.2 | 9.95 | -0.09 | 0 | Ant 4a | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.346 | 1.059 | 0.366 | 0.135 | 0.143 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | | | | |

## Table 10-48
## LTE Band 30 Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.39 | 0.01 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 49 | 0 mm | back | 1:1 | 0.984 | 1.074 | 1.057 | 0.358 | 0.384 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.47 | -0.05 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.973 | 1.054 | 1.026 | 0.353 | 0.372 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.38 | 0.00 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.010 | 1.076 | 1.087 | 0.366 | 0.394 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.7 | 10.47 | -0.02 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 25 | 0 mm | back | 1:1 | 0.512 | 1.054 | 0.540 | 0.189 | 0.199 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 10.7 | 10.56 | -0.05 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | back | 1:1 | 0.422 | 1.033 | 0.436 | 0.157 | 0.162 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.39 | 0.04 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 49 | 0 mm | top | 1:1 | 0.544 | 1.074 | 0.584 | 0.192 | 0.206 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.47 | -0.05 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | top | 1:1 | 0.524 | 1.054 | 0.552 | 0.185 | 0.195 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.39 | 0.00 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 49 | 0 mm | bottom | 1:1 | 0.000 | 1.074 | 0.000 | 0.000 | 0.000 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.47 | 0.00 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | bottom | 1:1 | 0.000 | 1.054 | 0.000 | 0.000 | 0.000 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.39 | 0.18 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 49 | 0 mm | right | 1:1 | 0.015 | 1.074 | 0.016 | 0.005 | 0.005 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.47 | -0.17 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | right | 1:1 | 0.014 | 1.054 | 0.015 | 0.005 | 0.005 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.39 | 0.01 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 49 | 0 mm | left | 1:1 | 0.025 | 1.074 | 0.027 | 0.011 | 0.012 | |
| 2310.00 | 27710 | Mid | LTE Band 30 | 10 | 13.7 | 13.47 | -0.03 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 25 | 25 | 0 mm | left | 1:1 | 0.025 | 1.054 | 0.026 | 0.010 | 0.011 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | | | | |

## Table 10-49
## LTE Band 7 Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink | Component Carrier | FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.05 | 0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.970 | 1.161 | 1.126 | 0.403 | 0.468 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.7 | 12.00 | 0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.826 | 1.175 | 0.971 | 0.339 | 0.398 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.7 | 11.90 | 0.03 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.885 | 1.202 | 1.064 | 0.360 | 0.433 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.10 | 0.03 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.958 | 1.148 | 1.100 | 0.399 | 0.458 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.7 | 12.01 | 0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.829 | 1.172 | 0.972 | 0.343 | 0.402 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.7 | 11.88 | 0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.819 | 1.208 | 0.989 | 0.336 | 0.406 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.04 | 0.03 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.839 | 1.164 | 0.977 | 0.347 | 0.404 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 9.7 | 9.20 | 0.03 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.436 | 1.122 | 0.489 | 0.177 | 0.199 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 9.7 | 9.10 | -0.12 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.404 | 1.148 | 0.464 | 0.164 | 0.188 | |
| 2 CC Uplink | PCC | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 11.70 | -0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.879 | 1.259 | 1.107 | 0.381 | 0.480 | |
| 2 CC Uplink | SCC | 2529.80 | 21048 | Low | LTE Band 7 | 20 | | | | | | | | 1 | 0 | | | | | | | | | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.05 | 0.07 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.013 | 1.161 | 0.015 | 0.005 | 0.006 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.10 | 0.08 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | top | 1:1 | 0.012 | 1.148 | 0.014 | 0.004 | 0.005 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.05 | -0.06 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | bottom | 1:1 | 0.317 | 1.161 | 0.368 | 0.091 | 0.106 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.10 | -0.11 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | bottom | 1:1 | 0.315 | 1.148 | 0.362 | 0.091 | 0.104 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.05 | -0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.654 | 1.161 | 0.759 | 0.223 | 0.259 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.7 | 12.00 | -0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.633 | 1.175 | 0.744 | 0.215 | 0.253 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.7 | 11.90 | -0.03 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.613 | 1.202 | 0.737 | 0.207 | 0.249 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.10 | -0.01 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.670 | 1.148 | 0.769 | 0.228 | 0.262 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.7 | 12.01 | -0.03 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.620 | 1.172 | 0.727 | 0.210 | 0.246 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.7 | 11.88 | 0.05 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.592 | 1.208 | 0.715 | 0.198 | 0.239 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.05 | 0.00 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.000 | 1.161 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.7 | 12.10 | 0.00 | 0 | Ant 2a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | left | 1:1 | 0.000 | 1.148 | 0.000 | 0.000 | 0.000 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | | | | | | | | | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-50
## LTE Band 7 Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink | Component Carrier | FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.3 | 12.28 | 0.02 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.978 | 1.005 | 0.983 | 0.350 | 0.352 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.30 | -0.04 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 0.993 | 1.000 | 0.993 | 0.350 | 0.350 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.3 | 11.83 | 0.04 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.852 | 1.114 | 0.949 | 0.314 | 0.350 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.3 | 12.03 | 0.01 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.100 | 1.064 | 1.170 | 0.384 | 0.409 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.3 | 12.17 | 0.01 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.981 | 1.030 | 1.010 | 0.352 | 0.363 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.27 | 0.01 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.988 | 1.007 | 0.995 | 0.351 | 0.353 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.3 | 12.07 | 0.00 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 1.040 | 1.054 | 1.096 | 0.366 | 0.386 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.3 | 12.16 | -0.03 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 100 | 0 | 0 mm | back | 1:1 | 0.980 | 1.033 | 1.012 | 0.348 | 0.359 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 9.3 | 9.30 | 0.04 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.440 | 1.000 | 0.440 | 0.160 | 0.160 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 9.3 | 9.02 | 0.13 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.467 | 1.067 | 0.498 | 0.168 | 0.179 | |
| 2 CC Uplink | PCC | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.3 | 11.72 | 0.04 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.816 | 1.143 | 0.933 | 0.300 | 0.343 | |
| 2 CC Uplink | SCC | 2540.20 | 21152 | High | LTE Band 7 | 20 | | | | | | | | 1 | 99 | | | | | | | | | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.30 | 0.00 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | top | 1:1 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.27 | 0.00 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | top | 1:1 | 0.000 | 1.007 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.30 | 0.03 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | bottom | 1:1 | 0.571 | 1.000 | 0.571 | 0.197 | 0.197 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.27 | 0.05 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | bottom | 1:1 | 0.568 | 1.007 | 0.572 | 0.195 | 0.196 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.30 | 0.11 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | right | 1:1 | 0.025 | 1.000 | 0.025 | 0.010 | 0.010 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.27 | 0.16 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | right | 1:1 | 0.023 | 1.007 | 0.023 | 0.009 | 0.009 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.30 | 0.19 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.018 | 1.000 | 0.018 | 0.006 | 0.006 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.3 | 12.27 | 0.06 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | left | 1:1 | 0.020 | 1.007 | 0.020 | 0.007 | 0.007 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.3 | 12.03 | -0.03 | 0 | Ant 2b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.030 | 1.064 | 1.096 | 0.369 | 0.393 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | |

Note: Blue entry represents variability measurement.

## Table 10-51
## LTE Band 7 Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink | Component Carrier | FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.5 | 12.37 | 0.04 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.020 | 1.030 | 1.051 | 0.422 | 0.435 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.50 | 0.01 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 1.020 | 1.000 | 1.020 | 0.415 | 0.415 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.5 | 12.28 | 0.04 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 1.070 | 1.052 | 1.126 | 0.428 | 0.450 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.5 | 12.33 | -0.02 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 0.997 | 1.040 | 1.037 | 0.410 | 0.426 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.43 | 0.00 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.995 | 1.016 | 1.011 | 0.408 | 0.415 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.5 | 11.90 | 0.06 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.991 | 1.148 | 1.138 | 0.401 | 0.460 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.41 | -0.13 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 100 | 0 | 0 mm | back | 1:1 | 1.010 | 1.021 | 1.031 | 0.413 | 0.422 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 9.5 | 9.45 | -0.06 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.507 | 1.012 | 0.513 | 0.207 | 0.209 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 9.5 | 9.23 | -0.01 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 25 | 0 mm | back | 1:1 | 0.473 | 1.064 | 0.503 | 0.193 | 0.205 | |
| 2 CC Uplink | PCC | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.5 | 11.82 | 0.01 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.942 | 1.169 | 1.101 | 0.398 | 0.465 | |
| 2 CC Uplink | SCC | 2540.20 | 21152 | High | LTE Band 7 | 20 | | | | | | | | 50 | 50 | | | | | | | | | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.50 | 0.01 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.306 | 1.000 | 0.306 | 0.089 | 0.089 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.43 | 0.01 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.296 | 1.016 | 0.301 | 0.085 | 0.086 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.50 | 0.02 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.011 | 1.000 | 0.011 | 0.004 | 0.004 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.43 | 0.12 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.000 | 1.016 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.50 | 0.02 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.43 | 0.01 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.000 | 1.016 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.5 | 12.37 | -0.01 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | left | 1:1 | 0.860 | 1.030 | 0.886 | 0.297 | 0.306 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.50 | -0.04 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.845 | 1.000 | 0.845 | 0.290 | 0.290 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.5 | 12.28 | 0.01 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.840 | 1.052 | 0.884 | 0.287 | 0.302 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 12.5 | 12.33 | 0.09 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | left | 1:1 | 0.856 | 1.040 | 0.890 | 0.292 | 0.304 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.43 | 0.03 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.834 | 1.016 | 0.847 | 0.283 | 0.288 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 12.5 | 11.90 | 0.05 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.796 | 1.148 | 0.914 | 0.270 | 0.310 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 12.5 | 12.41 | -0.10 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 100 | 0 | 0 mm | left | 1:1 | 0.830 | 1.021 | 0.847 | 0.282 | 0.288 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 9.5 | 9.45 | -0.11 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.426 | 1.012 | 0.431 | 0.143 | 0.145 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 9.5 | 9.23 | 0.09 | 0 | Ant 4a | DLXZG001P7GP | QPSK | 50 | 25 | 0 mm | left | 1:1 | 0.420 | 1.064 | 0.447 | 0.143 | 0.152 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | |




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-52
## LTE Band 7 Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink | Component Carrier | FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 13.3 | 13.23 | -0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 1.110 | 1.016 | 1.128 | 0.397 | 0.403 | A17 |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 13.3 | 13.19 | -0.05 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.020 | 1.026 | 1.047 | 0.363 | 0.372 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 13.3 | 13.13 | 0.00 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.000 | 1.040 | 1.040 | 0.354 | 0.368 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 13.3 | 13.21 | 0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.996 | 1.021 | 1.017 | 0.350 | 0.357 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 13.3 | 13.18 | -0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1 | 1.020 | 1.028 | 1.049 | 0.363 | 0.373 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 13.3 | 13.22 | 0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 1.030 | 1.019 | 1.050 | 0.364 | 0.371 | |
| 1 CC Uplink | N/A | 2560.00 | 21350 | High | LTE Band 7 | 20 | 13.3 | 13.14 | 0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 25 | 0 mm | back | 1:1 | 1.020 | 1.038 | 1.059 | 0.355 | 0.368 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 13.3 | 13.17 | 0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 100 | 0 | 0 mm | back | 1:1 | 1.050 | 1.030 | 1.082 | 0.369 | 0.380 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 10.3 | 10.19 | 0.00 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 0.597 | 1.026 | 0.613 | 0.216 | 0.222 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 10.3 | 10.13 | -0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1 | 0.571 | 1.040 | 0.594 | 0.209 | 0.217 | |
| 2 CC Uplink | PCC | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 13.3 | 13.12 | 0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1 | 1.050 | 1.042 | 1.094 | 0.387 | 0.403 | |
| 2 CC Uplink | SCC | 2529.80 | 21048 | Low | LTE Band 7 | 20 | | | | | | | | 1 | 0 | | | | | | | | | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 13.3 | 13.23 | -0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | top | 1:1 | 0.630 | 1.016 | 0.640 | 0.215 | 0.218 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 13.3 | 13.22 | -0.12 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | top | 1:1 | 0.543 | 1.019 | 0.553 | 0.185 | 0.189 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 13.3 | 13.23 | -0.07 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | bottom | 1:1 | 0.002 | 1.016 | 0.002 | 0.000 | 0.000 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 13.3 | 13.22 | 0.07 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | bottom | 1:1 | 0.003 | 1.019 | 0.003 | 0.000 | 0.000 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 13.3 | 13.23 | 0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | right | 1:1 | 0.031 | 1.016 | 0.031 | 0.012 | 0.012 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 13.3 | 13.22 | 0.08 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | right | 1:1 | 0.032 | 1.019 | 0.033 | 0.012 | 0.012 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 13.3 | 13.23 | -0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | left | 1:1 | 0.034 | 1.016 | 0.035 | 0.013 | 0.013 | |
| 1 CC Uplink | N/A | 2535.00 | 21100 | Mid | LTE Band 7 | 20 | 13.3 | 13.22 | -0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | left | 1:1 | 0.043 | 1.019 | 0.044 | 0.015 | 0.015 | |
| 1 CC Uplink | N/A | 2510.00 | 20850 | Low | LTE Band 7 | 20 | 13.3 | 13.23 | -0.05 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1 | 1.030 | 1.016 | 1.046 | 0.381 | 0.387 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | |

Note: Blue entry represents variability measurement.

## Table 10-53
## LTE Band 41 Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink / 2 CC Uplink, Power Class | Component Carrier | FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.7 | 13.99 | -0.10 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.727 | 1.178 | 0.856 | 0.302 | 0.356 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.7 | 13.77 | 0.02 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | back | 1:1.58 | 0.816 | 1.239 | 1.011 | 0.333 | 0.413 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.01 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | back | 1:1.58 | 0.870 | 1.172 | 1.020 | 0.348 | 0.408 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.7 | 13.73 | 0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.821 | 1.250 | 1.026 | 0.329 | 0.411 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.7 | 14.00 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.756 | 1.175 | 0.888 | 0.299 | 0.351 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.7 | 14.01 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.774 | 1.172 | 0.907 | 0.324 | 0.380 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.7 | 13.79 | 0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.817 | 1.233 | 1.007 | 0.331 | 0.408 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 13.98 | 0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.887 | 1.180 | 1.047 | 0.366 | 0.432 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.05 | 0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1.58 | 0.966 | 1.161 | 1.122 | 0.387 | 0.449 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.7 | 13.75 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.803 | 1.245 | 1.000 | 0.317 | 0.395 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.7 | 14.04 | -0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.757 | 1.164 | 0.881 | 0.296 | 0.345 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 13.97 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1.58 | 0.861 | 1.183 | 1.019 | 0.346 | 0.409 | |
| 1 CC Uplink - Power Class 2 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.01 | 0.04 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:2.31 | 0.554 | 1.172 | 0.649 | 0.231 | 0.271 | |
| 1 CC Uplink - Power Class 2 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.05 | -0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | back | 1:2.31 | 0.636 | 1.161 | 0.738 | 0.256 | 0.297 | |
| 2 CC Uplink - Power Class 3 | PCC | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 13.70 | 0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.808 | 1.259 | 1.017 | 0.333 | 0.419 | |
| 2 CC Uplink - Power Class 3 | SCC | 2573.20 | 40422 | Mid | LTE Band 41 | 20 | | | | | | | | 50 | 50 | | | | | | | | | |
| 2 CC Uplink - Power Class 2 | PCC | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 13.70 | 0.04 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:2.31 | 0.499 | 1.259 | 0.628 | 0.208 | 0.262 | |
| 2 CC Uplink - Power Class 2 | SCC | 2573.20 | 40422 | Mid | LTE Band 41 | 20 | | | | | | | | 50 | 50 | | | | | | | | | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.01 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | top | 1:1.58 | 0.012 | 1.172 | 0.014 | 0.004 | 0.005 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.05 | -0.09 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | top | 1:1.58 | 0.011 | 1.161 | 0.013 | 0.003 | 0.003 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.01 | -0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | bottom | 1:1.58 | 0.366 | 1.172 | 0.429 | 0.103 | 0.121 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.05 | -0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | bottom | 1:1.58 | 0.365 | 1.161 | 0.424 | 0.102 | 0.118 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.7 | 13.99 | -0.02 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1.58 | 0.714 | 1.178 | 0.841 | 0.252 | 0.297 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.7 | 13.77 | 0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | right | 1:1.58 | 0.571 | 1.239 | 0.707 | 0.199 | 0.247 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.01 | -0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | right | 1:1.58 | 0.594 | 1.172 | 0.696 | 0.201 | 0.236 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.7 | 13.73 | -0.02 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1.58 | 0.521 | 1.250 | 0.651 | 0.175 | 0.219 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.7 | 14.00 | -0.06 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1.58 | 0.417 | 1.175 | 0.490 | 0.143 | 0.168 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.7 | 14.01 | 0.02 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1.58 | 0.708 | 1.172 | 0.830 | 0.247 | 0.289 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.7 | 13.79 | 0.05 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1.58 | 0.585 | 1.233 | 0.697 | 0.197 | 0.243 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.05 | -0.04 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | right | 1:1.58 | 0.594 | 1.161 | 0.690 | 0.201 | 0.233 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.7 | 13.75 | -0.03 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1.58 | 0.492 | 1.245 | 0.613 | 0.165 | 0.205 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.7 | 14.04 | -0.05 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1.58 | 0.405 | 1.164 | 0.471 | 0.138 | 0.161 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 13.97 | -0.01 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | right | 1:1.58 | 0.592 | 1.183 | 0.700 | 0.200 | 0.237 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.01 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | left | 1:1.58 | 0.000 | 1.172 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.7 | 14.05 | 0.00 | 0 | Ant 2a | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | left | 1:1.58 | 0.000 | 1.161 | 0.000 | 0.000 | 0.000 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# Table 10-54
# LTE Band 41 Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink / 2 CC Uplink, Power Class | Component Carrier | FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.2 | 14.16 | -0.03 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.842 | 1.009 | 0.850 | 0.302 | 0.305 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 13.95 | 0.03 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.864 | 1.059 | 0.915 | 0.304 | 0.322 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.17 | 0.01 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.976 | 1.007 | 0.983 | 0.341 | 0.343 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.77 | 0.01 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.965 | 1.104 | 1.065 | 0.332 | 0.367 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.2 | 13.96 | 0.02 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.947 | 1.057 | 1.001 | 0.319 | 0.337 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.2 | 14.08 | 0.00 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.818 | 1.028 | 0.841 | 0.293 | 0.301 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 13.83 | 0.00 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.879 | 1.089 | 0.957 | 0.309 | 0.337 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.09 | 0.01 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.999 | 1.026 | 1.025 | 0.346 | 0.355 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.63 | 0.10 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.962 | 1.140 | 1.097 | 0.327 | 0.373 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.2 | 13.82 | 0.00 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.932 | 1.091 | 1.017 | 0.313 | 0.341 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.07 | 0.00 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1.58 | 1.000 | 1.030 | 1.030 | 0.348 | 0.358 | |
| 1 CC Uplink - Power Class 2 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.55 | -0.02 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:2.31 | 0.633 | 1.161 | 0.735 | 0.217 | 0.252 | |
| 2 CC Uplink - Power Class 3 | PCC | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.25 | -0.03 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.841 | 1.245 | 1.047 | 0.291 | 0.362 | |
| 2 CC Uplink - Power Class 3 | SCC | 2616.70 | 40857 | Mid-High | LTE Band 41 | 20 | | | | | | | | 50 | 50 | | | | | | | | | |
| 2 CC Uplink - Power Class 2 | PCC | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.11 | 0.01 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:2.31 | 0.555 | 1.285 | 0.713 | 0.192 | 0.247 | |
| 2 CC Uplink - Power Class 2 | SCC | 2616.70 | 40857 | Mid-High | LTE Band 41 | 20 | | | | | | | | 50 | 50 | | | | | | | | | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.17 | 0.00 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | top | 1:1.58 | 0.000 | 1.007 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.09 | 0.00 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | top | 1:1.58 | 0.004 | 1.026 | 0.004 | 0.001 | 0.001 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.17 | -0.01 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1.58 | 0.491 | 1.007 | 0.494 | 0.167 | 0.168 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.09 | -0.02 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1.58 | 0.498 | 1.026 | 0.511 | 0.168 | 0.172 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.17 | 0.15 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1.58 | 0.037 | 1.007 | 0.037 | 0.012 | 0.012 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.09 | -0.17 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1.58 | 0.037 | 1.026 | 0.038 | 0.012 | 0.012 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.17 | 0.03 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1.58 | 0.014 | 1.007 | 0.014 | 0.005 | 0.005 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 14.09 | -0.19 | 0 | Ant 2b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1.58 | 0.016 | 1.026 | 0.016 | 0.005 | 0.005 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | |

# Table 10-55
# LTE Band 41 Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink / 2 CC Uplink, Power Class | Component Carrier | FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.2 | 14.02 | 0.20 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1.58 | 0.715 | 1.042 | 0.745 | 0.304 | 0.317 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.04 | -0.20 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | back | 1:1.58 | 0.942 | 1.038 | 0.978 | 0.382 | 0.397 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 13.83 | -0.06 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.869 | 1.089 | 0.946 | 0.356 | 0.388 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.65 | -0.08 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.946 | 1.135 | 1.074 | 0.384 | 0.436 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.2 | 13.52 | -0.15 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.936 | 1.169 | 1.094 | 0.372 | 0.435 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.2 | 13.99 | -0.07 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1.58 | 0.701 | 1.050 | 0.736 | 0.299 | 0.314 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.01 | -0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1.58 | 0.947 | 1.045 | 0.990 | 0.383 | 0.400 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 13.80 | -0.13 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.847 | 1.096 | 0.928 | 0.347 | 0.380 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.67 | 0.01 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 1.040 | 1.130 | 1.175 | 0.411 | 0.464 | A18 |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.2 | 13.46 | -0.15 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | back | 1:1.58 | 0.973 | 1.186 | 1.154 | 0.386 | 0.458 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.2 | 13.99 | 0.04 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | back | 1:1.58 | 0.656 | 1.050 | 0.689 | 0.276 | 0.290 | |
| 1 CC Uplink - Power Class 2 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.61 | 0.01 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:2.31 | 0.702 | 1.146 | 0.804 | 0.275 | 0.315 | |
| 2 CC Uplink - Power Class 3 | PCC | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.33 | 0.03 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.929 | 1.222 | 1.135 | 0.384 | 0.469 | |
| 2 CC Uplink - Power Class 3 | SCC | 2616.70 | 40857 | Mid-High | LTE Band 41 | 20 | | | | | | | | 50 | 50 | | | | | | | | | |
| 2 CC Uplink - Power Class 2 | PCC | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.20 | -0.03 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | back | 1:2.31 | 0.612 | 1.259 | 0.771 | 0.250 | 0.315 | |
| 2 CC Uplink - Power Class 2 | SCC | 2616.70 | 40857 | Mid-High | LTE Band 41 | 20 | | | | | | | | 50 | 50 | | | | | | | | | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.04 | -0.07 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | top | 1:1.58 | 0.251 | 1.038 | 0.261 | 0.071 | 0.074 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.01 | -0.09 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | top | 1:1.58 | 0.238 | 1.045 | 0.249 | 0.068 | 0.071 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.04 | 0.01 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | bottom | 1:1.58 | 0.009 | 1.038 | 0.009 | 0.003 | 0.003 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.01 | 0.07 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | bottom | 1:1.58 | 0.010 | 1.045 | 0.010 | 0.003 | 0.003 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.04 | -0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | right | 1:1.58 | 0.000 | 1.038 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.01 | 0.00 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | right | 1:1.58 | 0.000 | 1.045 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.2 | 14.02 | -0.10 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | left | 1:1.58 | 0.654 | 1.042 | 0.681 | 0.242 | 0.252 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.04 | -0.02 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 50 | 0 mm | left | 1:1.58 | 0.673 | 1.038 | 0.699 | 0.244 | 0.253 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 13.83 | -0.10 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | left | 1:1.58 | 0.683 | 1.089 | 0.744 | 0.248 | 0.270 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.65 | -0.08 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 0 | 0 mm | left | 1:1.58 | 0.659 | 1.135 | 0.748 | 0.238 | 0.270 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.2 | 13.52 | -0.07 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 1 | 99 | 0 mm | left | 1:1.58 | 0.569 | 1.169 | 0.665 | 0.202 | 0.236 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.2 | 13.99 | -0.08 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | left | 1:1.58 | 0.647 | 1.050 | 0.679 | 0.240 | 0.252 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 14.2 | 14.01 | -0.05 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | left | 1:1.58 | 0.668 | 1.045 | 0.698 | 0.243 | 0.254 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 14.2 | 13.80 | -0.05 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 50 | 0 mm | left | 1:1.58 | 0.683 | 1.096 | 0.749 | 0.247 | 0.271 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 14.2 | 13.67 | -0.10 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 0 | 0 mm | left | 1:1.58 | 0.651 | 1.130 | 0.736 | 0.233 | 0.263 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 14.2 | 13.46 | -0.09 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 50 | 25 | 0 mm | left | 1:1.58 | 0.578 | 1.186 | 0.686 | 0.205 | 0.243 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 14.2 | 13.99 | -0.14 | 0 | Ant 4a | DLXZR009P7GX | QPSK | 100 | 0 | 0 mm | left | 1:1.58 | 0.643 | 1.050 | 0.675 | 0.237 | 0.249 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# Table 10-56
# LTE Band 41 Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 CC Uplink / 2 CC Uplink, Power Class | Component Carrier | FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| | | MHz | Ch. | | | | | | | | | | | | | | | | | | | | | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 15.9 | 15.83 | -0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 1.000 | 1.016 | 1.016 | 0.357 | 0.363 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 15.9 | 15.81 | -0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.910 | 1.021 | 0.929 | 0.322 | 0.329 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.90 | -0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.923 | 1.000 | 0.923 | 0.315 | 0.315 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 15.9 | 15.64 | 0.09 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.860 | 1.062 | 0.913 | 0.288 | 0.306 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 15.9 | 15.84 | -0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.848 | 1.014 | 0.860 | 0.280 | 0.284 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 15.9 | 15.84 | -0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 1.000 | 1.014 | 1.014 | 0.354 | 0.359 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 15.9 | 15.74 | 0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.887 | 1.038 | 0.921 | 0.313 | 0.325 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.85 | -0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.908 | 1.012 | 0.919 | 0.307 | 0.311 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 15.9 | 15.72 | 0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.872 | 1.042 | 0.909 | 0.289 | 0.301 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41400 | High | LTE Band 41 | 20 | 15.9 | 15.84 | -0.03 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.841 | 1.014 | 0.853 | 0.275 | 0.279 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.83 | 0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 100 | 0 | 0 mm | back | 1:1.58 | 0.897 | 1.016 | 0.911 | 0.304 | 0.309 | |
| 1 CC Uplink - Power Class 2 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 15.9 | 15.66 | 0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:2.31 | 0.702 | 1.057 | 0.742 | 0.257 | 0.272 | |
| 2 CC Uplink - Power Class 3 | PCC | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 15.9 | 15.70 | 0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.993 | 1.047 | 1.040 | 0.361 | 0.378 | |
| 2 CC Uplink - Power Class 3 | SCC | 2525.80 | 39948 | Low | LTE Band 41 | 20 | | | | | | | | 1 | 0 | | | | | | | | | |
| 2 CC Uplink - Power Class 2 | PCC | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 15.9 | 15.79 | 0.05 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | back | 1:2.31 | 0.714 | 1.026 | 0.733 | 0.262 | 0.269 | |
| 2 CC Uplink - Power Class 2 | SCC | 2525.80 | 39948 | Low | LTE Band 41 | 20 | | | | | | | | 1 | 0 | | | | | | | | | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 15.9 | 15.83 | 0.00 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | top | 1:1.58 | 0.667 | 1.016 | 0.678 | 0.229 | 0.233 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 15.9 | 15.81 | -0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | top | 1:1.58 | 0.664 | 1.021 | 0.678 | 0.225 | 0.230 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.90 | -0.07 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | top | 1:1.58 | 0.656 | 1.000 | 0.656 | 0.224 | 0.224 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 15.9 | 15.64 | -0.07 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 99 | 0 mm | top | 1:1.58 | 0.656 | 1.062 | 0.697 | 0.217 | 0.230 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41400 | High | LTE Band 41 | 20 | 15.9 | 15.84 | 0.01 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | top | 1:1.58 | 0.693 | 1.014 | 0.703 | 0.228 | 0.231 | |
| 1 CC Uplink - Power Class 3 | N/A | 2506.00 | 39750 | Low | LTE Band 41 | 20 | 15.9 | 15.84 | -0.05 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | top | 1:1.58 | 0.684 | 1.014 | 0.694 | 0.234 | 0.237 | |
| 1 CC Uplink - Power Class 3 | N/A | 2549.50 | 40185 | Low-Mid | LTE Band 41 | 20 | 15.9 | 15.74 | -0.03 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | top | 1:1.58 | 0.656 | 1.038 | 0.681 | 0.222 | 0.230 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.85 | -0.03 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | top | 1:1.58 | 0.658 | 1.012 | 0.666 | 0.220 | 0.223 | |
| 1 CC Uplink - Power Class 3 | N/A | 2636.50 | 41055 | Mid-High | LTE Band 41 | 20 | 15.9 | 15.72 | -0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 50 | 0 mm | top | 1:1.58 | 0.657 | 1.042 | 0.685 | 0.218 | 0.227 | |
| 1 CC Uplink - Power Class 3 | N/A | 2680.00 | 41490 | High | LTE Band 41 | 20 | 15.9 | 15.84 | -0.03 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | top | 1:1.58 | 0.691 | 1.014 | 0.701 | 0.226 | 0.229 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.83 | -0.03 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 100 | 0 | 0 mm | top | 1:1.58 | 0.659 | 1.016 | 0.670 | 0.221 | 0.225 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.90 | 0.00 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | bottom | 1:1.58 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.85 | 0.00 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | bottom | 1:1.58 | 0.000 | 1.012 | 0.000 | 0.000 | 0.000 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.90 | -0.02 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | right | 1:1.58 | 0.029 | 1.000 | 0.029 | 0.012 | 0.012 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.85 | 0.00 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | right | 1:1.58 | 0.030 | 1.012 | 0.030 | 0.012 | 0.012 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.90 | -0.04 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 1 | 0 | 0 mm | left | 1:1.58 | 0.072 | 1.000 | 0.072 | 0.027 | 0.027 | |
| 1 CC Uplink - Power Class 3 | N/A | 2593.00 | 40620 | Mid | LTE Band 41 | 20 | 15.9 | 15.85 | -0.08 | 0 | Ant 4b | DLXZG001P7GP | QPSK | 50 | 0 | 0 mm | left | 1:1.58 | 0.068 | 1.012 | 0.069 | 0.025 | 0.025 | |

| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |
|---|---|

# Table 10-57
# LTE Band 48 Ant 1 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 15.3 | 14.83 | 0.07 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 1.050 | 1.114 | 1.170 | 0.352 | 0.392 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.26 | -0.11 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 1.000 | 1.009 | 1.009 | 0.333 | 0.336 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 15.3 | 15.12 | -0.05 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 1.030 | 1.042 | 1.073 | 0.338 | 0.352 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.09 | 0.09 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.881 | 1.050 | 0.925 | 0.290 | 0.305 | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 15.3 | 14.75 | 0.09 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.945 | 1.135 | 1.073 | 0.317 | 0.360 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.06 | -0.10 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.840 | 1.057 | 0.888 | 0.280 | 0.296 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 15.3 | 15.03 | 0.03 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.957 | 1.064 | 1.018 | 0.316 | 0.336 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 14.90 | 0.04 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.917 | 1.096 | 1.005 | 0.308 | 0.338 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.04 | 0.12 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1.58 | 0.850 | 1.062 | 0.903 | 0.282 | 0.299 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.26 | 0.03 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | top | 1:1.58 | 0.003 | 1.009 | 0.003 | 0.002 | 0.002 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.06 | 0.06 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | top | 1:1.58 | 0.003 | 1.057 | 0.003 | 0.002 | 0.002 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.26 | 0.13 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | bottom | 1:1.58 | 0.339 | 1.009 | 0.342 | 0.093 | 0.094 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.06 | 0.02 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | bottom | 1:1.58 | 0.317 | 1.057 | 0.335 | 0.087 | 0.092 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.26 | -0.03 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | right | 1:1.58 | 0.003 | 1.009 | 0.003 | 0.002 | 0.002 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.06 | 0.06 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1.58 | 0.004 | 1.057 | 0.004 | 0.004 | 0.004 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.26 | 0.02 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | left | 1:1.58 | 0.509 | 1.009 | 0.514 | 0.133 | 0.134 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.06 | 0.03 | 0 | Ant 1 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | left | 1:1.58 | 0.471 | 1.057 | 0.498 | 0.124 | 0.131 | |

| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |
|---|---|




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-58
## LTE Band 48 Ant 3 Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 16.5 | 16.05 | -0.20 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.829 | 1.109 | 0.919 | 0.250 | 0.277 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.5 | 15.93 | -0.20 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.799 | 1.140 | 0.911 | 0.239 | 0.272 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 16.06 | 0.04 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.808 | 1.107 | 0.894 | 0.239 | 0.265 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 16.5 | 15.79 | -0.02 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.707 | 1.178 | 0.833 | 0.211 | 0.249 | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 16.5 | 15.60 | -0.08 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.801 | 1.230 | 0.985 | 0.230 | 0.283 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.5 | 15.62 | -0.08 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.752 | 1.225 | 0.921 | 0.226 | 0.277 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 15.76 | -0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.752 | 1.186 | 0.892 | 0.224 | 0.266 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 16.5 | 15.61 | -0.09 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.696 | 1.227 | 0.854 | 0.210 | 0.258 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.5 | 15.75 | -0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1.58 | 0.747 | 1.189 | 0.888 | 0.226 | 0.269 | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 16.5 | 16.05 | -0.04 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | top | 1:1.58 | 0.774 | 1.109 | 0.858 | 0.208 | 0.231 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.5 | 15.93 | -0.04 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | top | 1:1.58 | 0.714 | 1.140 | 0.814 | 0.189 | 0.215 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 16.06 | 0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | top | 1:1.58 | 0.708 | 1.107 | 0.784 | 0.188 | 0.208 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 16.5 | 15.79 | 0.01 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | top | 1:1.58 | 0.589 | 1.178 | 0.694 | 0.153 | 0.180 | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 16.5 | 15.60 | 0.15 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | top | 1:1.58 | 0.711 | 1.230 | 0.875 | 0.190 | 0.234 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.5 | 15.62 | -0.05 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | top | 1:1.58 | 0.673 | 1.225 | 0.824 | 0.179 | 0.219 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 15.76 | -0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | top | 1:1.58 | 0.646 | 1.186 | 0.766 | 0.166 | 0.197 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 16.5 | 15.61 | -0.01 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | top | 1:1.58 | 0.594 | 1.227 | 0.729 | 0.154 | 0.189 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.5 | 15.75 | -0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 100 | 0 | 0 mm | top | 1:1.58 | 0.681 | 1.189 | 0.810 | 0.179 | 0.213 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 16.06 | 0.05 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1.58 | 0.012 | 1.107 | 0.013 | 0.005 | 0.006 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 15.76 | 0.08 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1.58 | 0.011 | 1.186 | 0.013 | 0.005 | 0.006 | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 16.5 | 16.05 | 0.09 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1.58 | 1.070 | 1.109 | 1.187 | 0.300 | 0.333 | A19 |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.5 | 15.93 | -0.04 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | right | 1:1.58 | 0.993 | 1.140 | 1.132 | 0.272 | 0.310 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 16.06 | -0.01 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1.58 | 0.970 | 1.107 | 1.074 | 0.264 | 0.292 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 16.5 | 15.79 | 0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 99 | 0 mm | right | 1:1.58 | 0.677 | 1.178 | 0.798 | 0.179 | 0.211 | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 16.5 | 15.60 | 0.09 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1.58 | 0.956 | 1.230 | 1.176 | 0.267 | 0.328 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.5 | 15.62 | -0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1.58 | 0.931 | 1.225 | 1.140 | 0.255 | 0.312 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 15.76 | -0.02 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1.58 | 0.902 | 1.186 | 1.070 | 0.243 | 0.288 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 16.5 | 15.61 | -0.02 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1.58 | 0.667 | 1.227 | 0.818 | 0.175 | 0.215 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.5 | 15.75 | -0.04 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 100 | 0 | 0 mm | right | 1:1.58 | 0.951 | 1.189 | 1.131 | 0.259 | 0.308 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 16.06 | 0.02 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1.58 | 0.004 | 1.107 | 0.004 | 0.003 | 0.003 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.5 | 15.76 | 0.12 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1.58 | 0.004 | 1.186 | 0.005 | 0.003 | 0.004 | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 16.5 | 16.05 | 0.03 | 0 | Ant 3 | DLXZR00GP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1.58 | 1.040 | 1.109 | 1.153 | 0.290 | 0.322 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | |

Note: Blue entry represents variability measurement.

## Table 10-59
## LTE Band 48 Ant 2b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) | Scaling Factor | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | (W/kg) | | (W/kg) | (W/kg) | (W/kg) | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 15.3 | 14.84 | 0.00 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 1.030 | 1.112 | 1.145 | 0.306 | 0.340 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 15.08 | -0.03 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.860 | 1.052 | 0.905 | 0.255 | 0.268 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 15.3 | 15.07 | 0.00 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 0.827 | 1.054 | 0.872 | 0.243 | 0.256 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.21 | 0.00 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 0.833 | 1.021 | 0.850 | 0.237 | 0.242 | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 15.3 | 14.86 | 0.00 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1.58 | 0.977 | 1.107 | 1.082 | 0.295 | 0.327 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 15.3 | 14.88 | -0.06 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.824 | 1.102 | 0.908 | 0.243 | 0.268 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 15.3 | 15.02 | 0.01 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.781 | 1.067 | 0.833 | 0.228 | 0.243 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.23 | 0.03 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.836 | 1.016 | 0.849 | 0.238 | 0.242 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.20 | 0.02 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1.58 | 0.715 | 1.023 | 0.731 | 0.205 | 0.210 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.21 | 0.09 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 1 | 99 | 0 mm | top | 1:1.58 | 0.006 | 1.021 | 0.006 | 0.005 | 0.005 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.23 | 0.06 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 50 | 50 | 0 mm | top | 1:1.58 | 0.006 | 1.016 | 0.006 | 0.005 | 0.005 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.21 | -0.02 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 1 | 99 | 0 mm | bottom | 1:1.58 | 0.279 | 1.021 | 0.285 | 0.080 | 0.082 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.23 | -0.01 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 50 | 50 | 0 mm | bottom | 1:1.58 | 0.287 | 1.016 | 0.292 | 0.082 | 0.083 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.21 | 0.03 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 1 | 99 | 0 mm | right | 1:1.58 | 0.043 | 1.021 | 0.044 | 0.016 | 0.016 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.23 | 0.05 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 50 | 50 | 0 mm | right | 1:1.58 | 0.042 | 1.016 | 0.043 | 0.015 | 0.015 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.21 | 0.04 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 1 | 99 | 0 mm | left | 1:1.58 | 0.016 | 1.021 | 0.016 | 0.008 | 0.008 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 15.3 | 15.23 | 0.03 | 0 | Ant 2b | DLXZR00FP7GX | QPSK | 50 | 50 | 0 mm | left | 1:1.58 | 0.016 | 1.016 | 0.016 | 0.008 | 0.008 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-60
## LTE Band 48 Ant 4b Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | MPR [dB] | Antenna Config. | Device Serial Number | Modulation | RB Size | RB Offset | Spacing | Side | Duty Cycle | SAR (1g) (W/kg) | Scaling Factor | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | | | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 16.3 | 16.15 | 0.04 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 50 | 0 mm | back | 1:1.58 | 1.040 | 1.035 | 1.076 | 0.317 | 0.328 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.3 | 16.25 | -0.02 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 99 | 0 mm | back | 1:1.58 | 1.020 | 1.012 | 1.032 | 0.302 | 0.306 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.26 | -0.03 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 1.040 | 1.009 | 1.049 | 0.311 | 0.314 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 16.3 | 16.15 | -0.03 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 1.030 | 1.035 | 1.066 | 0.301 | 0.312 | |
| 3560.00 | 55340 | Low | LTE Band 48 | 20 | 16.3 | 16.21 | -0.02 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 50 | 25 | 0 mm | back | 1:1.58 | 1.030 | 1.021 | 1.052 | 0.309 | 0.315 | |
| 3603.30 | 55773 | Low-Mid | LTE Band 48 | 20 | 16.3 | 16.06 | -0.02 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 50 | 50 | 0 mm | back | 1:1.58 | 0.949 | 1.057 | 1.003 | 0.280 | 0.296 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.22 | -0.03 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.975 | 1.019 | 0.994 | 0.290 | 0.296 | |
| 3690.00 | 56640 | High | LTE Band 48 | 20 | 16.3 | 16.03 | -0.03 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | back | 1:1.58 | 0.991 | 1.064 | 1.054 | 0.287 | 0.305 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.21 | -0.01 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 100 | 0 | 0 mm | back | 1:1.58 | 0.993 | 1.021 | 1.014 | 0.292 | 0.298 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.26 | -0.04 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | top | 1:1.58 | 0.383 | 1.009 | 0.386 | 0.110 | 0.111 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.22 | 0.03 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | top | 1:1.58 | 0.368 | 1.019 | 0.375 | 0.105 | 0.107 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.26 | -0.09 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | bottom | 1:1.58 | 0.005 | 1.009 | 0.005 | 0.004 | 0.004 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.22 | 0.07 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | bottom | 1:1.58 | 0.005 | 1.019 | 0.005 | 0.004 | 0.004 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.26 | 0.03 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | right | 1:1.58 | 0.038 | 1.009 | 0.038 | 0.012 | 0.012 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.22 | 0.06 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | right | 1:1.58 | 0.036 | 1.019 | 0.037 | 0.012 | 0.012 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.26 | 0.04 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | left | 1:1.58 | 0.034 | 1.009 | 0.034 | 0.011 | 0.011 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.22 | -0.02 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 50 | 0 | 0 mm | left | 1:1.58 | 0.032 | 1.019 | 0.033 | 0.010 | 0.010 | |
| 3646.70 | 56207 | Mid-High | LTE Band 48 | 20 | 16.3 | 16.26 | -0.03 | 0 | Ant 4b | DLXZR00TP7GX | QPSK | 1 | 0 | 0 mm | back | 1:1.58 | 1.040 | 1.009 | 1.049 | 0.307 | 0.310 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | | | |

Note: Blue entry represents variability measurement.

## Table 10-61
## 2.4 GHz WLAN Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Spacing | Antenna Config. | Variant | Device Serial Number | Data Rate (Mbps) | Side | Duty Cycle (%) | SAR (1g) (W/kg) | Scaling Factor (Power) | Scaling Factor (Duty Cycle) | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | 0.05 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | back | 99.2 | 0.872 | 1.318 | 1.008 | 1.158 | 0.382 | 0.508 | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.53 | -0.08 | 0 mm | Ant 2a | V2 | DLXZN009P7GX | 1 | back | 99.0 | 0.784 | 1.403 | 1.010 | 1.111 | 0.340 | 0.482 | |
| 2437 | 6 | 802.11b | DSSS | 22 | 13.0 | 11.65 | 0.08 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | back | 99.2 | 0.750 | 1.365 | 1.008 | 1.032 | 0.323 | 0.444 | |
| 2462 | 11 | 802.11b | DSSS | 22 | 13.0 | 11.69 | 0.05 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | back | 99.2 | 0.822 | 1.352 | 1.008 | 1.120 | 0.347 | 0.473 | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | 0.03 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | top | 99.2 | 0.012 | 1.318 | 1.008 | 0.016 | 0.006 | 0.008 | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | 0.00 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | bottom | 99.2 | 0.313 | 1.318 | 1.008 | 0.416 | 0.097 | 0.129 | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | -0.01 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | right | 99.2 | 0.521 | 1.318 | 1.008 | 0.692 | 0.182 | 0.242 | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | 0.02 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | left | 99.2 | 0.002 | 1.318 | 1.008 | 0.003 | 0.001 | 0.001 | |
| 2462 | 11 | 802.11b | DSSS | 22 | 6.0 | 5.49 | -0.13 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | back | 99.2 | 0.195 | 1.125 | 1.008 | 0.221 | 0.081 | 0.092 | |
| 2462 | 11 | 802.11b | DSSS | 22 | 6.0 | 5.49 | 0.09 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | bottom | 99.2 | 0.071 | 1.125 | 1.008 | 0.081 | 0.022 | 0.025 | |
| 2462 | 11 | 802.11b | DSSS | 22 | 6.0 | 5.49 | 0.01 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | right | 99.2 | 0.095 | 1.125 | 1.008 | 0.108 | 0.033 | 0.037 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |

## Table 10-62
## 2.4 GHz WLAN Ant 4a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Spacing | Antenna Config. | Variant | Device Serial Number | Data Rate (Mbps) | Side | Duty Cycle (%) | SAR (1g) (W/kg) | Scaling Factor (Power) | Scaling Factor (Duty Cycle) | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | -0.01 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | back | 99.2 | 0.875 | 1.318 | 1.008 | 1.162 | 0.362 | 0.481 | A20 |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.65 | -0.02 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | back | 99.3 | 0.835 | 1.365 | 1.007 | 1.148 | 0.345 | 0.474 | |
| 2437 | 6 | 802.11b | DSSS | 22 | 13.0 | 11.66 | 0.02 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | back | 99.2 | 0.782 | 1.361 | 1.008 | 1.073 | 0.322 | 0.442 | |
| 2462 | 11 | 802.11b | DSSS | 22 | 13.0 | 11.67 | -0.02 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | back | 99.2 | 0.824 | 1.358 | 1.008 | 1.128 | 0.335 | 0.459 | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | 0.05 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | top | 99.2 | 0.305 | 1.318 | 1.008 | 0.405 | 0.091 | 0.121 | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | 0.03 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | bottom | 99.2 | 0.009 | 1.318 | 1.008 | 0.012 | 0.005 | 0.007 | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | 0.16 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | right | 99.2 | 0.003 | 1.318 | 1.008 | 0.004 | 0.001 | 0.001 | |
| 2412 | 1 | 802.11b | DSSS | 22 | 13.0 | 11.80 | 0.06 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | left | 99.2 | 0.533 | 1.318 | 1.008 | 0.708 | 0.187 | 0.248 | |
| 2437 | 6 | 802.11b | DSSS | 22 | 6.0 | 5.49 | 0.11 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | back | 99.2 | 0.183 | 1.125 | 1.008 | 0.208 | 0.076 | 0.086 | |
| 2437 | 6 | 802.11b | DSSS | 22 | 6.0 | 5.49 | 0.08 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | top | 99.2 | 0.075 | 1.125 | 1.008 | 0.085 | 0.022 | 0.025 | |
| 2437 | 6 | 802.11b | DSSS | 22 | 6.0 | 5.49 | 0.02 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | left | 99.2 | 0.138 | 1.125 | 1.008 | 0.156 | 0.051 | 0.058 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# Table 10-63
# 5 GHz WLAN 5GHz ANTlower Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Spacing | Antenna Config. | Variant | Device Serial Number | Data Rate (Mbps) | Side | Duty Cycle (%) | SAR (1g) | Scaling Factor (Power) | Scaling Factor (Duty Cycle) | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | (W/kg) | | | (W/kg) | (W/kg) | (W/kg) | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.5 | 15.35 | -0.05 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 13.5 | back | 98.1 | 0.042 | 1.303 | 1.019 | 0.056 | 0.015 | 0.020 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.5 | 15.35 | 0.00 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 13.5 | top | 98.1 | 0.000 | 1.303 | 1.019 | 0.000 | 0.000 | 0.000 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.5 | 15.35 | 0.00 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 13.5 | bottom | 98.1 | 0.000 | 1.303 | 1.019 | 0.000 | 0.000 | 0.000 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.5 | 15.60 | 0.20 | 0 mm | 5GHz ANTlower | V1 | DLXZN003P7GX | 13.5 | right | 97.8 | 0.797 | 1.230 | 1.022 | 1.002 | 0.182 | 0.229 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.5 | 15.35 | -0.05 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 13.5 | right | 98.1 | 0.769 | 1.303 | 1.019 | 1.021 | 0.182 | 0.242 | |
| 5310 | 62 | 802.11n | OFDM | 40 | 13.5 | 12.56 | 0.02 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 13.5 | right | 98.1 | 0.316 | 1.242 | 1.019 | 0.400 | 0.070 | 0.089 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.5 | 15.35 | 0.00 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 13.5 | left | 98.1 | 0.000 | 1.303 | 1.019 | 0.000 | 0.000 | 0.000 | |
| 5270 | 54 | 802.11ac | OFDM | 40 | 12.5 | 12.42 | 0.06 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | right | 98.1 | 0.275 | 1.019 | 1.019 | 0.286 | 0.062 | 0.064 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 16.5 | 15.60 | 0.17 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | back | 95.0 | 0.053 | 1.230 | 1.053 | 0.069 | 0.019 | 0.025 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 16.5 | 15.60 | 0.00 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | top | 95.0 | 0.000 | 1.230 | 1.053 | 0.000 | 0.000 | 0.000 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 16.5 | 15.60 | 0.00 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | bottom | 95.0 | 0.000 | 1.230 | 1.053 | 0.000 | 0.000 | 0.000 | |
| 5530 | 106 | 802.11ac | OFDM | 80 | 12.5 | 10.61 | 0.11 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | right | 95.0 | 0.226 | 1.545 | 1.053 | 0.368 | 0.047 | 0.076 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 16.5 | 15.60 | 0.10 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | right | 95.0 | 0.896 | 1.230 | 1.053 | 1.160 | 0.222 | 0.288 | |
| 5690 | 138 | 802.11ac | OFDM | 80 | 16.5 | 15.57 | 0.14 | 0 mm | 5GHz ANTlower | V1 | DLXZN002P7GX | 29.3 | right | 96.0 | 0.860 | 1.239 | 1.042 | 1.110 | 0.209 | 0.270 | |
| 5690 | 138 | 802.11ac | OFDM | 80 | 16.5 | 15.55 | 0.06 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | right | 95.0 | 0.900 | 1.245 | 1.053 | **1.180** | 0.229 | 0.300 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 16.5 | 15.60 | 0.03 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | left | 95.0 | 0.016 | 1.230 | 1.053 | 0.021 | 0.007 | 0.009 | |
| 5690 | 138 | 802.11ac | OFDM | 80 | 12.5 | 12.50 | 0.12 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | right | 95.0 | 0.414 | 1.000 | 1.053 | 0.436 | 0.104 | 0.110 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.5 | 14.52 | 0.04 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | back | 95.0 | 0.061 | 1.253 | 1.053 | 0.080 | 0.022 | 0.029 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.5 | 14.52 | 0.00 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | top | 95.0 | 0.000 | 1.253 | 1.053 | 0.000 | 0.000 | 0.000 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.5 | 14.52 | 0.00 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | bottom | 95.0 | 0.000 | 1.253 | 1.053 | 0.000 | 0.000 | 0.000 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.5 | 14.50 | -0.14 | 0 mm | 5GHz ANTlower | V1 | DLXZN002P7GX | 29.3 | right | 96.0 | 0.797 | 1.259 | 1.042 | 1.046 | 0.209 | 0.274 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.5 | 14.52 | -0.13 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | right | 95.0 | 0.854 | 1.253 | 1.053 | 1.127 | 0.222 | 0.293 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.5 | 14.52 | 0.01 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | left | 95.0 | 0.000 | 1.253 | 1.053 | 0.000 | 0.000 | 0.000 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 11.5 | 11.49 | 0.16 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | right | 95.0 | 0.385 | 1.002 | 1.053 | 0.406 | 0.097 | 0.102 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 16.5 | 15.60 | 0.02 | 0 mm | 5GHz ANTlower | V2 | DLXZR00JP7GX | 29.3 | right | 95.0 | 0.886 | 1.230 | 1.053 | 1.148 | 0.222 | 0.288 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | | | | |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 10-64
## 5 GHz WLAN 5GHz ANTupper Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Bandwidth [MHz] | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Spacing | Antenna Config. | Variant | Device Serial Number | Data Rate (Mbps) | Side | Duty Cycle (%) | SAR (1g) | Scaling Factor (Power) | Scaling Factor (Duty Cycle) | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | (W/kg) | | | (W/kg) | (W/kg) | (W/kg) | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.25 | 15.33 | 0.07 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 13.5 | back | 98.0 | 0.092 | 1.236 | 1.020 | 0.116 | 0.036 | 0.045 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.25 | 15.33 | 0.00 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 13.5 | top | 98.0 | 0.000 | 1.236 | 1.020 | 0.000 | 0.000 | 0.000 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.25 | 15.33 | 0.00 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 13.5 | bottom | 98.0 | 0.000 | 1.236 | 1.020 | 0.000 | 0.000 | 0.000 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.25 | 15.45 | -0.16 | 0 mm | 5GHz ANTupper | V1 | DLXZN002P7GX | 13.5 | right | 98.2 | 0.821 | 1.202 | 1.018 | 1.005 | 0.244 | 0.299 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.25 | 15.33 | -0.04 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 13.5 | right | 98.0 | 0.889 | 1.236 | 1.020 | 1.121 | 0.259 | 0.327 | |
| 5310 | 62 | 802.11n | OFDM | 40 | 13.50 | 12.51 | -0.03 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 13.5 | right | 98.0 | 0.430 | 1.256 | 1.020 | 0.551 | 0.127 | 0.163 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.25 | 15.33 | 0.07 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 13.5 | left | 98.0 | 0.008 | 1.236 | 1.020 | 0.010 | 0.035 | 0.044 | |
| 5270 | 54 | 802.11ac | OFDM | 40 | 11.25 | 11.17 | 0.01 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 13.5 | back | 98.0 | 0.020 | 1.019 | 1.020 | 0.021 | 0.007 | 0.007 | |
| 5290 | 58 | 802.11ac | OFDM | 80 | 11.25 | 11.17 | -0.01 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 29.3 | right | 98.0 | 0.302 | 1.019 | 1.020 | 0.314 | 0.084 | 0.087 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 15.00 | 14.18 | -0.12 | 0 mm | 5GHz ANTupper | V2 | DLXZR00JP7GX | 29.3 | back | 95.7 | 0.086 | 1.208 | 1.045 | 0.109 | 0.033 | 0.042 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 15.00 | 14.18 | -0.02 | 0 mm | 5GHz ANTupper | V2 | DLXZR00JP7GX | 29.3 | top | 95.7 | 0.000 | 1.208 | 1.045 | 0.000 | 0.000 | 0.000 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 15.00 | 14.18 | -0.01 | 0 mm | 5GHz ANTupper | V2 | DLXZR00JP7GX | 29.3 | bottom | 95.7 | 0.000 | 1.208 | 1.045 | 0.000 | 0.000 | 0.000 | |
| 5530 | 106 | 802.11ac | OFDM | 80 | 12.50 | 10.65 | 0.19 | 0 mm | 5GHz ANTupper | V2 | DLXZR00JP7GX | 29.3 | right | 95.7 | 0.311 | 1.531 | 1.045 | 0.498 | 0.093 | 0.149 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 15.00 | 14.06 | 0.04 | 0 mm | 5GHz ANTupper | V1 | DLXZN002P7GX | 29.3 | right | 95.7 | 0.841 | 1.242 | 1.045 | 1.092 | 0.275 | 0.357 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 15.00 | 14.18 | 0.06 | 0 mm | 5GHz ANTupper | V2 | DLXZR00JP7GX | 29.3 | right | 95.7 | 0.872 | 1.208 | 1.045 | 1.101 | 0.284 | 0.359 | |
| 5690 | 138 | 802.11ac | OFDM | 80 | 15.00 | 14.05 | -0.10 | 0 mm | 5GHz ANTupper | V2 | DLXZR00JP7GX | 29.3 | right | 95.7 | 0.688 | 1.245 | 1.045 | 0.895 | 0.226 | 0.294 | |
| 5610 | 122 | 802.11ac | OFDM | 80 | 15.00 | 14.18 | -0.09 | 0 mm | 5GHz ANTupper | V2 | DLXZR00JP7GX | 29.3 | left | 95.7 | 0.012 | 1.208 | 1.045 | 0.015 | 0.005 | 0.006 | |
| 5690 | 138 | 802.11ac | OFDM | 80 | 10.00 | 10.00 | -0.03 | 0 mm | 5GHz ANTupper | V2 | DLXZR00JP7GX | 29.3 | back | 95.7 | 0.016 | 1.000 | 1.045 | 0.017 | 0.006 | 0.006 | |
| 5690 | 138 | 802.11ac | OFDM | 80 | 10.00 | 10.00 | -0.06 | 0 mm | 5GHz ANTupper | V2 | DLXZR00JP7GX | 29.3 | right | 95.7 | 0.314 | 1.000 | 1.045 | 0.328 | 0.095 | 0.099 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.50 | 14.68 | 0.15 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 29.3 | back | 95.7 | 0.104 | 1.208 | 1.045 | 0.131 | 0.041 | 0.052 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.50 | 14.68 | 0.00 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 29.3 | top | 95.7 | 0.000 | 1.208 | 1.045 | 0.000 | 0.000 | 0.000 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.50 | 14.68 | 0.00 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 29.3 | bottom | 95.7 | 0.000 | 1.208 | 1.045 | 0.000 | 0.000 | 0.000 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.50 | 14.60 | 0.06 | 0 mm | 5GHz ANTupper | V1 | DLXZN002P7GX | 29.3 | right | 95.7 | 0.756 | 1.230 | 1.045 | 0.972 | 0.270 | 0.347 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.50 | 14.68 | 0.20 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 29.3 | right | 95.7 | 0.937 | 1.208 | 1.045 | 1.183 | 0.323 | 0.408 | A21 |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.50 | 14.68 | 0.09 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 29.3 | left | 95.7 | 0.017 | 1.208 | 1.045 | 0.021 | 0.005 | 0.006 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 10.50 | 10.39 | 0.07 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 29.3 | back | 95.7 | 0.023 | 1.026 | 1.045 | 0.025 | 0.008 | 0.009 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 10.50 | 10.39 | 0.11 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 29.3 | right | 95.7 | 0.287 | 1.026 | 1.045 | 0.308 | 0.093 | 0.100 | |
| 5270 | 54 | 802.11n | OFDM | 40 | 16.25 | 15.33 | -0.04 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 13.5 | right | 98.0 | 0.880 | 1.236 | 1.020 | 1.109 | 0.259 | 0.327 | |
| 5775 | 155 | 802.11ac | OFDM | 80 | 15.50 | 14.68 | 0.20 | 0 mm | 5GHz ANTupper | V2 | DLXZN009P7GX | 29.3 | right | 95.7 | 0.921 | 1.208 | 1.045 | 1.163 | 0.326 | 0.412 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | |

Note: Blue entry represents variability measurement.

## Table 10-65
## Bluetooth Ant 2a Body SAR

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Spacing | Antenna Config. | Variant | Device Serial Number | Data Rate (Mbps) | Side | Duty Cycle (%) | SAR (1g) | Scaling Factor (Cond Power) | Scaling Factor (Duty Cycle) | Reported SAR (1g) | SAR (10g) | Reported SAR (10g) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | (W/kg) | | | (W/kg) | (W/kg) | (W/kg) | |
| 2402 | 0 | Bluetooth | FHSS | 14.0 | 13.51 | -0.05 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | back | 77.1 | 1.050 | 1.119 | 1.005 | 1.181 | 0.463 | 0.521 | |
| 2402 | 0 | Bluetooth | FHSS | 14.0 | 13.28 | 0.02 | 0 mm | Ant 2a | V2 | DLXZN009P7GX | 1 | back | 77.1 | 0.818 | 1.180 | 1.005 | 0.970 | 0.350 | 0.415 | |
| 2441 | 39 | Bluetooth | FHSS | 14.0 | 13.69 | 0.01 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | back | 77.1 | 1.090 | 1.074 | 1.005 | 1.177 | 0.470 | 0.507 | A22 |
| 2480 | 78 | Bluetooth | FHSS | 14.0 | 13.49 | 0.12 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | back | 77.1 | 1.030 | 1.125 | 1.005 | 1.165 | 0.443 | 0.501 | |
| 2441 | 39 | Bluetooth | FHSS | 14.0 | 13.69 | 0.04 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | top | 77.1 | 0.012 | 1.074 | 1.005 | 0.013 | 0.006 | 0.006 | |
| 2441 | 39 | Bluetooth | FHSS | 14.0 | 13.69 | 0.01 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | bottom | 77.1 | 0.355 | 1.074 | 1.005 | 0.383 | 0.109 | 0.118 | |
| 2441 | 39 | Bluetooth | FHSS | 14.0 | 13.69 | 0.01 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | right | 77.1 | 0.711 | 1.074 | 1.005 | 0.767 | 0.250 | 0.270 | |
| 2441 | 39 | Bluetooth | FHSS | 14.0 | 13.69 | 0.00 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | left | 77.1 | 0.003 | 1.074 | 1.005 | 0.003 | 0.002 | 0.002 | |
| 2441 | 39 | Bluetooth | FHSS | 11.0 | 10.75 | -0.01 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | back | 77.1 | 0.509 | 1.059 | 1.005 | 0.542 | 0.219 | 0.233 | |
| 2441 | 39 | Bluetooth | FHSS | 11.0 | 10.75 | -0.01 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | bottom | 77.1 | 0.182 | 1.059 | 1.005 | 0.194 | 0.055 | 0.059 | |
| 2441 | 39 | Bluetooth | FHSS | 11.0 | 10.75 | 0.05 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | right | 77.1 | 0.313 | 1.059 | 1.005 | 0.333 | 0.110 | 0.117 | |
| 2480 | 78 | Bluetooth | FHSS | 7.0 | 6.87 | 0.05 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | back | 77.1 | 0.231 | 1.030 | 1.005 | 0.239 | 0.096 | 0.099 | |
| 2480 | 78 | Bluetooth | FHSS | 7.0 | 6.87 | 0.11 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | bottom | 77.1 | 0.104 | 1.030 | 1.005 | 0.108 | 0.031 | 0.032 | |
| 2480 | 78 | Bluetooth | FHSS | 7.0 | 6.87 | 0.06 | 0 mm | Ant 2a | V1 | DLXZN003P7GX | 1 | right | 77.1 | 0.119 | 1.030 | 1.005 | 0.123 | 0.044 | 0.046 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | |

Note: The reported SAR was scaled to the 77.5% transmission duty factor to determine compliance since the duty factor of the device is permanently limited to 77.5% per the manufacturer.




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 10-66**
**Bluetooth Ant 4a Body SAR**

| MEASUREMENT RESULTS | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQUENCY | | Mode | Service | Maximum Allowed Power [dBm] | Conducted Power [dBm] | Power Drift [dB] | Spacing | Antenna Config. | Variant | Device Serial Number | Data Rate (Mbps) | Side | Duty Cycle (%) | SAR (1g) (W/kg) | Scaling Factor (Cond Power) | Scaling Factor (Duty Cycle) | Reported SAR (1g) (W/kg) | SAR (10g) (W/kg) | Reported SAR (10g) (W/kg) | Plot # |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | |
| 2402 | 0 | Bluetooth | FHSS | 14.0 | 13.07 | -0.05 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | back | 77.1 | 0.946 | 1.239 | 1.005 | **1.178** | 0.399 | 0.497 | |
| 2441 | 39 | Bluetooth | FHSS | 14.0 | 12.94 | 0.02 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | back | 77.1 | 0.906 | 1.276 | 1.005 | 1.162 | 0.368 | 0.472 | |
| 2480 | 78 | Bluetooth | FHSS | 14.0 | 13.45 | 0.04 | 0 mm | Ant 4a | V1 | DLXZN003P7GX | 1 | back | 76.9 | 0.914 | 1.135 | 1.008 | 1.046 | 0.368 | 0.421 | |
| 2480 | 78 | Bluetooth | FHSS | 14.0 | 13.22 | 0.04 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | back | 77.1 | 0.981 | 1.197 | 1.005 | **1.180** | 0.402 | 0.484 | |
| 2480 | 78 | Bluetooth | FHSS | 14.0 | 13.22 | 0.00 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | top | 77.1 | 0.507 | 1.197 | 1.005 | 0.610 | 0.144 | 0.173 | |
| 2480 | 78 | Bluetooth | FHSS | 14.0 | 13.22 | 0.02 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | bottom | 77.1 | 0.015 | 1.197 | 1.005 | 0.018 | 0.005 | 0.006 | |
| 2480 | 78 | Bluetooth | FHSS | 14.0 | 13.22 | -0.05 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | right | 77.1 | 0.001 | 1.197 | 1.005 | 0.001 | 0.000 | 0.000 | |
| 2480 | 78 | Bluetooth | FHSS | 14.0 | 13.22 | -0.02 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | left | 77.1 | 0.661 | 1.197 | 1.005 | 0.795 | 0.227 | 0.273 | |
| 2480 | 78 | Bluetooth | FHSS | 7.0 | 6.27 | 0.07 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | back | 77.1 | 0.303 | 1.183 | 1.005 | 0.360 | 0.127 | 0.151 | |
| 2480 | 78 | Bluetooth | FHSS | 7.0 | 6.27 | 0.07 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | top | 77.1 | 0.090 | 1.183 | 1.005 | 0.107 | 0.027 | 0.032 | |
| 2480 | 78 | Bluetooth | FHSS | 7.0 | 6.27 | 0.05 | 0 mm | Ant 4a | V2 | DLXZN009P7GX | 1 | left | 77.1 | 0.247 | 1.183 | 1.005 | 0.294 | 0.085 | 0.101 | |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | | | | |

Note: The reported SAR was scaled to the 77.5% transmission duty factor to determine compliance since the duty factor of the device is permanently limited to 77.5% per the manufacturer.

## 10.2 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in FCC KDB Publication 616217 D04v01r02 and FCC KDB Publication 447498 D01v06.
2. Batteries are fully charged at the beginning of the SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical, and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v06.
6. Per FCC KDB 865664 D01v01r04, variability SAR tests were performed when the measured SAR results for a frequency band were greater than or equal to 0.8 W/kg. Repeated SAR measurements are highlighted in the tables above for clarity. Please see Section 12 for variability analysis.
7. FCC KDB Publication 616217 D04v01r02 Section 4.3, SAR tests are required for the back surface and edges of the tablet with the tablet touching the phantom. The SAR Exclusion Threshold in FCC KDB 447498 D01v06 was applied to determine SAR test exclusion for adjacent edge configurations.

GSM Test Notes:

1. Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October 2013 TCB Workshop Notes: The source-based frame-averaged output power was evaluated for all GPRS/EDGE slot configurations. The configuration with the highest target frame averaged output power was evaluated for SAR. When the maximum frame-averaged powers are equivalent across two or more slots (within 0.25 dB), the configuration with the most number of time slots was tested.
2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel was used.

UMTS Notes:

1. UMTS mode was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.




© 2020 PCTEST. REV 21.4 M 09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel was used.

LTE Notes:

1. LTE test configurations are determined according to SAR Evaluation Considerations for LTE Devices in FCC KDB Publication 941225 D05v02r04. The general test procedures used for testing can be found in Section 7.5.4.
2. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.
3. A-MPR was disabled for all SAR tests by setting NS=01 and MCC=001 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).
4. Per FCC KDB Publication 447498 D01v06, when the reported LTE Band 41 and Band 48 SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for 1g evaluations, testing at the other channels was required for such test configurations.
5. TDD LTE was tested per the guidance provided in FCC KDB Publication 941225 D05v02r04. Testing was performed using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633.
6. Per KDB Publication 941225 D05Av01r02, SAR for downlink only LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive.
7. This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per FCC Guidance, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions. Please see Section 13 for linearity results.
8. For intra-band ULCA LTE Band 7, LTE Band 5, and LTE Band 41, per FCC guidance, SAR was first measured with only a single carrier active in the uplink (carrier aggregation not active). For each exposure condition, the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when carrier aggregation was not active. The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power.
9. For inter-band uplink carrier aggregation, additional SAR Measurements were performed for some positions at the maximum allowed output power in inter-band ULCA mode. All single uplink 1g SAR values for each band were < 0.8 W/kg and the algebraic summation of the 1g SAR inter-band ULCA values were < 1.45. Per Fall 2018 TCB Workshop notes, no additional measurements were required.




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

WLAN Notes:

1. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 2.4 GHz WIFI single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11g/n/ax) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 7.6.4 for more information.
2. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2 W/kg for 1g evaluations. See Section 7.6.5 for more information.
3. Per KDB Publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB Publication 447498 D01v06 by either evaluating the sum of the 1g SAR values of each antenna transmitting independently or making a SAR measurement with both antennas transmitting simultaneously. Please see Section 11 for complete analysis.
4. When the maximum reported 1g averaged SAR is ≤0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg for 1g evaluations or all test channels were measured.
5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated EMC test reports.

Bluetooth Notes:

1. Bluetooth SAR was evaluated with a test mode with hopping disabled with DH5 operation. The reported SAR was scaled to the 77.5% transmission duty factor to determine compliance since the duty factor of the device is limited to 77.5% per the manufacturer. See Section 8.6 for the time domain plot and calculation for the duty factor of the device.




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 11 FCC MULTI-TX AND ANTENNA SAR CONSIDERATIONS

## 11.1 Introduction

The following procedures adopted from FCC KDB Publication 447498 D01v06 are applicable to devices with built-in unlicensed transmitters such as 802.11 and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

## 11.2 Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per FCC KDB Publication 447498 D01v06 4.3.2 and IEEE 1528-2013 Section 6.3.4.1.2, simultaneous transmission SAR test exclusion may be applied when the sum of the 1g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤1.6 W/kg. The different test positions in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1g or 10g SAR.

Note:
SAR Summations for some scenarios when the output power levels are reduced, SAR values at the maximum output power level were used as the most conservative evaluation for simultaneous transmission analysis.

For each position, the highest SAR value across all modes for the applicable cellular band antenna was considered for summation to determine simultaneous SAR test exclusion.

*The SAR distributions for at least one of the antennas are spatially separated from the other antennas per FCC KDB Publication 248227 Section 6.1 procedures. Therefore, the simultaneous transmission were treated independently for this configuration. See section 11.4 for more information about the Spatial Separation Analysis.

## 11.3 Body SAR Simultaneous Transmission Analysis

**Table 11-1**
**Cellular Band Ant 1 Simultaneous Transmission Scenario with 2.4 GHz WLAN**

| Simult Tx | Configuration | Cellular Band Antenna 1 SAR (W/kg) | 2.4 GHz WLAN Ant 2a SAR (W/kg) | 2.4 GHz WLAN Ant 4a SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.170 | 1.158 | 1.162 | 1.170* | 1.170* | 1.170* |
| | Top | 0.052 | 0.016 | 0.405 | 0.068 | 0.457 | 0.473 |
| | Bottom | 0.646 | 0.416 | 0.012 | 1.062 | 0.658 | 1.074 |
| | Right | 0.016 | 0.692 | 0.004 | 0.708 | 0.020 | 0.712 |
| | Left | 1.168 | 0.003 | 0.708 | **1.171** | 1.168* | 1.171* |

**Table 11-2**
**Cellular Band Ant 2A Simultaneous Transmission Scenario with 2.4 GHz WLAN**

| Simult Tx | Configuration | Cellular Band Antenna 2a SAR (W/kg) | 2.4 GHz WLAN Ant 2a Reduced at 6dBm SAR (W/kg) | 2.4 GHz WLAN Ant 4a SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.126 | 0.221 | 1.162 | **1.347** | 1.162* | 1.347* |
| | Top | 0.021 | 0.016 | 0.405 | 0.037 | 0.426 | 0.442 |
| | Bottom | 0.429 | 0.081 | 0.012 | 0.510 | 0.441 | 0.522 |
| | Right | 0.986 | 0.108 | 0.004 | 1.094 | 0.990 | 1.098 |
| | Left | 0.006 | 0.003 | 0.708 | 0.009 | 0.714 | 0.717 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 11-3
## Cellular Band Ant 2B Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 2b SAR (W/kg) | 2.4 GHz WLAN Ant 2a Reduced at 6dBm SAR (W/kg) | 2.4 GHz WLAN Ant 4a SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.187 | 0.221 | 1.162 | **1.408** | 1.187* | 1.408* |
| | Top | 0.006 | 0.016 | 0.405 | 0.022 | 0.411 | 0.427 |
| | Bottom | 0.750 | 0.081 | 0.012 | 0.831 | 0.762 | 0.843 |
| | Right | 0.055 | 0.108 | 0.004 | 0.163 | 0.059 | 0.167 |
| | Left | 0.023 | 0.003 | 0.708 | 0.026 | 0.731 | 0.734 |

## Table 11-4
## Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 3 SAR (W/kg) | 2.4 GHz WLAN Ant 2a SAR (W/kg) | 2.4 GHz WLAN Ant 4a SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.141 | 1.158 | 1.162 | 1.158* | 1.162* | 1.162* |
| | Top | 0.875 | 0.016 | 0.405 | 0.891 | 1.280 | **1.296** |
| | Bottom | 0.064 | 0.416 | 0.012 | 0.480 | 0.076 | 0.492 |
| | Right | 1.187 | 0.692 | 0.004 | 1.187* | 1.191 | 1.191* |
| | Left | 0.016 | 0.003 | 0.708 | 0.019 | 0.724 | 0.727 |

## Table 11-5
## Cellular Band Ant 4A Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 4a SAR (W/kg) | 2.4 GHz WLAN Ant 2a SAR (W/kg) | 2.4 GHz WLAN Ant 4a Reduced at 6dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.175 | 1.158 | 0.208 | 1.175* | **1.383** | 1.383* |
| | Top | 0.433 | 0.016 | 0.085 | 0.449 | 0.518 | 0.534 |
| | Bottom | 0.020 | 0.416 | 0.012 | 0.436 | 0.032 | 0.448 |
| | Right | 0.002 | 0.692 | 0.004 | 0.694 | 0.006 | 0.698 |
| | Left | 1.097 | 0.003 | 0.156 | 1.100 | 1.253 | 1.256 |

## Table 11-6
## Cellular Band Ant 4B Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 4b SAR (W/kg) | 2.4 GHz WLAN Ant 2a SAR (W/kg) | 2.4 GHz WLAN Ant 4a Reduced at 6dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.128 | 1.158 | 0.208 | 1.158* | **1.336** | 1.336* |
| | Top | 0.850 | 0.016 | 0.085 | 0.866 | 0.935 | 0.951 |
| | Bottom | 0.010 | 0.416 | 0.012 | 0.426 | 0.022 | 0.438 |
| | Right | 0.038 | 0.692 | 0.004 | 0.730 | 0.042 | 0.734 |
| | Left | 0.078 | 0.003 | 0.156 | 0.081 | 0.234 | 0.237 |

## Table 11-7
## Cellular Band Ant 1 Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 1 SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.170 | 0.080 | 0.131 | 1.250 | 1.301 | **1.381** |
| | Top | 0.052 | 0.000 | 0.000 | 0.052 | 0.052 | 0.052 |
| | Bottom | 0.646 | 0.000 | 0.000 | 0.646 | 0.646 | 0.646 |
| | Right | 0.016 | 1.180 | 1.183 | 1.196 | 1.199 | 1.199* |
| | Left | 1.168 | 0.021 | 0.021 | 1.189 | 1.189 | 1.210 |

## Table 11-8
## Cellular Band Ant 2A Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 2a SAR (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.126 | 0.080 | 0.131 | 1.206 | 1.257 | 1.337 |
| | Top | 0.021 | 0.000 | 0.000 | 0.021 | 0.021 | 0.021 |
| | Bottom | 0.429 | 0.000 | 0.000 | 0.429 | 0.429 | 0.429 |
| | Right | 0.986 | 0.436 | 1.183 | **1.422** | 1.183* | 1.422* |
| | Left | 0.006 | 0.021 | 0.021 | 0.027 | 0.027 | 0.048 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 11-9
## Cellular Band Ant 2B Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 2b SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.187 | 0.080 | 0.131 | 1.267 | 1.318 | **1.398** |
| | Top | 0.006 | 0.000 | 0.000 | 0.006 | 0.006 | 0.006 |
| | Bottom | 0.750 | 0.000 | 0.000 | 0.750 | 0.750 | 0.750 |
| | Right | 0.055 | 1.180 | 1.183 | 1.235 | 1.238 | 1.238* |
| | Left | 0.023 | 0.021 | 0.021 | 0.044 | 0.044 | 0.065 |

## Table 11-10
## Cellular Band Ant 3 Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 3 SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.141 | 0.080 | 0.025 | 1.221 | 1.166 | 1.246 |
| | Top | 0.875 | 0.000 | 0.000 | 0.875 | 0.875 | 0.875 |
| | Bottom | 0.064 | 0.000 | 0.000 | 0.064 | 0.064 | 0.064 |
| | Right | 1.187 | 1.180 | 0.328 | 1.187* | **1.515** | 1.515* |
| | Left | 0.016 | 0.021 | 0.021 | 0.037 | 0.037 | 0.058 |

## Table 11-11
## Cellular Band Ant 4A Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 4a SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.175 | 0.080 | 0.131 | 1.255 | 1.306 | **1.386** |
| | Top | 0.433 | 0.000 | 0.000 | 0.433 | 0.433 | 0.433 |
| | Bottom | 0.020 | 0.000 | 0.000 | 0.020 | 0.020 | 0.020 |
| | Right | 0.002 | 1.180 | 1.183 | 1.182 | 1.185 | 1.185* |
| | Left | 1.097 | 0.021 | 0.021 | 1.118 | 1.118 | 1.139 |

## Table 11-12
## Cellular Band Ant 4B Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 4b SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body | Back | 1.128 | 0.080 | 0.131 | 1.208 | 1.259 | **1.339** |
| | Top | 0.850 | 0.000 | 0.000 | 0.850 | 0.850 | 0.850 |
| | Bottom | 0.010 | 0.000 | 0.000 | 0.010 | 0.010 | 0.010 |
| | Right | 0.038 | 1.180 | 1.183 | 1.218 | 1.221 | 1.221* |
| | Left | 0.078 | 0.021 | 0.021 | 0.099 | 0.099 | 0.120 |

## Table 11-13
## Cellular Band Ant 1 Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 1 SAR (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.170 | 0.239 | 1.180 | **1.409** | 1.180* | 1.180* |
| | Top | 0.052 | 0.013 | 0.610 | 0.065 | 0.662 | 0.675 |
| | Bottom | 0.646 | 0.108 | 0.018 | 0.754 | 0.664 | 0.772 |
| | Right | 0.016 | 0.123 | 0.001 | 0.139 | 0.017 | 0.140 |
| | Left | 1.168 | 0.003 | 0.795 | 1.171 | 1.168* | 1.171* |

## Table 11-14
## Cellular Band Ant 2A Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 2a SAR (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.126 | 0.239 | 1.180 | **1.365** | 1.180* | 1.365* |
| | Top | 0.021 | 0.013 | 0.610 | 0.034 | 0.631 | 0.644 |
| | Bottom | 0.429 | 0.108 | 0.018 | 0.537 | 0.447 | 0.555 |
| | Right | 0.986 | 0.123 | 0.001 | 1.109 | 0.987 | 1.110 |
| | Left | 0.006 | 0.003 | 0.795 | 0.009 | 0.801 | 0.804 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 11-15
## Cellular Band Ant 2B Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 2b SAR (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.187 | 0.239 | 1.180 | **1.426** | 1.187* | 1.426* |
| | Top | 0.006 | 0.013 | 0.610 | 0.019 | 0.616 | 0.629 |
| | Bottom | 0.750 | 0.108 | 0.018 | 0.858 | 0.768 | 0.876 |
| | Right | 0.055 | 0.123 | 0.001 | 0.178 | 0.056 | 0.179 |
| | Left | 0.023 | 0.003 | 0.795 | 0.026 | 0.818 | 0.821 |

## Table 11-16
## Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 3 SAR (W/kg) | Bluetooth Ant 2a SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.141 | 1.181 | 0.360 | 1.181* | **1.501** | 1.181* |
| | Top | 0.875 | 0.013 | 0.107 | 0.888 | 0.982 | 0.995 |
| | Bottom | 0.064 | 0.383 | 0.018 | 0.447 | 0.082 | 0.465 |
| | Right | 1.187 | 0.767 | 0.001 | 1.187* | 1.188 | 1.188* |
| | Left | 0.016 | 0.003 | 0.294 | 0.019 | 0.310 | 0.313 |

## Table 11-17
## Cellular Band Ant 4A Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 4a SAR (W/kg) | Bluetooth Ant 2a SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body SAR | Back | 1.175 | 1.181 | 0.360 | 1.181* | **1.535** | 1.535* |
| | Top | 0.433 | 0.013 | 0.107 | 0.446 | 0.540 | 0.553 |
| | Bottom | 0.020 | 0.383 | 0.018 | 0.403 | 0.038 | 0.421 |
| | Right | 0.002 | 0.767 | 0.001 | 0.769 | 0.003 | 0.770 |
| | Left | 1.097 | 0.003 | 0.294 | 1.100 | 1.391 | 1.394 |

## Table 11-18
## Cellular Band Ant 4B Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 4b SAR (W/kg) | Bluetooth Ant 2a SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1+2 | 1+3 | 1+2+3 |
| Body | Back | 1.128 | 1.181 | 0.360 | 1.181* | **1.488** | 1.488* |
| | Top | 0.850 | 0.013 | 0.107 | 0.863 | 0.957 | 0.970 |
| | Bottom | 0.010 | 0.383 | 0.018 | 0.393 | 0.028 | 0.411 |
| | Right | 0.038 | 0.767 | 0.001 | 0.805 | 0.039 | 0.806 |
| | Left | 0.078 | 0.003 | 0.294 | 0.081 | 0.372 | 0.375 |

## Table 11-19
## Cellular Band Ant 1 Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 1 SAR (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 1+2+3+4+5 |
| Body SAR | Back | 1.170 | 0.239 | 1.180 | 0.080 | 0.131 | 1.381* |
| | Top | 0.052 | 0.013 | 0.610 | 0.000 | 0.000 | 0.675 |
| | Bottom | 0.646 | 0.108 | 0.018 | 0.000 | 0.000 | **0.772** |
| | Right | 0.016 | 0.123 | 0.001 | 1.180 | 1.183 | 1.320* |
| | Left | 1.168 | 0.003 | 0.795 | 0.021 | 0.021 | 1.213* |

## Table 11-20
## Cellular Band Ant 2A Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 2a SAR (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a SAR (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 1+2+3+4+5 |
| Body SAR | Back | 1.126 | 0.239 | 1.180 | 0.080 | 0.131 | 1.576* |
| | Top | 0.021 | 0.013 | 0.610 | 0.000 | 0.000 | 0.644 |
| | Bottom | 0.429 | 0.108 | 0.018 | 0.000 | 0.000 | 0.555 |
| | Right | 0.986 | 0.123 | 0.001 | 0.436 | 1.183 | 1.546* |
| | Left | 0.006 | 0.003 | 0.795 | 0.021 | 0.021 | **0.846** |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 11-21
## Cellular Band Ant 2B Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 2b SAR (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 1+2+3+4+5 |
| Body SAR | Back | 1.187 | 0.239 | 1.180 | 0.080 | 0.131 | 1.506* |
| | Top | 0.006 | 0.013 | 0.610 | 0.000 | 0.000 | **0.629** |
| | Bottom | 0.750 | 0.108 | 0.018 | 0.000 | 0.000 | 0.876 |
| | Right | 0.055 | 0.123 | 0.001 | 1.180 | 1.183 | 1.359* |
| | Left | 0.023 | 0.003 | 0.795 | 0.021 | 0.021 | 0.863 |

## Table 11-22
## Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 3 SAR (W/kg) | Bluetooth Ant 2a at 11 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 1+2+3+4+5 |
| Body SAR | Back | 1.141 | 0.542 | 0.360 | 0.080 | 0.025 | 1.246* |
| | Top | 0.875 | 0.013 | 0.107 | 0.000 | 0.000 | **0.995** |
| | Bottom | 0.064 | 0.194 | 0.018 | 0.000 | 0.000 | 0.276 |
| | Right | 1.187 | 0.333 | 0.001 | 1.180 | 0.328 | 1.516* |
| | Left | 0.016 | 0.003 | 0.294 | 0.021 | 0.021 | 0.355 |

## Table 11-23
## Cellular Band Ant 4A Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 4a SAR (W/kg) | Bluetooth Ant 2a at 11 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 1+2+3+4+5 |
| Body SAR | Back | 1.175 | 0.542 | 0.360 | 0.080 | 0.131 | 1.535* |
| | Top | 0.433 | 0.013 | 0.107 | 0.000 | 0.000 | 0.553 |
| | Bottom | 0.020 | 0.194 | 0.018 | 0.000 | 0.000 | 0.232 |
| | Right | 0.002 | 0.333 | 0.001 | 1.180 | 1.183 | 1.516* |
| | Left | 1.097 | 0.003 | 0.294 | 0.021 | 0.021 | **1.436** |

## Table 11-24
## Cellular Band Ant 4B Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 4b SAR (W/kg) | Bluetooth Ant 2a at 11 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 1+2+3+4+5 |
| Body SAR | Back | 1.128 | 0.542 | 0.360 | 0.080 | 0.131 | 1.488* |
| | Top | 0.850 | 0.013 | 0.107 | 0.000 | 0.000 | **0.970** |
| | Bottom | 0.010 | 0.194 | 0.018 | 0.000 | 0.000 | 0.222 |
| | Right | 0.038 | 0.333 | 0.001 | 1.180 | 1.183 | 1.552* |
| | Left | 0.078 | 0.003 | 0.294 | 0.021 | 0.021 | 0.417 |

## Table 11-25
## Inter-band ULCA Cellular Bands Ant 1 and 2A Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 2a Inter-band ULCA Active (W/kg) | 2.4 GHz WLAN Ant 2a Reduced at 6dBm SAR (W/kg) | 2.4 GHz WLAN Ant 4a Reduced at 6dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.755 | 0.543 | 0.221 | 0.208 | **1.519** | 1.506 | 0.764* |
| | Top | 0.052 | 0.020 | 0.016 | 0.085 | 0.088 | 0.157 | 0.173 |
| | Bottom | 0.646 | 0.391 | 0.081 | 0.012 | 1.118 | 1.049 | 1.130 |
| | Right | 0.016 | 0.798 | 0.108 | 0.004 | 0.922 | 0.818 | 0.926 |
| | Left | 0.516 | 0.002 | 0.003 | 0.156 | 0.521 | 0.674 | 0.677 |

## Table 11-26
## Inter-band ULCA Cellular Bands Ant 1 and 4A Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4a Inter-band ULCA Active (W/kg) | 2.4 GHz WLAN Ant 2a Reduced at 6dBm SAR (W/kg) | 2.4 GHz WLAN Ant 4a Reduced at 6dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.755 | 0.620 | 0.221 | 0.208 | 0.755* | **1.583** | 0.828* |
| | Top | 0.052 | 0.366 | 0.016 | 0.085 | 0.434 | 0.503 | 0.519 |
| | Bottom | 0.646 | 0.020 | 0.081 | 0.012 | 0.747 | 0.678 | 0.759 |
| | Right | 0.016 | 0.002 | 0.108 | 0.004 | 0.126 | 0.022 | 0.130 |
| | Left | 0.516 | 0.787 | 0.003 | 0.156 | 1.306 | 1.459 | 1.462 |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 11-27
## Inter-band ULCA Cellular Bands Ant 1 and 4B Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4b Inter-band ULCA Active (W/kg) | 2.4 GHz WLAN Ant 2a Reduced at 6dBm SAR (W/kg) | 2.4 GHz WLAN Ant 4a Reduced at 6dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.755 | 0.613 | 0.221 | 0.208 | **1.589** | 1.576 | 0.821* |
| | Top | 0.052 | 0.640 | 0.016 | 0.085 | 0.708 | 0.777 | 0.793 |
| | Bottom | 0.646 | 0.010 | 0.081 | 0.012 | 0.737 | 0.668 | 0.749 |
| | Right | 0.016 | 0.033 | 0.108 | 0.004 | 0.157 | 0.053 | 0.161 |
| | Left | 0.516 | 0.078 | 0.003 | 0.156 | 0.597 | 0.750 | 0.753 |

## Table 11-28
## Inter-band ULCA Cellular Bands Ant 2A and 3 Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 2a Inter-band ULCA Active (W/kg) | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | 2.4 GHz WLAN Ant 2a Reduced at 6dBm SAR (W/kg) | 2.4 GHz WLAN Ant 4a Reduced at 6dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.543 | 0.588 | 0.221 | 0.208 | 1.352 | 1.339 | **1.560** |
| | Top | 0.020 | 0.634 | 0.016 | 0.085 | 0.670 | 0.739 | 0.755 |
| | Bottom | 0.391 | 0.064 | 0.081 | 0.012 | 0.536 | 0.467 | 0.548 |
| | Right | 0.798 | 0.705 | 0.108 | 0.004 | 0.906* | 0.802* | 0.910* |
| | Left | 0.002 | 0.013 | 0.003 | 0.156 | 0.018 | 0.171 | 0.174 |

## Table 11-29
## Inter-band ULCA Cellular Bands Ant 2B and 3 Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 2b Inter-band ULCA Active (W/kg) | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | 2.4 GHz WLAN Ant 2a Reduced at 6dBm SAR (W/kg) | 2.4 GHz WLAN Ant 4a Reduced at 6dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.533 | 0.588 | 0.221 | 0.208 | 1.342 | 1.329 | **1.550** |
| | Top | 0.005 | 0.634 | 0.016 | 0.085 | 0.655 | 0.724 | 0.740 |
| | Bottom | 0.729 | 0.064 | 0.081 | 0.012 | 0.874 | 0.805 | 0.886 |
| | Right | 0.055 | 0.705 | 0.108 | 0.004 | 0.868 | 0.764 | 0.872 |
| | Left | 0.023 | 0.013 | 0.003 | 0.156 | 0.039 | 0.192 | 0.195 |

## Table 11-30
## Inter-band ULCA Cellular Bands Ant 3 and 4A Simultaneous Transmission Scenario with 2.4 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4a Inter-band ULCA Active (W/kg) | 2.4 GHz WLAN Ant 2a Reduced at 6dBm SAR (W/kg) | 2.4 GHz WLAN Ant 4a Reduced at 6dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.588 | 0.620 | 0.221 | 0.208 | **1.429** | 1.416 | 0.828* |
| | Top | 0.634 | 0.366 | 0.016 | 0.085 | 1.016 | 1.085 | 1.101 |
| | Bottom | 0.064 | 0.020 | 0.081 | 0.012 | 0.165 | 0.096 | 0.177 |
| | Right | 0.705 | 0.002 | 0.108 | 0.004 | 0.815 | 0.711 | 0.819 |
| | Left | 0.013 | 0.787 | 0.003 | 0.156 | 0.803 | 0.956 | 0.959 |

## Table 11-31
## Inter-band ULCA Cellular Bands Ant 1 and 2A Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 2a Inter-band ULCA Active (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.755 | 0.543 | 0.080 | 0.025 | 1.378 | 1.323 | 1.403 |
| | Top | 0.052 | 0.020 | 0.000 | 0.000 | 0.072 | 0.072 | 0.072 |
| | Bottom | 0.646 | 0.391 | 0.000 | 0.000 | 1.037 | 1.037 | 1.037 |
| | Right | 0.016 | 0.798 | 0.436 | 0.328 | 1.250 | 1.142 | **1.578** |
| | Left | 0.516 | 0.002 | 0.021 | 0.021 | 0.539 | 0.539 | 0.560 |

## Table 11-32
## Inter-band ULCA Cellular Bands Ant 1 and 4A Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4a Inter-band ULCA Active (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.755 | 0.620 | 0.080 | 0.025 | 1.455 | 1.400 | **1.480** |
| | Top | 0.052 | 0.366 | 0.000 | 0.000 | 0.418 | 0.418 | 0.418 |
| | Bottom | 0.646 | 0.020 | 0.000 | 0.000 | 0.666 | 0.666 | 0.666 |
| | Right | 0.016 | 0.002 | 0.436 | 0.328 | 0.454 | 0.346 | 0.782 |
| | Left | 0.516 | 0.787 | 0.021 | 0.021 | 1.324 | 1.324 | 1.345 |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 11-33
## Inter-band ULCA Cellular Bands Ant 1 and 4B Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4b Inter-band ULCA Active (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.755 | 0.613 | 0.080 | 0.025 | 1.448 | 1.393 | **1.473** |
| | Top | 0.052 | 0.640 | 0.000 | 0.000 | 0.692 | 0.692 | 0.692 |
| | Bottom | 0.646 | 0.010 | 0.000 | 0.000 | 0.656 | 0.656 | 0.656 |
| | Right | 0.016 | 0.033 | 0.436 | 0.328 | 0.485 | 0.377 | 0.813 |
| | Left | 0.516 | 0.078 | 0.021 | 0.021 | 0.615 | 0.615 | 0.636 |

## Table 11-34
## Inter-band ULCA Cellular Bands Ant 2A and 3 Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 2a Inter-band ULCA Active (W/kg) | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.543 | 0.588 | 0.080 | 0.025 | 1.211 | 1.156 | **1.236** |
| | Top | 0.020 | 0.634 | 0.000 | 0.000 | 0.654 | 0.654 | 0.654 |
| | Bottom | 0.391 | 0.064 | 0.000 | 0.000 | 0.455 | 0.455 | 0.455 |
| | Right | 0.798 | 0.705 | 0.436 | 0.328 | 1.234* | 1.033* | 1.234* |
| | Left | 0.002 | 0.013 | 0.021 | 0.021 | 0.036 | 0.036 | 0.057 |

## Table 11-35
## Inter-band ULCA Cellular Bands Ant 2B and 3 Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 2b Inter-band ULCA Active (W/kg) | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.533 | 0.588 | 0.080 | 0.025 | 1.201 | 1.146 | 1.226 |
| | Top | 0.005 | 0.634 | 0.000 | 0.000 | 0.639 | 0.639 | 0.639 |
| | Bottom | 0.729 | 0.064 | 0.000 | 0.000 | 0.793 | 0.793 | 0.793 |
| | Right | 0.055 | 0.705 | 0.436 | 0.328 | 1.196 | 1.088 | **1.524** |
| | Left | 0.023 | 0.013 | 0.021 | 0.021 | 0.057 | 0.057 | 0.078 |

## Table 11-36
## Inter-band ULCA Cellular Bands Ant 3 and 4A Simultaneous Transmission Scenario with 5 GHz WLAN

| Simult Tx | Configuration | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4a Inter-band ULCA Active (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.588 | 0.620 | 0.080 | 0.025 | 1.288 | 1.233 | 1.313 |
| | Top | 0.634 | 0.366 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 |
| | Bottom | 0.064 | 0.020 | 0.000 | 0.000 | 0.084 | 0.084 | 0.084 |
| | Right | 0.705 | 0.002 | 0.436 | 0.328 | 1.143 | 1.035 | **1.471** |
| | Left | 0.013 | 0.787 | 0.021 | 0.021 | 0.821 | 0.821 | 0.842 |

## Table 11-37
## Inter-band ULCA Cellular Bands Ant 1 and 2A Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 2a Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.755 | 0.543 | 0.239 | 0.360 | **1.537** | 0.755* | 0.782* |
| | Top | 0.052 | 0.020 | 0.013 | 0.107 | 0.085 | 0.179 | 0.192 |
| | Bottom | 0.646 | 0.391 | 0.108 | 0.018 | 1.145 | 1.055 | 1.163 |
| | Right | 0.016 | 0.798 | 0.123 | 0.001 | 0.937 | 0.815 | 0.938 |
| | Left | 0.516 | 0.002 | 0.003 | 0.294 | 0.521 | 0.812 | 0.815 |

## Table 11-38
## Inter-band ULCA Cellular Bands Ant 1 and 4A Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4a Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.755 | 0.620 | 0.239 | 0.360 | 0.755* | 0.980* | 0.980* |
| | Top | 0.052 | 0.366 | 0.013 | 0.107 | 0.431 | 0.525 | 0.538 |
| | Bottom | 0.646 | 0.020 | 0.108 | 0.018 | 0.774 | 0.684 | 0.792 |
| | Right | 0.016 | 0.002 | 0.123 | 0.001 | 0.141 | 0.019 | 0.142 |
| | Left | 0.516 | 0.787 | 0.003 | 0.294 | **1.306** | 1.081* | 1.084* |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 11-39
## Inter-band ULCA Cellular Bands Ant 1 and 4B Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4b Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.755 | 0.613 | 0.239 | 0.360 | 0.755* | 0.973* | 0.973* |
| | Top | 0.052 | 0.640 | 0.013 | 0.107 | 0.705 | 0.799 | 0.812 |
| | Bottom | 0.646 | 0.010 | 0.108 | 0.018 | 0.764 | 0.674 | 0.782 |
| | Right | 0.016 | 0.033 | 0.123 | 0.001 | 0.172 | 0.050 | 0.173 |
| | Left | 0.516 | 0.078 | 0.003 | 0.294 | 0.597 | 0.888 | **0.891** |

## Table 11-40
## Inter-band ULCA Cellular Bands Ant 2A and 3 Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 2a Inter-band ULCA Active (W/kg) | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.543 | 0.588 | 0.239 | 0.360 | 1.370 | **1.491** | 0.782* |
| | Top | 0.020 | 0.634 | 0.013 | 0.107 | 0.667 | 0.761 | 0.774 |
| | Bottom | 0.391 | 0.064 | 0.108 | 0.018 | 0.563 | 0.473 | 0.581 |
| | Right | 0.798 | 0.705 | 0.123 | 0.001 | 0.921* | 0.799* | 0.922* |
| | Left | 0.002 | 0.013 | 0.003 | 0.294 | 0.018 | 0.309 | 0.312 |

## Table 11-41
## Inter-band ULCA Cellular Bands Ant 2B and 3 Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 2b Inter-band ULCA Active (W/kg) | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.533 | 0.588 | 0.239 | 0.360 | 1.360 | **1.481** | 0.772* |
| | Top | 0.005 | 0.634 | 0.013 | 0.107 | 0.652 | 0.746 | 0.759 |
| | Bottom | 0.729 | 0.064 | 0.108 | 0.018 | 0.901 | 0.811 | 0.919 |
| | Right | 0.055 | 0.705 | 0.123 | 0.001 | 0.883 | 0.761 | 0.884 |
| | Left | 0.023 | 0.013 | 0.003 | 0.294 | 0.039 | 0.330 | 0.333 |

## Table 11-42
## Inter-band ULCA Cellular Bands Ant 3 and 4A Simultaneous Transmission Scenario with 2.4 GHz BT

| Simult Tx | Configuration | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4a Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | Σ SAR (W/kg) | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3 | 1+2+4 | 1+2+3+4 |
| Body SAR | Back | 0.588 | 0.620 | 0.239 | 0.360 | 1.447 | **1.568** | 0.980* |
| | Top | 0.634 | 0.366 | 0.013 | 0.107 | 1.013 | 1.107 | 1.120 |
| | Bottom | 0.064 | 0.020 | 0.108 | 0.018 | 0.192 | 0.102 | 0.210 |
| | Right | 0.705 | 0.002 | 0.123 | 0.001 | 0.830 | 0.708 | 0.831 |
| | Left | 0.013 | 0.787 | 0.003 | 0.294 | 0.803 | 1.094 | 1.097 |

## Table 11-43
## Inter-band ULCA Cellular Bands Ant 1 and 2A Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 2a Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 1+2+3+4+5+6 |
| Body SAR | Back | 0.755 | 0.543 | 0.239 | 0.360 | 0.080 | 0.025 | 0.887* |
| | Top | 0.052 | 0.020 | 0.013 | 0.107 | 0.000 | 0.000 | 0.192 |
| | Bottom | 0.646 | 0.391 | 0.108 | 0.018 | 0.000 | 0.000 | **1.163** |
| | Right | 0.016 | 0.798 | 0.123 | 0.001 | 0.436 | 0.328 | 1.374* |
| | Left | 0.516 | 0.002 | 0.003 | 0.294 | 0.021 | 0.021 | 0.857 |

## Table 11-44
## Inter-band ULCA Cellular Bands Ant 1 and 4A Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4a Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 1+2+3+4+5+6 |
| Body SAR | Back | 0.755 | 0.620 | 0.239 | 0.360 | 0.080 | 0.025 | 0.980* |
| | Top | 0.052 | 0.366 | 0.013 | 0.107 | 0.000 | 0.000 | 0.538 |
| | Bottom | 0.646 | 0.020 | 0.108 | 0.018 | 0.000 | 0.000 | 0.792 |
| | Right | 0.016 | 0.002 | 0.123 | 0.001 | 0.436 | 0.328 | **0.906** |
| | Left | 0.516 | 0.787 | 0.003 | 0.294 | 0.021 | 0.021 | 1.126* |




© 2020 PCTEST.

REV 21.4 M
09/11/2019

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

## Table 11-45
## Inter-band ULCA Cellular Bands Ant 1 and 4B Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 1 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4b Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 1+2+3+4+5+6 |
| Body SAR | Back | 0.755 | 0.613 | 0.239 | 0.360 | 0.080 | 0.025 | 0.973* |
| | Top | 0.052 | 0.640 | 0.013 | 0.107 | 0.000 | 0.000 | 0.812 |
| | Bottom | 0.646 | 0.010 | 0.108 | 0.018 | 0.000 | 0.000 | 0.782 |
| | Right | 0.016 | 0.033 | 0.123 | 0.001 | 0.436 | 0.328 | **0.937** |
| | Left | 0.516 | 0.078 | 0.003 | 0.294 | 0.021 | 0.021 | 0.933 |

## Table 11-46
## Inter-band ULCA Cellular Bands Ant 2A and 3 Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 2a Inter-band ULCA Active (W/kg) | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 1+2+3+4+5+6 |
| Body SAR | Back | 0.543 | 0.588 | 0.239 | 0.360 | 0.080 | 0.025 | 0.887* |
| | Top | 0.020 | 0.634 | 0.013 | 0.107 | 0.000 | 0.000 | **0.774** |
| | Bottom | 0.391 | 0.064 | 0.108 | 0.018 | 0.000 | 0.000 | 0.581 |
| | Right | 0.798 | 0.705 | 0.123 | 0.001 | 0.436 | 0.328 | 1.358* |
| | Left | 0.002 | 0.013 | 0.003 | 0.294 | 0.021 | 0.021 | 0.354 |

## Table 11-47
## Inter-band ULCA Cellular Bands Ant 2B and 3 Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 2b Inter-band ULCA Active (W/kg) | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 1+2+3+4+5+6 |
| Body SAR | Back | 0.533 | 0.588 | 0.239 | 0.360 | 0.080 | 0.025 | 0.852* |
| | Top | 0.005 | 0.634 | 0.013 | 0.107 | 0.000 | 0.000 | 0.759 |
| | Bottom | 0.729 | 0.064 | 0.108 | 0.018 | 0.000 | 0.000 | **0.919** |
| | Right | 0.055 | 0.705 | 0.123 | 0.001 | 0.436 | 0.328 | 1.089* |
| | Left | 0.023 | 0.013 | 0.003 | 0.294 | 0.021 | 0.021 | 0.375 |

## Table 11-48
## Inter-band ULCA Cellular Bands Ant 3 and 4A Simultaneous Transmission Scenario with 2.4 GHz BT MIMO and 5 GHz WLAN MIMO

| Simult Tx | Configuration | Cellular Band Antenna 3 Inter-band ULCA Active (W/kg) | Cellular Band Antenna 4a Inter-band ULCA Active (W/kg) | Bluetooth Ant 2a at 7 dBm SAR (W/kg) | Bluetooth Ant 4a at 7 dBm SAR (W/kg) | WLAN 5GHz ANTlower Reduced SAR (W/kg) | WLAN 5GHz ANTupper Reduced SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 1+2+3+4+5+6 |
| Body | Back | 0.588 | 0.620 | 0.239 | 0.360 | 0.080 | 0.025 | 0.980* |
| | Top | 0.634 | 0.366 | 0.013 | 0.107 | 0.000 | 0.000 | 1.120 |
| | Bottom | 0.064 | 0.020 | 0.108 | 0.018 | 0.000 | 0.000 | 0.210 |
| | Right | 0.705 | 0.002 | 0.123 | 0.001 | 0.436 | 0.328 | 1.036* |
| | Left | 0.013 | 0.787 | 0.003 | 0.294 | 0.021 | 0.021 | **1.139** |

## Table 11-49
## 2.4 GHz Bluetooth MIMO Simultaneous Transmission Scenario with 5 GHz WLAN MIMO

| Simult Tx | Configuration | Bluetooth Ant 2a at 11 dBm SAR (W/kg) | Bluetooth Ant 4a SAR (W/kg) | WLAN 5GHz ANTlower SAR (W/kg) | WLAN 5GHz ANTupper SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1+2+3+4 |
| Body SAR | Back | 0.542 | 1.180 | 0.080 | 0.131 | 1.180* |
| | Top | 0.013 | 0.610 | 0.000 | 0.000 | 0.623 |
| | Bottom | 0.194 | 0.018 | 0.000 | 0.000 | 0.212 |
| | Right | 0.333 | 0.001 | 1.180 | 1.183 | 1.514* |
| | Left | 0.003 | 0.795 | 0.021 | 0.021 | **0.840** |



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 11-50**
**Simultaneous Transmission Scenario with 2.4 GHz Bluetooth**

| Simult Tx | Configuration | Bluetooth Ant 2a SAR (W/kg) | Bluetooth Ant 4a SAR (W/kg) | Σ SAR (W/kg) |
|---|---|---|---|---|
| | | 1 | 2 | 1+2 |
| Body SAR | Back | 1.181 | 1.180 | 1.181* |
| | Top | 0.013 | 0.610 | 0.623 |
| | Bottom | 0.383 | 0.018 | 0.401 |
| | Right | 0.767 | 0.001 | 0.768 |
| | Left | 0.003 | 0.795 | **0.798** |

Notes:
1. For each position, the highest SAR value across all modes for the applicable cellular band antenna was considered for summation to determine simultaneous SAR test exclusion.

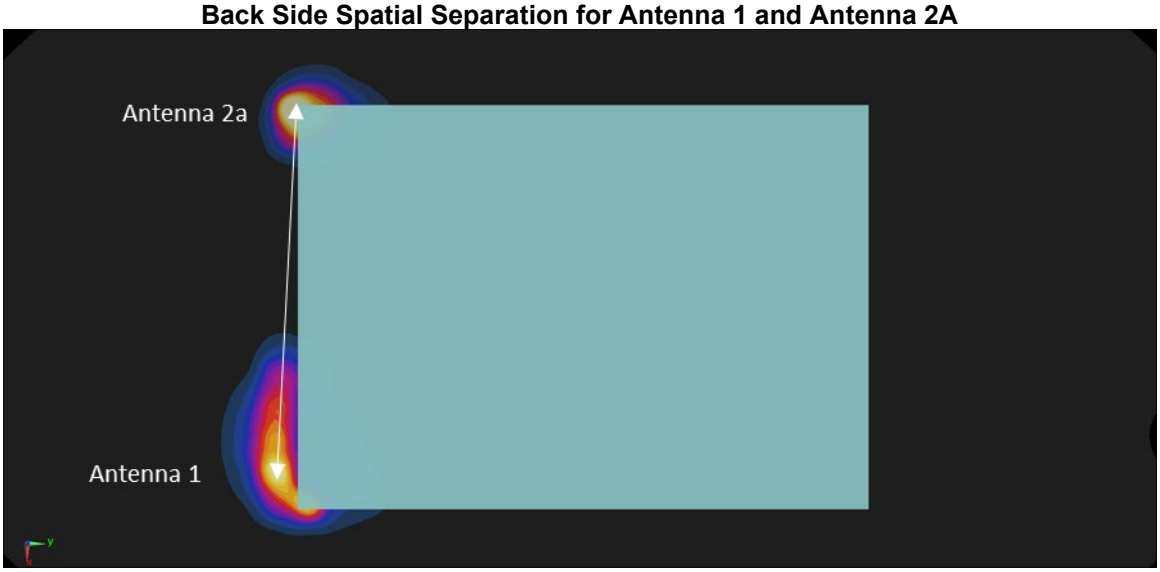
## 11.4 Spatial Separation Analysis

Per FCC KDB Publication 248227, antennas may be considered spatially separated when the aggregate SAR from multiple antennas at any location in the combined SAR distribution is either ≤ 1.2 W/kg where at least 90% of the SAR is attributed to a single SAR distribution or ≤ 0.4 W/kg where no more than one SAR distribution is contributing > 0.1 W/kg.

Spatial separation was determined by inspection of the area scan SAR distributions to confirm that at all locations, SAR was < 1.2 W/kg, where at least 90% of the SAR is attributed to a single SAR distribution. See below for illustrations of the spatial separated antennas considered.

### 11.4.1 Back Side Spatial Separation Analysis

**Figure 11-1**
**Back Side Spatial Separation for Antenna 1 and Antenna 2A**






© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Figure 11-2**
**Back Side Spatial Separation for Antenna 1 and Antenna 4A**

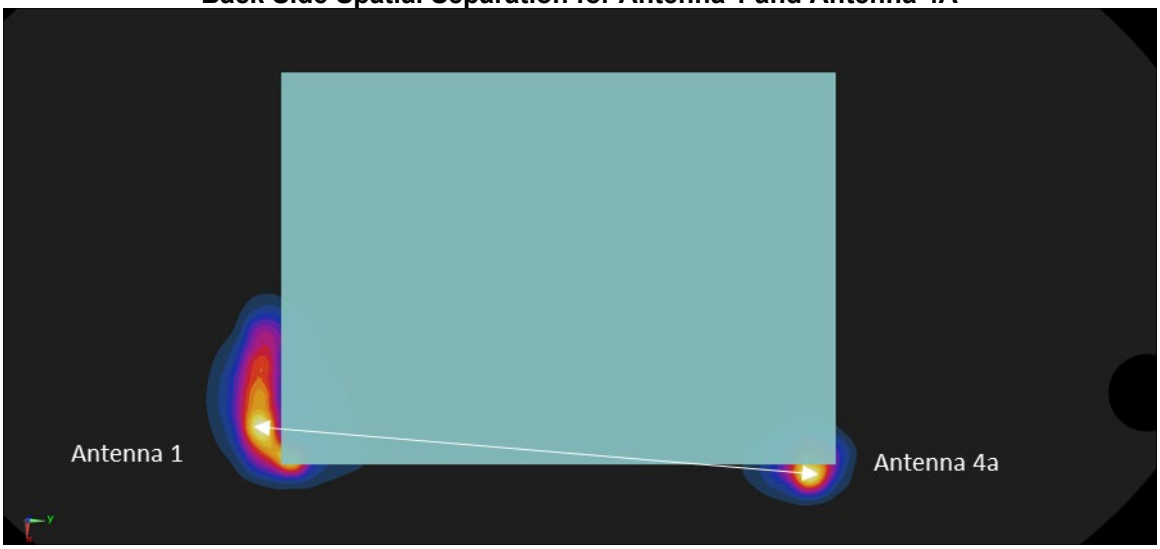
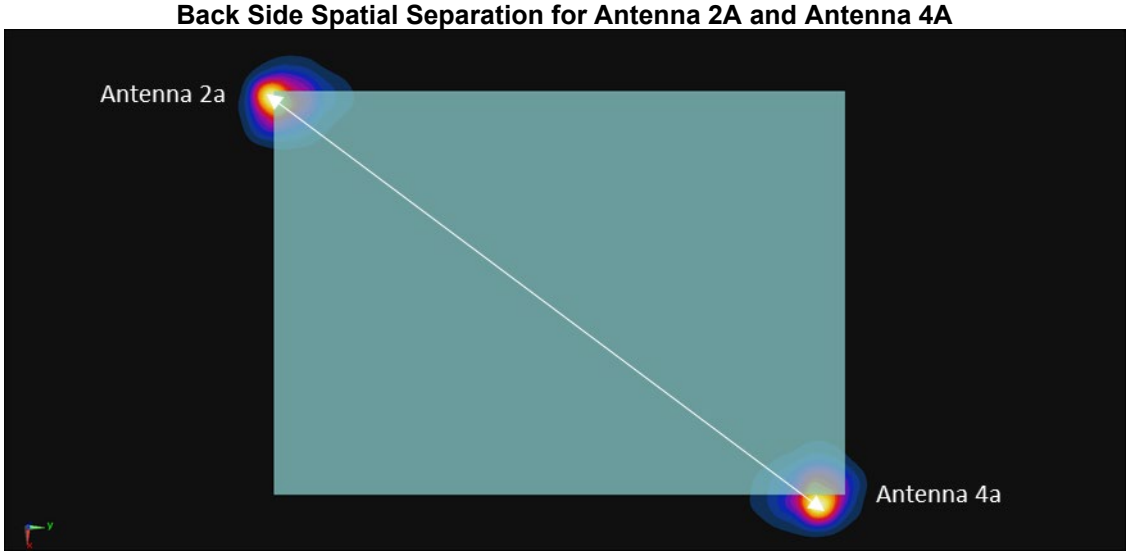



**Figure 11-3**
**Back Side Spatial Separation for Antenna 2A and Antenna 4A**






© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Figure 11-4**
**Back Side Spatial Separation for Antenna 2B and Antenna 4A**

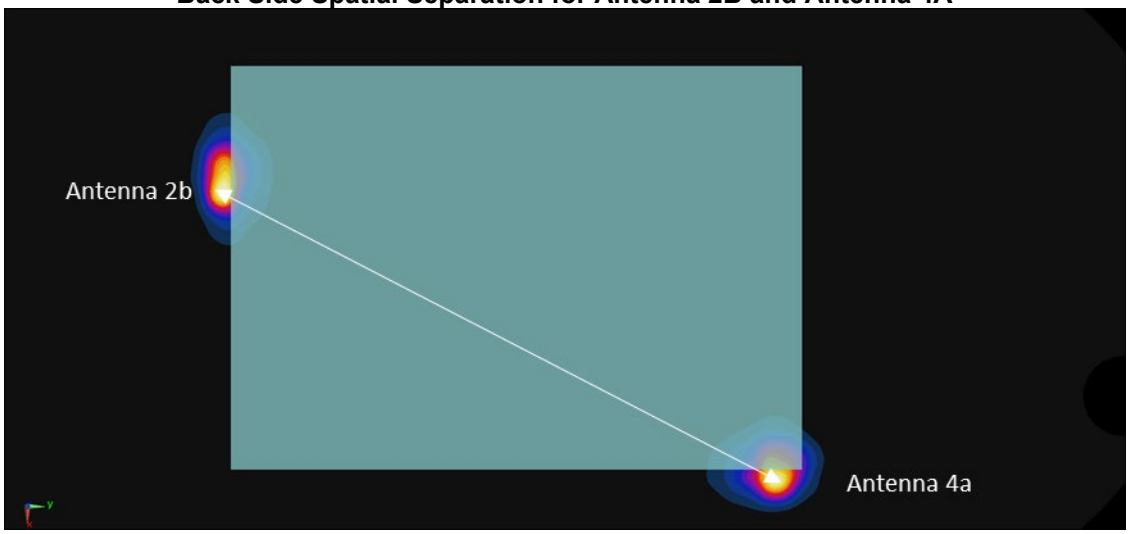
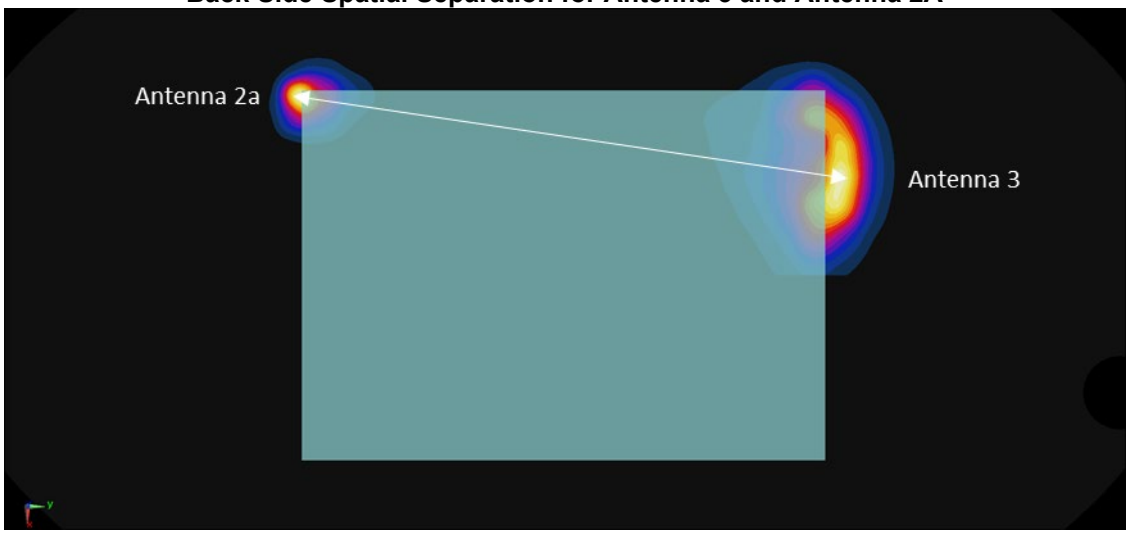



**Figure 11-5**
**Back Side Spatial Separation for Antenna 3 and Antenna 2A**







© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Figure 11-6**
**Back Side Spatial Separation for Antenna 3 and Antenna 4A**

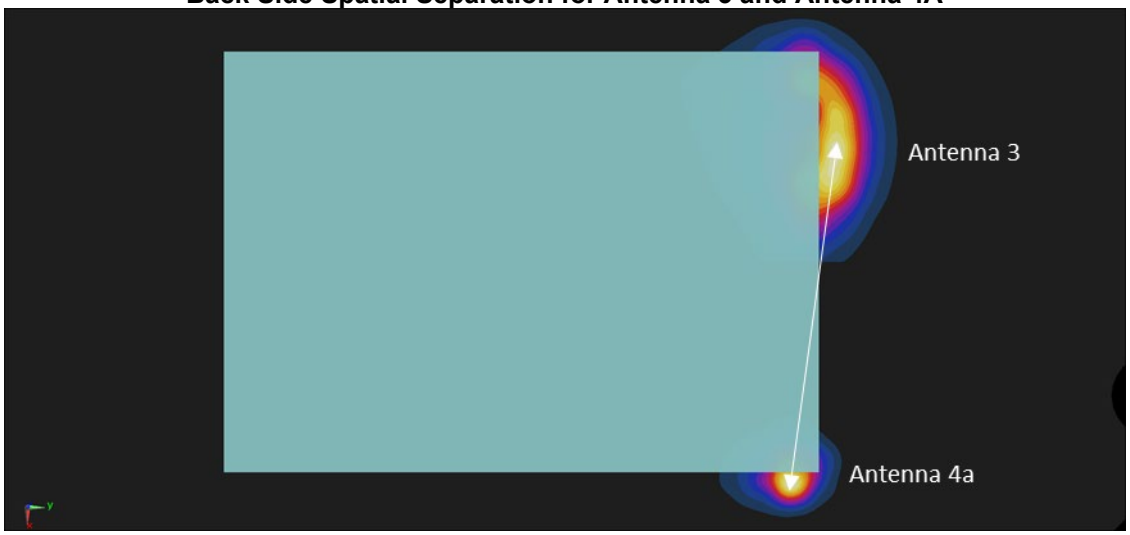
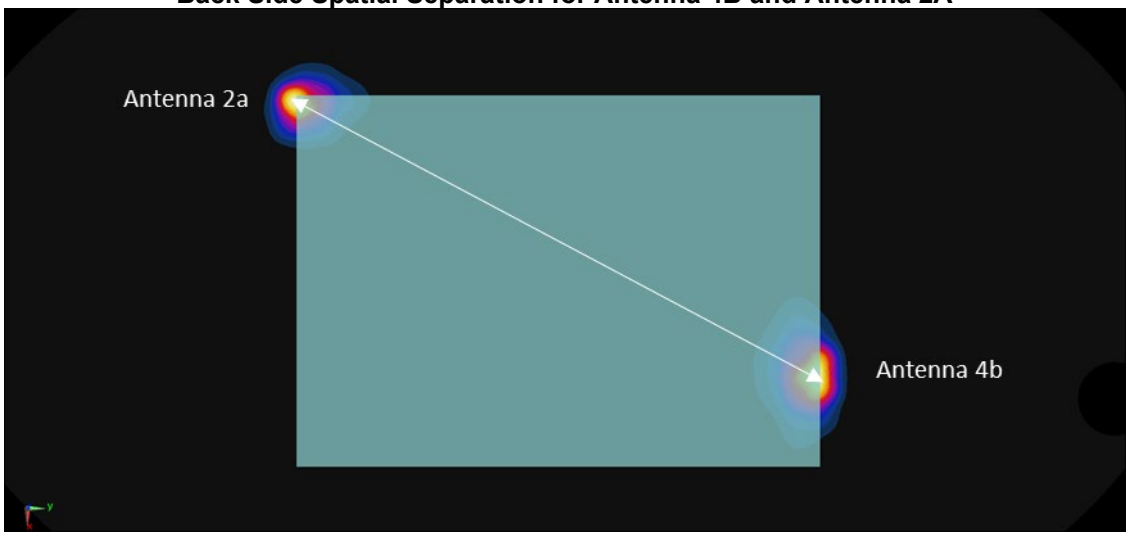



**Figure 11-7**
**Back Side Spatial Separation for Antenna 4B and Antenna 2A**







© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Figure 11-8**
**Back Side Spatial Separation for Antenna 1 and Antenna 4B**

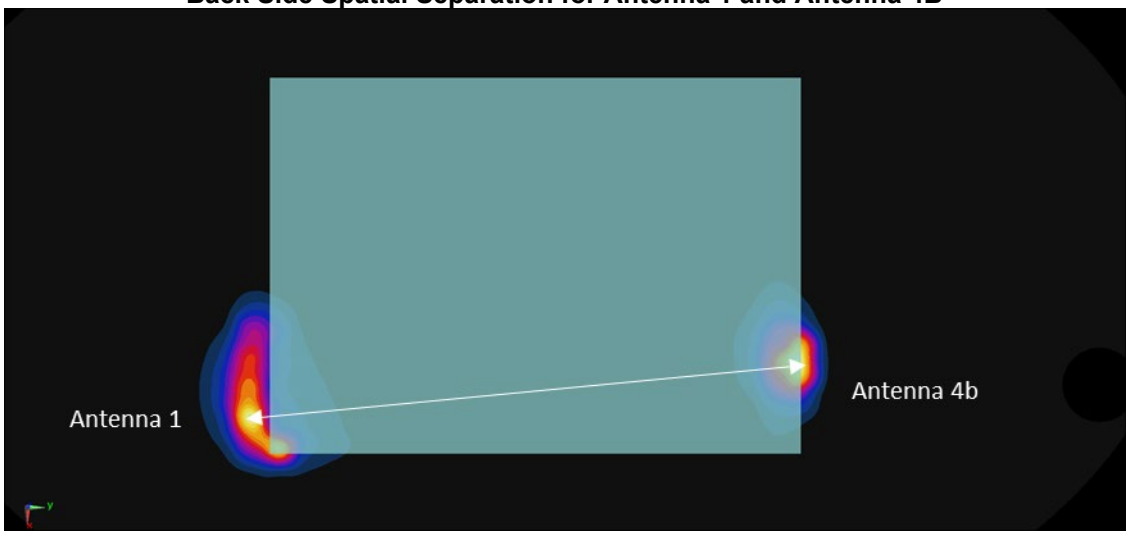
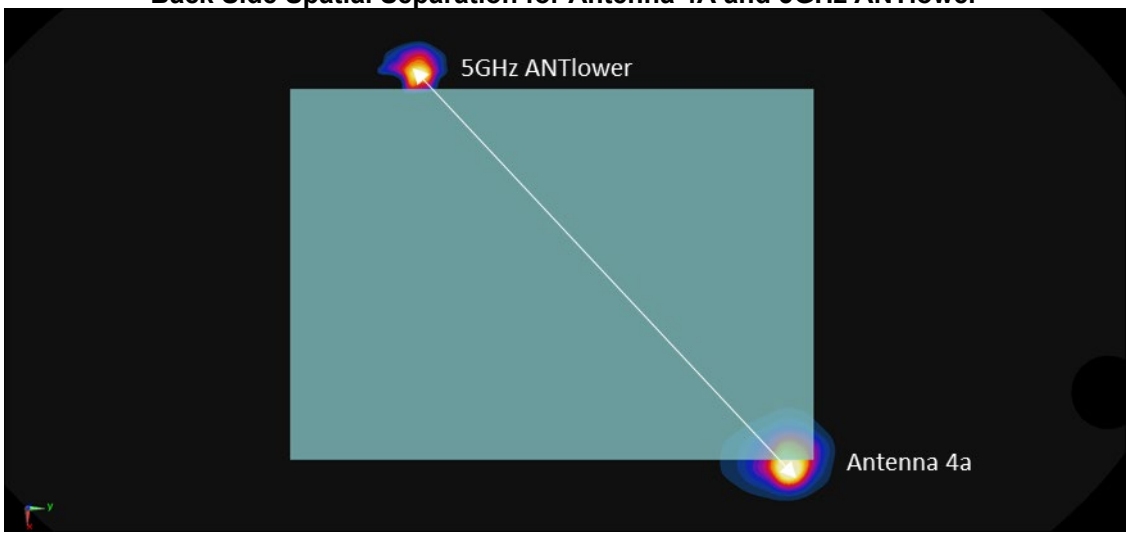



**Figure 11-9**
**Back Side Spatial Separation for Antenna 4A and 5GHz ANTlower**







© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Figure 11-10**
**Back Side Spatial Separation for Antenna 4A and 5GHz ANTupper**

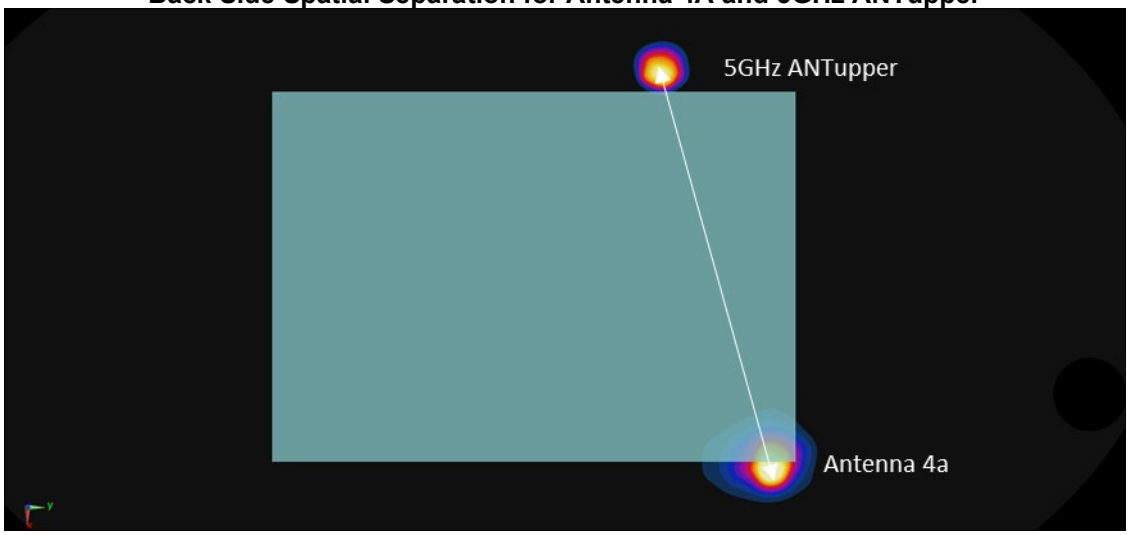
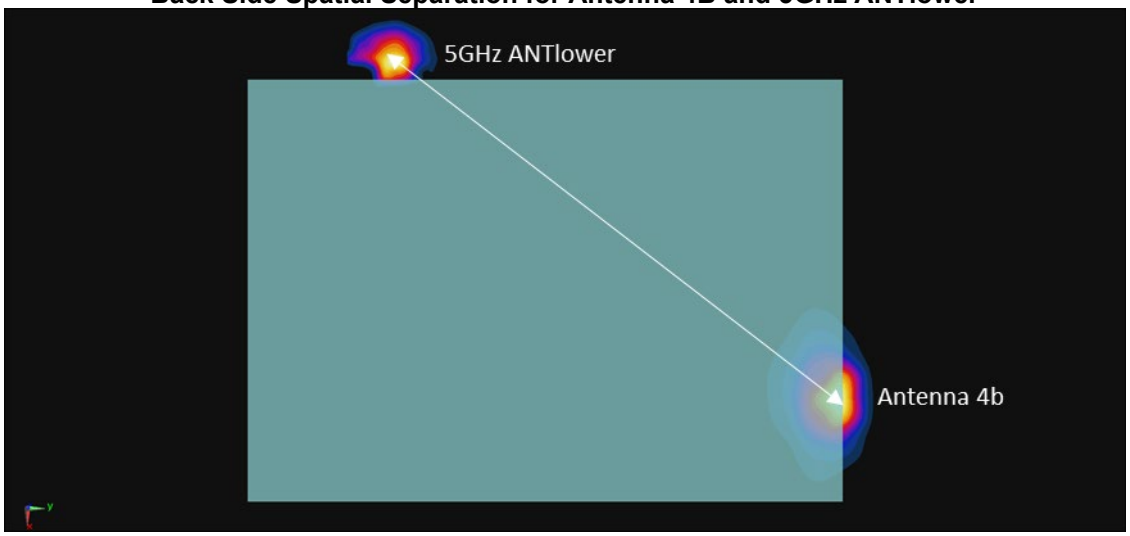



**Figure 11-11**
**Back Side Spatial Separation for Antenna 4B and 5GHz ANTlower**







© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Figure 11-12**
**Back Side Spatial Separation for Antenna 4B and 5GHz ANTupper**

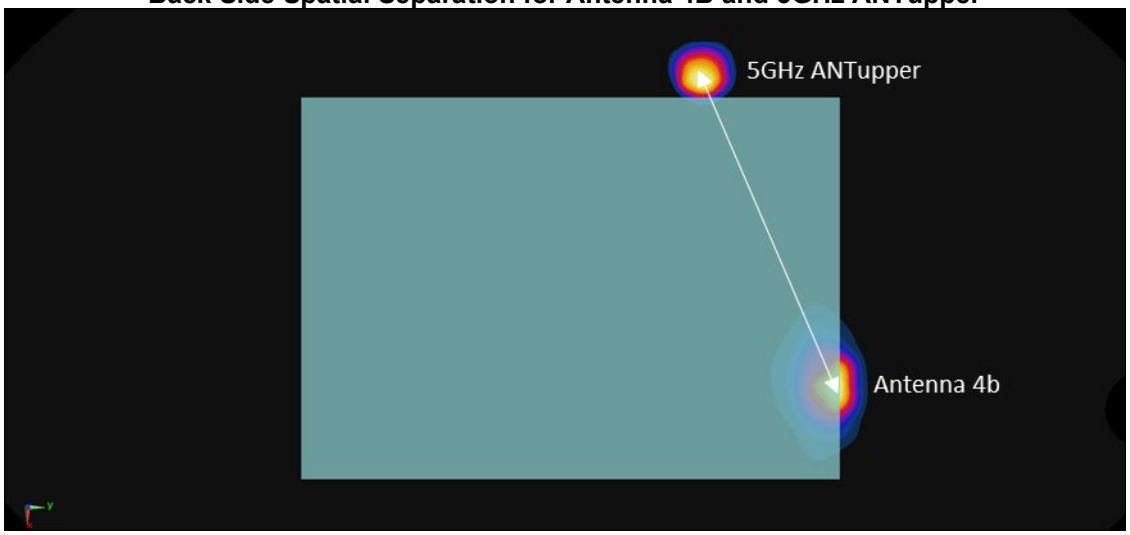
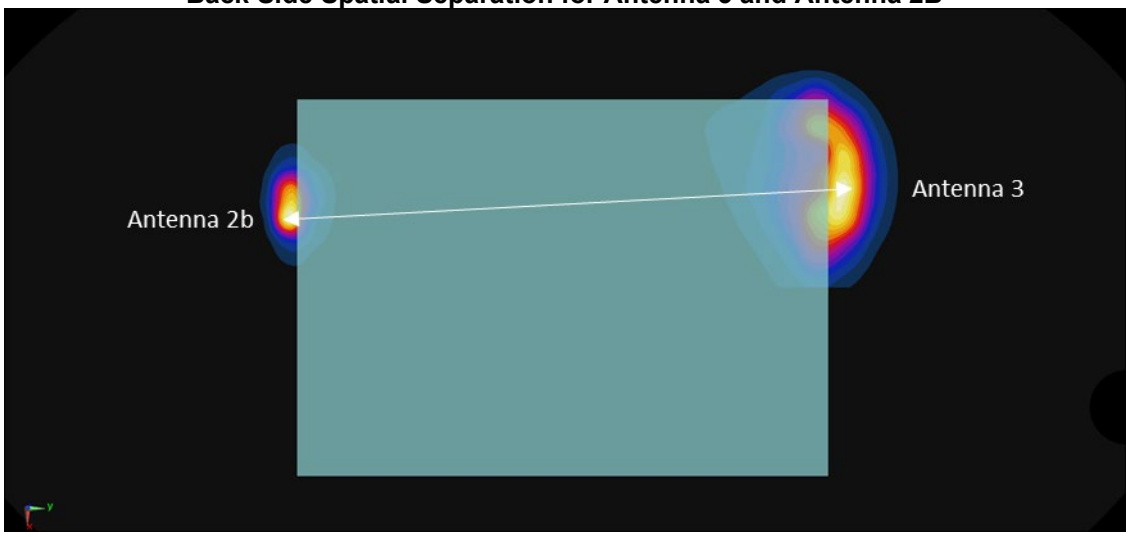



**Figure 11-13**
**Back Side Spatial Separation for Antenna 3 and Antenna 2B**



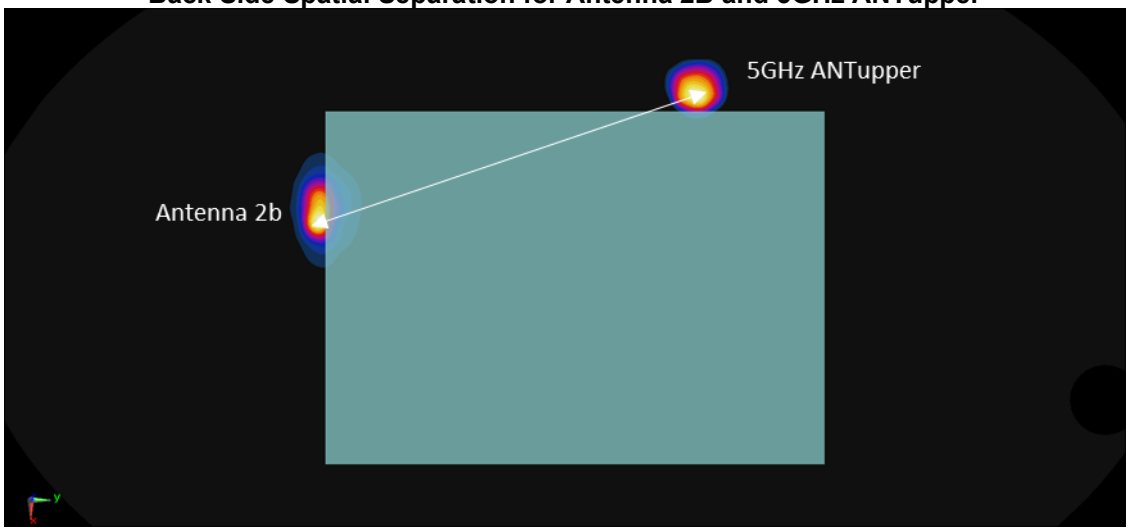




© 2020 PCTEST.

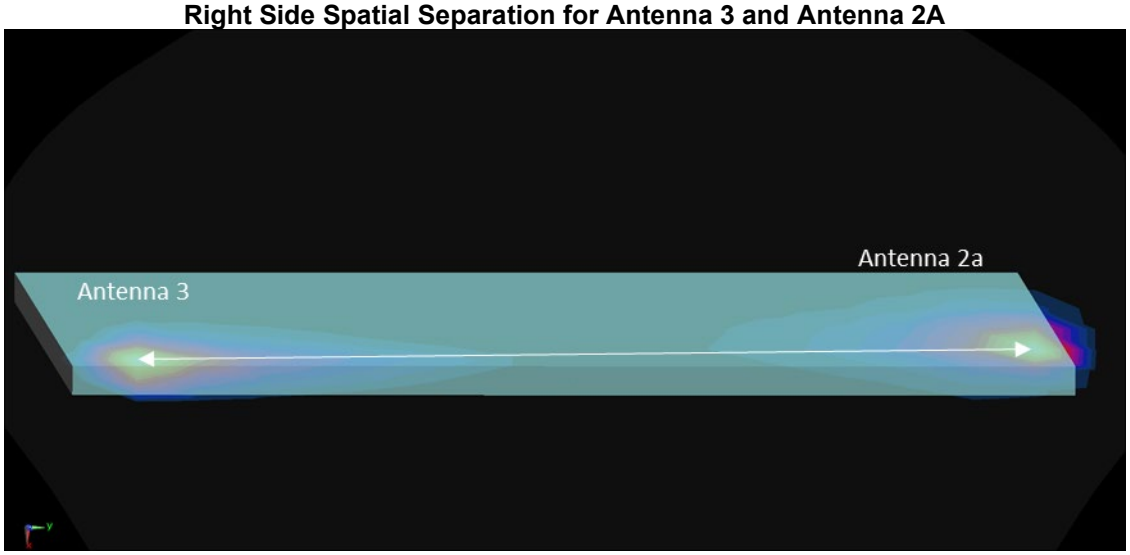
© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Figure 11-14**
**Back Side Spatial Separation for Antenna 2B and 5GHz ANTupper**




## 11.4.2 Right Side Spatial Separation Analysis

**Figure 11-15**
**Right Side Spatial Separation for Antenna 3 and Antenna 2A**







© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Figure 11-16**
**Right Side Spatial Separation for 5GHz ANTlower and 5GHz ANTupper**

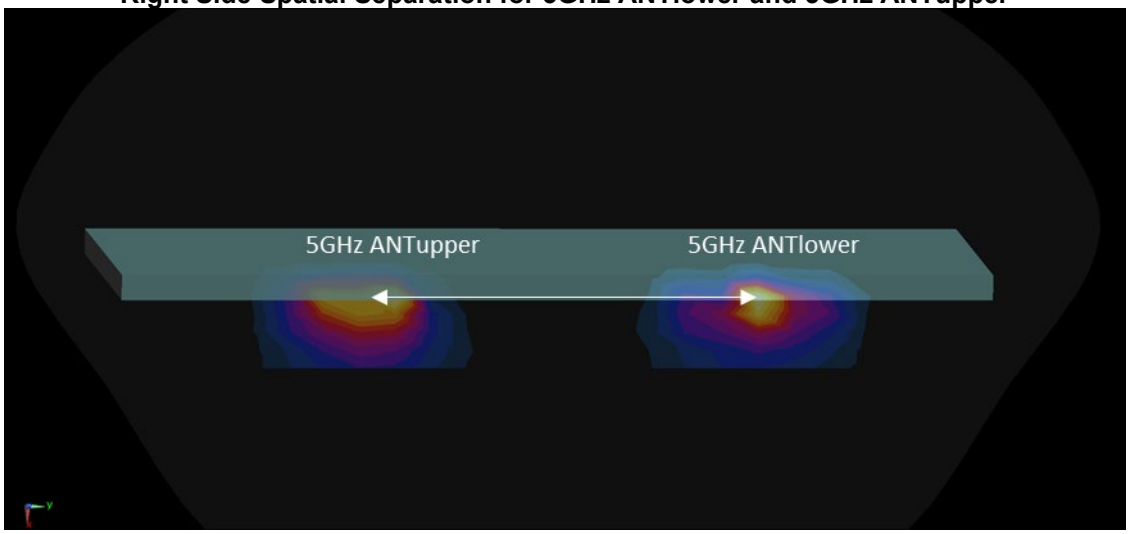
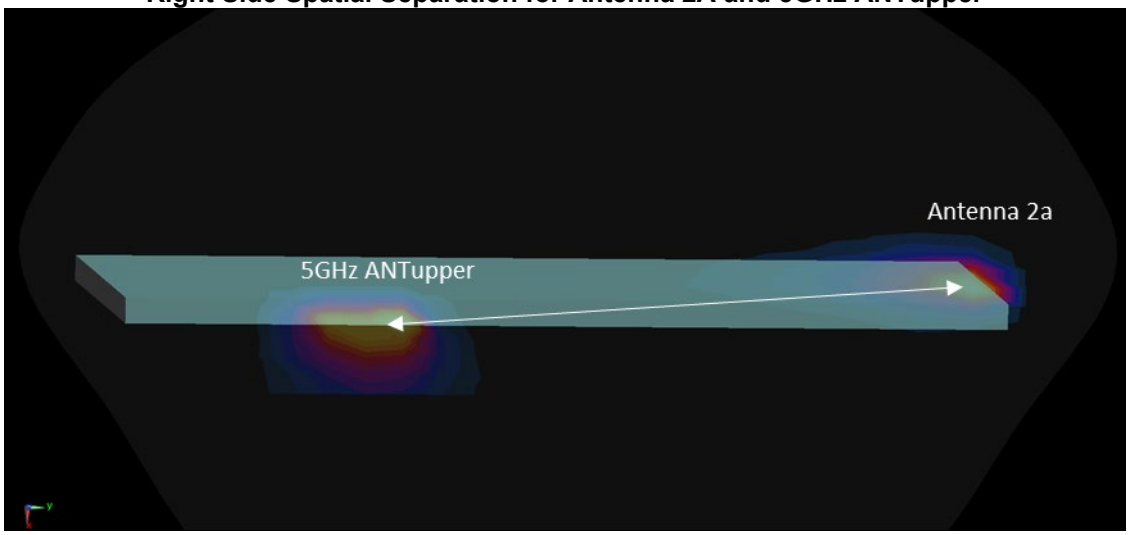



**Figure 11-17**
**Right Side Spatial Separation for Antenna 2A and 5GHz ANTupper**







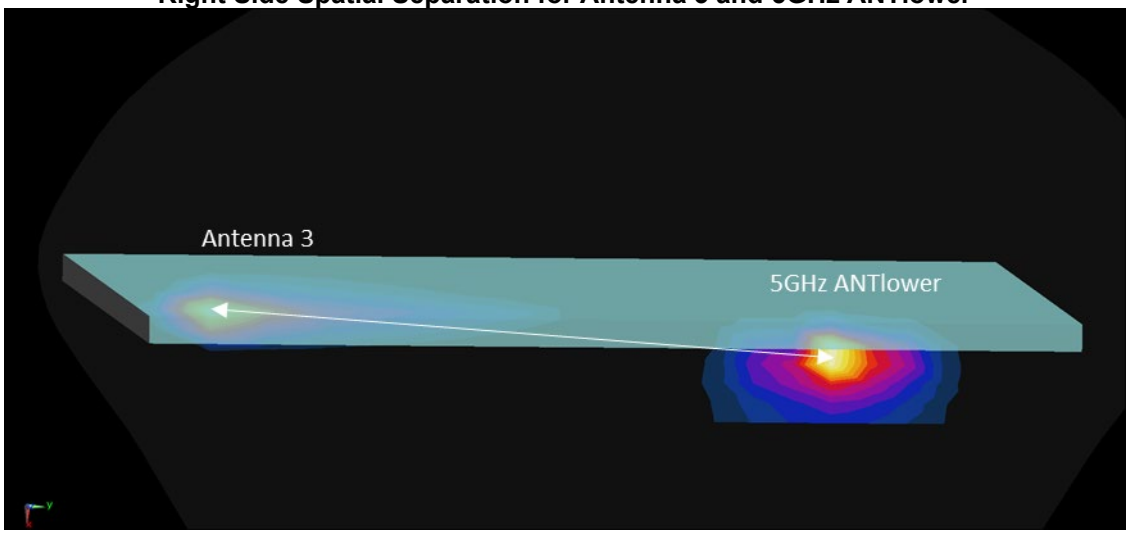
© 2020 PCTEST.





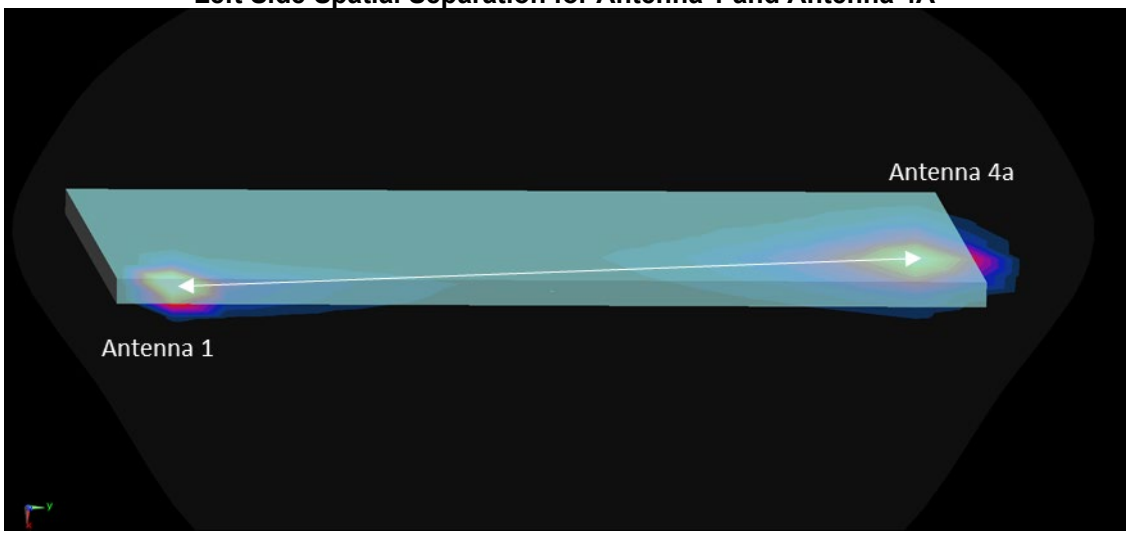
© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Figure 11-18**
**Right Side Spatial Separation for Antenna 3 and 5GHz ANTlower**




### 11.4.3 Left Side Spatial Separation Analysis

**Figure 11-19**
**Left Side Spatial Separation for Antenna 1 and Antenna 4A**




## 11.5 Simultaneous Transmission Conclusion

The above numerical summed SAR results and spatial separation analysis for all the worst-case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528-2013 Section 6.3.4.1.2.




© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 12 SAR MEASUREMENT VARIABILITY

## 12.1 Measurement Variability

Per FCC KDB Publication 865664 D01v01r04, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 12-1**
**Body SAR Measurement Variability Results**

| BODY VARIABILITY RESULTS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Band | FREQUENCY | | Mode | Service | Antenna | Data Rate (Mbps) | Side | Spacing | Measured SAR (1g) | 1st Repeated SAR (1g) | Ratio | 2nd Repeated SAR (1g) | Ratio | 3rd Repeated SAR (1g) | Ratio |
| | MHz | Ch. | | | | | | | (W/kg) | (W/kg) | | (W/kg) | | (W/kg) | |
| 750 | 707.50 | 23095 | LTE Band 12, 10 MHz Bandwidth | QPSK, 1 RB, 0 RB Offset | Ant 1 | N/A | left | 0 mm | 1.120 | 1.070 | 1.05 | N/A | N/A | N/A | N/A |
| 835 | 826.40 | 4132 | UMTS 850 | RMC | Ant 1 | N/A | left | 0 mm | 1.160 | 1.050 | 1.10 | N/A | N/A | N/A | N/A |
| 1750 | 1732.50 | 20175 | LTE Band 4 (AWS), 20 MHz Bandwidth | QPSK, 100 RB, 0 RB Offset | Ant 2A | N/A | back | 0 mm | 0.981 | 0.964 | 1.02 | N/A | N/A | N/A | N/A |
| 1900 | 1880.00 | 18900 | LTE Band 2 (PCS), 20 MHz Bandwidth | QPSK, 50 RB, 25 RB Offset | Ant 2B | N/A | back | 0 mm | 1.160 | 1.140 | 1.02 | N/A | N/A | N/A | N/A |
| 2300 | 2310.00 | 27710 | LTE Band 30, 10 MHz Bandwidth | QPSK, 1 RB, 0 RB Offset | Ant 2B | N/A | back | 0 mm | 1.030 | 1.020 | 1.01 | N/A | N/A | N/A | N/A |
| 2450 | 2510.00 | 20850 | LTE Band 7, 20 MHz Bandwidth | QPSK, 1RB, 0 RB Offset | Ant 4B | N/A | back | 0 mm | 1.110 | 1.030 | 1.08 | N/A | N/A | N/A | N/A |
| 2600 | 2560.00 | 21350 | LTE Band 7, 20 MHz Bandwidth | QPSK, 1RB, 99 RB Offset | Ant 2B | N/A | back | 0 mm | 1.100 | 1.030 | 1.07 | N/A | N/A | N/A | N/A |
| 3500 | 3560.00 | 55340 | LTE Band 48, 20 MHz Bandwidth | QPSK, 1 RB, 0 RB Offset | Ant 3 | N/A | right | 0 mm | 1.070 | 1.040 | 1.03 | N/A | N/A | N/A | N/A |
| 3700 | 3646.70 | 56207 | LTE Band 48, 20 MHz Bandwidth | QPSK, 1RB, 0 RB Offset | Ant 4B | N/A | back | 0 mm | 1.040 | 1.040 | 0.00 | N/A | N/A | N/A | N/A |
| 5250 | 5270.00 | 54 | 802.11n, 40 MHz Bandwidth | OFDM | 5GHz ANTupper | 13.5 | right | 0 mm | 0.889 | 0.880 | 1.01 | N/A | N/A | N/A | N/A |
| 5600 | 5610.00 | 122 | 802.11ac, 80 MHz Bandwidth | OFDM | 5GHz ANTlower | 29.3 | right | 0 mm | 0.896 | 0.886 | 1.01 | N/A | N/A | N/A | N/A |
| 5750 | 5775.00 | 155 | 802.11ac, 80 MHz Bandwidth | OFDM | 5GHz ANTupper | 29.3 | right | 0 mm | 0.937 | 0.921 | 1.02 | N/A | N/A | N/A | N/A |
| ANSI / IEEE C95.1 1992 - SAFETY LIMIT<br>Spatial Peak<br>Uncontrolled Exposure/General Population | | | | | | | | | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram | | | | | | |

## 12.2 Measurement Uncertainty

The measured SAR was <1.5 W/kg for 1g and <3.75 W/kg for 10g for all frequency bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE 1528-2013 was not required.




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 13 ADDITIONAL TESTING PER FCC GUIDANCE

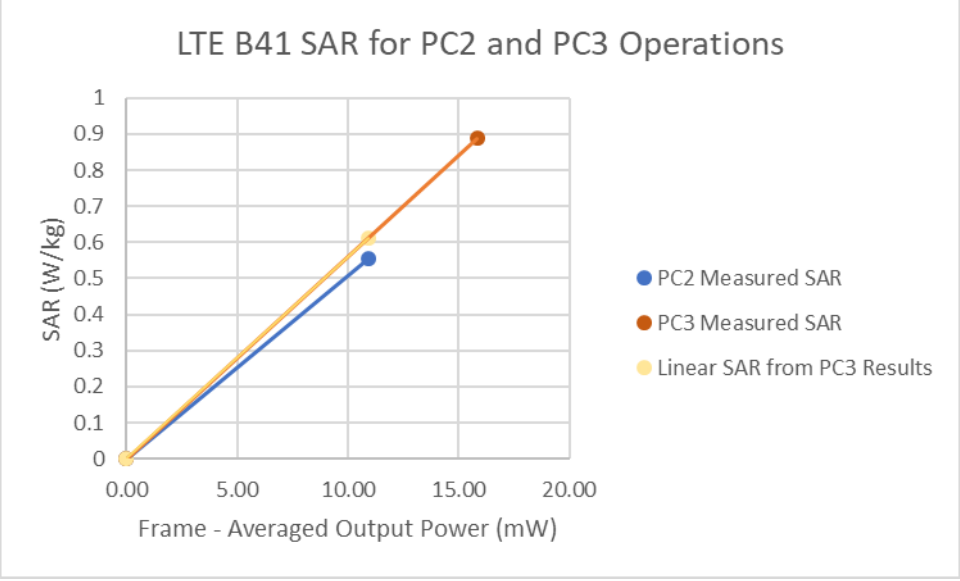
## 13.1 LTE Band 41 Power Class 2 and Power Class 3 Linearity

This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per May 2017 TCB Workshop Notes based on the device behavior, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the highest power and available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR for each exposure condition. The linearity between the Power Class 2 and Power Class 3 SAR results and the respective frame averaged powers was calculated to determine that the results were linear. When ULCA is active, the linearity between the Power Class 2 with ULCA active and Power Class 3 with ULCA active SAR results and the respective frame averaged powers was calculated to determine that the results were linear. Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes was < 10% and all reported SAR values were < 1.4 W/kg for 1g and < 3.5 W/kg for 10g.

LTE Band 41 SAR testing with power class 2 at the highest power and available duty factor was additionally performed for the power class 3 configuration with the highest SAR for each exposure condition.

**Table 13-1**
**LTE Band 41 Body Linearity Data – Ant 2a**

| | LTE Band 41 PC3 | LTE Band 41 PC2 |
|---|---|---|
| Maximum Allowed Output Power (dBm) | 14.7 | 14.7 |
| Measured Output Power (dBm) | 13.98 | 14.01 |
| Measured SAR (W/kg) | 0.887 | 0.554 |
| Measured Power (mW) | 25.00 | 25.18 |
| Duty Cycle | 63.3% | 43.3% |
| Frame Averaged Output Power (mW) | 15.83 | 10.90 |
| % deviation from expected linearity | | -9.32% |







© 2020 PCTEST.

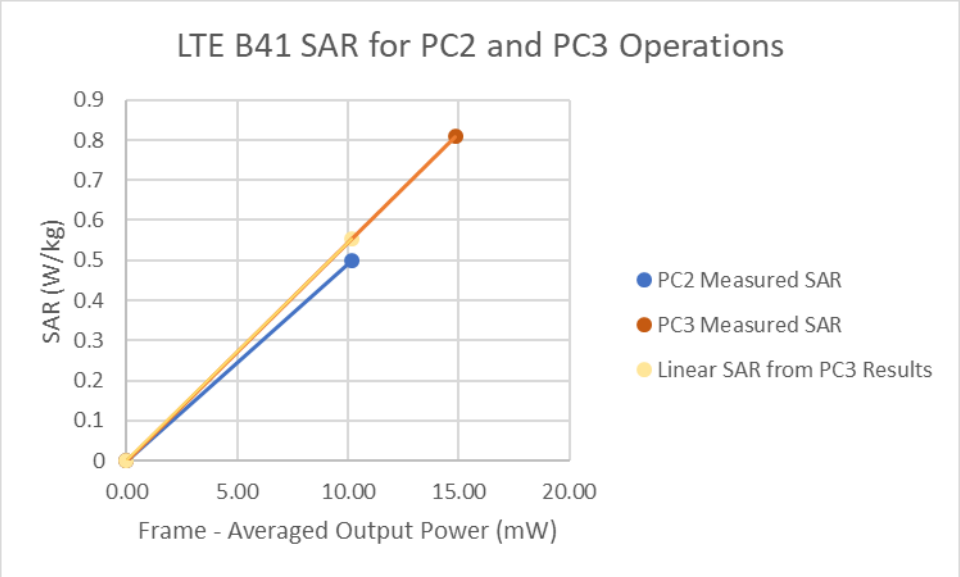




© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 13-2**
**LTE Band 41 ULCA Body Linearity Data – Ant 2a**

| | LTE Band 41 PC3 | LTE Band 41 PC2 |
|---|---|---|
| Maximum Allowed Output Power (dBm) | 14.7 | 14.7 |
| Measured Output Power (dBm) | 13.7 | 13.7 |
| Measured SAR (W/kg) | 0.808 | 0.499 |
| Measured Power (mW) | 23.44 | 23.44 |
| Duty Cycle | 63.3% | 43.3% |
| Frame Averaged Output Power (mW) | 14.84 | 10.15 |
| % deviation from expected linearity | | -9.72% |







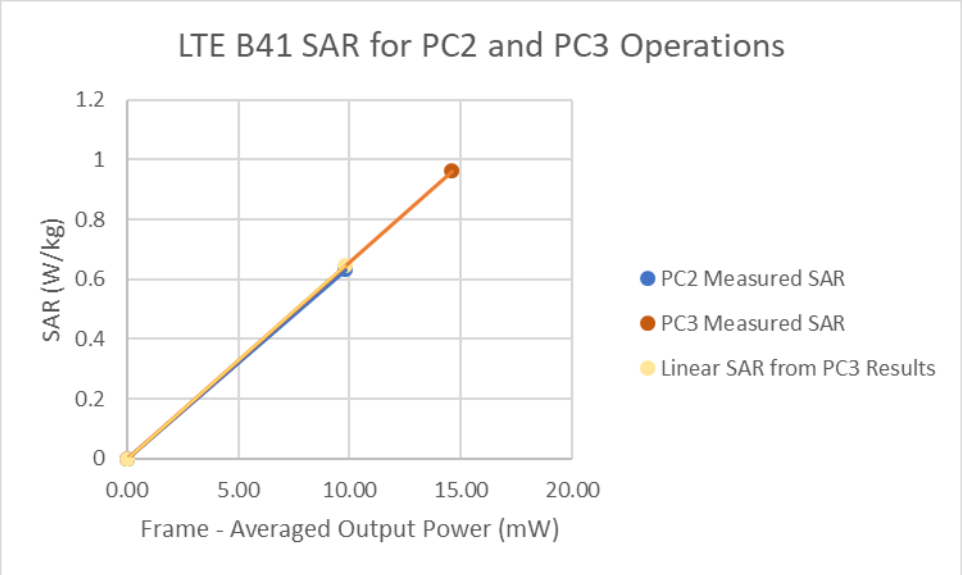
© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 13-3**
**LTE Band 41 Body Linearity Data – Ant 2b**

| | LTE Band 41 PC3 | LTE Band 41 PC2 |
|---|---|---|
| Maximum Allowed Output Power (dBm) | 14.2 | 14.2 |
| Measured Output Power (dBm) | 13.63 | 13.55 |
| Measured SAR (W/kg) | 0.962 | 0.633 |
| Measured Power (mW) | 23.07 | 22.65 |
| Duty Cycle | 63.3% | 43.3% |
| Frame Averaged Output Power (mW) | 14.60 | 9.81 |
| % deviation from expected linearity | | -2.02% |







© 2020 PCTEST.

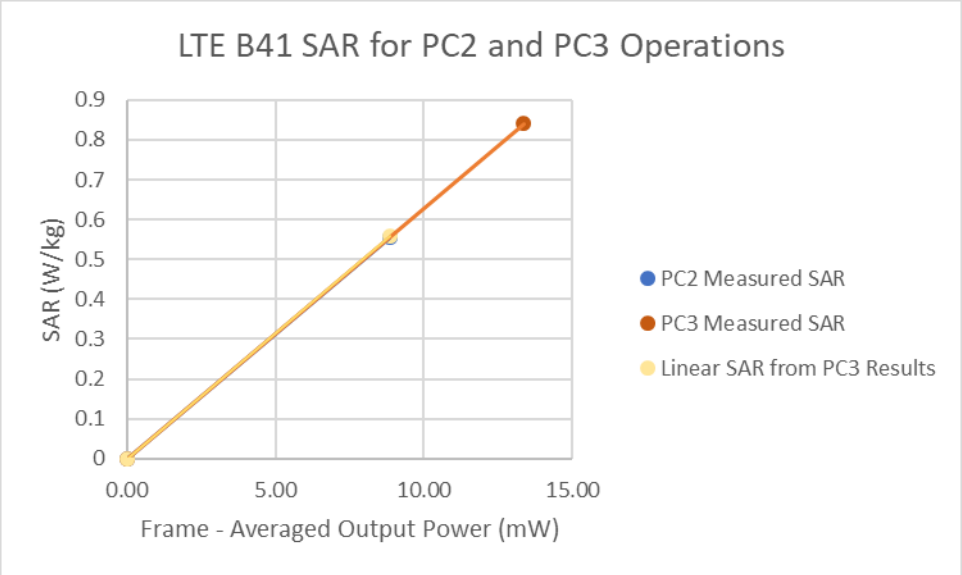




© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 13-4**
**LTE Band 41 ULCA Body Linearity Data – Ant 2b**

| | LTE Band 41 PC3 | LTE Band 41 PC2 |
|---|---|---|
| Maximum Allowed Output Power (dBm) | 14.2 | 14.2 |
| Measured Output Power (dBm) | 13.25 | 13.11 |
| Measured SAR (W/kg) | 0.841 | 0.555 |
| Measured Power (mW) | 21.13 | 20.46 |
| Duty Cycle | 63.3% | 43.3% |
| Frame Averaged Output Power (mW) | 13.38 | 8.86 |
| % deviation from expected linearity | | -0.36% |







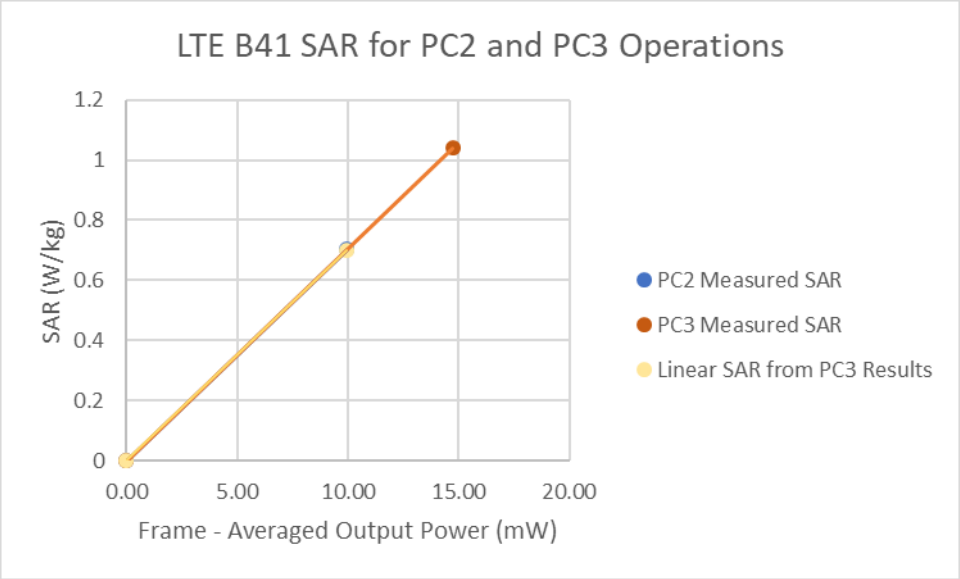
© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 13-5**
**LTE Band 41 Body Linearity Data – Ant 4a**

| | LTE Band 41 PC3 | LTE Band 41 PC2 |
|---|---|---|
| Maximum Allowed Output Power (dBm) | 14.2 | 14.2 |
| Measured Output Power (dBm) | 13.67 | 13.61 |
| Measured SAR (W/kg) | 1.04 | 0.702 |
| Measured Power (mW) | 23.28 | 22.96 |
| Duty Cycle | 63.3% | 43.3% |
| Frame Averaged Output Power (mW) | 14.74 | 9.94 |
| % deviation from expected linearity | | 0.05% |







© 2020 PCTEST.

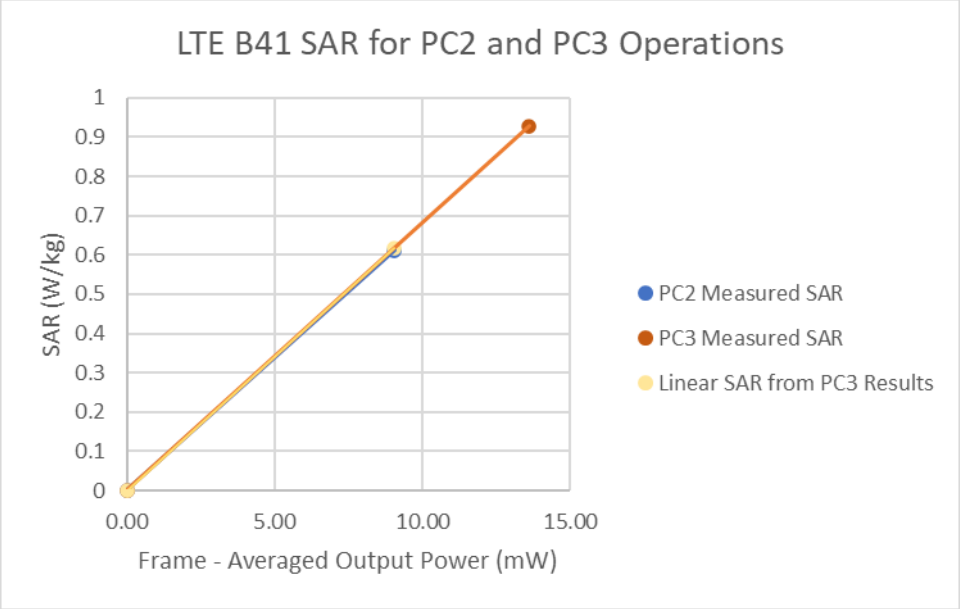




© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 13-6**
**LTE Band 41 ULCA Body Linearity Data – Ant 4a**

| | LTE Band 41 PC3 | LTE Band 41 PC2 |
|---|---|---|
| Maximum Allowed Output Power (dBm) | 14.2 | 14.2 |
| Measured Output Power (dBm) | 13.33 | 13.2 |
| Measured SAR (W/kg) | 0.929 | 0.612 |
| Measured Power (mW) | 21.53 | 20.89 |
| Duty Cycle | 63.3% | 43.3% |
| Frame Averaged Output Power (mW) | 13.63 | 9.05 |
| % deviation from expected linearity | | -0.77% |







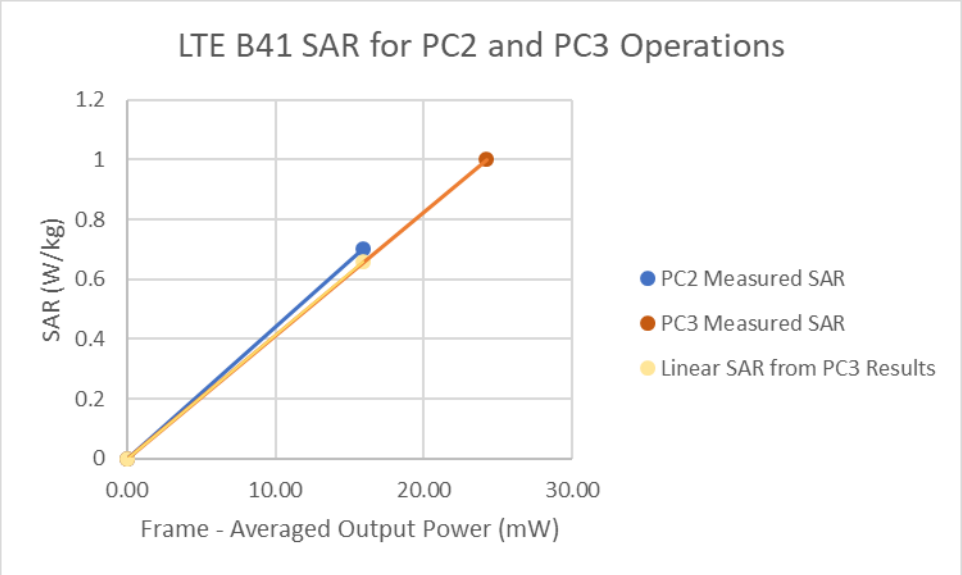
© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 13-7**
**LTE Band 41 Body Linearity Data – Ant 4b**

| | LTE Band 41 PC3 | LTE Band 41 PC2 |
|---|---|---|
| Maximum Allowed Output Power (dBm) | 15.9 | 15.9 |
| Measured Output Power (dBm) | 15.83 | 15.66 |
| Measured SAR (W/kg) | 1 | 0.702 |
| Measured Power (mW) | 38.28 | 36.81 |
| Duty Cycle | 63.3% | 43.3% |
| Frame Averaged Output Power (mW) | 24.23 | 15.94 |
| % deviation from expected linearity | | 6.72% |







© 2020 PCTEST.

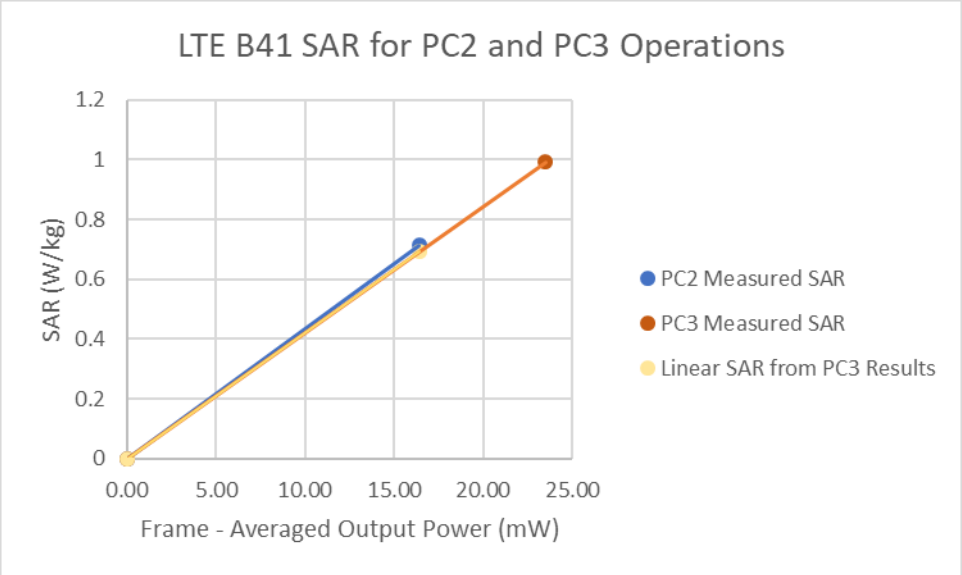




© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

**Table 13-8**
**LTE Band 41 ULCA Body Linearity Data – Ant 4b**

| | LTE Band 41 PC3 | LTE Band 41 PC2 |
|---|---|---|
| Maximum Allowed Output Power (dBm) | 15.9 | 15.9 |
| Measured Output Power (dBm) | 15.7 | 15.79 |
| Measured SAR (W/kg) | 0.993 | 0.714 |
| Measured Power (mW) | 37.15 | 37.93 |
| Duty Cycle | 63.3% | 43.3% |
| Frame Averaged Output Power (mW) | 23.52 | 16.42 |
| % deviation from expected linearity | | 2.96% |







© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 14 EQUIPMENT LIST

| Manufacturer | Model | Description | Cal Date | Cal Interval | Cal Due | Serial Number |
|---|---|---|---|---|---|---|
| Agilent | E4438C | ESG Vector Signal Generator | 6/27/2019 | Annual | 6/27/2020 | MY45093852 |
| Agilent | E4438C | ESG Vector Signal Generator | 9/11/2019 | Annual | 9/11/2020 | MY45093678 |
| Agilent | E5515C | Wireless Communications Test Set | 2/28/2018 | Biennial | 2/28/2020 | GB41450275 |
| Agilent | E5515C | Wireless Communications Test Set | 5/22/2018 | Biennial | 5/22/2020 | GB43193563 |
| Agilent | N5182A | MXG Vector Signal Generator | 6/27/2019 | Annual | 6/27/2020 | US46240505 |
| Agilent | N5182A | MXG Vector Signal Generator | 8/19/2019 | Annual | 8/19/2020 | MY47420837 |
| Amplifier Research | 150A100C | Amplifier | CBT | N/A | CBT | 350132 |
| Amplifier Research | 15S1G6 | Amplifier | CBT | N/A | CBT | 343972 |
| Amplifier Research | 15S1G6 | Amplifier | CBT | N/A | CBT | 343971 |
| Anritsu | MA24106A | USB Power Sensor | 8/5/2019 | Annual | 8/5/2020 | 1827527 |
| Anritsu | MA24106A | USB Power Sensor | 6/21/2019 | Annual | 6/21/2020 | 1244515 |
| Anritsu | MA24106A | USB Power Sensor | 7/8/2019 | Annual | 7/8/2020 | 1248508 |
| Anritsu | MA24106A | USB Power Sensor | 8/5/2019 | Annual | 8/5/2020 | 1827528 |
| Anritsu | MA24106A | USB Power Sensor | 8/27/2019 | Annual | 8/27/2020 | 1827533 |
| Anritsu | MA2411B | Pulse Power Sensor | 12/4/2019 | Annual | 12/4/2020 | 1126066 |
| Anritsu | ML2496A | Power Meter | 11/6/2019 | Annual | 11/6/2020 | 1405003 |
| Anritsu | ML2496A | Power Meter | 12/17/2019 | Annual | 12/17/2020 | 1138001 |
| Anritsu | MT8820C | Radio Communication Analyzer | 7/25/2019 | Annual | 7/25/2020 | 6201240328 |
| Anritsu | MT8821C | Radio Communication Analyzer | 8/16/2019 | Annual | 8/16/2020 | 6201144418 |
| Anritsu | MT8821C | Radio Communication Analyzer | 3/18/2019 | Annual | 3/18/2020 | 6201144419 |
| Control Company | 4040 | Temperature / Humidity Monitor | 2/28/2018 | Biennial | 2/28/2020 | 150761911 |
| Control Company | 4040 | Therm./ Clock/ Humidity Monitor | 2/28/2018 | Biennial | 2/28/2020 | 170151872 |
| Control Company | 4040 | Therm./ Clock/ Humidity Monitor | 2/28/2018 | Biennial | 2/28/2020 | 170151893 |
| Control Company | 4352 | Ultra Long Stem Thermometer | 2/28/2018 | Biennial | 2/28/2020 | 170330160 |
| Control Company | 4352 | Ultra Long Stem Thermometer | 2/28/2018 | Biennial | 2/28/2020 | 170330158 |
| Control Company | 4352 | Ultra Long Stem Thermometer | 8/2/2018 | Biennial | 8/2/2020 | 181292054 |
| Control Company | 1235C55 | Digital Caliper | 3/20/2018 | Biennial | 3/20/2020 | 140448586 |
| MCL | BW-N3W5+ | 3dB Attenuator | CBT | N/A | CBT | 1812 |
| MCL | BW-N6W5+ | 6dB Attenuator | CBT | N/A | CBT | 1311 |
| MCL | BW-N10W5+ | 10dB Attenuator | CBT | N/A | CBT | 1611 |
| Mini-Circuits | NLP-1000+ | Low Pass Filter | CBT | N/A | CBT | N/A |
| Mini-Circuits | NLP-1200+ | Low Pass Filter | CBT | N/A | CBT | N/A |
| Mini-Circuits | NLP-2950+ | Low Pass Filter | CBT | N/A | CBT | N/A |
| Mini-Circuits | VLF-6000+ | Low Pass Filter | CBT | N/A | CBT | N/A |
| Pasternack | PE2208-6 | Bidirectional Coupler | CBT | N/A | CBT | N/A |
| Mini-Circuits | ZHDC-16-63-S+ | 50-6000MHz Bidirectional Coupler | CBT | N/A | CBT | N/A |
| Pasternack | NC-100 | Torque Wrench | 5/23/2018 | Biennial | 5/23/2020 | N/A |
| Seekonk | NC-100 | Torque Wrench | 5/9/2018 | Biennial | 5/9/2020 | 22217 |
| Rohde & Schwarz | CMW500 | Radio Communication Tester | 6/24/2019 | Annual | 6/24/2020 | 101699 |
| Rohde & Schwarz | CMW500 | Radio Communication Tester | 8/20/2019 | Annual | 8/20/2020 | 106578 |
| Rohde & Schwarz | CMW500 | Radio Communication Tester | 6/26/2019 | Annual | 6/26/2020 | 108843 |
| Rohde & Schwarz | CMW500 | Radio Communication Tester | 4/15/2019 | Annual | 4/15/2020 | 167283 |
| Rohde & Schwarz | CMW500 | Radio Communication Tester | 4/15/2019 | Annual | 4/15/2020 | 167284 |
| Rohde & Schwarz | CMW500 | Radio Communication Tester | 4/17/2019 | Annual | 4/17/2020 | 167285 |
| Rohde& Schwarz | CMW500 | Wideband Radio Communication Tester | 8/8/2019 | Annual | 8/8/2020 | 145663 |
| SPEAG | D750V3 | 750 MHz SAR Dipole | 9/8/2017 | Triennial | 9/8/2020 | 1097 |
| SPEAG | D835V2 | 835 MHz SAR Dipole | 6/20/2019 | Annual | 6/20/2020 | 4d040 |
| SPEAG | D1750V2 | 1750 MHz SAR Dipole | 6/19/2019 | Annual | 6/19/2020 | 1083 |
| SPEAG | D1900V2 | 1900 MHz SAR Dipole | 5/14/2018 | Biennial | 5/14/2020 | 5d026 |
| SPEAG | D2300V2 | 2300 MHz SAR Dipole | 3/7/2018 | Biennial | 3/7/2020 | 1038 |
| SPEAG | D2450V2 | 2450 MHz SAR Dipole | 11/12/2018 | Biennial | 11/12/2020 | 921 |
| SPEAG | D2600V2 | 2600 MHz SAR Dipole | 9/11/2017 | Triennial | 9/11/2020 | 1069 |
| SPEAG | D3500V2 | 3500 MHz SAR Dipole | 12/4/2019 | Annual | 12/4/2020 | 1068 |
| SPEAG | D3700V2 | 3700 MHz SAR Dipole | 12/4/2019 | Annual | 12/4/2020 | 1029 |
| SPEAG | D5GHzV2 | 5 GHz SAR Dipole | 3/13/2018 | Biennial | 3/13/2020 | 1123 |
| SPEAG | DAE4 | Dasy Data Acquisition Electronics | 8/12/2019 | Annual | 8/12/2020 | 1408 |
| SPEAG | DAE4 | Dasy Data Acquisition Electronics | 2/13/2019 | Annual | 2/13/2020 | 1403 |
| SPEAG | DAE4 | Dasy Data Acquisition Electronics | 7/10/2019 | Annual | 7/10/2020 | 1402 |
| SPEAG | DAE4 | Dasy Data Acquisition Electronics | 1/15/2019 | Annual | 1/15/2020 | 793 |
| SPEAG | DAE4 | Dasy Data Acquisition Electronics | 11/13/2019 | Annual | 11/13/2020 | 1213 |
| SPEAG | DAE4 | Dasy Data Acquisition Electronics | 6/14/2019 | Annual | 6/14/2020 | 701 |
| SPEAG | DAE4 | Dasy Data Acquisition Electronics | 4/17/2019 | Annual | 4/17/2020 | 501 |
| SPEAG | DAE4 | Dasy Data Acquisition Electronics | 3/13/2019 | Annual | 3/13/2020 | 604 |
| SPEAG | DAK-3.5 | Dielectric Assessment Kit | 5/7/2019 | Annual | 5/7/2020 | 1070 |
| SPEAG | DAKS-3.5 | Portable DAK | 9/10/2019 | Annual | 9/10/2020 | 1045 |
| SPEAG | EX3DV4 | SAR Probe | 8/29/2019 | Annual | 8/29/2020 | 3949 |
| SPEAG | EX3DV4 | SAR Probe | 6/19/2019 | Annual | 6/19/2020 | 7416 |
| SPEAG | EX3DV4 | SAR Probe | 11/21/2019 | Annual | 11/21/2020 | 7420 |
| SPEAG | EX3DV4 | SAR Probe | 1/28/2019 | Annual | 1/28/2020 | 3837 |
| SPEAG | EX3DV4 | SAR Probe | 7/16/2019 | Annual | 7/16/2020 | 7491 |
| SPEAG | EX3DV4 | SAR Probe | 2/19/2019 | Annual | 2/19/2020 | 7427 |
| SPEAG | EX3DV4 | SAR Probe | 3/18/2019 | Annual | 3/18/2020 | 7421 |
| SPEAG | EX3DV4 | SAR Probe | 4/12/2019 | Annual | 4/12/2020 | 7532 |

Note: CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements. Each equipment item was used solely within its respective calibration period.



© 2020 PCTEST.



© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 15 MEASUREMENT UNCERTAINTIES

| a | c | d | e= f(d,k) | f | g | h = c x f/e | i = c x g/e | k |
|---|---|---|---|---|---|---|---|---|
| **Uncertainty Component** | **Tol. (± %)** | **Prob. Dist.** | **Div.** | **$c_i$ 1gm** | **$c_i$ 10 gms** | **1gm $u_i$ (± %)** | **10gms $u_i$ (± %)** | **$v_i$** |
| **Measurement System** | | | | | | | | |
| Probe Calibration | 6.55 | N | 1 | 1.0 | 1.0 | 6.6 | 6.6 | ∞ |
| Axial Isotropy | 0.25 | N | 1 | 0.7 | 0.7 | 0.2 | 0.2 | ∞ |
| Hemishperical Isotropy | 1.3 | N | 1 | 0.7 | 0.7 | 0.9 | 0.9 | ∞ |
| Boundary Effect | 2.0 | R | 1.73 | 1.0 | 1.0 | 1.2 | 1.2 | ∞ |
| Linearity | 0.3 | N | 1 | 1.0 | 1.0 | 0.3 | 0.3 | ∞ |
| System Detection Limits | 0.25 | R | 1.73 | 1.0 | 1.0 | 0.1 | 0.1 | ∞ |
| Readout Electronics | 0.3 | N | 1 | 1.0 | 1.0 | 0.3 | 0.3 | ∞ |
| Response Time | 0.8 | R | 1.73 | 1.0 | 1.0 | 0.5 | 0.5 | ∞ |
| Integration Time | 2.6 | R | 1.73 | 1.0 | 1.0 | 1.5 | 1.5 | ∞ |
| RF Ambient Conditions - Noise | 3.0 | R | 1.73 | 1.0 | 1.0 | 1.7 | 1.7 | ∞ |
| RF Ambient Conditions - Reflections | 3.0 | R | 1.73 | 1.0 | 1.0 | 1.7 | 1.7 | ∞ |
| Probe Positioner Mechanical Tolerance | 0.4 | R | 1.73 | 1.0 | 1.0 | 0.2 | 0.2 | ∞ |
| Probe Positioning w/ respect to Phantom | 6.7 | R | 1.73 | 1.0 | 1.0 | 3.9 | 3.9 | ∞ |
| Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation | 4.0 | R | 1.73 | 1.0 | 1.0 | 2.3 | 2.3 | ∞ |
| **Test Sample Related** | | | | | | | | |
| Test Sample Positioning | 2.7 | N | 1 | 1.0 | 1.0 | 2.7 | 2.7 | 35 |
| Device Holder Uncertainty | 1.67 | N | 1 | 1.0 | 1.0 | 1.7 | 1.7 | 5 |
| Output Power Variation - SAR drift measurement | 5.0 | R | 1.73 | 1.0 | 1.0 | 2.9 | 2.9 | ∞ |
| SAR Scaling | 0.0 | R | 1.73 | 1.0 | 1.0 | 0.0 | 0.0 | ∞ |
| **Phantom & Tissue Parameters** | | | | | | | | |
| Phantom Uncertainty (Shape & Thickness tolerances) | 7.6 | R | 1.73 | 1.0 | 1.0 | 4.4 | 4.4 | ∞ |
| Liquid Conductivity - measurement uncertainty | 4.2 | N | 1 | 0.78 | 0.71 | 3.3 | 3.0 | 10 |
| Liquid Permittivity - measurement uncertainty | 4.1 | N | 1 | 0.23 | 0.26 | 1.0 | 1.1 | 10 |
| Liquid Conductivity - Temperature Uncertainty | 3.4 | R | 1.73 | 0.78 | 0.71 | 1.5 | 1.4 | ∞ |
| Liquid Permittivity - Temperature Unceritainty | 0.6 | R | 1.73 | 0.23 | 0.26 | 0.1 | 0.1 | ∞ |
| Liquid Conductivity - deviation from target values | 5.0 | R | 1.73 | 0.64 | 0.43 | 1.8 | 1.2 | ∞ |
| Liquid Permittivity - deviation from target values | 5.0 | R | 1.73 | 0.60 | 0.49 | 1.7 | 1.4 | ∞ |
| **Combined Standard Uncertainty (k=1)** | | RSS | | | | 11.5 | 11.3 | 60 |
| **Expanded Uncertainty** (95% CONFIDENCE LEVEL) | | k=2 | | | | 23.0 | 22.6 | |




© 2020 PCTEST.





© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 16 CONCLUSION

## 16.1 Measurement Conclusion

The SAR evaluation indicates that the EUT complies with the RF radiation exposure limits of the FCC and Innovation, Science, and Economic Development Canada, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables. [3]




© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# 17 REFERENCES


[1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, Aug. 1996.

[2] ANSI/IEEE C95.1-2005, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, 2006.

[3] ANSI/IEEE C95.1-1992, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, Sept. 1992.

[4] ANSI/IEEE C95.3-2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave, New York: IEEE, December 2002.

[5] IEEE Standards Coordinating Committee 39 –Standards Coordinating Committee 34 – IEEE Std. 1528-2013, IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

[6] NCRP, National Council on Radiation Protection and Measurements, Biological Effects and Exposure Criteria for RadioFrequency Electromagnetic Fields, NCRP Report No. 86, 1986. Reprinted Feb. 1995.

[7] T. Schmid, O. Egger, N. Kuster, Automated E-field scanning system for dosimetric assessments, IEEE Transaction on Microwave Theory and Techniques, vol. 44, Jan. 1996, pp. 105-113.

[8] K. Pokovic, T. Schmid, N. Kuster, Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequencies, ICECOM97, Oct. 1997, pp. 1 -124.

[9] K. Pokovic, T. Schmid, and N. Kuster, E-field Probe with improved isotropy in brain simulating liquids, Proceedings of the ELMAR, Zadar, Croatia, June 23-25, 1996, pp. 172-175.

[10] Schmid & Partner Engineering AG, Application Note: Data Storage and Evaluation, June 1998, p2.

[11] V. Hombach, K. Meier, M. Burkhardt, E. Kuhn, N. Kuster, The Dependence of EM Energy Absorption upon Human Modeling at 900 MHz, IEEE Transaction on Microwave Theory and Techniques, vol. 44 no. 10, Oct. 1996, pp. 1865-1873.

[12] N. Kuster and Q. Balzano, Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz, IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.

[13] G. Hartsgrove, A. Kraszewski, A. Surowiec, Simulated Biological Materials for Electromagnetic Radiation Absorption Studies, University of Ottawa, Bioelectromagnetics, Canada: 1987, pp. 29-36.

[14] Q. Balzano, O. Garay, T. Manning Jr., Electromagnetic Energy Exposure of Simulated Users of Portable Cellular Telephones, IEEE Transactions on Vehicular Technology, vol. 44, no.3, Aug. 1995.

[15] W. Gander, Computermathematick, Birkhaeuser, Basel, 1992.

[16] W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, Numerical Recipes in C, The Art of Scientific Computing, Second edition, Cambridge University Press, 1992.

[17] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.





© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

[18] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10kHz-300GHz, Jan. 1995.

[19] Prof. Dr. Niels Kuster, ETH, Eidgenössische Technische Hoschschule Zürich, Dosimetric Evaluation of the Cellular Phone.

[20] IEC 62209-1, Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1: Devices used next to the ear (Frequency range of 300 MHz to 6 GHz), July 2016.

[21] Innovation, Science, Economic Development Canada RSS-102 Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) Issue 5, March 2015.

[22] Health Canada Safety Code 6 Limits of Human Exposure to Radio Frequency Electromagnetic Fields in the Frequency Range from 3 kHz – 300 GHz, 2015

[23] FCC SAR Test Procedures for 2G-3G Devices, Mobile Hotspot and UMPC Devices KDB Publications 941225, D01-D07

[24] SAR Measurement Guidance for IEEE 802.11 Transmitters, KDB Publication 248227 D01

[25] FCC SAR Considerations for Handsets with Multiple Transmitters and Antennas, KDB Publications 648474 D03-D04

[26] FCC SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers, FCC KDB Publication 616217 D04

[27] FCC SAR Measurement and Reporting Requirements for 100MHz – 6 GHz, KDB Publications 865664 D01-D02

[28] FCC General RF Exposure Guidance and SAR Procedures for Dongles, KDB Publication 447498, D01-D02

[29] Anexo à Resolução No. 533, de 10 de Septembro de 2009.

[30] IEC 62209-2, Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz), Mar. 2010.



© 2020 PCTEST.

© 2020 PCTEST. All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

# APPENDIX A: SAR TEST DATA

© 2020 PCTEST

# PCTEST

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR02WP7GX**

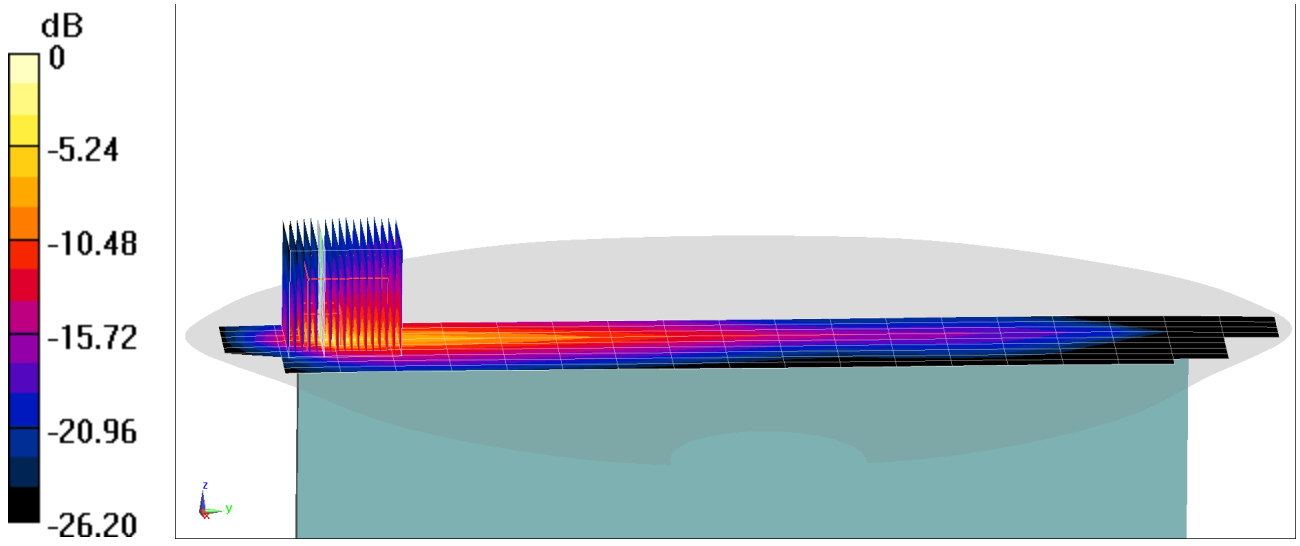
Communication System: UID 0, _GSM GPRS; 2 Tx slots; Frequency: 824.2 MHz; Duty Cycle: 1:4.15
Medium: 835 MHz Body Medium parameters used (interpolated):
f = 824.2 MHz; $\sigma$ = 0.996 S/m; $\varepsilon_r$ = 56.233; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-09-2020; Ambient Temp: 22.0°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7416; ConvF(9.71, 9.71, 9.71) @ 824.2 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## Mode: GPRS 850 Antenna 1, Body SAR, Left Edge, Low.ch, 2 Tx Slots

**Area Scan (10x20x1):** Measurement grid: dx=5mm, dy=15mm
**Zoom Scan (17x17x8)/Cube 0:** Measurement grid: dx=1.9mm, dy=1.9mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 26.21 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 23.4 W/kg
**SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.310 W/kg**




0 dB = 4.36 W/kg = 6.39 dBW/kg

# PCTEST

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR00TP7GX**

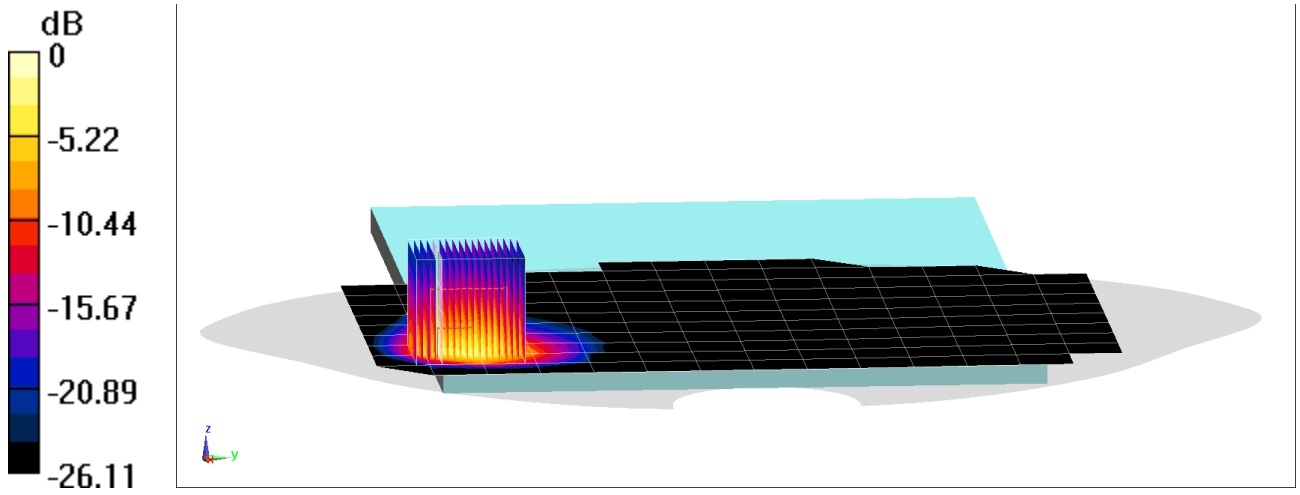
Communication System: UID 0, GSM GPRS; 2 Tx slots; Frequency: 1909.8 MHz; Duty Cycle: 1:4.15
Medium: 1900 MHz Body Medium parameters used:
f = 1910 MHz; $\sigma$ = 1.561 S/m; $\varepsilon_r$ = 52.341; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-15-2020; Ambient Temp: 21.5°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7421; ConvF(7.6, 7.6, 7.6) @ 1909.8 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## Mode: GPRS 1900 Antenna 4A, Body SAR, Back side, High.ch, 2 Tx Slots

**Area Scan (12x15x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (18x18x8)/Cube 0:** Measurement grid: dx=1.8mm, dy=1.8mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 25.40 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 6.22 W/kg
**SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.493 W/kg**




0 dB = 2.51 W/kg = 4.00 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR00TP7GX**

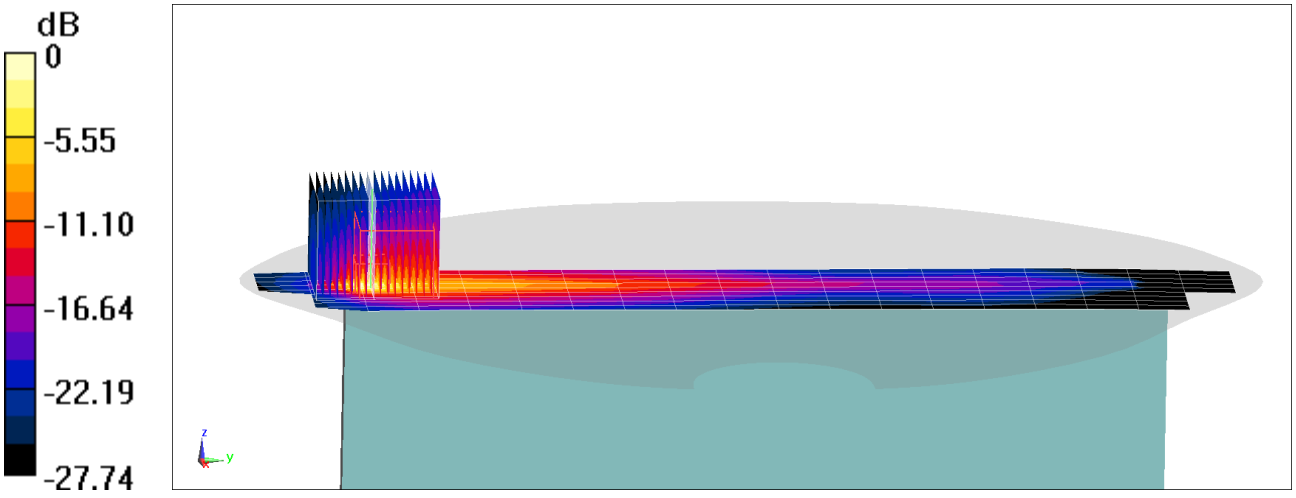
Communication System: UID 0, _UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used (interpolated):
f = 826.4 MHz; $\sigma$ = 0.965 S/m; $\varepsilon_r$ = 54.788; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12-30-2019; Ambient Temp: 20.0°C; Tissue Temp: 19.1°C

Probe: EX3DV4 - SN7416; ConvF(9.71, 9.71, 9.71) @ 826.4 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## Mode: UMTS 850 Antenna 1, Body SAR, Left Edge, Low.ch

**Area Scan (10x20x1):** Measurement grid: dx=5mm, dy=15mm
**Zoom Scan (17x18x8)/Cube 0:** Measurement grid: dx=2.1mm, dy=2.1mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 27.36 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 27.0 W/kg
**SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.327 W/kg**




0 dB = 4.72 W/kg = 6.74 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR009P7GX**

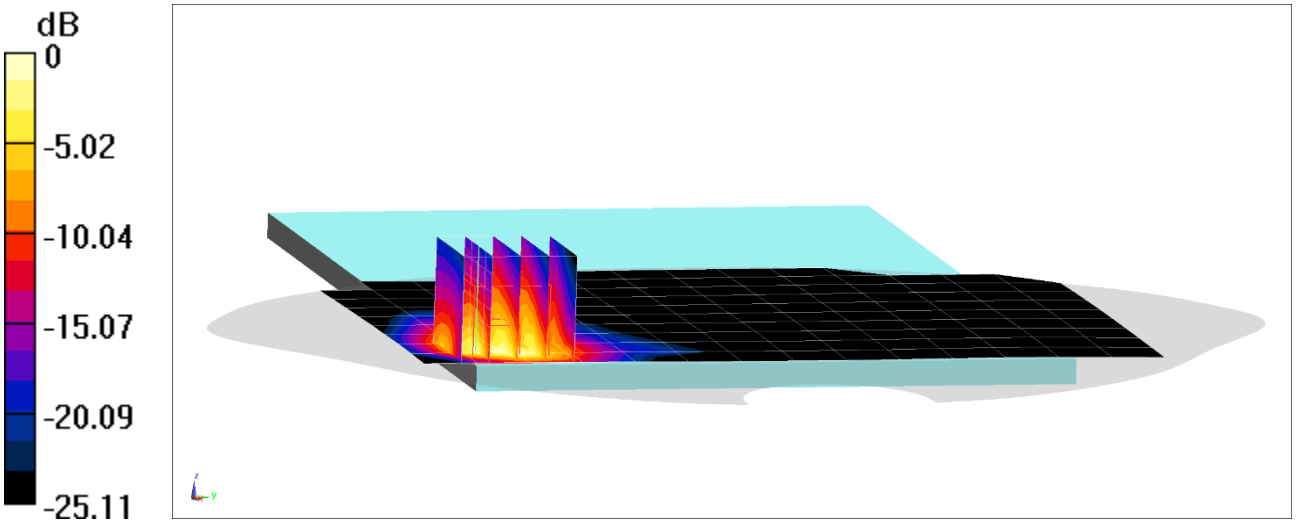
Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used (interpolated):
f = 1732.4 MHz; $\sigma$ = 1.468 S/m; $\varepsilon_r$ = 52.368; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-21-2020; Ambient Temp: 23.8°C; Tissue Temp: 18.4°C

Probe: EX3DV4 - SN7427; ConvF(8.14, 8.14, 8.14) @ 1732.4 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2019
Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## Mode: UMTS 1750 Antenna 4A, Body SAR, Back side, Mid.ch

**Area Scan (11x15x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.84 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 2.71 W/kg
**SAR(1 g) = 0.964 W/kg; SAR(10 g) = 0.455 W/kg**




0 dB = 1.91 W/kg = 2.81 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR00TP7GX**

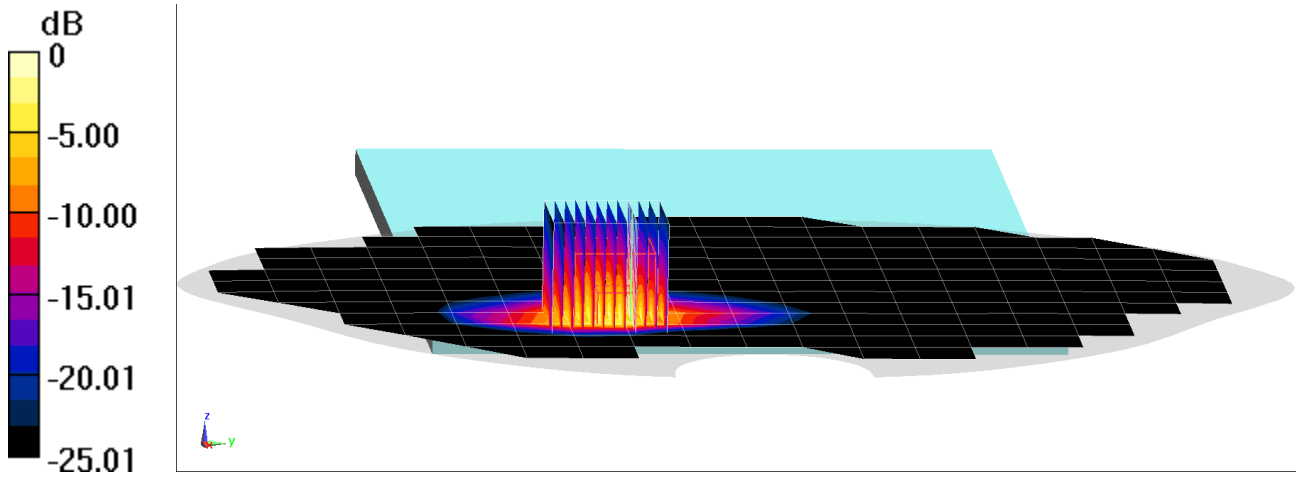
Communication System: UID 0, UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used:
f = 1880 MHz; $\sigma$ = 1.536 S/m; $\varepsilon_r$ = 51.693; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-07-2020; Ambient Temp: 21.7°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7491; ConvF(8.04, 8.04, 8.04) @ 1880 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1402; Calibrated: 7/10/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: UMTS 1900 Antenna 2B, Body SAR, Back side, Mid.ch**

**Area Scan (15x19x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (12x12x8)/Cube 0:** Measurement grid: dx=2.8mm, dy=2.8mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 27.88 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 6.35 W/kg
**SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.437 W/kg**




0 dB = 2.57 W/kg = 4.10 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR00GP7GX**

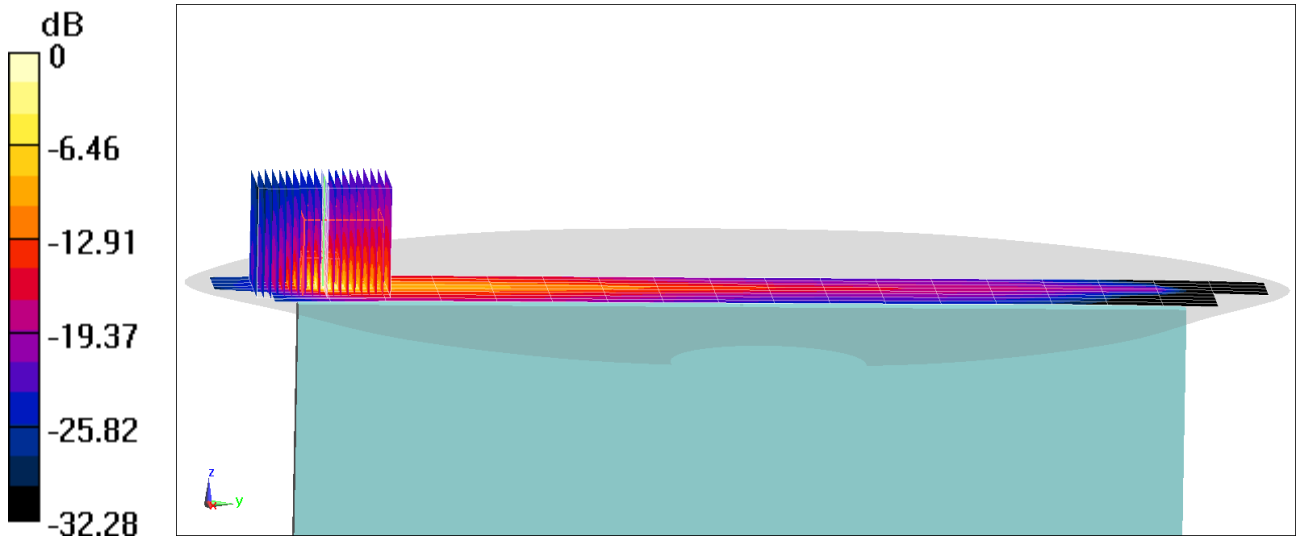
Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1
Medium: 750 MHz Body Medium parameters used (interpolated):
f = 680.5 MHz; $\sigma$ = 0.913 S/m; $\varepsilon_r$ = 55.751; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-05-2020; Ambient Temp: 20.0°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 680.5 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 71 Antenna 1, Body SAR, Left Edge, Mid.ch, 20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset**

**Area Scan (9x20x1):** Measurement grid: dx=5mm, dy=15mm
**Zoom Scan (17x20x8)/Cube 0:** Measurement grid: dx=1.9mm, dy=1.9mm, dz=1.4mm; Graded Ratio: 1.4
Peak SAR (extrapolated) = 26.5 W/kg
Reference Value = 31.53 V/m; Power Drift = -0.03 dB
**SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.246 W/kg**




0 dB = 4.37 W/kg = 6.40 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR009P7GX**

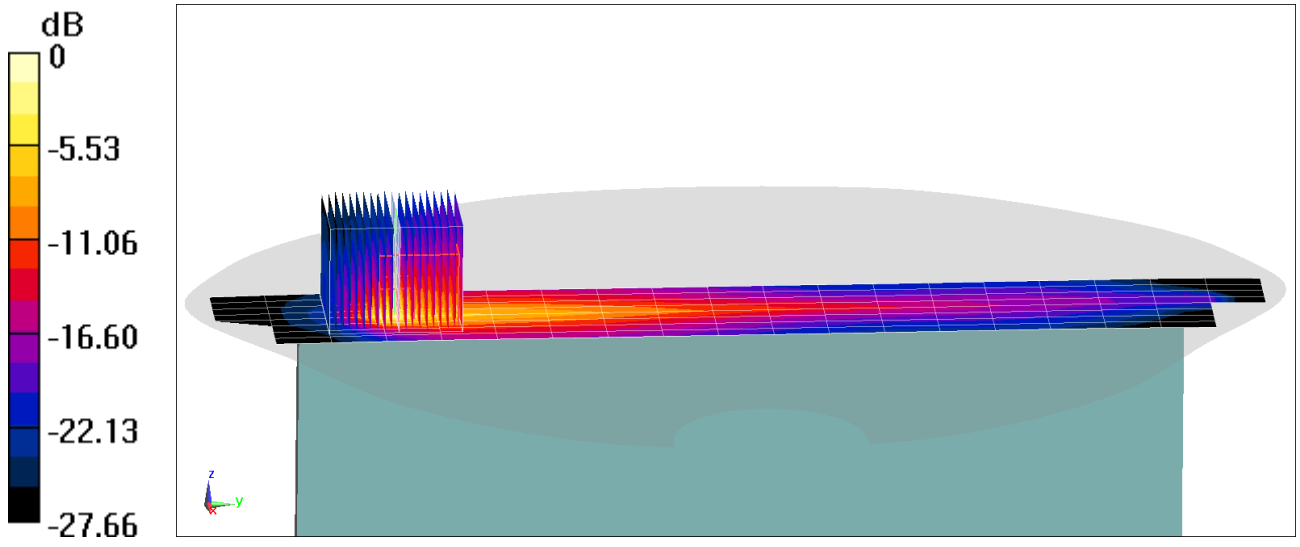
Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1
Medium: 750 MHz Body Medium parameters used (interpolated):
f = 707.5 MHz; $\sigma$ = 0.926 S/m; $\varepsilon_r$ = 55.462; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-05-2020; Ambient Temp: 20.0°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 707.5 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 12 Antenna 1, Body SAR, Left Edge, Mid.ch,**
**10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

**Area Scan (9x20x1):** Measurement grid: dx=5mm, dy=15mm
**Zoom Scan (17x20x8)/Cube 0:** Measurement grid: dx=1.9mm, dy=1.9mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 29.28 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 22.9 W/kg
**SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.310 W/kg**




0 dB = 4.29 W/kg = 6.32 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZG001P7GP**

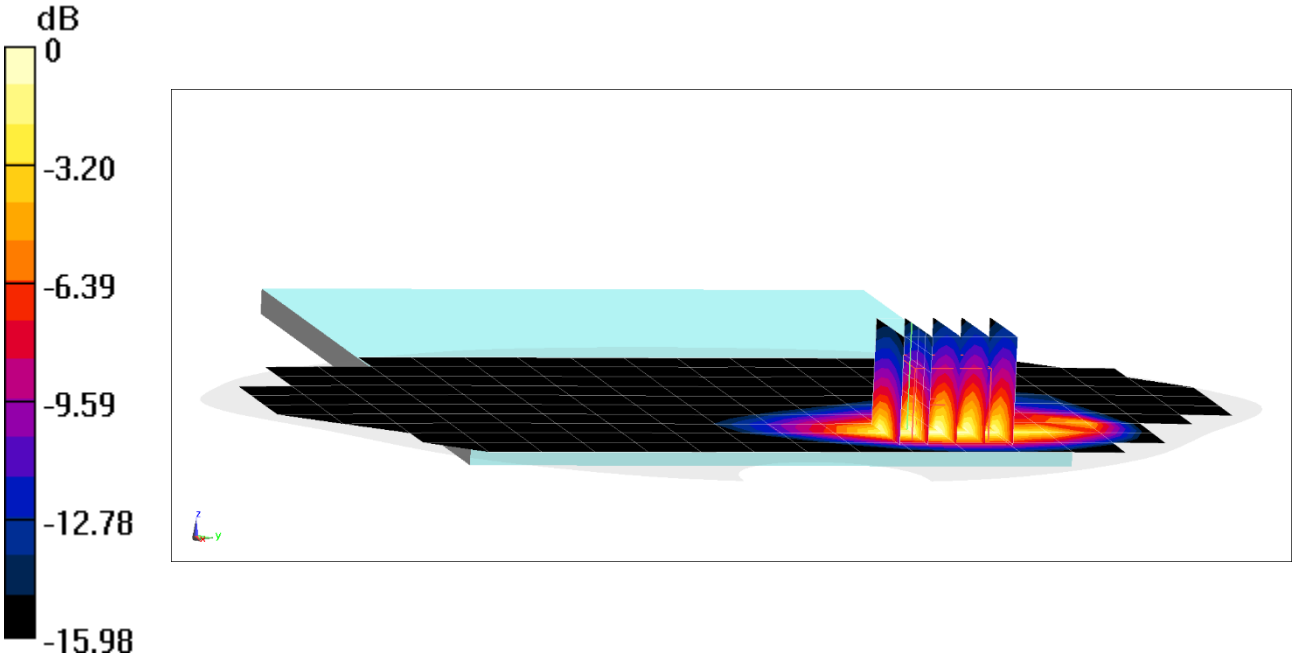
Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1
Medium: 750 MHz Body Medium parameters used (interpolated):
f = 782 MHz; $\sigma$ = 1.006 S/m; $\varepsilon_r$ = 54.77; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-07-2020; Ambient Temp: 20.5°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 782 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 13 Antenna 3, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.20 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 2.33 W/kg
**SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.520 W/kg**




0 dB = 1.57 W/kg = 1.96 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR00FP7GX**

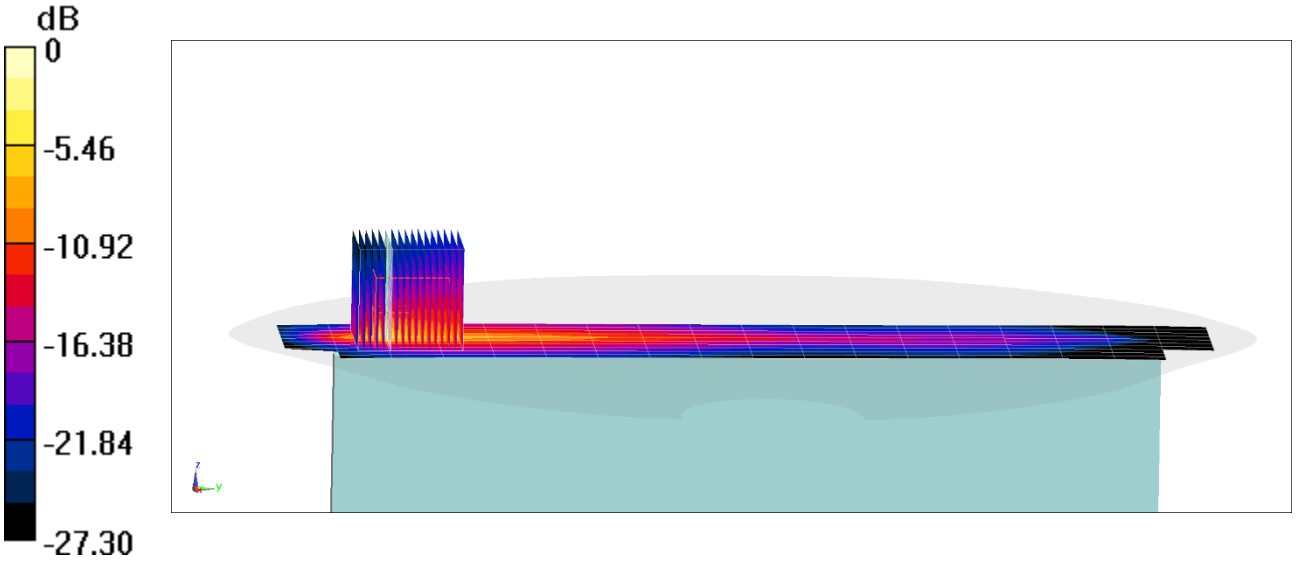
Communication System: UID 0, LTE Band 14; Frequency: 793 MHz; Duty Cycle: 1:1
Medium: 750 MHz Body Medium parameters used (interpolated):
f = 793 MHz; $\sigma$ = 1.01 S/m; $\varepsilon_r$ = 54.701; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-07-2020; Ambient Temp: 20.5°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 793 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 14 Antenna 1, Body SAR, Left Edge, Mid.ch,**
**10 MHz Bandwidth, QPSK, 50 RB, 0 RB Offset**

**Area Scan (9x6x1):** Measurement grid: dx=5mm, dy=15mm
**Zoom Scan (17x17x8)/Cube 0:** Measurement grid: dx=1.9mm, dy=1.9mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 23.92 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 22.0 W/kg
**SAR(1 g) = 0.975 W/kg; SAR(10 g) = 0.270 W/kg**




0 dB = 4.01 W/kg = 6.03 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR009P7GX**

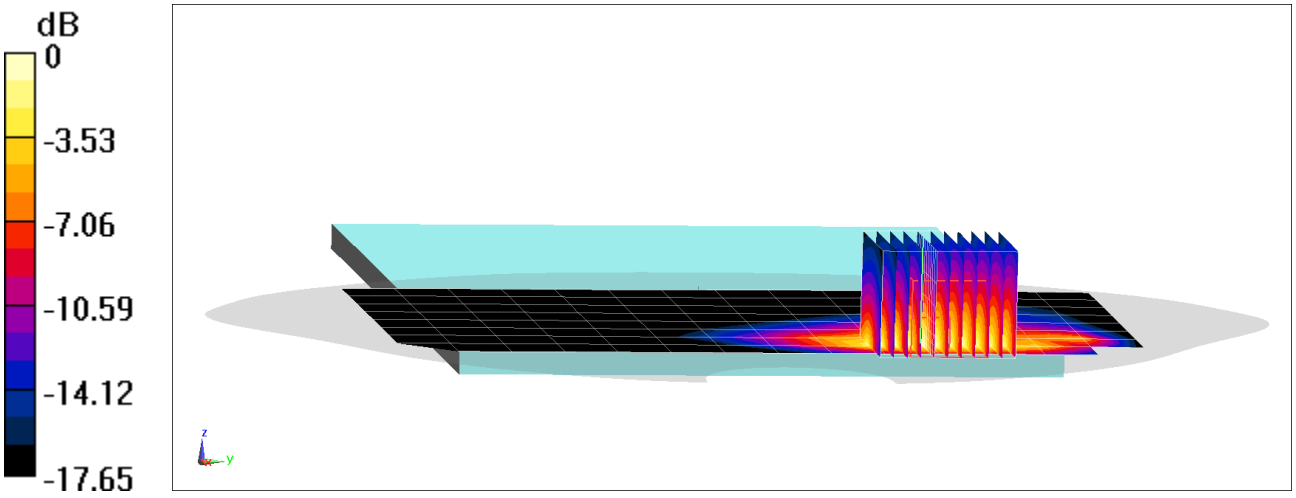
Communication System: UID 0, _LTE Band 26; Frequency: 819 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used (extrapolated):
f = 819 MHz; $\sigma$ = 0.967 S/m; $\varepsilon_r$ = 55.944; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-15-2020; Ambient Temp: 20.0°C; Tissue Temp: 18.4°C

Probe: EX3DV4 - SN7416; ConvF(9.71, 9.71, 9.71) @ 819 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 26 (Cell.) Antenna 3, Body SAR, Back side, Low.ch, 10 MHz Bandwidth, QPSK, 50 RB, 0 RB Offset**

**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (11x11x8)/Cube 0:** Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 32.55 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 2.85 W/kg
**SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.519 W/kg**




0 dB = 1.77 W/kg = 2.48 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR00GP7GX**

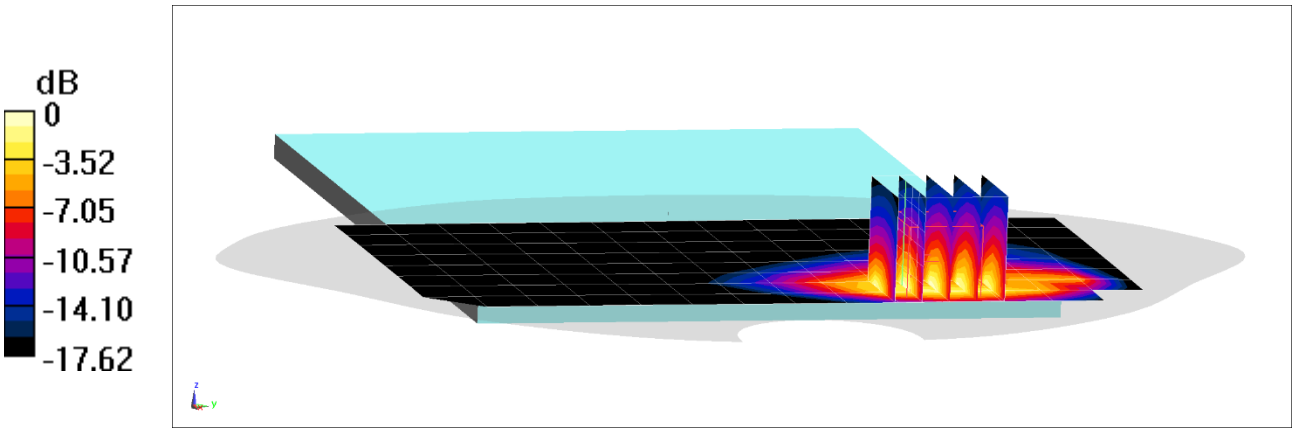
Communication System: UID 0, _LTE Band 5 (Cell.); Frequency: 836.5 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used (interpolated):
f = 836.5 MHz; $\sigma$ = 1.004 S/m; $\varepsilon_r$ = 54.251; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12-26-2019; Ambient Temp: 22.6°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN3837; ConvF(9.08, 9.08, 9.08) @ 836.5 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0 (20deg probe tilt) SUB use; Type: QD 000 P40 CC; Serial: 1403
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 5 (Cell.) Antenna 3, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth, QPSK, 1 RB,0 RB Offset**

**Area Scan (11x17x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.33 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.30 W/kg
**SAR(1 g) = 0.982 W/kg; SAR(10 g) = 0.496 W/kg**




0 dB = 1.51 W/kg = 1.79 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR032P7GX**

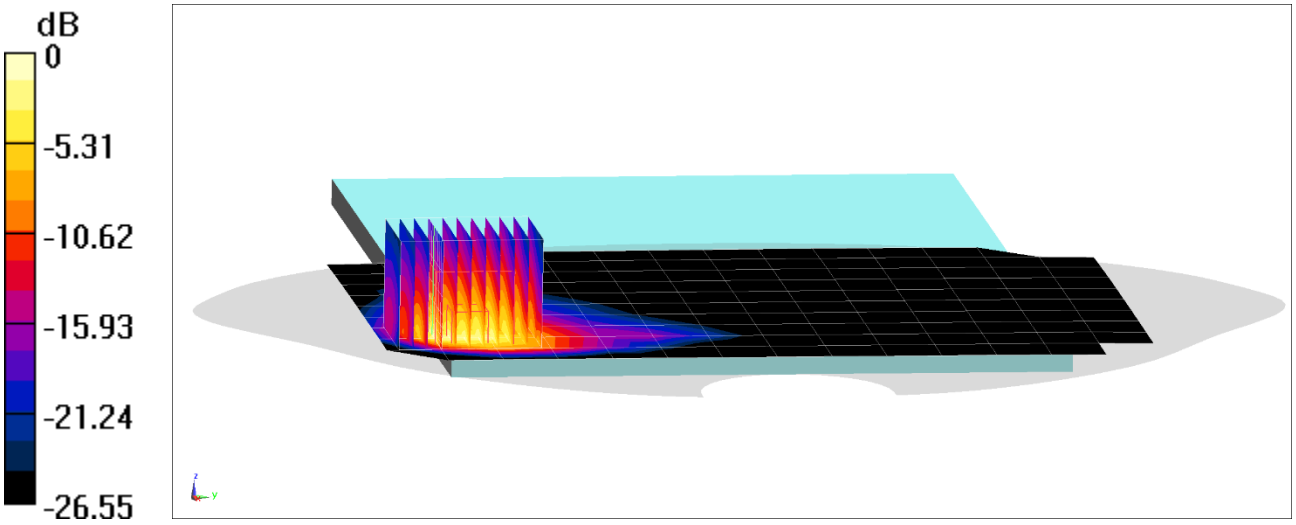
Communication System: UID 0, LTE Band 4 (AWS); Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used (interpolated):
f = 1732.5 MHz; $\sigma$ = 1.494 S/m; $\varepsilon_r$ = 51.591; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-07-2020; Ambient Temp: 20.3°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN7416; ConvF(7.89, 7.89, 7.89) @ 1732.5 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 4 (AWS) Antenna 2A, Body SAR, Back side, Mid.ch, 20 MHz Bandwidth, QPSK, 100 RB, 0 RB Offset**

**Area Scan (11x15x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (9x11x8)/Cube 0:** Measurement grid: dx=3.9mm, dy=3.9mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 25.13 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 5.10 W/kg
**SAR(1 g) = 0.981 W/kg; SAR(10 g) = 0.460 W/kg**




0 dB = 2.24 W/kg = 3.50 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR009P7GX**

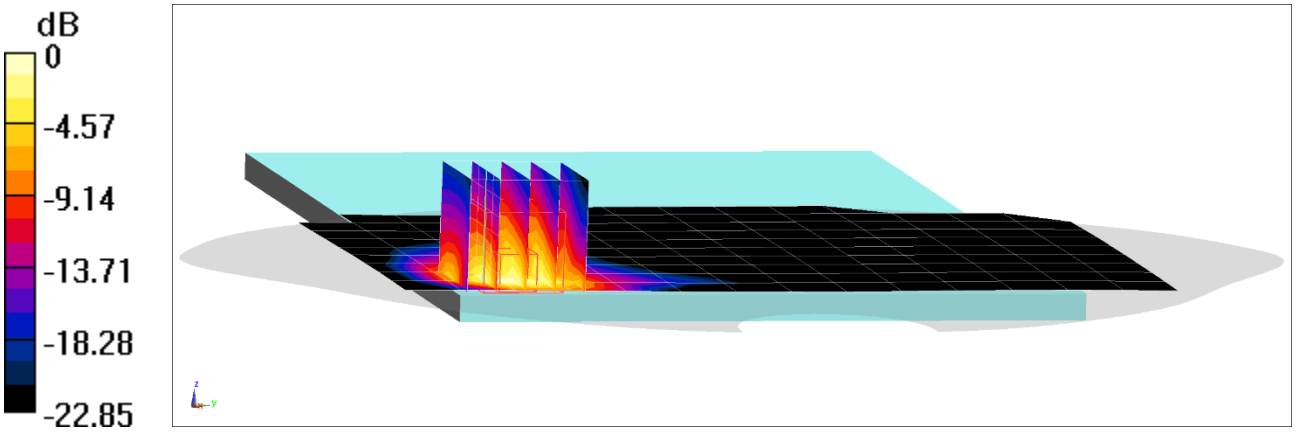
Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1745 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used (interpolated):
f = 1745 MHz; $\sigma$ = 1.479 S/m; $\varepsilon_r$ = 52.321; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-21-2020; Ambient Temp: 23.8°C; Tissue Temp: 18.4°C

Probe: EX3DV4 - SN7427; ConvF(8.14, 8.14, 8.14) @ 1745 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2019
Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## Mode: LTE Band 66 (AWS) Antenna 4A, Body SAR, Back side, Mid.ch, 20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

**Area Scan (11x15x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.18 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 2.23 W/kg
**SAR(1 g) = 0.953 W/kg; SAR(10 g) = 0.462 W/kg**




0 dB = 1.59 W/kg = 2.01 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR00TP7GX**

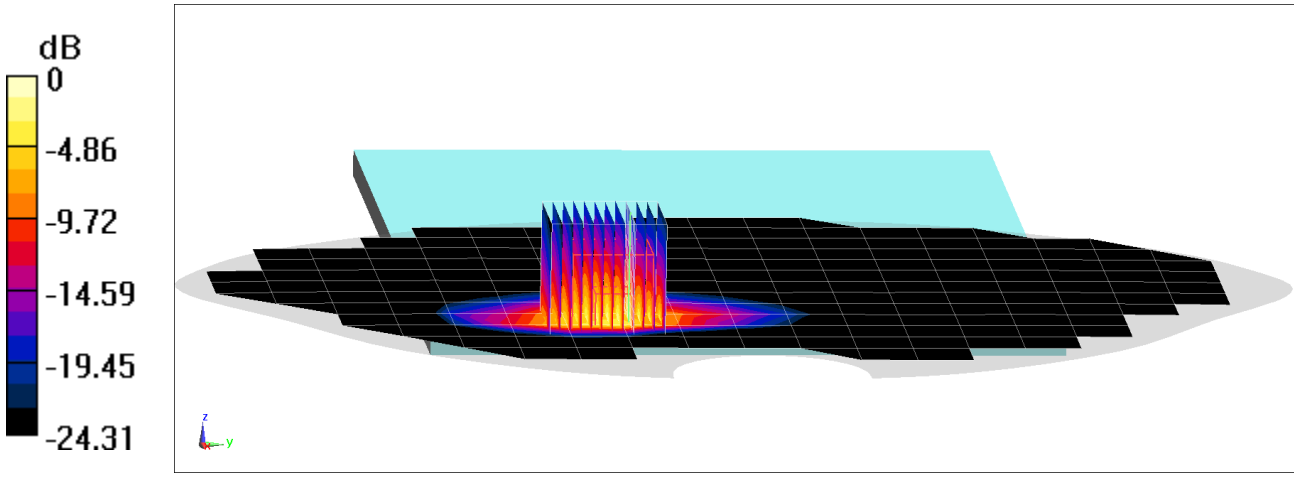
Communication System: UID 0, LTE Band 2 (PCS); Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used:
f = 1880 MHz; $\sigma$ = 1.567 S/m; $\varepsilon_r$ = 52.249; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-18-2020; Ambient Temp: 19.9°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7420; ConvF(7.64, 7.64, 7.64) @ 1880 MHz; Calibrated: 11/21/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1213; Calibrated: 11/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CA; Serial: 1275
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 2 (PCS) Antenna 2B, Body SAR, Back side, Mid.ch, 20 MHz Bandwidth, QPSK, 50 RB, 25 RB Offset**

**Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (12x12x8)/Cube 0:** Measurement grid: dx=3mm, dy=3mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 27.60 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 6.99 W/kg
**SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.481 W/kg**




0 dB = 2.66 W/kg = 4.25 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR009P7GX**

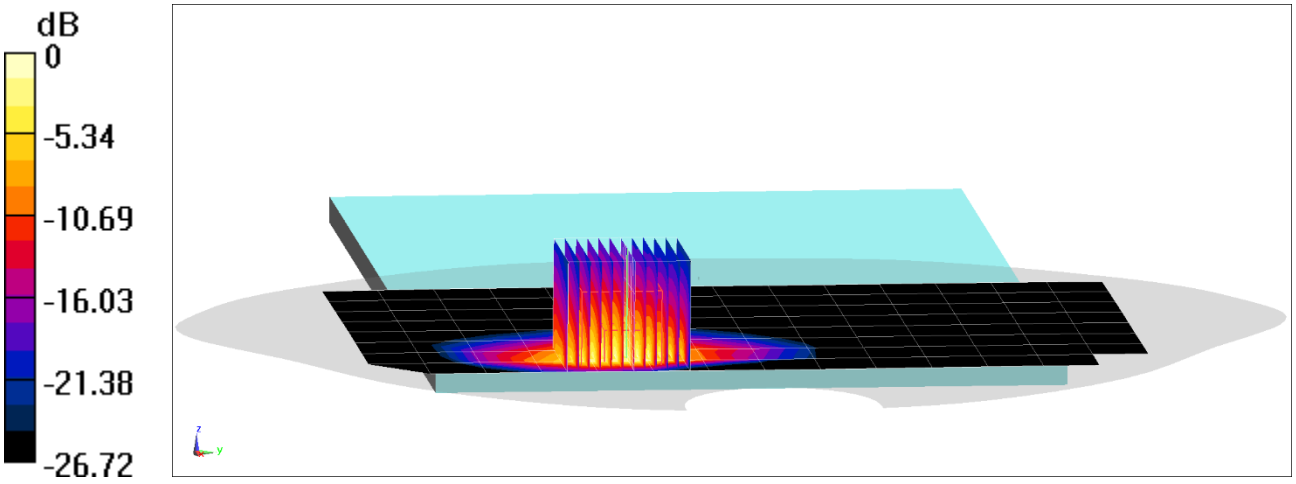
Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1860 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
f = 1860 MHz; $\sigma$ = 1.462 S/m; $\varepsilon_r$ = 51.391; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12-30-2019; Ambient Temp: 21.7°C; Tissue Temp: 19.0°C

Probe: EX3DV4 - SN7491; ConvF(8.04, 8.04, 8.04) @ 1860 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1402; Calibrated: 7/10/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 25 (PCS) Antenna 2B, Body SAR, Back side, Low.ch, 20 MHz Bandwidth, QPSK, 50 RB, 0 RB Offset/Resolution**

**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (12x12x8)/Cube 0:** Measurement grid: dx=3mm, dy=3mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 28.26 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 5.56 W/kg
**SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.436 W/kg**




0 dB = 2.41 W/kg = 3.82 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR009P7GX**

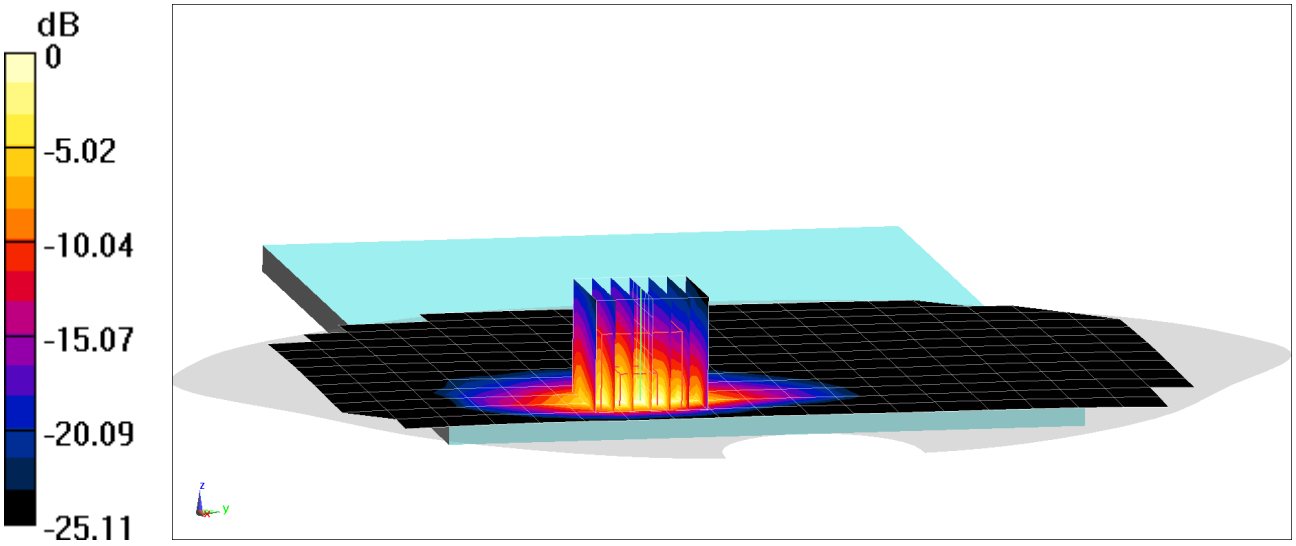
Communication System: UID 0, LTE Band 30; Frequency: 2310 MHz; Duty Cycle: 1:1
Medium: 2300 MHz Body Medium parameters used:
f = 2310 MHz; $\sigma$ = 1.866 S/m; $\varepsilon_r$ = 51.325; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-19-2020; Ambient Temp: 22.4°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7532; ConvF(7.93, 7.93, 7.93) @ 2310 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 30 Antenna 2B, Body SAR, Back side, Mid.ch, 10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

**Area Scan (14x20x1):** Measurement grid: dx=12mm, dy=12mm
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.60 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 2.80 W/kg
**SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.406 W/kg**




0 dB = 1.90 W/kg = 2.79 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZG001P7GP**

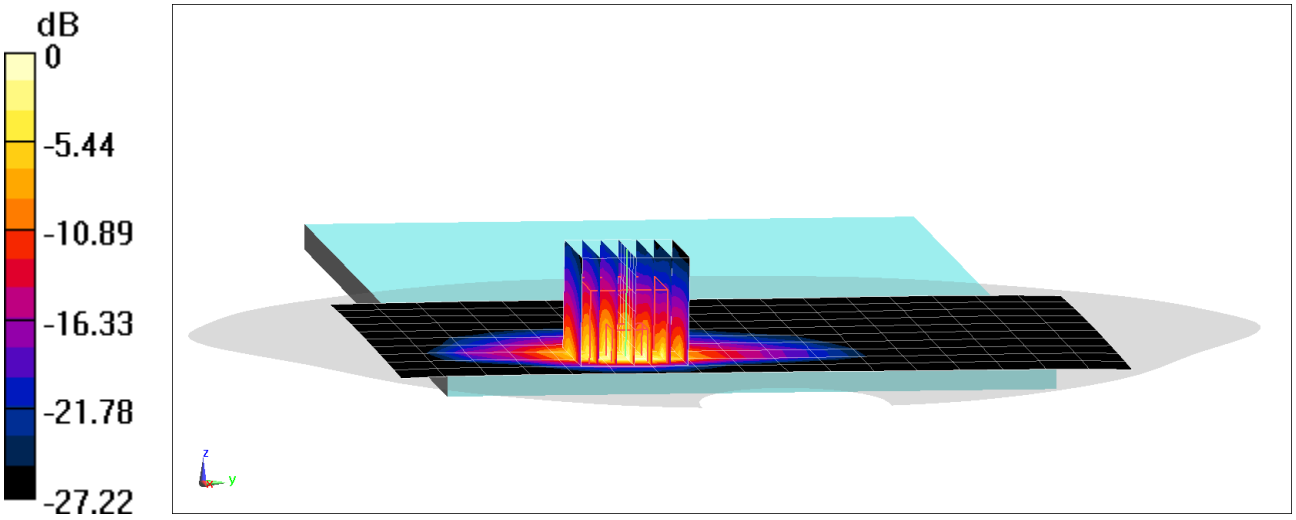
Communication System: UID 0, LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1
Medium: 2450-2600 MHz Body Medium parameters used (interpolated):
f = 2510 MHz; $\sigma$ = 2.106 S/m; $\varepsilon_r$ = 51.624; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12-26-2019; Ambient Temp: 21.6°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7532; ConvF(7.66, 7.66, 7.66) @ 2510 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 7 Antenna 4B, Body SAR, Back side, Low.ch, 20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

**Area Scan (11x18x1):** Measurement grid: dx=12mm, dy=12mm
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.80 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.70 W/kg
**SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.397 W/kg**




0 dB = 2.45 W/kg = 3.89 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR009P7GX**

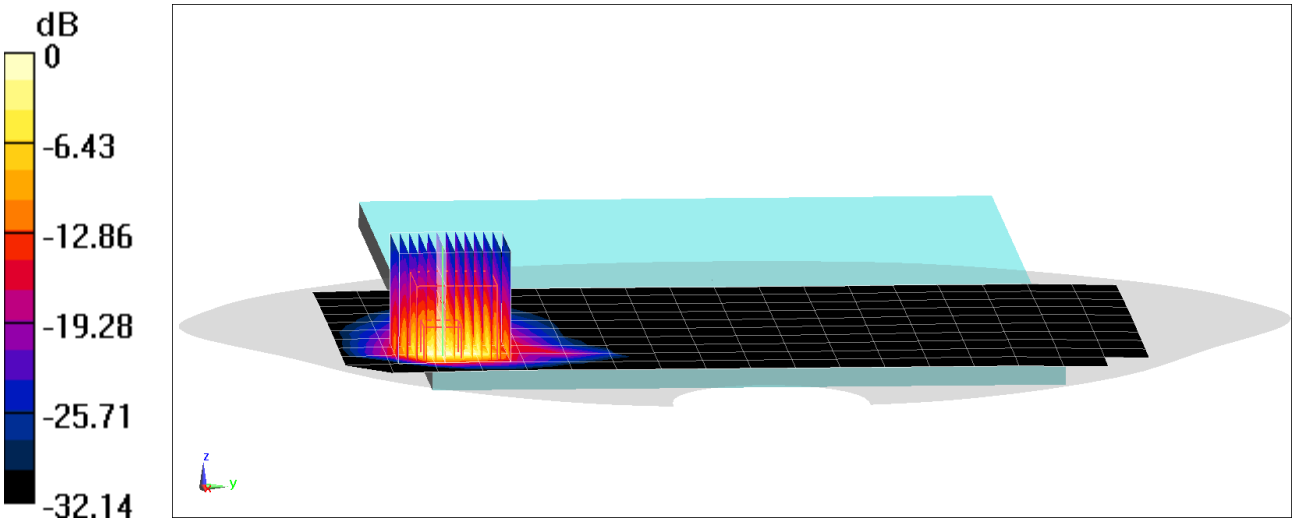
Communication System: UID 0, LTE Band 41 (Class 3); Frequency: 2636.5 MHz; Duty Cycle: 1:1.58
Medium: 2450-2600 MHz Body Medium parameters used (interpolated):
f = 2636.5 MHz; $\sigma$ = 2.278 S/m; $\varepsilon_r$ = 50.296; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-05-2020; Ambient Temp: 22.2°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7532; ConvF(7.47, 7.47, 7.47) @ 2636.5 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 41 Antenna 4A, Body SAR, Back side, Mid-High.ch, 20 MHz Bandwidth, QPSK, 50 RB, 0 RB Offset**

**Area Scan (11x19x1):** Measurement grid: dx=12mm, dy=12mm
**Zoom Scan (13x13x8)/Cube 0:** Measurement grid: dx=2.5mm, dy=2.5mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 17.52 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 5.97 W/kg
**SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.411 W/kg**




0 dB = 2.93 W/kg = 4.67 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZR00GP7GX**

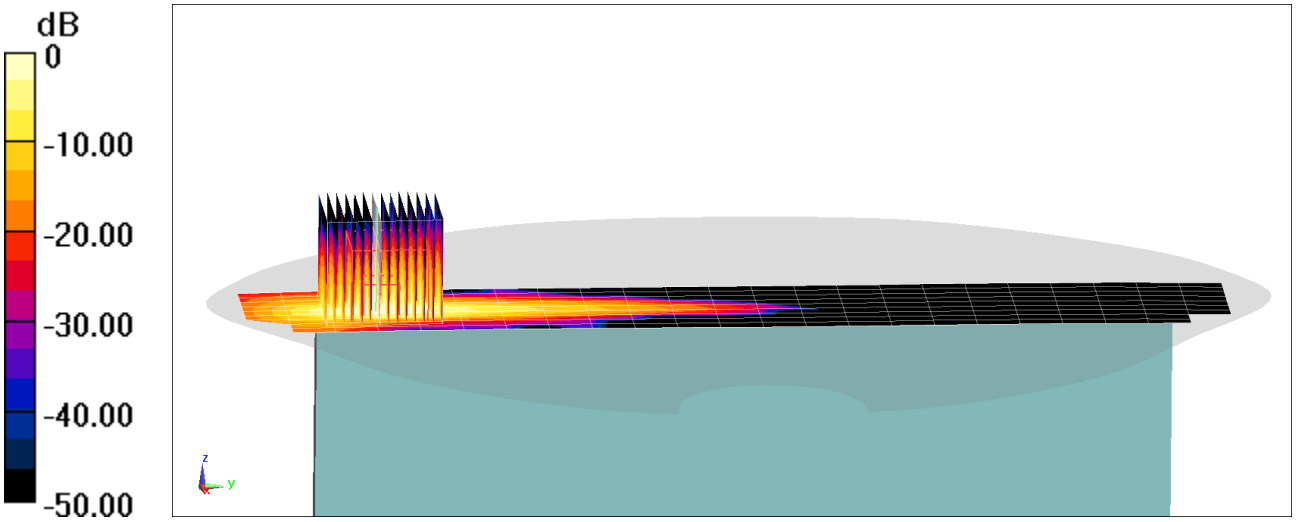
Communication System: UID 0, _LTE Band 48; Frequency: 3560 MHz; Duty Cycle: 1:1.58
Medium: 3500-3730 MHz Body Medium parameters used (interpolated):
f = 3560 MHz; $\sigma$ = 3.464 S/m; $\varepsilon_r$ = 48.936; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-07-2020; Ambient Temp: 22.3°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN3949; ConvF(6.88, 6.88, 6.88) @ 3560 MHz; Calibrated: 8/29/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1408; Calibrated: 8/12/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1596
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: LTE Band 48 Antenna 3, Body SAR, Right Edge, Low.ch, 20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

**Area Scan (10x24x1):** Measurement grid: dx=5mm, dy=12mm
**Zoom Scan (14x14x8)/Cube 0:** Measurement grid: dx=2.5mm, dy=2.5mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 19.22 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 4.55 W/kg
**SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.300 W/kg**




0 dB = 2.69 W/kg = 4.30 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZN003P7GX**

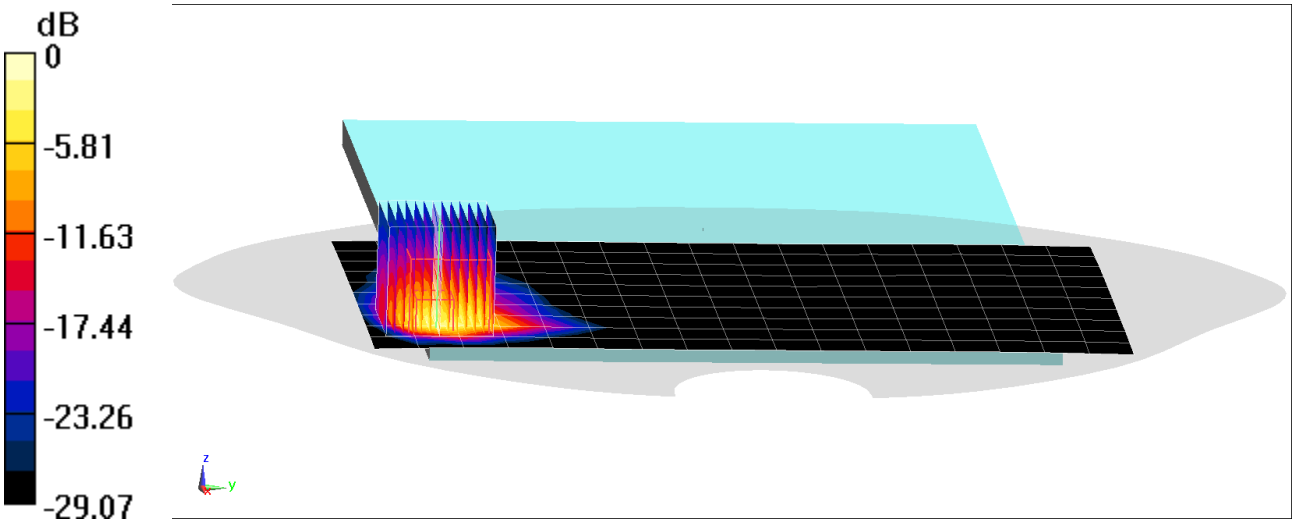
Communication System: UID 0, IEEE 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: 2450 MHz Body Medium parameters used (interpolated):
f = 2412 MHz; $\sigma$ = 1.989 S/m; $\varepsilon_r$ = 51.228; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12-20-2019; Ambient Temp: 21.0°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7532; ConvF(7.66, 7.66, 7.66) @ 2412 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: IEEE 802.11b Antenna 4A Variant 1, 22 MHz Bandwidth, Body SAR, Ch 1, 1 Mbps, Back Side**

**Area Scan (11x18x1):** Measurement grid: dx=12mm, dy=12mm
**Zoom Scan (13x13x8)/Cube 0:** Measurement grid: dx=2.4mm, dy=2.4mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 19.45 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 4.32 W/kg
**SAR(1 g) = 0.875 W/kg; SAR(10 g) = 0.362 W/kg**




0 dB = 2.30 W/kg = 3.62 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZN009P7GX**

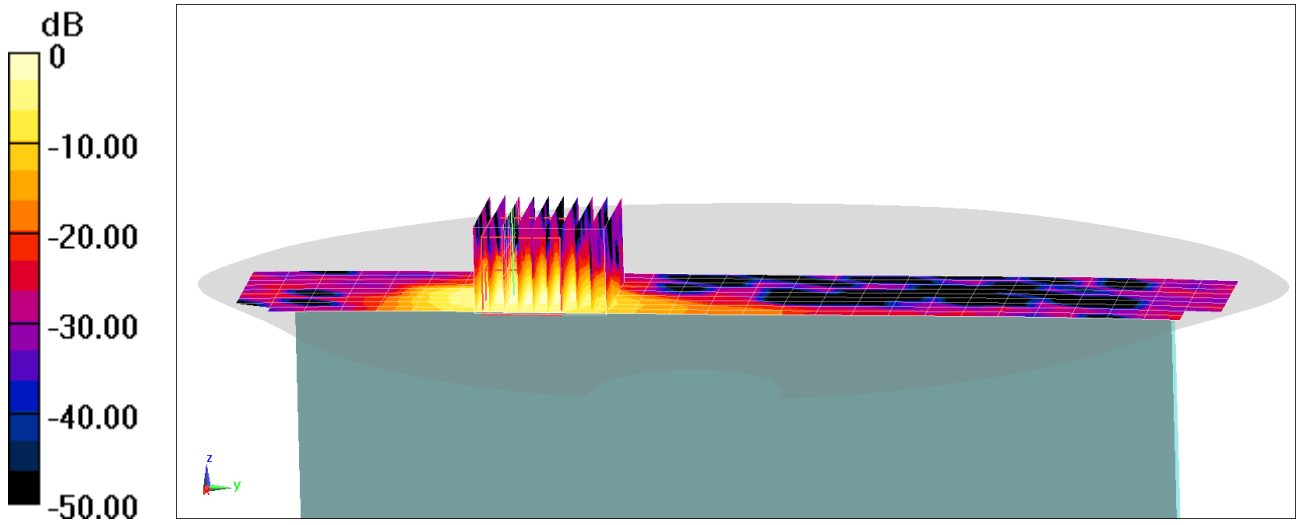
Communication System: UID 0, _IEEE 802.11ac; Frequency: 5775 MHz; Duty Cycle: 1:1
Medium: 5 GHz Body Medium parameters used (interpolated):
f = 5775 MHz; $\sigma$ = 5.903 S/m; $\varepsilon_r$ = 46.471; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12-16-2019; Ambient Temp: 22.6°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN3837; ConvF(4.34, 4.34, 4.34) @ 5775 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0 (20deg probe tilt) SUB use; Type: QD 000 P40 CC; Serial: 1403
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Mode: IEEE 802.11ac 5GHz ANTupper Variant 2, U-NII-3, 80 MHz Bandwidth, Body SAR, Ch 155, 29.3 Mbps, Right Edge**

**Area Scan (10x28x1):** Measurement grid: dx=5mm, dy=10mm
**Zoom Scan (10x10x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4
Reference Value = 12.89 V/m; Power Drift = 0.20 dB
Peak SAR (extrapolated) = 5.07 W/kg
**SAR(1 g) = 0.937 W/kg; SAR(10 g) = 0.323 W/kg**




0 dB = 2.54 W/kg = 4.05 dBW/kg

**DUT: BCGA2068; Type: Tablet Device; Serial: DLXZN003P7GX**

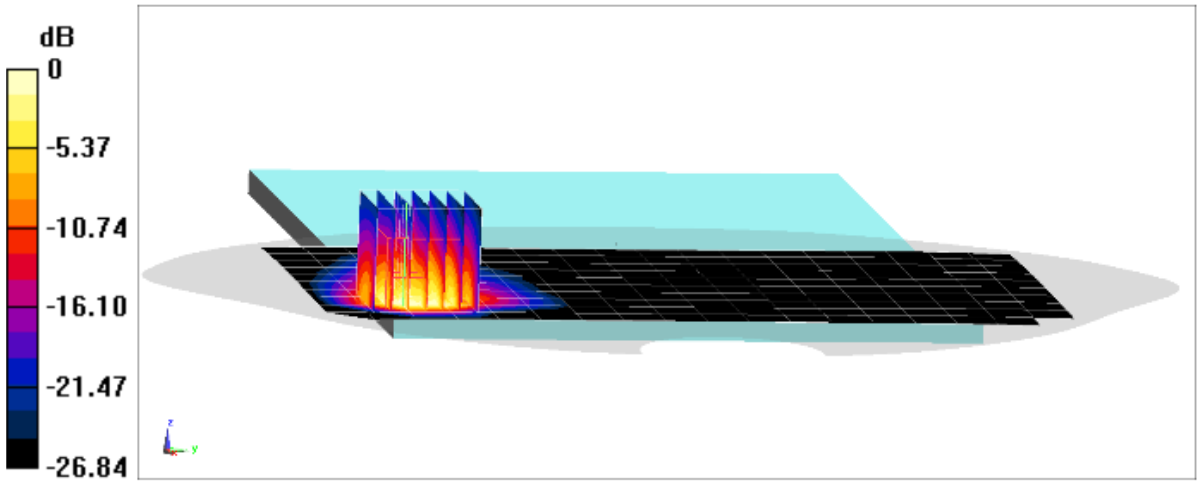
Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.297
Medium: 2450 MHz Medium parameters used (interpolated):
f = 2441 MHz; $\sigma$ = 1.937 S/m; $\varepsilon_r$ = 50.89; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01-14-2020; Ambient Temp: 22.1°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7532; ConvF(7.66, 7.66, 7.66) @ 2441 MHz; Calibrated: 4/12/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn501; Calibrated: 4/17/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CC; Serial: 1179
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## Mode: Bluetooth Antenna 2A Variant 1, Body SAR, Ch 39, 1 Mbps, Back Side

**Area Scan (11x19x1):** Measurement grid: dx=12mm, dy=12mm
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.17 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.66 W/kg
**SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.470 W/kg**




0 dB = 2.26 W/kg = 3.54 dBW/kg

# APPENDIX B: SYSTEM VERIFICATION

© 2020 PCTEST

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1097**

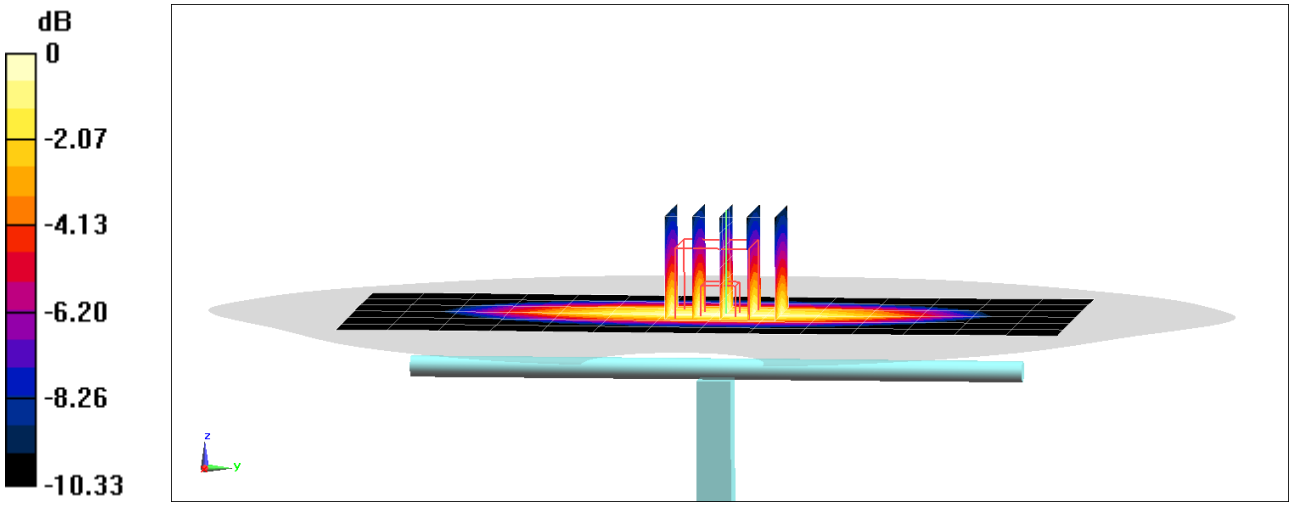
Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1
Medium: 750 MHz Body Medium parameters used (interpolated):
f = 750 MHz; $\sigma$ = 0.977 S/m; $\varepsilon_r$ = 54.636; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 01-05-2020; Ambient Temp: 20.0°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 750 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 750 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 2.66 W/kg
**SAR(1 g) = 1.77 W/kg; SAR(10 g) = 1.18 W/kg**
Deviation(1 g) = 3.39%




0 dB = 2.36 W/kg = 3.73 dBW/kg

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1097**

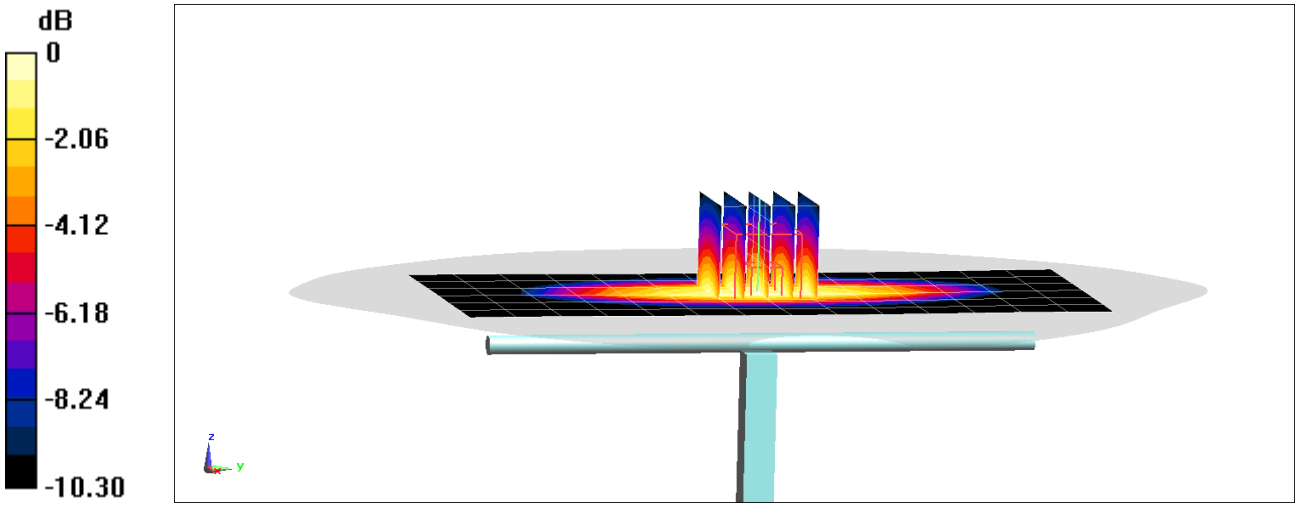
Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1
Medium: 750 MHz Body Medium parameters used (interpolated):
f = 750 MHz; $\sigma$ = 0.976 S/m; $\varepsilon_r$ = 54.862; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 01-07-2020; Ambient Temp: 20.5°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7421; ConvF(9.66, 9.66, 9.66) @ 750 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 750 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 2.65 W/kg
**SAR(1 g) = 1.76 W/kg; SAR(10 g) = 1.16 W/kg**
Deviation(1 g) = 2.80%




0 dB = 2.34 W/kg = 3.69 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d040**

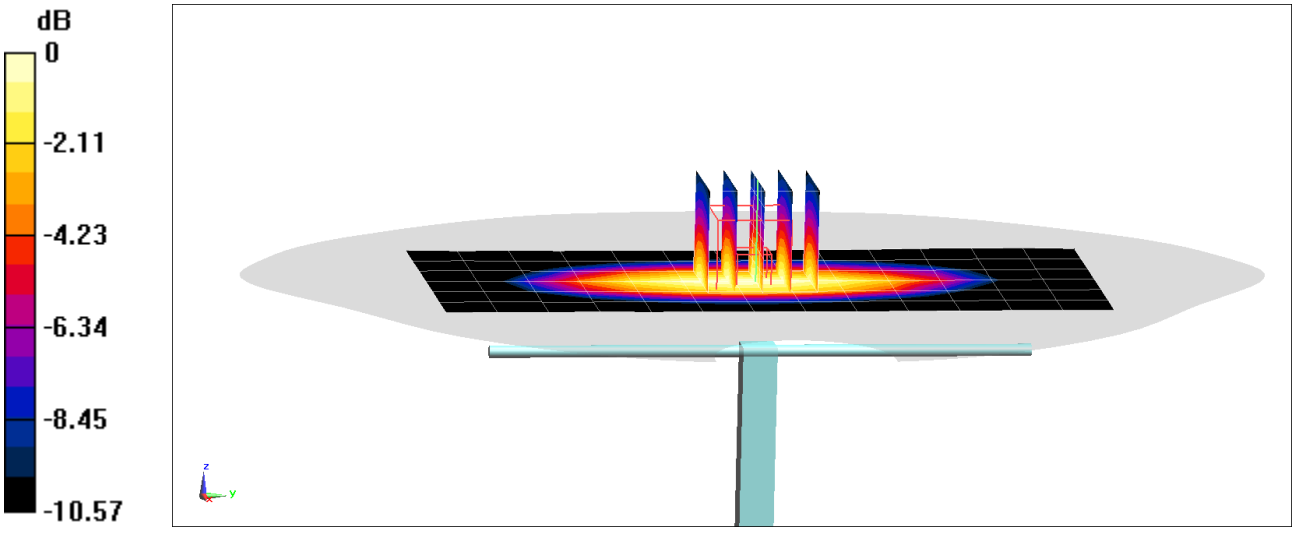
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used:
f = 835 MHz; $\sigma$ = 1.002 S/m; $\varepsilon_r$ = 54.27; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12-26-2019; Ambient Temp: 22.6°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN3837; ConvF(9.08, 9.08, 9.08) @ 835 MHz; Calibrated: 1/28/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn793; Calibrated: 1/15/2019
Phantom: Twin-SAM V4.0 (20deg probe tilt) SUB use; Type: QD 000 P40 CC; Serial: 1403
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 835 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 3.05 W/kg
**SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.33 W/kg**
Deviation(1 g) = 7.03%




0 dB = 2.69 W/kg = 4.30 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d040**

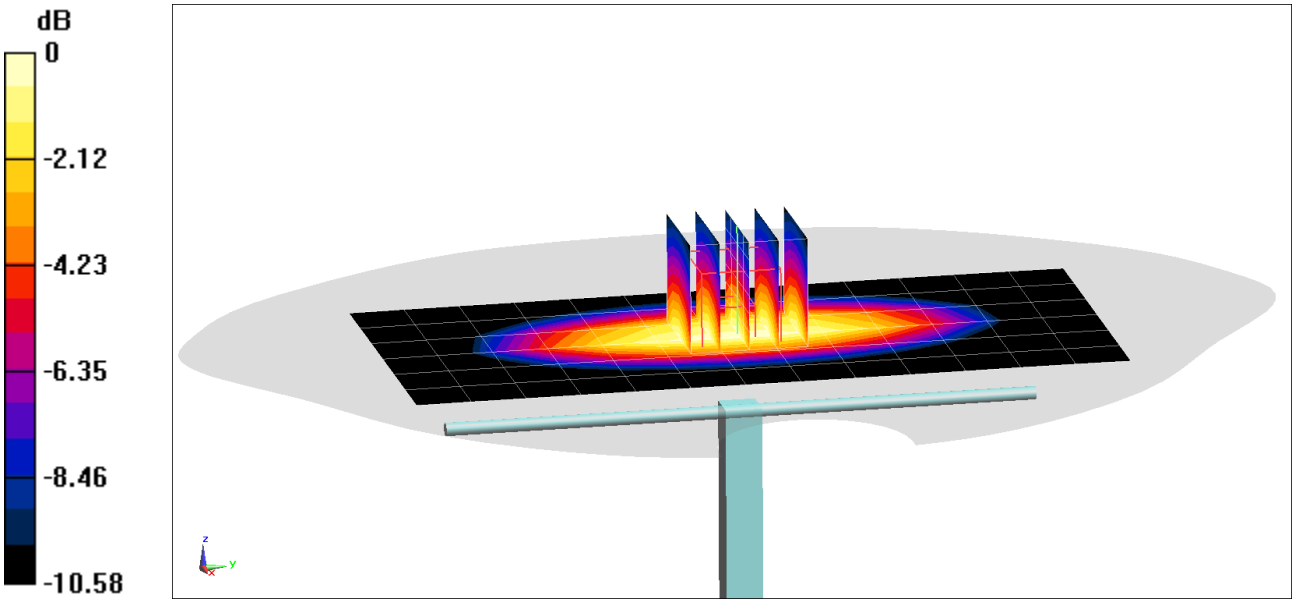
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used:
f = 835 MHz; $\sigma$ = 0.978 S/m; $\varepsilon_r$ = 54.515; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12-30-2019; Ambient Temp: 20.0°C; Tissue Temp: 19.1°C

Probe: EX3DV4 - SN7416; ConvF(9.71, 9.71, 9.71) @ 835 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 835 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 2.86 W/kg
**SAR(1 g) = 1.9 W/kg; SAR(10 g) = 1.25 W/kg**
Deviation(1 g) = -0.31%




0 dB = 2.52 W/kg = 4.01 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d040**

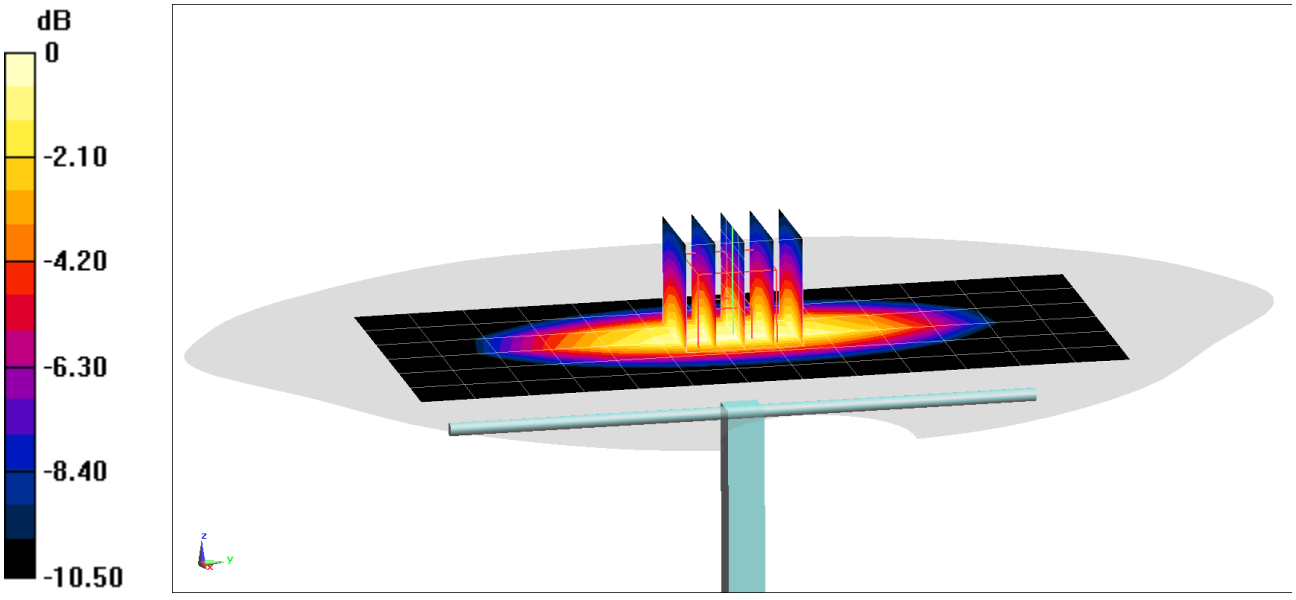
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used:
f = 835 MHz; $\sigma$ = 1.001 S/m; $\varepsilon_r$ = 56.021; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 01-09-2020; Ambient Temp: 22.0°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7416; ConvF(9.71, 9.71, 9.71) @ 835 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 835 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 2.85 W/kg
**SAR(1 g) = 1.89 W/kg; SAR(10 g) = 1.24 W/kg**
Deviation(1 g) = -0.84%




0 dB = 2.52 W/kg = 4.01 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d040**

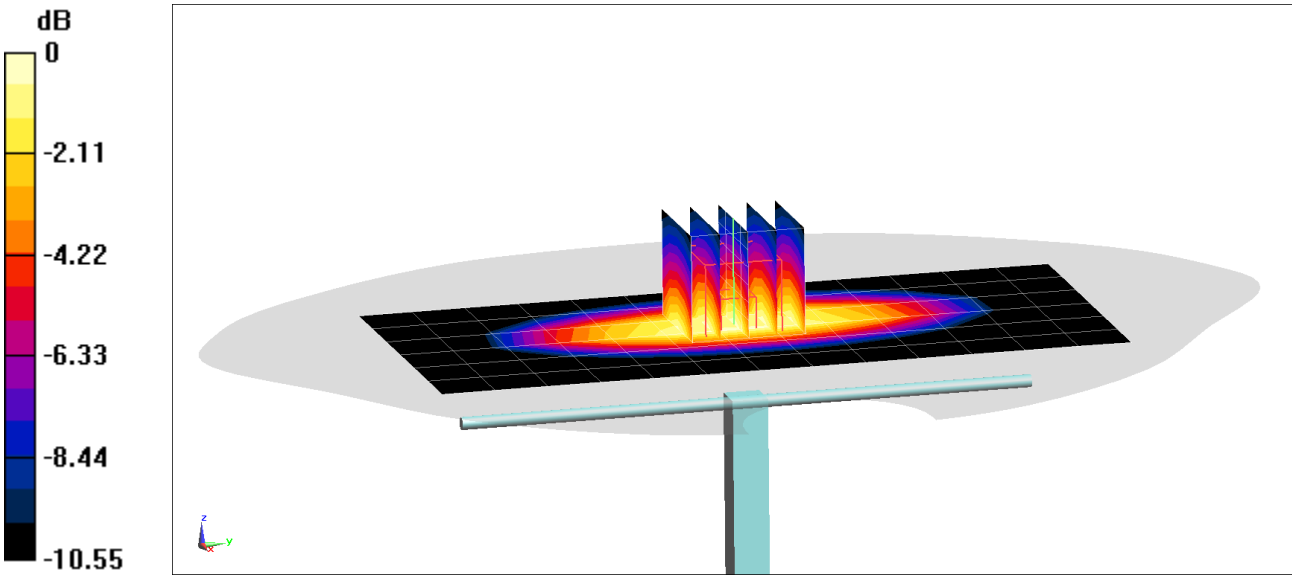
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 835 MHz Body Medium parameters used:
f = 835 MHz; $\sigma$ = 0.989 S/m; $\varepsilon_r$ = 55.563; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.5 cm

Test Date: 01-15-2020; Ambient Temp: 20.0°C; Tissue Temp: 18.4°C

Probe: EX3DV4 - SN7416; ConvF(9.71, 9.71, 9.71) @ 835 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 835 MHz System Verification at 23.0 dBm (200 mW)

**Area Scan (7x14x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 2.76 W/kg
**SAR(1 g) = 1.81 W/kg; SAR(10 g) = 1.19 W/kg**
Deviation(1 g) = -5.04%




0 dB = 2.44 W/kg = 3.87 dBW/kg

# PCTEST

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1083**

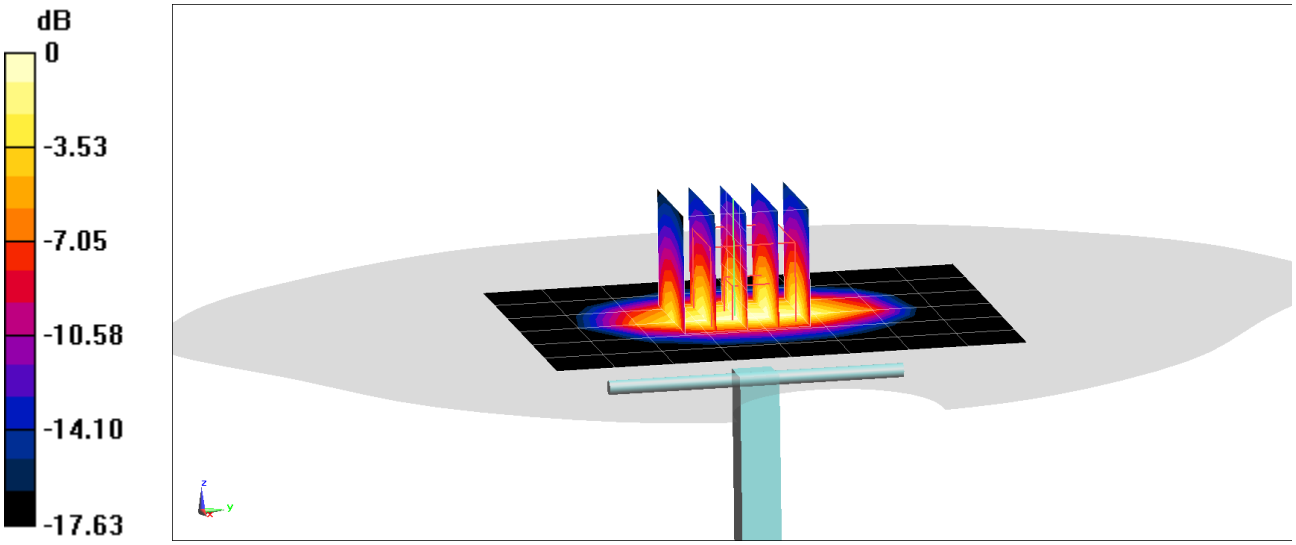
Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used:
f = 1750 MHz; $\sigma$ = 1.509 S/m; $\varepsilon_r$ = 51.554; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-07-2020; Ambient Temp: 20.3°C; Tissue Temp: 19.4°C

Probe: EX3DV4 - SN7416; ConvF(7.89, 7.89, 7.89) @ 1750 MHz; Calibrated: 6/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn701; Calibrated: 6/14/2019
Phantom: Twin-SAM V8.0_Left; Type: QD 000 P41 AA; Serial: 1935
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 6.86 W/kg
**SAR(1 g) = 3.81 W/kg; SAR(10 g) = 2.01 W/kg**
Deviation(1 g) = 2.70%




0 dB = 5.73 W/kg = 7.58 dBW/kg

# PCTEST

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1083**

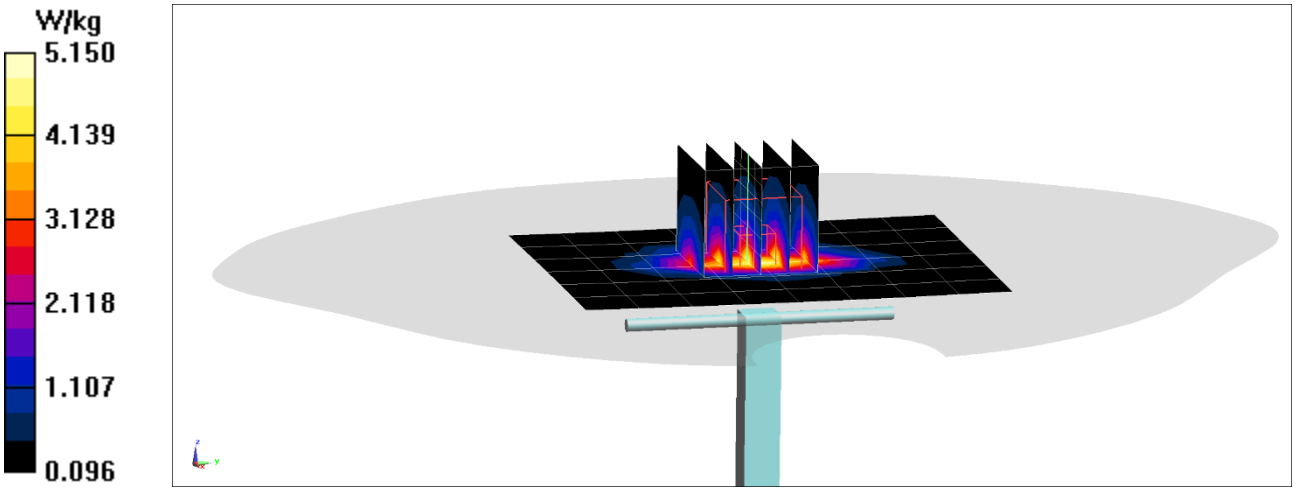
Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1
Medium: 1750 MHz Body Medium parameters used:
f = 1750 MHz; $\sigma$ = 1.484 S/m; $\varepsilon_r$ = 52.302; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-21-2020; Ambient Temp: 23.8°C; Tissue Temp: 18.4°C

Probe: EX3DV4 - SN7427; ConvF(8.14, 8.14, 8.14) @ 1750 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1403; Calibrated: 2/13/2019
Phantom: Twin-SAM V4.0 Main; Type: QD 000 P40 CC; Serial: 1114
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 6.07 W/kg
**SAR(1 g) = 3.42 W/kg; SAR(10 g) = 1.82 W/kg**
Deviation(1 g) = -7.82%



**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d026**

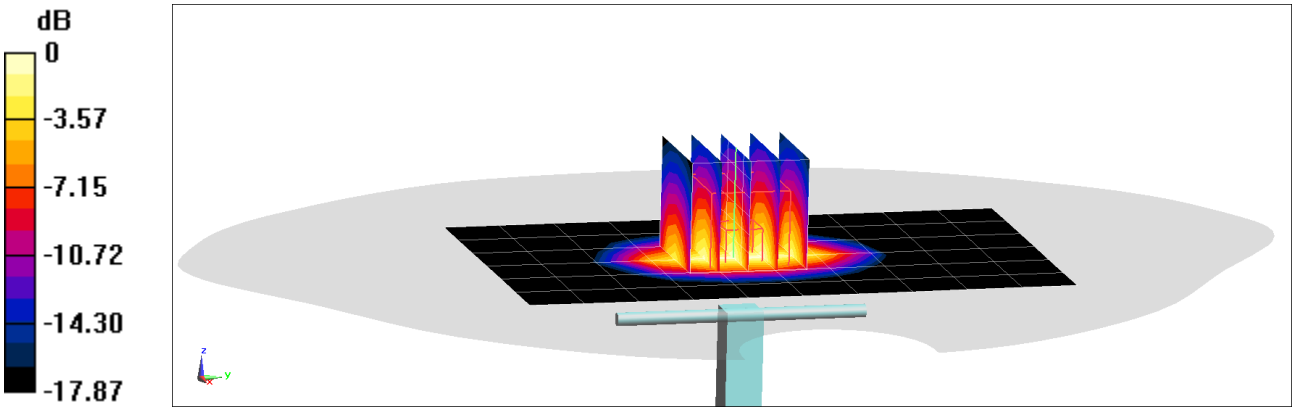
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
f = 1900 MHz; $\sigma$ = 1.491 S/m; $\varepsilon_r$ = 51.205; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12-30-2019; Ambient Temp: 21.7°C; Tissue Temp: 19.0°C

Probe: EX3DV4 - SN7491; ConvF(8.04, 8.04, 8.04) @ 1900 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1402; Calibrated: 7/10/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 7.60 W/kg
**SAR(1 g) = 4.18 W/kg; SAR(10 g) = 2.17 W/kg**
Deviation(1 g) = 4.76%




0 dB = 6.39 W/kg = 8.06 dBW/kg

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d026**

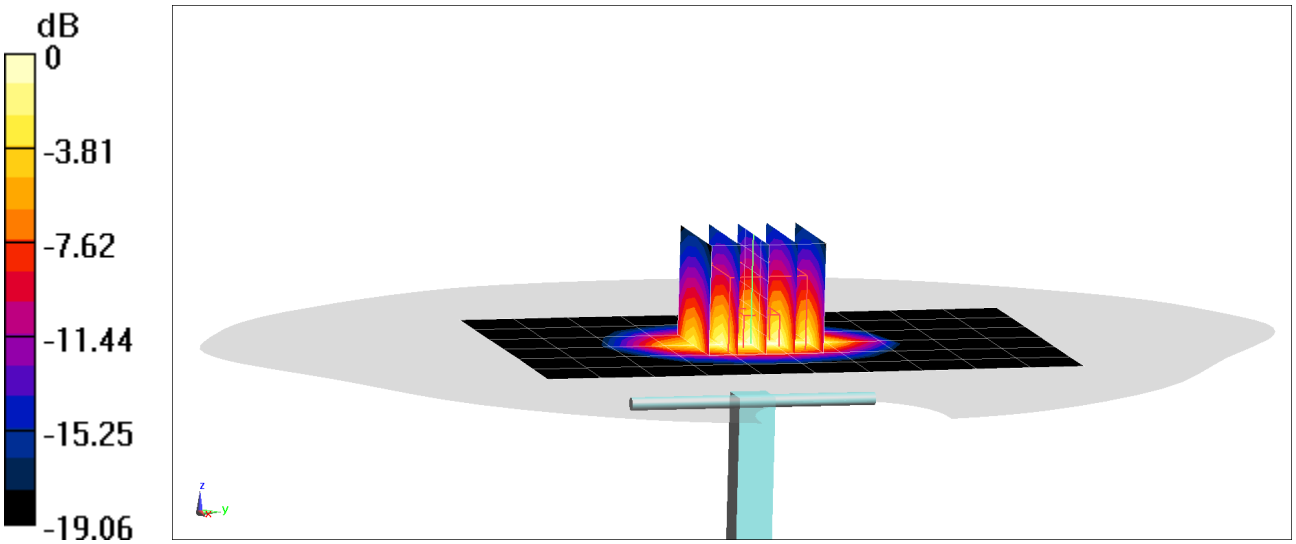
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
f = 1900 MHz; $\sigma$ = 1.555 S/m; $\varepsilon_r$ = 51.648; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-07-2020; Ambient Temp: 21.7°C; Tissue Temp: 20.4°C

Probe: EX3DV4 - SN7491; ConvF(8.04, 8.04, 8.04) @ 1900 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1402; Calibrated: 7/10/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1936
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 7.58 W/kg
**SAR(1 g) = 4.02 W/kg; SAR(10 g) = 2.03 W/kg**
Deviation(1 g) = 0.75%




0 dB = 6.30 W/kg = 7.99 dBW/kg

# PCTEST

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d026**

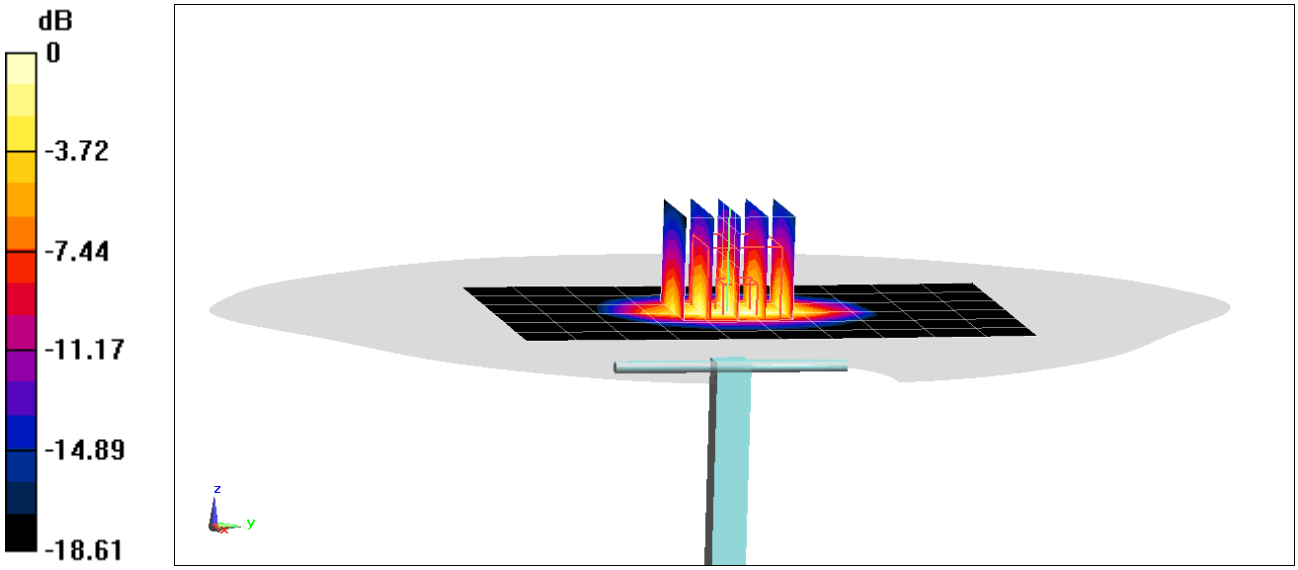
Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 MHz Body Medium parameters used (interpolated):
f = 1900 MHz; $\sigma$ = 1.55 S/m; $\varepsilon_r$ = 52.373; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01-15-2020; Ambient Temp: 21.5°C; Tissue Temp: 19.8°C

Probe: EX3DV4 - SN7421; ConvF(7.6, 7.6, 7.6) @ 1900 MHz; Calibrated: 3/18/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn604; Calibrated: 3/13/2019
Phantom: Twin-SAM V4.0; Type: QD 000 P40 CD; Serial: 1736
Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 7.61 W/kg
**SAR(1 g) = 4.1 W/kg; SAR(10 g) = 2.11 W/kg**
Deviation(1 g) = 2.76%




0 dB = 6.36 W/kg = 8.03 dBW/kg