TEST REPORT

FCC SAR Part 1 Test for SM-A266MDS
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-SR-2501-FC006-R2

DATE OF ISSUE
February 14, 2025

Tested by
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TEST REPORT

FCC Part 1 SAR Test for certification

REPORT NO.
HCT-SR-2501-FC006-R2

DATE OF ISSUE
Feb. 14, 2025

FCC ID
A3LSMA266M

Applicant	SAMSUNG Electronics Co., Ltd 129, Samsung-ro, Yeongtong-gu, Suwon-Si, Gyeonggi-do, 16677, Korea
Product Name	Mobile Phone
Model Name	SM-A266M/DS
Additional Model Name	SM-A266M
Date of Test	Dec. 11, 2024~Jan. 15, 2025
Location of Test	■ Permanent Testing Lab☐ On Site Testing Lab (Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA)
FCC Rule Part(s)	CFR § 2.1093
Test Results	PASS (SAR Limit : 1.6 W/kg) Refer to the clause 3.2 Attestation of test result

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REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	Jan. 22, 2025	Initial Release
1	Jan. 23, 2025	Revised Sec. 4.1, Sec. 4.5
2	Feb. 14, 2025	Revised Sec. 4.1, Sec. 4.10.2

Notice

Content
The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated. The test results have only been applied with the test methods required by the standard(s). The laboratory is not accredited for the test results marked *. Information provided by the applicant is marked **. Test results provided by external providers are marked ***. When confirmation of authenticity of this test report is required, please contact www.hct.co.kr The test results in this test report are not associated with the ((KS Q) ISO/IEC 17025) accreditation by KOLAS (Korea Laboratory Accreditation Scheme) / A2LA (American Association for Laboratory Accreditation) that are under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA).

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1. Test Regulations

The tests documented in this report were performed in accordance with FCC CFR § 2.1093, IEEE 1528-2013, ANSI C63.26-2015 the following FCC Published RF exposure KDB procedures:

- FCC KDB Publication 941225 D01 3G SAR Procedures v03r01
- FCC KDB Publication 941225 D06 Hot Spot SAR v02r01
- FCC KDB Publication 941225 D05 SAR for LTE Devices v02r05
- FCC KDB Publication 941225 D05A LTE Rel.10 KDB Inquiry sheet v01r02
- FCC KDB Publication 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB Publication 447498 D01 General RF Exposure Guidance v06
- FCC KDB Publication 648474 D04 Handset SAR v01r03
- FCC KDB Publication 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
- FCC KDB Publication 865664 D02 SAR Reporting v01r02
- FCC KDB Publication 690783 D01 SAR Listings on Grants v01r03
- FCC KDB Publication 971168 D01 Power Meas License Digital Systems v03r01

In Addition to the above, the following information was used.

- October 2013 TCB Workshop Notes (GPRS testing criteria)
- October 2014 TCB Workshop Notes (Overlapping LTE Bands)
- April 2015 TCB Workshop Notes (Overlapping LTE Bands Test exclusion)
- April 2015 TCB Workshop Notes (Simultaneous transmission summation clarified)
- October 2016 TCB Workshop Notes (Bluetooth Duty Factor)
- November 2017 TCBC Workshop Notes (LTE Carrier Aggregation)
- April 2018 TCBC Workshop Notes (LTE UL CA, DL CA SAR Test Exclusion)
- April 2022 TCBC Workshop Notes (Sum-Peak Location Separation Ratio)

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2. Test Location

2.1 Test Laboratory

Company Name	HCT Co., Ltd.
Address	74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si,Gyeonggi-do, 17383 KOREA
Telephone	031-645-6300
Fax.	031-645-6401

2.2 Test Facilities

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

Korea	National Radio Research Agency (Designation No. KR0032)
	KOLAS (Testing No. KT197)

3. Information of the EUT

3.1 General Information of the EUT

Model Name	SM-A266M/DS
Additional Model Name	SM-A266M
Equipment Type	Mobile Phone
FCC ID	A3LSMA266M
Application Type	Certification
Applicant	SAMSUNG Electronics Co., Ltd.

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3.2 Attestation of test result of device under test

The Highest Reported SAR						
Band	Tx. Frequency	Equipment Class	Reported SAR (W/kg)			
			1 g Head	1 g Hotspot	1 g Body -worn	10 g Extremity
GSM/GPRS/EDGE 850	824.2 MHz ~ 848.8 MHz	PCE	0.32	1.19	**1.19**	N/A
GSM/GPRS/EDGE 1900	1 850.2 MHz~ 1 909.8 MHz	PCE	0.15	0.49	0.49	N/A
UMTS Band 5	826.4 MHz~ 846.6 MHz	PCE	0.29	0.67	0.67	N/A
UMTS Band 4	1 712.4 MHz~ 1 752.6 MHz	PCE	0.18	1.09	1.09	N/A
UMTS Band 2	1 852.4 MHz~ 1 907.6 MHz	PCE	0.34	0.82	0.79	N/A
LTE FDD Band 2 (PCS)	1 850.7 MHz~ 1 909.3 MHz	PCE	**0.82**	0.87	0.75	N/A
LTE FDD Band 4 (AWS)	1 710.7 MHz~ 1 754.3 MHz	PCE	N/A	N/A	N/A	N/A
LTE FDD Band 5 (Cell)	824.7 MHz~ 848.3 MHz	PCE	0.30	N/A	N/A	N/A
LTE FDD Band 12	699.7 MHz~ 715.3 MHz	PCE	0.18	0.31	0.31	N/A
LTE FDD Band 13	779.5 MHz ~ 784.5 MHz	PCE	0.23	0.47	0.47	N/A
LTE FDD Band 17	706.5 MHz~ 713.5 MHz	PCE	N/A	N/A	N/A	N/A
LTE FDD Band 26 (Cell)	814.7 MHz~ 848.3 MHz	PCE	0.18	0.64	0.64	N/A
LTE TDD Band 41	2 498.5 MHz ~ 2 687.5 MHz	PCE	0.11	0.34	0.24	N/A
LTE FDD Band 66 (AWS)	1 710.7 MHz ~ 1 779.3 MHz	PCE	0.23	1.00	1.00	N/A
NR FDD Band n5	826.5 MHz~ 846.5 MHz	PCE	0.29	0.43	0.43	N/A
NR FDD Band n66	1 712.5 MHz~ 1 777.5 MHz	PCE	0.81	**1.20**	1.04	N/A
2.4 GHz WLAN	2 412 MHz~ 2 462 MHz	DTS	0.43	0.99	0.77	N/A
U-NII-1	5 180 MHz~ 5 240 MHz	NII	N/A	N/A	N/A	N/A
U-NII-2A	5 260 MHz~ 5 320 MHz	NII	0.13	0.33	0.33	N/A
U-NII-2C	5 500 MHz~ 5 720 MHz	NII	0.14	0.46	0.46	N/A
U-NII-3	5 745 MHz~ 5 825 MHz	NII	0.11	0.51	0.51	N/A
U-NII-4	5 845 MHz ~ 5 885 MHz	NII	0.11	0.42	0.42	N/A
Bluetooth	2 402 MHz~ 2 480 MHz	DSS	0.13	0.20	0.18	N/A
NFC	13.56 MHz	DXX	N/A	N/A	N/A	**<0.10**
Simultaneous SAR per KDB 690783 D01v01r03			**1.57**	**1.54**	**1.30**	**<0.10**
Date(s) of Tests:	Dec. 11, 2024~Jan. 15, 2025					

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4. Device Under Test Description

4.1 DUT specification

Device Wireless specification overview		
Band & Mode	Operating Mode	Tx Frequency
GSM850	Voice / Data	824.2 MHz~ 848.8 MHz
GSM1900	Voice / Data	1 850.2 MHz~ 1 909.8 MHz
UMTS Band 2	Voice / Data	1 852.4 MHz~ 1 907.6 MHz
UMTS Band 4	Voice / Data	1 712.4 MHz~ 1 752.6 MHz
UMTS Band 5	Voice / Data	826.4 MHz~ 846.6 MHz
LTE FDD Band 2 (PCS)	Voice / Data	1 850.7 MHz~ 1 909.3 MHz
LTE FDD Band 4 (AWS)	Voice / Data	1 710.7 MHz~ 1 754.3 MHz
LTE FDD Band 5 (Cell)	Voice / Data	824.7 MHz~ 848.3 MHz
LTE FDD Band 12	Voice / Data	699.7 MHz~ 715.3 MHz
LTE FDD Band 13	Voice / Data	779.5 MHz~ 784.5 MHz
LTE FDD Band 17	Voice / Data	706.5 MHz~ 713.5 MHz
LTE FDD Band 26	Voice / Data	814.7 MHz~ 848.3 MHz
LTE TDD Band 41	Voice / Data	2 498.5 MHz ~ 2 687.5 MHz
LTE FDD Band 66 (AWS)	Voice / Data	1 710.7 MHz ~ 1 779.3 MHz
NR FDD Band n5	Voice / Data	826.5 MHz~ 846.5 MHz
NR FDD Band n66	Voice / Data	1 712.5 MHz~ 1 777.5 MHz
U-NII-1	Voice / Data	5 180 MHz ~ 5 240 MHz
U-NII-2A	Voice / Data	5 260 MHz ~ 5 320 MHz
U-NII-2C	Voice / Data	5 500 MHz ~ 5 720 MHz
U-NII-3	Voice / Data	5 745 MHz ~ 5 825 MHz
U-NII-4	Voice / Data	5 845 MHz ~ 5 885 MHz
2.4 GHz WLAN	Voice / Data	2 412 MHz ~ 2 462 MHz
Bluetooth / LE 5.3	Data	2 402 MHz ~ 2 480 MHz
NFC	Data	13.56 MHz

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Device Description		
Battery	EB-BA166ASY (ATL)	
Device Serial Numbers	Mode	Serial Number
	GSM850, GSM1900, UMTS Band 2, 4, 5 LTE Band 5, 12, 13, 26	XL41025M
	LTE Band 41,66	XL41261M
	NR Band n5, 66, NFC	XL41255M
	WLAN 2.4G, WLAN 5G, BT	YA92535M
	The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics are within operational tolerances expected for production units.	

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4.2 Time-Averaging Algorithm for RF Exposure Compliance

This device is enabled with the Samsung S.LSI proprietary TAS (Time Average SAR) algorithm to control and manage transmitting power in real time and to ensure that the time-averaged RF exposure from 2G/3G/4G/5G NR WWAN except WLAN/BT is in compliance with FCC requirements.

This SAR Char. Report shows SAR characterization of WWAN radios for 2G/3G/4G and 5G Sub-6 NR respectively. Characterization is achieved by determining Plimit for 2G/3G/4G and 5G Sub-6 NR except WLAN/BT correspond to the exposure design targets after accounting for all device design related uncertainties, i.e. SAR_design_target (< FCC SAR limit) for sub-6 radio. The SAR characterization is denoted as SAR Char in this report. Section 2.3 includes a nomenclature of the specific terms used in this report.

The compliance test under the static transmission scenario and simultaneous transmission analysis are

reportedin Part 1 report. The validation of the time-averaging algorithm and compliance under the dynamic (time- varying) transmission scenario for WWAN technologies are reported in Part 2 report.

This WWAN Mode of DUT is equipped with an S.LSI chipset to which the Samsung S.LSI proprietary TAS (Time Average SAR) algorithm is applied.
This DUT is enabled with the Samsung S.LSI proprietary TAS (Time Average SAR) algorithm for WWAN Mode in real time and to ensure at all times the time-averaged RF exposure is incompliance with the FCC requirement

FCC RF exposure limit is based on time averaged RF exposure. The SAR regulatory specification is defined over certain measurement duration allowing for time-averaging. The Samsung S.LSI proprietary TAS (Time Average SAR) algorithm has been designed to meet the compliance limits over the required duration, while still allowing dynamic control of transmit power to satisfy the performance of the system.

This feature performs time averaging SAR algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time.

The WLAN mode are not controlled by The Samsung S.LSI proprietary TAS (Time Average SAR) algorithm.
This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time.

The Samsung S.LSI TAS algorithm allow the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit NV settings and maximum tune up output power Pmax configured for this DUT for various transmit conditions (Radio SAR indicator RSI for Head /Body SAR of WWAN Mode, Device State Index RSI for WLAN mode).
Note that the device uncertainty for sub-6GHz WLAN/WWAN is 1.0dB for this DUT.

The purpose of this report is to demonstrate that the DUT meets FCC SAR limits when transmitting in static transmission configurations at Plimit specified by manufacturer.

Measurement Condition: All conducted power and SAR measurements in this report were performed by Plimit in static Power condition.

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Table 4-4 SAR Characterization

Plim values in green indicate Plimit < Pmax			Plim values in grey indicate Plim > Pmax		
Plimit corresponding to 1 W/kg (1g) SAR_Design_target					Pmax
SAR Exposure Position			Non-Head (body/Hotspot/Phablet)	Head	Maximum Tune-up Output Power (Frame Averaged Power) [dBm]
Averaging volume			1g	1g	
seperation Distance			5 mm	0 mm	
Mode	Band	Antenna	RSI=0	RSI=1	
GSM/GPRS/EDGE	850	Ant.A	22.8	30.8	25.0
GSM/GPRS/EDGE	1900	Ant.B	17.1	31.8	21.0
UMTS	2	Ant.B	18.0	29.7	24.0
UMTS	4	Ant.B	20.0	31.5	24.0
UMTS	5	Ant.A	20.0	30.9	24.5
LTE FDD	2	Ant.B	19.5	29.2	23.0
LTE FDD	2	Ant.D	20.0	20.0	23.5
LTE FDD	5	Ant.A	20.0	30.7	24.5
LTE FDD	4/66	Ant.B	19.5	30.4	23.0
LTE FDD	12	Ant.A	19.5	32.5	24.5
LTE FDD	13	Ant.A	19.5	31.8	24.5
LTE FDD	26	Ant.A	20.0	31.4	24.5
LTE FDD	41	Ant.B	16.0	33.0	21.5
NR FDD	5	Ant.A	18.0	30.4	24.0
NR FDD	66	Ant.B	20.0	32.2	23.5
NR FDD	66	Ant.D	18.5	19.0	23.5

*Note all Plimit and maximum tune up output power Pmax levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of TDD modulation schemes (for e.g., GSM, LTE TDD).
*The maximum time-averaged output power (dBm) for any 2G/3G/4G WWAN technology, band, and SAR Exposure condition=minimum of “Plimit” and “Maximum tune up output power: “Pmax” + 1dB device uncertainty.
The maximum time averaged output power means Plimit for each modes SAR values in this report were scaled to the maximum allowed output power to determine compliance per KDB Publication 447498 D01v06.

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4.3 Power Reduction for SAR

In this model, except for WLAN/BT, the output Power of the DUT in WWAN mode is controlled by the application of The Samsung S.LSI proprietary TAS (Time Average SAR) algorithm, with the output Power depending on the RSI of the predefined DUT.

This device uses an independent fixed level power reduction mechanism for WLAN operations when during all voice or VoIP held to ear scenarios. Per FCC Guidance, the held-to-ear exposure conditions were evaluated at reduced power according to the head SAR positions described in IEEE 1528-2013. Detailed descriptions of the power reduction mechanism are included in the operational description. The reduced powers for the power reduction mechanisms were conformed via conducted power measurements at the RF Port.

4.4 Nominal and Maximum Output Power Specifications

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

4.4.1 2G/3G/4G/5G Nominal Output Power

A. GSM Modes

GSM/GPRS/EDGE 850_Antenna A									
Power Level	Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
	1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	33	33	31	29	28	27	24.5	23	21
RSI = 0 (Non Head)	32	32	29	25	23	27	24.5	23	21
RSI = 1 (Head)	33	33	31	29	28	27	24.5	23	21

GSM/GPRS/EDGE 1900									
Power Level	Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
	1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	30	30	27	25	23	26	23	22	21
RSI = 0 (Non Head)	26	26	23	21.5	20	26	23	22	21
RSI = 1 (Head)	30	30	27	25	23	26	23	22	21

Tolerance: -1.5 dB ~ +1.0 dB

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B. UMTS Modes

UMTS Band 5 (850 MHz)				
Power Level	Modulated Average Output Power (in dBm)			
	3GPP UMTS Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	**24.5**	**22.5**	**22.5**	**22.5**
RSI = 0 (Non Head)	**20**	**19**	**17**	**19**
RSI = 1 (Head)	**24.5**	**22.5**	**22.5**	**22.5**

UMTS Band 4 (1750 MHz)				
Power Level	Modulated Average Output Power (in dBm)			
	3GPP UMTS Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	**24**	**22.5**	**23.5**	**22.5**
RSI = 0 (Non Head)	**20**	**19**	**18**	**19**
RSI = 1 (Head)	**24**	**22.5**	**23.5**	**22.5**

UMTS Band 2 (1900 MHz)				
Power Level	Modulated Average Output Power (in dBm)			
	3GPP UMTS Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	**24**	**22.5**	**23**	**22.5**
RSI = 0 (Non Head)	**18**	**17**	**15**	**17**
RSI = 1 (Head)	**24**	**22.5**	**23**	**22.5**

Tolerance: -1.5 dB ~ +1.0 dB

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C. LTE Modes

Mode / Band	Antenna	Modulated Average Output Power (in dBm)		
		Pmax	RSI = 0 (Non Head)	RSI = 1 (Head)
LTE Band 2	B	23	19.5	23
LTE Band 2_ UPPER	D	23.5	20	20
LTE Band 4	B	23	19.5	23
LTE Band 5	A	24.5	20	24.5
LTE Band 12	A	24.5	19.5	24.5
LTE Band 13	A	24.5	19.5	24.5
LTE Band 17	A	24.5	19.5	24.5
LTE Band 26	A	23	20	23
LTE Band 41	B	23.5	18	23.5
LTE Band 66	B	23	19.5	23

Tolerance: -1.5 dB ~ +1.0 dB

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D. 5G NR SUB 6

Mode / Band	Antenna	Modulated Average Output Power (in dBm)		
		Pmax	RSI = 0 (Non Head)	RSI = 1 (Head)
NR Band n5	A	24	18	24
NR Band n66	B	23.5	20	23.5
NR Band n66 _ UPPER	D	23.5	18.5	18.5

Tolerance: -1.5 dB ~ +1.0 dB

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4.4.2 Maximum 2.4 ㎓, 5 ㎓ WIFI output power

a. Maximum Power

Mode	Band	SISO				
		a	b	g	n	ac
2.4 GHz	2.45GHz		16 12,13ch : 8	16 9ch : 14 10,11ch : 13 12,13ch : 5	16 9ch : 14 10,11ch : 13 12,13ch : 5	
5 GHz (20MHz)	5200 ㎒	17			17	17
	5300 ㎒	17			17	17
	5500 ㎒	17			17	17
	5800 ㎒	17			17	17
5 GHz (40MHz)	5200 ㎒				14	14
	5300 ㎒				14	14
	5500 ㎒				14	14
	5800 ㎒				14	14
5 GHz (80MHz)	5210 ㎒					10
	5290 ㎒					10
	5500 ㎒					13 106ch : 11
	5800 ㎒					13

(Upper Tolerance: target +1.0 dB)

b. Reduced Power – RCV On

Mode	Band	SISO				
		a	b	g	n	ac
2.4 GHz	2.45GHz		15 12,13ch : 8	15 9ch : 14 10,11ch : 13 12,13ch : 5	15 9ch : 14 10,11ch : 13 12,13ch : 5	
5 GHz (20MHz)	5200 ㎒	13			13	13
	5300 ㎒	13			13	13
	5500 ㎒	13			13	13
	5800 ㎒	13			13	13
5 GHz (40MHz)	5200 ㎒				13	13
	5300 ㎒				13	13
	5500 ㎒				13	13
	5800 ㎒				13	13
5 GHz (80MHz)	5210 ㎒					10
	5290 ㎒					10
	5500 ㎒					13 106ch : 11
	5800 ㎒					13

(Upper Tolerance: target +1.0 dB)

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c. Bluetooth Maximum and Reduced Conducted Output Power in Conducted Mode

Mode	Max
BDR	10
EDR	8
BLE	8

(Upper Tolerance: target +1.0 dB)

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4.5 LTE Information

Item.		Description
Frequency Range	LTE FDD Band 2 (PCS)	1 850.7 MHz~ 1 909.3 MHz
	LTE FDD Band 4 (AWS)	1 710.7 MHz~ 1 754.3 MHz
	LTE FDD Band 5 (Cell)	824.7 MHz~ 848.3 MHz
	LTE FDD Band 12	699.7 MHz~ 715.3 MHz
	LTE FDD Band 13	779.5 MHz~ 784.5 MHz
	LTE FDD Band 17	706.5 MHz~ 713.5 MHz
	LTE FDD Band 26	814.7 MHz~ 848.3 MHz
	LTE TDD Band 41	2 498.5 MHz ~ 2 687.5 MHz
	LTE FDD Band 66 (AWS)	1 710.7 MHz ~ 1 779.3 MHz
Channel Bandwidths	LTE FDD Band 2 (PCS)	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE FDD Band 4 (AWS)	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE FDD Band 5 (Cell)	1.4 MHz, 3 MHz, 5 MHz, 10 MHz
	LTE FDD Band 12	1.4 MHz, 3 MHz, 5 MHz, 10 MHz
	LTE FDD Band 13	5 MHz, 10 MHz
	LTE FDD Band 17	5 MHz, 10 MHz
	LTE FDD Band 26	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz
	LTE TDD Band 41	5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE FDD Band 66 (AWS)	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz

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Ch. No.& Freq.(MHz)		Low / Low-Mid	Mid	Mid-High / High
LTE FDD Band 2 (PCS)	1.4 MHz	1 850.7 (18607)	1 880.0 (18900)	1 909.3 (19193)
	3 MHz	1 851.5 (18615)	1 880.0 (18900)	1 908.5 (19185)
	5 MHz	1 852.5 (18625)	1 880.0 (18900)	1 907.5 (19175)
	10 MHz	1 855.0 (18650)	1 880.0 (18900)	1 905.0 (19150)
	15 MHz	1 857.5 (18675)	1 880.0 (18900)	1 902.5 (19125)
	20 MHz	1 860.0 (18700)	1 880.0 (18900)	1 900.0 (19100)
LTE FDD Band 4 (AWS)	1.4 MHz	1 710.7 (19957)	1 732.5 (20175)	1 754.3 (20393)
	3 MHz	1 711.5 (19965)	1 732.5 (20175)	1 753.5 (20385)
	5 MHz	1 712.5 (19975)	1 732.5 (20175)	1 752.5 (20375)
	10 MHz	1 715.0 (20000)	1 732.5 (20175)	1 750.0 (20350)
	15 MHz	1 717.5 (20025)	1 732.5 (20175)	1 747.5 (20325)
	20 MHz		1 732.5 (20175)	
LTE FDD Band 5 (Cell)	1.4 MHz	824.7 (20407)	836.5 (20525)	848.3 (20643)
	3 MHz	825.5 (20415)	836.5 (20525)	847.5 (20635)
	5 MHz	826.5 (20425)	836.5 (20525)	846.5 (20625)
	10 MHz		836.5 (20525)	
LTE FDD Band 12	1.4 MHz	699.7 (23017)	707.5 (23095)	715.3 (23173)
	3 MHz	700.5 (23025)	707.5 (23095)	714.5 (23165)
	5 MHz	701.5 (23035)	707.5 (23095)	713.5 (23155)
	10 MHz		707.5 (23095)	
LTE FDD Band 13	5 MHz		782 (23230)	
	10 MHz		782 (23230)	
LTE FDD Band 17	5 MHz		710 (23790)	
	10 MHz		710 (23790)	
LTE FDD Band 26 (Cell)	1.4 MHz	814.7 (26697)	831.5 (26865)	848.3 (27033)
	3 MHz	815.5 (26705)	831.5 (26865)	847.5 (27025)
	5 MHz	816.5 (26715)	831.5 (26865)	846.5 (27015)
	10 MHz	819.0 (26740)	831.5 (26865)	844.0 (26990)
	15 MHz		831.5 (26865)	

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Ch. No.& Freq.(MHz)		Low / Low-Mid		Mid		Mid-High / High
LTE FDD Band 66 (AWS)	1.4 MHz	1 710.7 (131979)		1 745 (132322)		1 779.3 (132665)
	3 MHz	1 711.5 (131987)		1 745 (132322)		1 778.5 (132657)
	5 MHz	1 712.5 (131997)		1 745 (132322)		1 777.5 (132647)
	10 MHz	1 715.0 (132022)		1 745 (132322)		1 775.0 (132622)
	15 MHz	1 717.5 (132047)		1 745 (132322)		1 772.5 (132597)
	20 MHz	1 720.0 (132072)		1 745 (132322)		1 770.0 (132572)
LTE TDD Band 41	5 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)
	10 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)
	15 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)
	20 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)

UE Category	LTE Rel. 16, DL: Category 18, UL: Category 18
HPUE Power Class	LTE TDD 41 Power Class 3 : (Duty : 63.3%)
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256 QAM
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3	Yes
A-MPR disabled for SAR Testing.	Yes
LTE Carrier Aggregation	This device supports Inter-Band & Intra-Band DL-link Carrier aggregations and Inter-Band UL-link Carrier aggregations. Detailed information in Technical Description document.
LTE Release information	It supports only DL carrier aggregation. All other uplink communications are identical to the release 8 specifications. The following LTE Rel.16 Features are not supported: Relay, Hetnet, Enhanced elCl, MDH, cross-carrier Scheduling, Enhanced SC-FDMA,UL-CA.

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4.6 5G NR SUB 6 Information

Item.		Description
Frequency Range	NR FDD Band n5	826.5 MHz~ 846.5 MHz
	NR FDD Band n66	1 712.5 MHz~ 1 777.5 MHz
Channel Bandwidths	NR FDD Band n5	5 MHz, 10 MHz, 15 MHz, 20 MHz
	NR FDD Band n66	5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz

Ch. No.& Freq.(MHz)		Low / Low-Mid	Mid	Mid-High / High
NR FDD Band n5 (Cell)	5 MHz	826.5 (165300)	836.5(167300)	846.5 (169300)
	10 MHz		836.5(167300)	
	15 MHz		836.5(167300)	
	20 MHz		836.5(167300)	
NR FDD Band n66	5 MHz	1 712.5(342500)	1 745(349000)	1 777.5(355500)
	10 MHz	1 715(343000)	1 745(349000)	1 775(355000)
	15 MHz	1 717.5(343500)	1 745(349000)	1 772.5(354500)
	20 MHz	1 720(344000)	1 745(349000)	1 770(354000)
	25 MHz	1 722.5(344500)	1 745(349000)	1 767.5(353500)
	30 MHz		1 745(349000)	
	40 MHz		1 745(349000)	

Item.	Description
NR FDD Band n5/n66	15 kHz
A-MPR disabled for SAR Testing.	Yes
5G NR UL/DL FR1	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM DFT-s-OFDM: π/2-BPSK(UL Only), QPSK, 16QAM, 64QAM, 256QAM
Non-Standalone & Standalone are supported. 5G NR FR1 Bands, n5, n66 are supported to NSA and SA Connectivity.	
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations
LTE Anchor Bands for NR Band n5 (Cell)	Main Antenna 2(Ant.B) : LTE Band 2/66
LTE Anchor Bands for NR Band n66 (AWS)	Main Antenna 1(Ant.A) : LTE Band 5/12/13 sub Antenna 2(Ant.D) : LTE Band 2

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4.7 DUT Antenna Locations

The overall dimensions of this device are > 9 X 5 cm. A diagram showing device antenna can be found in SAR_setup_photos. Since the diagonal dimension of this device is > 160 ㎜ and < 200 ㎜, it is considered a "phablet".

This model allows users to exchange data or media files with other Bluetooth enabled devices using Bluetooth, which means they can connect to other Bluetooth enabled devices via Bluetooth tethering. Therefore, SAR test was performed for additional simultaneous transmissions.
Head and Bluetooth Tethering SAR were evaluated for BT BR tethering applications.

Antenna	Mode	Rear	Front	Left	Right	Bottom	Top
Ant A	GSM/GPRS/EDGE 850	Yes	Yes	Yes	Yes	Yes	No
Ant B	GSM/GPRS/EDGE 1900	Yes	Yes	Yes	No	Yes	No
Ant A	UMTS Band 5	Yes	Yes	Yes	Yes	Yes	No
Ant B	UMTS Band 4	Yes	Yes	Yes	No	Yes	No
Ant B	UMTS Band 2	Yes	Yes	Yes	No	Yes	No
Ant B	LTE FDD Band 2 (PCS)	Yes	Yes	Yes	No	Yes	No
Ant D	LTE FDD Band 2 (PCS)	Yes	Yes	Yes	No	No	Yes
Ant B	LTE FDD Band 4 (AWS)	Yes	Yes	Yes	No	Yes	No
Ant A	LTE FDD Band 5	Yes	Yes	Yes	Yes	Yes	No
Ant A	LTE FDD Band 12	Yes	Yes	Yes	Yes	Yes	No
Ant A	LTE FDD Band 13	Yes	Yes	Yes	Yes	Yes	No
Ant A	LTE FDD Band 17	Yes	Yes	Yes	Yes	Yes	No
Ant A	LTE FDD Band 26 (Cell)	Yes	Yes	Yes	Yes	Yes	No
Ant B	LTE TDD Band 41	Yes	Yes	Yes	No	Yes	No
Ant B	LTE FDD Band 66 (AWS)	Yes	Yes	Yes	No	Yes	No
Ant A	NR FDD Band n5	Yes	Yes	Yes	Yes	Yes	No
Ant B	NR FDD Band n66	Yes	Yes	Yes	No	Yes	No
Ant D	NR FDD Band n66	Yes	Yes	Yes	No	No	Yes
Ant F	2.4 ㎓ WLAN	Yes	Yes	Yes	No	No	Yes
Ant F	Bluetooth	Yes	Yes	Yes	No	No	Yes
Ant E	5 ㎓ WLAN	Yes	Yes	Yes	No	No	Yes
NFC	NFC	Yes	Yes	Yes	No	No	Yes

Particular EUT edges were not required to be evaluated for Bluetooth Tethering and Hotspot SAR if the edges were > 25 ㎜ from the transmitting antenna according to FCC KDB 941225 D06v02r01 on page 2.
The distance between the transmit antennas and the edges of the device are included in the filing.

- Note: All test configurations are based on front view position.

4.8 Near Field Communications (NFC) Antenna

This EUT has NFC operations. The NFC antenna is integrated into the device for this model. Therefore, all SAR tests were performed with the device which already incorporates the NFC antenna. A diagram showing the location of the NFC antenna can be found in SAR _ Setup_ photos.

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4.9 SAR Summation Scenario

According to FCC KDB 447498 D01v06, transmitters are considered to be transmitting simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds. Possible transmission paths for the EUT are shown below paths and are mode in same rectangle to indicate communication modes which share the same path. Modes which share the same transmission path cannot transmit simultaneously with one another.
This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB 447498 D01v06.

WWAN	BT	2.4G	5G	Scenario
O	O	X	X	WWAN + Bluetooth
O	O	X	O	WWAN + Bluetooth + 5GHz Wi-Fi
O	X	O	X	WWAN + 2.4GHz Wi-Fi
O	X	X	O	WWAN + 5GHz Wi-Fi

Note:
1. 2.4 ㎓ WLAN and 5 ㎓ WLAN share the same antenna path and cannot transmit simultaneously.
2. UMTS +WLAN scenario also represents the UMTS Voice/DATA + WLAN hotspot scenario.
3. VoIP is supported in GPRS/EDGE
4. The highest reported SAR for each exposure condition is used for SAR summation purpose.
5. Wi-Fi Hotspot is supported for 2.4 ㎓/UNII-3 of 5 ㎓ WLAN.
6. * Pre-installed VOIP applications are considered
7. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held to ear or Body worn accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFi Direct beyond that listed in the above table.
8. This device supports SISO mode for WLAN 802.11a/g/n/ac. 802.11a/g/n/ac support CDD and STBC and 802.11n/ac additionally supports SDM.
9. This device supports VoLTE/ VoWiFi.
10. LTE + 5G NR FR1 Scenarios are supported NSA and SA Connectivity.
11. NFC was evaluated for phablet based on expected usage conditions.

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4.10 SAR Test Considerations

4.10.1 WiFi

Since wireless router operations are not allowed by the chipset firmware using U-NII-1, U-NII-2A and U-NII-2C WiFi, WiFi Hotspot SAR test and combinations are considered only 2.4 GHz and U-NII-3 for SAR with respected to wireless router configurations according to FCC KDB 941225 D06v02r01.

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 for 1g SAR and is less than 3.0 W/kg for 10g SAR, SAR is not required for U-NII-1 Band according to FCC KDB 248227D01v02r02.

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) Up to 256 QAM is supported
d) TDWR and Band gap channels are supported for 5 GHz

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is greater than 160mm and less than 200mm. Phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. However, 1g SAR for this device was tested at 5 mm, in this case, 10g SAR is not required according to KDB 941225 D7.

Wireless router operations are not supported for U-NII-1, U-NII-2A, U-NII-2C and U-NII-4 WLAN.

4.10.2 Licensed Transmitter(s)

GSM/GPRS/EDGE DTM is not supported for US Bands. Therefore, the GSM Voice modes in this report do not transmit simultaneously with GPRS/EDGE Data.

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 D05v02r05.

Per FCC KDB 648474 D04v01r03, this device is considered a “Phablet” since the diagonal dimension is greater than 160 mm and less than 200 mm. Therefore, extremity SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR >1.2 W/kg. When hotspot mode applies, 10g SAR required only for the surfaces and edges with hotspot mode scaled to the maximum output power (including tolerance) is 1g SAR > 1.2 W/kg.

This Device supports 64QAM and 256QAM on the uplink and 256QAM on the downlink for LTE Operations. Conducted powers for 64QAM and 256QAM uplink configurations were measured per section 5.1 of FCC KDB 941225 D05v02r05. SAR was not required for 64QAM or 256QAM since the highest maximum output power for 64QAM and 256QAM is ≤ 0.5dB higher than the same configuration in QPSK and the reported SAR for QPSK configuration is ≤1.45 W/Kg, per section 5.2.4 for FCC KDB941225 D05v02r05.

This device supports LTE capabilities with overlapping transmission frequency ranges. When the supported frequency range of LTE Band falls completely within an LTE Band with a larger

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transmission frequency range, both LTE Bands have the same target power or the Band with the larger transmission frequency range has a higher target power and both LTE Bands share the same transmission path and signal characteristics, SAR was only tested for the Band with the larger transmission frequency range.

LTE capabilities with overlapping transmission frequency ranges were applied to LTE Band 4 (1 710.7 MHz~ 1 754.3MHz) is covered by LTE Band 66(1 710.7 MHz~ 1 779.3 MHz), LTE Band 12(699.7 MHz~ 715.3MHz) is covered by LTE Band 17(706.5 MHz~ 713.5 MHz) of this model each both LTE bands have the same target powers.

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 DL 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.

This device supports NSA(Non-standalone) and SA (Standalone) connectivity for 5G NR FR1 Bands, more detailed specifications of the Bands are contained in the Technical description document.

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.

Per FCC KDB 941225 D01v03r01, 12.2 kbps RMC is the primary mode and HSPA (HSUPA/HSDPA with RMC) is the secondary mode.
Per FCC KDB 941225 D01v03r01, The SAR test exclusion is applied to the secondary mode by the following equation.

$$Adjusted\ SAR = Highest\ Reported\ SAR\ x \frac{Secondary\ Max\ tune - up\ (mW)}{Primary\ Max\ tune\ tune - up(mW)} \leq 1.2\ \mathrm{W/kg}.$$

Based on the highest Reported SAR, the secondary mode is not required.

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5. Introduction

The FCC has adopted the guidelines for evaluating the environmental effects of radio frequency radiation in ET Docket 93-62 on Aug. 6, 1996 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices.

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. 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York 10017. The measurement procedure described in IEEE/ANSI C95.3-1992 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave is used for guidance in measuring 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 National Council on Radiation Protection and Measurements (NCRP) in Biological Effects and Exposure Criteria for Radio Frequency Electromagnetic Fields," NCRP Report No. 86 NCRP, 1986, Bethesda, MD 20814. 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.

SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative of the incremental electromagnetic energy (d*W*) absorbed by (dissipated in) an incremental mass (d*m*) contained in a volume element (d*V*) of a given density (*r*). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body.

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

Figure 1. SAR Mathematical Equation

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

Where:
= conductivity of the tissue-simulant material (S/m)
= mass density of the tissue-simulant material (kg/m³)
= 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 relations 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.

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6. Description of test equipment

6.1 SAR MEASUREMENT SETUP

These measurements are performed using the DASY4 automated dosimetric assessment system. It is made by Schmid& Partner Engineering AG (SPEAG) in Zurich, Switzerland. It consists of high precision robotics system (Staubli), robot controller, Pentium III computer, near-field probe, probe alignment sensor, and the generic twin phantom containing the brain equivalent material. The robot is a six-axis industrial robot performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF) (see Figure.2).

A cell controller system contains the power supply, robot controller, teach pendant (Joystick), and remote control, is used to drive the robot motors. The PC with Windows XP or Windows 7 or Window 10 or Window 11 is working with SAR Measurement system DASY5& DASY6 &DASY8 A/D interface card, monitor, mouse, and keyboard. The Staubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card.

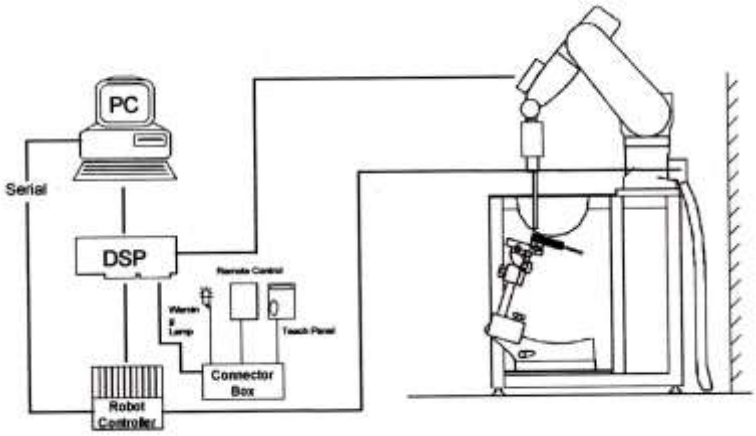

Figure 2. HCT SAR Lab. Test Measurement Set-up

The DAE consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer. The system is described in detail in.

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7. SAR Measurement Procedure

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

1. The SAR distribution at the exposed side of the head or body was measured at a distance no more than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the DUT's head and body area and the horizontal grid resolution was depending on the FCC KDB 865664 D01v01r04 table 4-1 & IEEE 1528-2013.

2. Based on step, the area of the maximum absorption was determined by sophisticated interpolations routines implemented in DASY software. When an Area Scan has measured all reachable point. DASY system computes the field maximal found in the scanned are, within a range of the maximum. SAR at this fixed point was measured and used as a reference value.

3. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB 865664 D01v01r04 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 (reference from the DASY manual.)

   a. The data at the surface were extrapolated, since the center of the dipoles is no more than 2.7 mm away from the tip of the probe (it is different from the probe type) and the distance between the surface and the lowest measuring point is 1.2 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

   b. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed using the 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 integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.

   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. If the value changed by more than 5 %, the SAR evaluation and drift measurements were repeated.

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Area scan and zoom scan resolution setting follow KDB 865664 D01v01r04 quoted below.

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm	·δ·ln(2)±0.5 mm
Maximum probe angle from probe axis to phantom surfacenormal at the measurement location			30°±1°	20°±1°
MaximumareascanSpatial resolution: Δx_{Area},Δy_{Area}			≤ 2 GHz: ≤15 mm 2-3 GHz: ≤12 mm	3-4 GHz: ≤12 mm 4-6 GHz: ≤10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan Spatial resolution: Δx_{zoom},Δy_{zoom}			≤ 2 GHz: ≤8mm 2-3 GHz: ≤5mm*	3-4 GHz: ≤5 mm* 4-6 GHz: ≤4 mm*
Maximum zoom scan Spatial resolution normal to phantom surface	uniform grid:$\Delta z_{zoom}(n)$		≤ 5 mm	3-4 GHz: ≤4 mm 4-5 GHz: ≤3 mm 5-6 GHz: ≤2 mm
	graded grid	$\Delta z_{zoom}(1)$: between1st two Points closest to phantom surface	≤ 4 mm	3-4 GHz: ≤3 mm 4-5 GHz: ≤2.5 mm 5-6 GHz: ≤2 mm
		$\Delta z_{zoom}(n>1)$:between subsequent Points	≤1.5·$\Delta z_{zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3-4 GHz: ≥28 mm 4-5 GHz: ≥25 mm 5-6 GHz: ≥22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. * When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

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8. Description of Test Position

8.1 EAR REFERENCE POINT

Figure 8-2 shows the front, back and side views of the SAM phantom. The center-of-mouth reference point is labeled “M”, the left ear reference point (ERP) is marked “LE”, and the right ERP is marked “RE.” Each ERP is on the B-M (back-mouth) line located 15 mm behind the entrance-to-ear-canal (EEC) point, as shown in Figure 6-1. The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (Neck-Front), also called the Reference Pivoting Line, is not perpendicular to the reference plane (See Figure 5-1), Line B-M is perpendicular to the N-F line. Both N-F and B-M lines are marked on the external phantom shell to facilitate handset positioning.

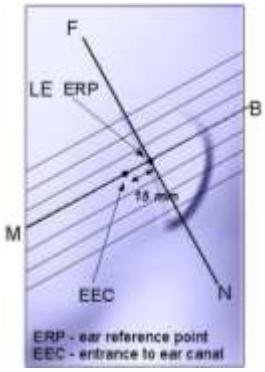

Figure 8-1
Close-up side view of ERP

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8.2 Handset Reference Points

Two imaginary lines on the handset were established: the vertical centerline and the horizontal line. The device under test was placed in a normal operating position with the acoustic output located along the “vertical centerline” on the front of the device aligned to the “ear reference point”(see Figure 8-3). The acoustic output was than located at the same level as the center of the ear reference point. The device under test was positioned so that the “vertical centerline” was bisecting the front surface of the handset at its top and bottom edges, positioning the “ear reference point” on the outer surface of the both the left and right head phantoms on the ear reference point.

Figure 8-2
Front, back and side views of SAM Twin Phantom

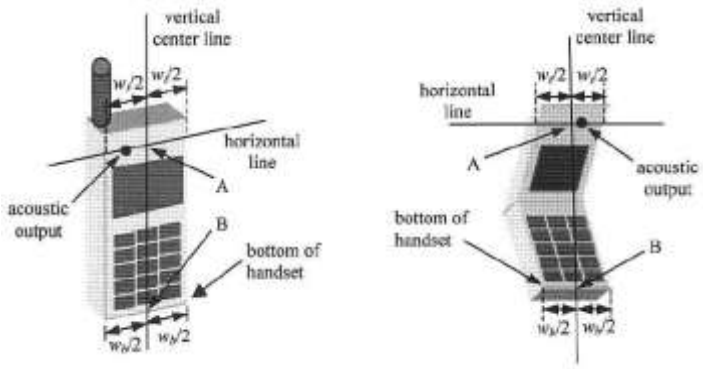

Figure 8-3. Handset vertical and horizontal reference lines

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8.3 Device Holder

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

8.4 Position for Touch

Figure 8.4. shows Touch or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

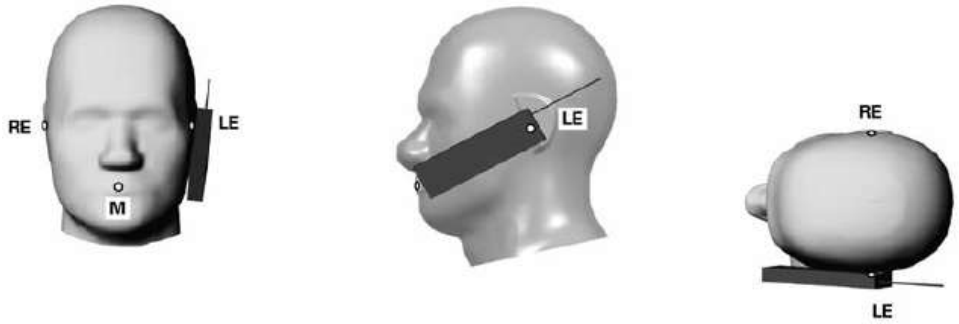

Figure 8.4 Touch/ Touch position of the wireless device

8.5 Definition of the “tilted” position

Figure 8.5. shows tilted position. Place the device in the Touch position. Then while maintaining the orientation of the device, retract the device parallel to the reference plane far enough away from the phantom to enable a rotation of the device by 15°.

Figure 8.5. Tilt 15°position of the wireless device

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8.6 Body-Worn Accessory Configurations

Body-worn operating configurations are tested with the belt-dips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 8.6). Per FCC KDB Publication 648474 D04v01r03 Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in Body-worn accessories. The Body-worn accessory procedures in FCC KDB Publication 447498 D01v06 should be used to test for Body-worn accessory SAR compliance, without a headset connected to it. When the reported SAR for a body- worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency Band should be repeated for that body- worn accessory with a headset attached to the handset.

Figure 8.6
Sample Body-Worn Diagram

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-dip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

8.7 Wireless Router Configurations

Some battery-operated handsets have the capability to transmit and receive user data through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06v02r01 where SAR test considerations for handsets (L x W≥9cmx5 cm) are based on *a* composite test separation distance of 10 ㎜ from the front back and edges of the device containing transmitting antennas within 2.5 cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the Body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some Body-worn accessory SAR tests.

In the closed configuration, only a simple display/interaction of notifications occurs and overall dimensions are <9 X 5 cm. Therefore Per 941225 D06v02r01, when the device is closed, test separation for hotspot mode is 5 ㎜.

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When the user enables the personal wireless router functions for the handset actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v06 publication procedures. The Portable Hotspot feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

8.8 Extremity Exposure Configurations

Devices that are designed or intended for use on extremities or mainly operated in extremity only exposure conditions: i.e., hands, wrists, feet and ankles, may require extremity SAR evaluation. When the device also operates in close proximity to the user's body, SAR compliance for the body is also required. The 1-g body and 10-g extremity SAR Exclusion Thresholds found in KDB Publication 447498 D01v06 should be applied to determine SAR test requirements.

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear. The phablets procedures outlined in KDB Publication 648474 D04 v01r03 should be applied to evaluate SAR compliance. A device marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance. In addition to the normally required head and body-worm accessory SAR test procedures required for handsets, the UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna ≤25 mm from that surface or edge, in direct contact with the phantom, for 10-g SAR. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (including tolerance) is 1-g SAR > 1.2 W/kg.

8.9 Bluetooth tethering Configurations

Per May 2017 TCBC Workshop Document, When Bluetooth tethering applies, simultaneous transmission SAR needs consideration.

This model allows users to exchange data or media files with other Bluetooth enabled devices using Bluetooth, which means they can connect to other Bluetooth enabled devices via Bluetooth tethering. Therefore, SAR test was performed for additional simultaneous transmissions.

Head and Bluetooth tethering SAR were evaluated for BT BDR tethering applications.

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9. RF Exposure Limits

HUMAN EXPOSURE	UNCONTROLLED ENVIRONMENT General Population (W/kg)	CONTROLLED ENVIRONMENT Occupational (W/kg)
SPATIAL PEAK SAR * (Partial Body)	1.6	8.0
SPATIAL AVERAGE SAR ** (Whole Body)	0.08	0.4
SPATIAL PEAK SAR *** (Hands / Feet / Ankle / Wrist)	4.0	20.0

NOTES:

*The Spatial Peak value of the SAR averaged over any 1 g of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

** The Spatial Average value of the SAR averaged over the whole-body.

*** The Spatial Peak value of the SAR averaged over any 10 g of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

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 mad 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.

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.

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10. FCC SAR General Measurement Procedures

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

10.1 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.

10.2 3G SAR Test Reduction Procedure

10.2.1 GSM, GPRS and EDGE

The following procedures may be considered for each frequency Band to determine SAR test reduction for devices operating in GSM/GPRS/EDGE modes to demonstrate RF exposure compliance. GSM voice mode transmits with 1 time-slot. GPRS and EDGE may transmit up to 4 time slots in the 8 time-slot frame according to the multi-slot class implemented in a device.

10.2.2 SAR Test Reduction

In FCC KDB 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.
SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested

10.2.3 Procedures Used to Establish RF Signal for SAR

The following procedures are according to FCC KDB 941225 D01v03r01-3G SAR Measurement Procedures.
The handset was placed into a simulated call using a base station simulator in a shielded chamber. Such test signals offer a consistent means for testing SAR and are recommended for evaluation SAR measurements were taken with a fully charged battery. In order to verify that the device was tested and maintained at full power, this was configured with the base station simulator. The SAR measurement Software calculates a reference point at the start and end of the test to Touch for power drifts. Lf conducted Power deviations of more than 5 % occurred, the tests were repeated.

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10.3 SAR Measurement Conditions for UMTS

10.3.1 Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in sec. 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.

10.3.2 Body SAR measurements

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

10.3.3 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 and FRC with H-SET 1 in Sub-test and a 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to release 6 HSPA test procedures. 8.4.5 SAR Measurement 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 12.2kbps 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.

10.3.4 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-Set1 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.

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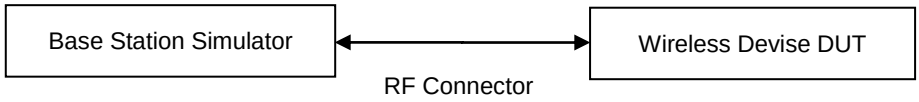
10.3.5 DC-HSDPA

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 TS34.121-1 to determine SAR test reduction. Primary and secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

DC-HSDPA Configurations

- 3GPP specification TS 34.121-1 Release 8. Was used for used for DC-HSDPA guidance.
- H-set 12(QPSK)was conformed to be used during DC-HSDPA measurements.



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10.4 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r05publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluation 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).

10.4.1 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.

10.4.2 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.

10.4.3 A-MPR

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

10.4.4 Required RB Size and RB offsets for SAR testing

According to FCC KDB 941225 D05v02r05

a. Per sec 4.2.1, 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 Sec 4.2.2, SAR is required for 50% RB allocation using the largest Bandwidth following the same procedures outlined in Sec 4.2.1.
c. Per Sec. 4.2.3, 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 Sec. 4.2.4 and 4.3, SAR test for higher order modulations and lower Bandwidths configurations are not required when the conducted power of the required test configurations determined by Sec. 4.2.1 through 4.2.3 is less than or equal to 1/2 dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is < 1.45 W/Kg.

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10.4.5 Downlink 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 (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. For every supported combination of downlink only carrier aggregation, additional conducted output Powers are measured with downlink carrier aggregation active for the configuration with highest measured maximum conducted power with the 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 carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25dB higher than the average output power with downlink only carrier aggregation inactive.

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10.4.7 LTE(TDD) Considerations

According to KDB 941225 D05v02r05, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

SAR was tested with the highest transmission duty factor (63.33 %) using Uplink-downlink configuration 0 and Special subframe configuration 6. LTE TDD Band 41 supports 3GPP TS 36.211 section 4.2 for Type 2 Frame and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special sub frame configurations.

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Calculated Duty Cycle – Extended cyclic prefix in uplink x (T_s) x no of S + no of U

Table 4.2-2: Uplink-downlink configurations.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Example for calculated Duty Cycle for Uplink-Downlink Configuration 0:
Calculated Duty Cycle = (5120 x (1/(15000 x 2048)) x 2 + 0.006)/0.01 = 63.33 %
Where
T_s = 1/(15000 x 2048) seconds

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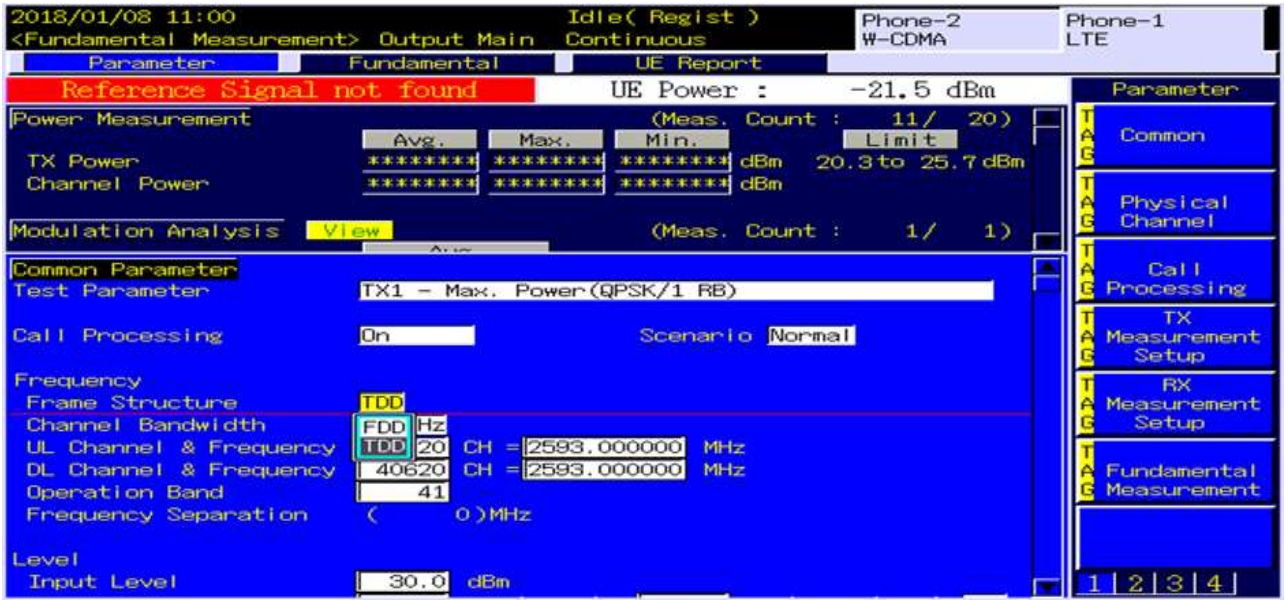
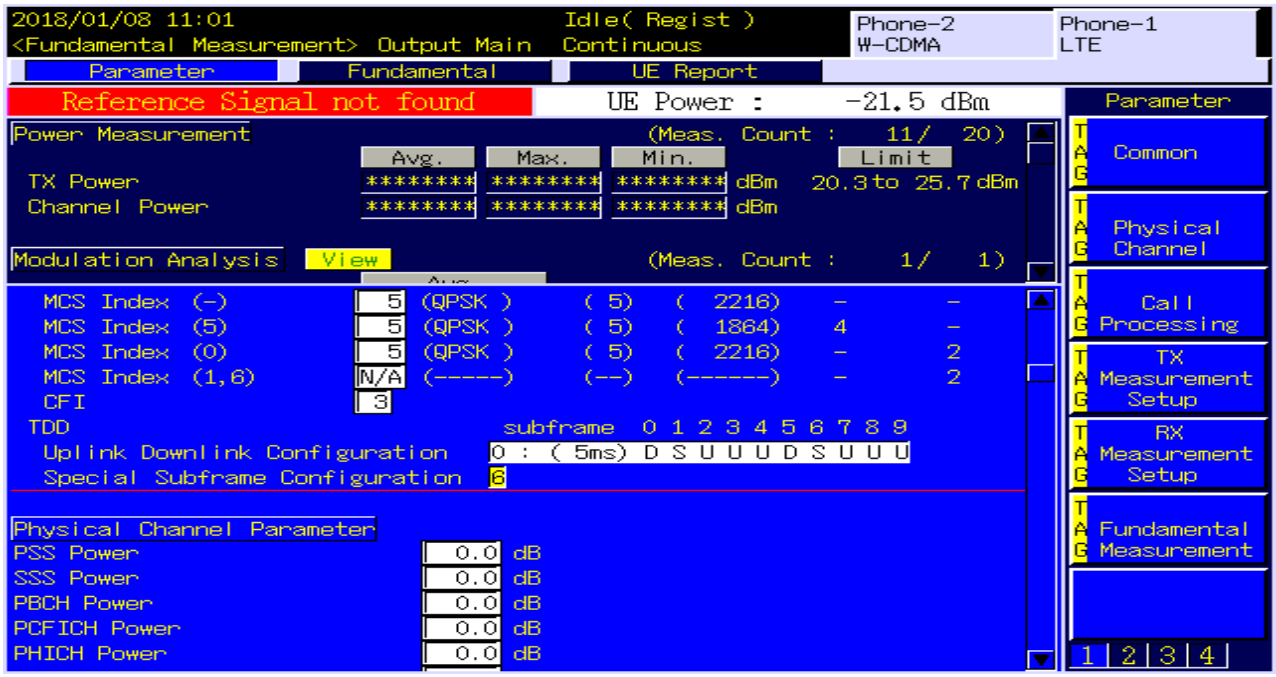
10.4.8 The Call Box Setup for LTE(TDD)

When you Want to Test for LTE TDD, Please Change Frame Structure TDD and TDD Uplink Downlink Configuration 0 and Special Subframe Configuration 6.





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10.5 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.

10.5.1 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 system 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.

10.5.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII2A 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 for 1g SAR or > 3.0 W/kg for 10g SAR. 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 for 1g SAR or > 3.0 W/kg for 10g SAR.

10.5.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 GHz – 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 GHz – 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.

10.5.4 Initial Test Position Procedure

For exposure conditions with multiple test positions, such as handset operating nest to the ear, devices with hotspot mode or UMPC mini-tablet, procedures for initial test position can be applied. Using the transmission mode determined by the DSSS procedure or initial test configuration, area scans are measured for all positions in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg for 1g SAR and ≤ 1.0 W/kg for 10g SAR, no additional testing for the remaining test position is required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg for 1g SAR and ≤ 2.0 W/kg for 10g SAR or all test positions are measured.

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10.5.5 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 is that exposure configuration.
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 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.

10.5.6 OFDM Transmission Mode and SAR Test Channel Selection

For the 2.4 GHz and 5 GHz Bands, 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 and lowest order 802.11 a/g/n/ac mode. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11 ac or 802.11g and 802.11n with the same channel Bandwidth, modulation and data rate etc., the lower order 802.11 mode i.2., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. 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.

10.5.7 Initial Test Configuration Procedure

For OFDM, in both 2.4 GHz and 5 GHz Bands, 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, and lowest data rate. If the average RF output powers of the highest identical transmission modes are within 0.25 dB of each other, mid channel of the transmission mode with highest average RF output power is the initial test channel. Otherwise, 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.

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10.5.8 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 on 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 for 1g SAR and ≤ 3.0 W/kg for 10g SAR, no additional SAR tests for the subsequent test configurations are required.

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11. Output Power Specifications

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

Licensed Bands

Test Description	Test Procedure Used
Conducted Output Power	- KDB 971168 D01 v03r01 – Section 5.2.4 - ANSI C63.26-2015 – Section 5.2.1 & 5.2.4.2

Test Overview

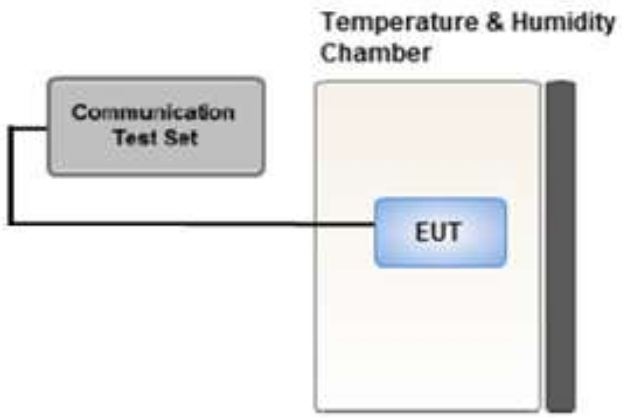
According to ANSI C63.26-2015 Section 5.2.1 when measuring the maximum RF output power from such devices, control over the EUT must be provided either through special test software (provided by manufacturer specifically for compliance testing, but not accessible by an end user) or through use of a base station emulator, communications test set, call box, or similar instrumentation that is capable of establishing a communications link with the EUT to enable control over variable parameters (e.g., output power, OBW, etc.).

In some cases, these instruments also include basic digital spectrum analyzer and/or power meter capabilities that can be utilized to measure the RF output power if the specified detectors and requirements can be realized and the measurement functions have been calibrated.

Test Procedure

1. The RF port of the EUT was connected to the Communication Tester via an RF cable.
2. Conducted average power was measured using a calibrated Radio Communication Tester.

Test setup



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11.1 GSM Maximum Output Power

11.1.1 GSM850 Maximum Conducted Output Power

GSM850–Antenna A

Measured *Pmax*,RSI = 1

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		34.00	34.00	32.00	30.00	29.00	28.00	25.50	24.00	22.00
Nominal		33.00	33.00	31.00	29.00	28.00	27.00	24.50	23.00	21.00
GSM 850	128	33.21	33.26	30.86	28.99	27.38	26.89	24.65	22.80	20.17
	190	33.14	33.16	30.85	29.01	27.32	26.91	24.51	22.84	20.11
	251	33.10	33.11	30.69	28.86	27.27	26.65	24.23	22.61	20.05

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		24.97	24.97	25.98	25.74	25.99	18.97	19.48	19.74	18.99
Nominal		23.97	23.97	24.98	24.74	24.99	17.97	18.48	18.74	17.99
GSM 850	128	24.18	24.23	24.84	24.73	24.37	17.86	18.63	18.54	17.16
	190	24.11	24.13	24.83	24.75	24.31	17.88	18.49	18.58	17.10
	251	24.07	24.08	24.67	24.60	24.26	17.62	18.21	18.35	17.04

GSM Conducted output powers (Frame-Average)

Measured RSI = 0

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		33.00	33.00	30.00	26.00	24.00	27.00	24.50	23.00	22.00
Nominal		32.00	32.00	29.00	25.00	23.00	26.00	23.50	22.00	21.00
GSM 850	128	31.41	31.49	28.46	24.83	23.20				
	190	31.38	31.42	28.28	24.82	23.27				
	251	31.21	31.24	28.04	24.41	23.08				

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		23.97	23.97	23.98	21.74	20.99	17.97	18.48	18.74	18.99
Nominal		22.97	22.97	22.98	20.74	19.99	16.97	17.48	17.74	17.99
GSM 850	128	22.38	22.46	22.44	20.57	20.19				
	190	22.35	22.39	22.26	20.56	20.26				
	251	22.18	22.21	22.02	20.15	20.07				

GSM Conducted output powers (Frame-Average)

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11.1.2 GSM 1900 Maximum Conducted Output Power

GSM1900–Antenna B

Measured *Pmax*,, RSI = 1

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**31.00**	**31.00**	**28.00**	**26.00**	**24.00**	**27.00**	**24.00**	**23.00**	**22.00**
Nominal		**30.00**	**30.00**	**27.00**	**25.00**	**23.00**	**26.00**	**23.00**	**22.00**	**21.00**
GSM 1900	512	29.66	29.68	27.00	24.93	23.52	25.90	23.80	22.20	20.60
	661	29.67	29.70	27.01	25.00	23.54	26.12	23.81	22.41	20.80
	810	29.72	29.85	27.34	25.43	23.96	26.45	23.97	22.64	21.26

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**21.97**	**21.97**	**21.98**	**21.74**	**20.99**	**17.97**	**17.98**	**18.74**	**18.99**
Nominal		**20.97**	**20.97**	**20.98**	**20.74**	**19.99**	**16.97**	**16.98**	**17.74**	**17.99**
GSM 1900	512	20.63	20.65	20.98	20.67	20.51	16.87	17.78	17.94	17.59
	661	20.64	20.67	20.99	20.74	20.53	17.09	17.79	18.15	17.79
	810	20.69	20.82	21.32	21.17	20.95	17.42	17.95	18.38	18.25

GSM Conducted output powers (Frame-Average)

Measured RSI = 0

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**27.00**	**27.00**	**24.00**	**22.50**	**21.00**	**27.00**	**24.00**	**23.00**	**22.00**
Nominal		**26.00**	**26.00**	**23.00**	**21.50**	**20.00**	**26.00**	**23.00**	**22.00**	**21.00**
GSM 1900	512	25.94	26.06	23.03	20.86	19.34				
	661	26.02	26.34	23.15	21.07	19.72				
	810	26.30	26.54	23.10	21.15	19.85				

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**17.97**	**17.97**	**17.98**	**18.24**	**17.99**	**17.97**	**17.98**	**18.74**	**18.99**
Nominal		**16.97**	**16.97**	**16.98**	**17.24**	**16.99**	**16.97**	**16.98**	**17.74**	**17.99**
GSM 1900	512	16.91	17.03	17.01	16.60	16.33				
	661	16.99	17.31	17.13	16.81	16.71				
	810	17.27	17.51	17.08	16.89	16.84				

GSM Conducted output powers (Frame-Average)

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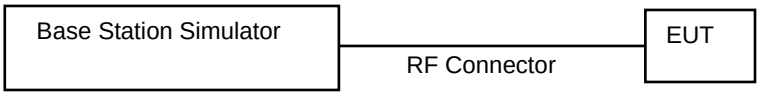
Note:

Time slot average factor is as follows:
1 Tx slot = 9.03 dB, Frame-Average output power = Burst-Average output power – 9.03 dB
2 Tx slot = 6.02 dB, Frame-Average output power = Burst-Average output power – 6.02 dB
3 Tx slot = 4.26 dB, Frame-Average output power = Burst-Average output power – 4.26 dB
4 Tx slot = 3.01 dB, Frame-Average output power = Burst-Average output power – 3.01 dB



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11.2 UMTS Maximum Output Power

HSPA+
This DUT is only capable of QPSK HSPA+ in uplink. Therefore, the RF conducted power is not measured according to 941225 D01v03r01 3G SAR.

11.2.1 UMTS Band 5 Maximum Conducted Output Power

UMTS Band 5 Maximum Conducted Output Power–Antenna A

Measured *Pmax*, RSI = 1

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 5 [dBm]			3GPP MPR
		Subtest	UL4132 DL4357	UL4183 DL4408	UL4233 DL4458	
99	UMTS	12.2 kbps RMC	24.85	24.68	24.42	-
99		12.2 kbps AMR	24.82	24.61	24.32	-
5	HSDPA	Subtest 1	23.33	23.08	22.85	0
5		Subtest 2	22.33	22.08	21.76	0
5		Subtest 3	21.29	21.05	20.78	0.5
5		Subtest 4	21.30	21.08	20.78	0.5
6	HSUPA	Subtest 1	22.38	22.16	21.82	0
6		Subtest 2	20.34	20.13	19.80	2
6		Subtest 3	21.33	21.10	20.78	1
6		Subtest 4	20.30	20.07	19.76	2
6		Subtest 5	23.32	23.10	22.80	0
8	DC-HSDPA	Subtest1	22.97	22.66	22.54	0
8		Subtest2	21.95	21.57	21.53	0
8		Subtest3	20.92	20.58	20.54	0.5
8		Subtest4	20.89	20.54	20.52	0.5

UMTS Average Conducted output powers

Measured RSI = 0

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 5 [dBm]			3GPP MPR
		Subtest	UL4132 DL4357	UL4183 DL4408	UL4233 DL4458	
99	UMTS	12.2 kbps RMC	19.75	19.48	19.23	-
99		12.2 kbps AMR	19.72	19.47	19.21	-
5	HSDPA	Subtest 1	18.77	18.55	18.26	0
5		Subtest 2	18.78	18.56	18.27	0
5		Subtest 3	18.77	18.55	18.24	0
5		Subtest 4	18.76	18.52	18.23	0
6	HSUPA	Subtest 1	16.69	16.47	16.19	0
6		Subtest 2	16.67	16.48	16.18	0
6		Subtest 3	16.70	16.47	16.20	0
6		Subtest 4	16.69	16.47	16.18	0
6		Subtest 5	17.69	17.48	17.20	0
8	DC-HSDPA	Subtest1	18.46	18.10	18.01	0
8		Subtest2	18.44	18.10	18.03	0
8		Subtest3	18.41	18.12	18.01	0
8		Subtest4	18.44	18.14	18.04	0

UMTS Average Conducted output powers

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11.2.2 UMTS Band 4 Maximum Conducted Output Power

UMTS Band 4 Maximum Conducted Output Power–Antenna B

Measured *Pmax*, RSI = 1

3GPP Release Version	Mode	3GPP 34.121 Subtest	UMTS Band 4 [dBm] UL 1312 DL 1537	UL 1412 DL 1637	UL 1513 DL 1738	3GPP MPR
99	UMTS	12.2 kbps RMC	24.08	24.24	24.41	-
99		12.2 kbps AMR	24.01	24.21	24.40	-
5	HSDPA	Subtest 1	23.06	23.15	23.37	0
5		Subtest 2	22.06	22.14	22.36	0
5		Subtest 3	21.05	21.15	21.40	0.5
5		Subtest 4	21.08	21.15	21.39	0.5
6	HSUPA	Subtest 1	23.05	23.17	23.34	0
6		Subtest 2	21.04	21.13	21.36	2
6		Subtest 3	22.05	22.13	22.37	1
6		Subtest 4	21.02	21.11	21.36	2
6		Subtest 5	24.09	24.22	24.38	0
8	DC-HSDPA	Subtest1	22.68	22.68	23.19	0
8		Subtest2	21.74	21.83	22.20	0
8		Subtest3	20.84	20.94	21.34	0.5
8		Subtest4	20.75	20.82	21.18	0.5

UMTS Average Conducted output powers

Measured RSI = 0

3GPP Release Version	Mode	3GPP 34.121 Subtest	UMTS Band 4 [dBm] UL 1312 DL 1537	UL 1412 DL 1637	UL 1513 DL 1738	3GPP MPR
99	UMTS	12.2 kbps RMC	19.56	19.72	19.93	-
99		12.2 kbps AMR	19.51	19.72	19.93	-
5	HSDPA	Subtest 1	18.52	18.65	18.86	0
5		Subtest 2	18.55	18.66	18.87	0
5		Subtest 3	18.53	18.70	18.86	0
5		Subtest 4	18.56	18.66	18.88	0
6	HSUPA	Subtest 1	17.58	17.69	17.88	0
6		Subtest 2	17.59	17.70	17.86	0
6		Subtest 3	17.59	17.69	17.85	0
6		Subtest 4	17.59	17.68	17.86	0
6		Subtest 5	18.53	18.68	18.84	0
8	DC-HSDPA	Subtest1	18.20	18.21	18.61	0
8		Subtest2	18.22	18.23	18.69	0
8		Subtest3	18.19	18.26	18.70	0
8		Subtest4	18.24	18.21	18.68	0

UMTS Average Conducted output powers

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11.2.3 UMTS Band 2 Maximum Conducted Output Power

UMTS Band 2 Maximum Conducted Output Power– Antenna B

Measured *Pmax*, RSI = 1

3GPP Release Version	Mode	3GPP 34.121 Subtest	UMTS Band 2 [dBm] UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	3GPP MPR
99	UMTS	12.2 kbps RMC	23.83	23.70	24.03	-
99		12.2 kbps AMR	23.82	23.70	24.01	-
5	HSDPA	Subtest 1	22.70	22.67	23.04	0
5		Subtest 2	21.74	21.61	21.99	0
5		Subtest 3	20.75	20.65	21.00	0.5
5		Subtest 4	20.79	20.66	21.05	0.5
6	HSUPA	Subtest 1	21.74	21.67	22.02	0
6		Subtest 2	19.83	19.70	20.01	2
6		Subtest 3	20.74	20.66	21.02	1
6		Subtest 4	19.80	19.72	20.00	2
6		Subtest 5	22.74	22.62	23.04	0
8	DC-HSDPA	Subtest 1	22.50	22.38	22.65	0
8		Subtest2	21.58	21.31	21.83	0
8		Subtest3	20.72	20.55	20.96	0.5
8		Subtest4	20.65	20.57	20.84	0.5

UMTS Average Conducted output powers

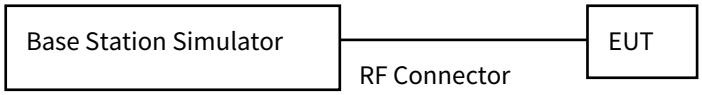
Measured RSI = 0

3GPP Release Version	Mode	3GPP 34.121 Subtest	UMTS Band 2 [dBm] UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	3GPP MPR
99	UMTS	12.2 kbps RMC	17.25	17.18	17.53	-
99		12.2 kbps AMR	17.24	17.17	17.47	-
5	HSDPA	Subtest 1	16.33	16.25	16.58	0
5		Subtest 2	16.31	16.21	16.58	0
5		Subtest 3	16.30	16.19	16.55	0
5		Subtest 4	16.34	16.21	16.59	0
6	HSUPA	Subtest 1	14.25	14.14	14.49	0
6		Subtest 2	14.28	14.15	14.48	0
6		Subtest 3	14.27	14.16	14.52	0
6		Subtest 4	14.25	14.14	14.49	0
6		Subtest 5	15.25	15.14	15.41	0
8	DC-HSDPA	Subtest 1	16.20	16.04	16.32	0
8		Subtest2	16.20	16.04	16.34	0
8		Subtest3	16.22	16.06	16.33	0
8		Subtest4	16.21	16.02	16.35	0

UMTS Average Conducted output powers

HSDPA Configurations

- 3GPP specification TS 34.121-1 Release 8. Was used for used for DC-HSDPA guidance.
- H-set 12(QPSK)was conformed to be used during DC-HSDPA measurements.



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11.3 LTE Maximum Output Power

Only the Conducted Power measurement results of the maximum bandwidth, which is the SAR test condition of LTE Bands according to FCC KDB 941225 D05v02r05, are included, and the measurement results of other bandwidths are listed in Appendix J.

LTE B4/B5/B12/B13/B14/B26/B30/B71 at Max Bandwidth does not support three non-overlapping channels. Per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel Bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

11.3.1 LTE FDD Band 2 Maximum Conducted Output Power

LTE FDD Band 2 Conducted Power _ Measured *Pmax*,RSI = 1 _ Antenna B

LTE FDD Band 2 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 MHz	18900 Ch. 1880 MHz	19193 Ch. 1909.3 MHz		
1.4 MHz	QPSK	1	0	22.40	22.43	22.71	0	0
		1	3	22.35	22.46	22.71	0	0
		1	5	22.51	22.58	22.84	0	0
		3	0	22.49	22.58	22.80	0	0
		3	1	22.40	22.45	22.81	0	0
		3	3	22.49	22.54	22.87	0	0
		6	0	21.57	21.59	21.90	0-1	1
	16QAM	1	0	21.78	21.87	22.02	0-1	1
		1	3	21.46	21.71	21.96	0-1	1
		1	5	21.59	21.59	21.97	0-1	1
		3	0	21.57	21.62	21.93	0-1	1
		3	1	21.62	21.66	21.94	0-1	1
		3	3	21.64	21.59	22.01	0-1	1
		6	0	20.70	20.69	20.97	0-2	2
	64QAM	1	0	20.78	20.81	21.13	0-2	2
		1	3	20.52	20.69	21.03	0-2	2
		1	5	20.63	20.80	21.05	0-2	2
		3	0	20.68	20.59	20.88	0-2	2
		3	1	20.71	20.71	20.91	0-2	2
		3	3	20.61	20.76	20.91	0-2	2
		6	0	19.66	19.70	19.99	0-3	3
	256QAM	1	0	17.69	17.86	17.98	0-5	5
		1	3	17.68	17.72	18.00	0-5	5
		1	5	17.65	17.75	18.07	0-5	5
		3	0	17.64	17.71	17.95	0-5	5
		3	1	17.56	17.69	17.96	0-5	5
		3	3	17.64	17.79	17.99	0-5	5
		6	0	17.63	17.74	17.99	0-5	5

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LTE FDD Band 2 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 MHz	18900 Ch. 1880 MHz	19185 Ch. 1908.5 MHz		
3 MHz	QPSK	1	0	22.40	22.46	22.76	0	0
		1	7	22.25	22.34	22.60	0	0
		1	14	22.32	22.41	22.70	0	0
		8	0	21.52	21.62	21.88	0-1	1
		8	3	21.51	21.65	21.90	0-1	1
		8	7	21.57	21.62	21.90	0-1	1
		15	0	21.55	21.65	21.91	0-1	1
	16QAM	1	0	21.79	21.71	22.04	0-1	1
		1	7	21.56	21.69	21.94	0-1	1
		1	14	21.86	21.86	21.98	0-1	1
		8	0	20.57	20.67	20.90	0-2	2
		8	3	20.62	20.74	20.97	0-2	2
		8	7	20.62	20.69	21.00	0-2	2
		15	0	20.61	20.66	20.94	0-2	2
	64QAM	1	0	20.76	20.79	20.97	0-2	2
		1	7	20.73	20.80	21.05	0-2	2
		1	14	20.77	20.80	21.09	0-2	2
		8	0	19.61	19.68	19.96	0-3	3
		8	3	19.61	19.70	19.96	0-3	3
		8	7	19.65	19.74	19.92	0-3	3
		15	0	19.61	19.70	19.98	0-3	3
	256QAM	1	0	17.65	17.82	18.15	0-5	5
		1	7	17.55	17.69	18.00	0-5	5
		1	14	17.62	17.75	18.12	0-5	5
		8	0	17.48	17.47	17.82	0-5	5
		8	3	17.52	17.55	17.84	0-5	5
		8	7	17.50	17.60	17.81	0-5	5
		15	0	17.56	17.57	17.95	0-5	5

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LTE FDD Band 2 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 MHz	18900 Ch. 1880 MHz	19175 Ch. 1907.5 MHz		
5 MHz	QPSK	1	0	22.28	22.35	22.66	0	0
		1	12	22.23	22.37	22.56	0	0
		1	24	22.37	22.48	22.70	0	0
		12	0	21.54	21.65	21.88	0-1	1
		12	6	21.57	21.64	21.88	0-1	1
		12	11	21.58	21.67	21.87	0-1	1
		25	0	21.56	21.66	21.92	0-1	1
	16QAM	1	0	21.68	21.83	22.07	0-1	1
		1	12	21.35	21.69	21.91	0-1	1
		1	24	21.55	21.64	22.05	0-1	1
		12	0	20.58	20.70	20.93	0-2	2
		12	6	20.61	20.63	20.88	0-2	2
		12	11	20.58	20.67	20.92	0-2	2
		25	0	20.52	20.65	20.94	0-2	2
	64QAM	1	0	20.73	20.88	21.08	0-2	2
		1	12	20.73	20.82	20.93	0-2	2
		1	24	20.80	20.86	21.09	0-2	2
		12	0	19.56	19.65	19.90	0-3	3
		12	6	19.61	19.65	19.88	0-3	3
		12	11	19.57	19.67	19.87	0-3	3
		25	0	19.55	19.66	19.89	0-3	3
	256QAM	1	0	17.63	17.90	18.05	0-5	5
		1	12	17.38	17.82	18.03	0-5	5
		1	24	17.67	17.93	18.13	0-5	5
		12	0	17.58	17.67	17.93	0-5	5
		12	6	17.57	17.66	17.97	0-5	5
		12	11	17.55	17.71	17.96	0-5	5
		25	0	17.61	17.62	17.91	0-5	5

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LTE FDD Band 2 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 MHz	18900 Ch. 1880 MHz	19150 Ch. 1905 MHz		
10 MHz	QPSK	1	0	22.36	22.47	22.70	0	0
		1	24	22.29	22.39	22.61	0	0
		1	49	22.33	22.43	22.62	0	0
		25	0	21.51	21.65	21.90	0-1	1
		25	12	21.54	21.62	21.86	0-1	1
		25	24	21.59	21.67	21.91	0-1	1
		50	0	21.62	21.68	21.94	0-1	1
	16QAM	1	0	21.70	21.91	22.02	0-1	1
		1	24	21.67	21.82	21.87	0-1	1
		1	49	21.70	21.88	21.90	0-1	1
		25	0	20.55	20.68	20.88	0-2	2
		25	12	20.57	20.64	20.84	0-2	2
		25	24	20.56	20.69	20.86	0-2	2
		50	0	20.62	20.71	20.90	0-2	2
	64QAM	1	0	20.76	20.75	20.95	0-2	2
		1	24	20.70	20.92	21.10	0-2	2
		1	49	20.60	20.90	20.98	0-2	2
		25	0	19.56	19.66	19.86	0-3	3
		25	12	19.60	19.64	19.88	0-3	3
		25	24	19.57	19.68	19.88	0-3	3
		50	0	19.59	19.70	19.92	0-3	3
	256QAM	1	0	17.66	17.87	18.13	0-5	5
		1	24	17.73	17.83	18.05	0-5	5
		1	49	17.86	17.90	18.22	0-5	5
		25	0	17.59	17.66	17.89	0-5	5
		25	12	17.64	17.71	17.94	0-5	5
		25	24	17.60	17.68	17.95	0-5	5
		50	0	17.58	17.62	17.91	0-5	5

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LTE FDD Band 2 _ 15 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 MHz	18900 Ch. 1880 MHz	19125 Ch. 1902.5 MHz		
15 MHz	QPSK	1	0	22.22	22.38	22.59	0	0
		1	36	22.29	22.39	22.50	0	0
		1	74	22.34	22.45	22.63	0	0
		36	0	21.52	21.64	21.90	0-1	1
		36	18	21.53	21.66	21.88	0-1	1
		36	39	21.56	21.67	21.86	0-1	1
		75	0	21.55	21.64	21.85	0-1	1
	16QAM	1	0	21.59	21.82	21.94	0-1	1
		1	36	21.70	21.43	22.04	0-1	1
		1	74	21.82	21.69	22.03	0-1	1
		36	0	20.54	20.65	20.89	0-2	2
		36	18	20.61	20.70	20.88	0-2	2
		36	39	20.61	20.69	20.89	0-2	2
		75	0	20.57	20.65	20.88	0-2	2
	64QAM	1	0	20.58	20.77	21.01	0-2	2
		1	36	20.83	20.60	20.91	0-2	2
		1	74	20.85	20.68	21.08	0-2	2
		36	0	19.59	19.68	19.91	0-3	3
		36	18	19.63	19.69	19.92	0-3	3
		36	39	19.61	19.67	19.91	0-3	3
		75	0	19.57	19.62	19.88	0-3	3
	256QAM	1	0	17.64	17.95	18.08	0-5	5
		1	36	17.73	17.94	18.10	0-5	5
		1	74	17.63	17.89	18.11	0-5	5
		36	0	17.52	17.64	17.89	0-5	5
		36	18	17.55	17.65	17.88	0-5	5
		36	39	17.59	17.63	17.88	0-5	5
		75	0	17.57	17.67	17.90	0-5	5

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LTE FDD Band 2 _ 20 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 MHz	18900 Ch. 1880 MHz	19100 Ch. 1900 MHz		
20 MHz	QPSK	1	0	22.24	22.35	22.60	0	0
		1	49	22.27	22.40	22.67	0	0
		1	99	22.24	22.34	22.57	0	0
		50	0	21.53	21.68	21.87	0-1	1
		50	25	21.56	21.72	21.96	0-1	1
		50	49	21.55	21.67	21.90	0-1	1
		100	0	21.48	21.60	21.88	0-1	1
	16QAM	1	0	21.57	21.74	22.17	0-1	1
		1	49	21.68	21.69	21.97	0-1	1
		1	99	21.52	21.80	21.93	0-1	1
		50	0	20.55	20.68	20.93	0-2	2
		50	25	20.57	20.68	20.96	0-2	2
		50	49	20.55	20.70	20.95	0-2	2
		100	0	20.50	20.62	20.87	0-2	2
	64QAM	1	0	20.55	20.81	21.10	0-2	2
		1	49	20.69	20.74	21.05	0-2	2
		1	99	20.60	20.78	20.97	0-2	2
		50	0	19.51	19.69	19.98	0-3	3
		50	25	19.62	19.70	19.95	0-3	3
		50	49	19.59	19.70	19.92	0-3	3
		100	0	19.51	19.64	19.90	0-3	3
	256QAM	1	0	17.62	17.80	18.03	0-5	5
		1	49	17.61	17.89	18.11	0-5	5
		1	99	17.74	17.96	17.98	0-5	5
		50	0	17.50	17.63	17.90	0-5	5
		50	25	17.56	17.65	17.94	0-5	5
		50	49	17.53	17.66	17.94	0-5	5
		100	0	17.57	17.64	17.96	0-5	5

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LTE FDD Band 2 Conducted Power _ Measured RSI = 0_ Antenna B

LTE FDD Band 2 _ 1.4 MHz BandwidthConducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 MHz	18900 Ch. 1880 MHz	19193 Ch. 1909.3 MHz		
1.4 MHz	QPSK	1	0	19.08	19.15	19.48	0	0
		1	3	19.07	19.20	19.45	0	0
		1	5	19.19	19.28	19.56	0	0
		3	0	19.16	19.27	19.51	0	0
		3	1	19.28	19.18	19.46	0	0
		3	3	19.24	19.29	19.51	0	0
		6	0	19.25	19.28	19.65	0-1	1
	16QAM	1	0	19.47	19.54	19.85	0-1	1
		1	3	19.40	19.51	19.68	0-1	1
		1	5	19.52	19.47	19.71	0-1	1
		3	0	19.26	19.40	19.69	0-1	1
		3	1	19.38	19.44	19.71	0-1	1
		3	3	19.38	19.38	19.71	0-1	1
		6	0	19.33	19.37	19.69	0-2	2
	64QAM	1	0	19.43	19.53	19.87	0-2	2
		1	3	19.28	19.28	19.81	0-2	2
		1	5	19.40	19.45	19.81	0-2	2
		3	0	19.29	19.44	19.69	0-2	2
		3	1	19.29	19.40	19.69	0-2	2
		3	3	19.26	19.36	19.60	0-2	2
		6	0	19.26	19.41	19.69	0-3	3
	256QAM	1	0	17.86	17.96	18.25	0-5	5
		1	3	17.92	17.89	18.17	0-5	5
		1	5	17.83	17.87	18.24	0-5	5
		3	0	17.71	17.89	18.08	0-5	5
		3	1	17.82	17.85	18.20	0-5	5
		3	3	17.90	17.89	18.24	0-5	5
		6	0	17.85	17.87	18.12	0-5	5

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LTE FDD Band 2 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 MHz	18900 Ch. 1880 MHz	19185 Ch. 1908.5 MHz		
3 MHz	QPSK	1	0	19.06	19.20	19.44	0	0
		1	7	18.94	19.05	19.31	0	0
		1	14	19.02	19.10	19.37	0	0
		8	0	19.23	19.31	19.58	0-1	1
		8	3	19.15	19.29	19.58	0-1	1
		8	7	19.22	19.29	19.53	0-1	1
		15	0	19.26	19.29	19.61	0-1	1
	16QAM	1	0	19.25	19.44	19.67	0-1	1
		1	7	19.33	19.40	19.60	0-1	1
		1	14	19.50	19.48	19.74	0-1	1
		8	0	19.21	19.33	19.63	0-2	2
		8	3	19.33	19.41	19.69	0-2	2
		8	7	19.33	19.38	19.57	0-2	2
		15	0	19.33	19.30	19.63	0-2	2
	64QAM	1	0	19.36	19.42	19.72	0-2	2
		1	7	19.32	19.38	19.67	0-2	2
		1	14	19.41	19.40	19.72	0-2	2
		8	0	19.21	19.35	19.59	0-3	3
		8	3	19.22	19.34	19.59	0-3	3
		8	7	19.31	19.34	19.56	0-3	3
		15	0	19.22	19.26	19.69	0-3	3
	256QAM	1	0	17.92	18.07	18.37	0-5	5
		1	7	17.85	17.90	18.16	0-5	5
		1	14	17.98	17.79	18.47	0-5	5
		8	0	17.63	17.66	17.99	0-5	5
		8	3	17.61	17.72	18.02	0-5	5
		8	7	17.67	17.66	17.98	0-5	5
		15	0	17.68	17.78	18.06	0-5	5

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LTE FDD Band 2 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 MHz	18900 Ch. 1880 MHz	19175 Ch. 1907.5 MHz		
5 MHz	QPSK	1	0	19.02	19.07	19.30	0	0
		1	12	18.95	19.04	19.29	0	0
		1	24	19.09	19.17	19.42	0	0
		12	0	19.18	19.32	19.55	0-1	1
		12	6	19.19	19.29	19.59	0-1	1
		12	11	19.23	19.32	19.60	0-1	1
		25	0	19.18	19.26	19.55	0-1	1
	16QAM	1	0	19.49	19.21	19.63	0-1	1
		1	12	19.21	19.31	19.54	0-1	1
		1	24	19.40	19.40	19.65	0-1	1
		12	0	19.25	19.40	19.58	0-2	2
		12	6	19.23	19.37	19.64	0-2	2
		12	11	19.25	19.36	19.60	0-2	2
		25	0	19.20	19.28	19.58	0-2	2
	64QAM	1	0	19.32	19.45	19.68	0-2	2
		1	12	19.25	19.46	19.60	0-2	2
		1	24	19.39	19.49	19.75	0-2	2
		12	0	19.25	19.19	19.60	0-3	3
		12	6	19.24	19.19	19.57	0-3	3
		12	11	19.27	19.21	19.55	0-3	3
		25	0	19.23	19.16	19.52	0-3	3
	256QAM	1	0	17.86	18.12	18.18	0-5	5
		1	12	17.60	17.95	18.16	0-5	5
		1	24	17.77	18.07	18.23	0-5	5
		12	0	17.69	17.78	18.01	0-5	5
		12	6	17.71	17.83	18.08	0-5	5
		12	11	17.74	17.83	18.14	0-5	5
		25	0	17.66	17.78	18.00	0-5	5

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LTE FDD Band 2 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 MHz	18900 Ch. 1880 MHz	19150 Ch. 1905 MHz		
10 MHz	QPSK	1	0	19.03	19.13	19.36	0	0
		1	24	18.97	19.07	19.30	0	0
		1	49	18.99	19.08	19.38	0	0
		25	0	19.17	19.26	19.53	0-1	1
		25	12	19.16	19.28	19.47	0-1	1
		25	24	19.21	19.29	19.50	0-1	1
		50	0	19.22	19.29	19.53	0-1	1
	16QAM	1	0	19.42	19.39	19.63	0-1	1
		1	24	19.47	19.36	19.64	0-1	1
		1	49	19.57	19.29	19.79	0-1	1
		25	0	19.18	19.27	19.53	0-2	2
		25	12	19.20	19.34	19.52	0-2	2
		25	24	19.18	19.33	19.47	0-2	2
		50	0	19.21	19.29	19.54	0-2	2
	64QAM	1	0	19.48	19.50	19.79	0-2	2
		1	24	19.29	19.52	19.65	0-2	2
		1	49	19.41	19.49	19.71	0-2	2
		25	0	19.20	19.30	19.51	0-3	3
		25	12	19.12	19.32	19.54	0-3	3
		25	24	19.17	19.30	19.56	0-3	3
		50	0	19.26	19.34	19.55	0-3	3
	256QAM	1	0	17.76	17.89	18.20	0-5	5
		1	24	17.67	17.86	18.06	0-5	5
		1	49	17.73	17.87	18.22	0-5	5
		25	0	17.69	17.74	18.02	0-5	5
		25	12	17.69	17.77	18.04	0-5	5
		25	24	17.76	17.79	18.01	0-5	5
		50	0	17.70	17.79	18.02	0-5	5

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LTE FDD Band 2 _ 15 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 MHz	18900 Ch. 1880 MHz	19125 Ch. 1902.5 MHz		
15 MHz	QPSK	1	0	18.95	19.04	19.24	0	0
		1	36	18.91	19.20	19.45	0	0
		1	74	19.04	19.07	19.31	0	0
		36	0	19.21	19.31	19.51	0-1	1
		36	18	19.18	19.30	19.50	0-1	1
		36	39	19.21	19.28	19.49	0-1	1
		75	0	19.16	19.29	19.50	0-1	1
	16QAM	1	0	19.39	19.48	19.72	0-1	1
		1	36	19.37	19.38	19.61	0-1	1
		1	74	19.38	19.48	19.46	0-1	1
		36	0	19.17	19.32	19.53	0-2	2
		36	18	19.19	19.26	19.51	0-2	2
		36	39	19.24	19.31	19.56	0-2	2
		75	0	19.19	19.28	19.46	0-2	2
	64QAM	1	0	19.37	19.19	19.61	0-2	2
		1	36	19.30	19.37	19.63	0-2	2
		1	74	19.33	19.38	19.69	0-2	2
		36	0	19.23	19.32	19.54	0-3	3
		36	18	19.22	19.31	19.59	0-3	3
		36	39	19.22	19.31	19.55	0-3	3
		75	0	19.17	19.29	19.52	0-3	3
	256QAM	1	0	17.85	17.92	18.01	0-5	5
		1	36	17.75	17.84	18.23	0-5	5
		1	74	17.72	17.96	18.18	0-5	5
		36	0	17.69	17.77	17.98	0-5	5
		36	18	17.67	17.77	17.97	0-5	5
		36	39	17.70	17.75	17.99	0-5	5
		75	0	17.72	17.79	18.03	0-5	5

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LTE FDD Band 2 _ 20 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 MHz	18900 Ch. 1880 MHz	19100 Ch. 1900 MHz		
20 MHz	QPSK	1	0	18.86	18.98	19.38	0	0
		1	49	18.97	19.05	19.28	0	0
		1	99	18.88	18.99	19.23	0	0
		50	0	19.14	19.23	19.62	0-1	1
		50	25	19.13	19.30	19.52	0-1	1
		50	49	19.15	19.25	19.49	0-1	1
		100	0	19.16	19.21	19.50	0-1	1
	16QAM	1	0	19.26	19.10	19.67	0-1	1
		1	49	19.44	19.18	19.67	0-1	1
		1	99	19.37	19.26	19.65	0-1	1
		50	0	19.14	19.30	19.57	0-2	2
		50	25	19.16	19.33	19.56	0-2	2
		50	49	19.16	19.30	19.56	0-2	2
		100	0	19.12	19.18	19.51	0-2	2
	64QAM	1	0	19.21	19.37	19.49	0-2	2
		1	49	19.25	19.38	19.61	0-2	2
		1	99	19.29	19.33	19.53	0-2	2
		50	0	19.17	19.29	19.54	0-3	3
		50	25	19.23	19.28	19.57	0-3	3
		50	49	19.20	19.26	19.54	0-3	3
		100	0	19.13	19.23	19.49	0-3	3
	256QAM	1	0	17.84	17.84	18.12	0-5	5
		1	49	17.89	18.02	18.31	0-5	5
		1	99	17.89	17.89	18.18	0-5	5
		50	0	17.64	17.72	17.97	0-5	5
		50	25	17.66	17.77	18.04	0-5	5
		50	49	17.63	17.76	17.98	0-5	5
		100	0	17.67	17.77	18.02	0-5	5

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LTE FDD Band 2 (Upper) Conducted Power _ Measured *Pmax*_ Antenna D

LTE FDD Band 2 _ 1.4 MHz BandwidthConducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 MHz	18900 Ch. 1880 MHz	19193 Ch. 1909.3 MHz		
1.4 MHz	QPSK	1	0	22.96	22.79	23.03	0	0
		1	3	22.84	22.81	22.94	0	0
		1	5	22.85	22.91	23.07	0	0
		3	0	22.93	22.89	23.03	0	0
		3	1	23.00	22.94	23.07	0	0
		3	3	22.88	22.91	23.10	0	0
		6	0	22.00	21.88	22.12	0-1	1
	16QAM	1	0	22.19	22.06	22.36	0-1	1
		1	3	22.14	22.09	22.19	0-1	1
		1	5	22.05	22.21	22.26	0-1	1
		3	0	21.94	21.99	22.14	0-1	1
		3	1	21.98	21.95	22.18	0-1	1
		3	3	21.87	21.95	22.18	0-1	1
		6	0	21.11	20.93	21.17	0-2	2
	64QAM	1	0	21.04	21.08	21.26	0-2	2
		1	3	21.06	21.04	21.20	0-2	2
		1	5	20.98	21.09	21.22	0-2	2
		3	0	20.96	20.94	21.09	0-2	2
		3	1	20.93	20.90	21.07	0-2	2
		3	3	20.88	21.02	21.16	0-2	2
		6	0	20.07	20.01	20.17	0-3	3
	256QAM	1	0	18.04	18.00	18.18	0-5	5
		1	3	18.00	17.92	18.19	0-5	5
		1	5	18.15	18.02	18.14	0-5	5
		3	0	18.06	17.98	18.20	0-5	5
		3	1	18.07	18.03	18.20	0-5	5
		3	3	18.13	18.04	18.21	0-5	5
		6	0	18.02	17.96	18.14	0-5	5

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LTE FDD Band 2 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 MHz	18900 Ch. 1880 MHz	19185 Ch. 1908.5 MHz		
3 MHz	QPSK	1	0	22.96	22.85	23.07	0	0
		1	7	22.87	22.81	23.06	0	0
		1	14	22.90	22.87	23.02	0	0
		8	0	22.01	21.98	22.17	0-1	1
		8	3	21.97	22.04	22.20	0-1	1
		8	7	22.02	22.03	22.24	0-1	1
		15	0	22.03	22.02	22.22	0-1	1
	16QAM	1	0	22.33	22.35	22.43	0-1	1
		1	7	22.23	22.30	22.39	0-1	1
		1	14	22.38	22.39	22.48	0-1	1
		8	0	21.12	21.08	21.30	0-2	2
		8	3	21.11	21.12	21.28	0-2	2
		8	7	21.07	21.06	21.23	0-2	2
		15	0	20.98	21.02	21.15	0-2	2
	64QAM	1	0	21.24	21.23	21.33	0-2	2
		1	7	20.99	21.07	21.27	0-2	2
		1	14	21.32	21.35	21.47	0-2	2
		8	0	20.10	20.04	20.24	0-3	3
		8	3	20.12	20.12	20.32	0-3	3
		8	7	20.04	20.09	20.27	0-3	3
		15	0	20.08	20.11	20.24	0-3	3
	256QAM	1	0	18.07	18.18	18.20	0-5	5
		1	7	18.16	18.11	18.33	0-5	5
		1	14	18.13	18.22	18.40	0-5	5
		8	0	18.06	18.09	18.23	0-5	5
		8	3	18.12	18.07	18.27	0-5	5
		8	7	18.09	18.06	18.23	0-5	5
		15	0	18.02	18.02	18.19	0-5	5

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LTE FDD Band 2 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 MHz	18900 Ch. 1880 MHz	19175 Ch. 1907.5 MHz		
5 MHz	QPSK	1	0	22.93	22.88	23.01	0	0
		1	12	22.87	22.89	23.08	0	0
		1	24	22.91	23.01	23.18	0	0
		12	0	22.02	22.08	22.21	0-1	1
		12	6	22.02	22.06	22.23	0-1	1
		12	11	22.02	22.06	22.23	0-1	1
		25	0	22.12	22.12	22.28	0-1	1
	16QAM	1	0	22.34	22.38	22.50	0-1	1
		1	12	22.35	22.21	22.55	0-1	1
		1	24	22.35	22.31	22.52	0-1	1
		12	0	21.18	21.17	21.37	0-2	2
		12	6	21.15	21.13	21.34	0-2	2
		12	11	21.22	21.24	21.43	0-2	2
		25	0	21.08	21.11	21.27	0-2	2
	64QAM	1	0	21.32	21.34	21.47	0-2	2
		1	12	21.13	21.06	21.21	0-2	2
		1	24	21.27	21.22	21.45	0-2	2
		12	0	20.05	20.11	20.25	0-3	3
		12	6	20.06	20.07	20.26	0-3	3
		12	11	20.11	20.19	20.33	0-3	3
		25	0	20.00	20.09	20.21	0-3	3
	256QAM	1	0	18.21	18.26	18.41	0-5	5
		1	12	18.14	18.15	18.30	0-5	5
		1	24	18.19	18.21	18.37	0-5	5
		12	0	18.13	18.13	18.27	0-5	5
		12	6	18.11	18.11	18.29	0-5	5
		12	11	18.14	18.15	18.36	0-5	5
		25	0	18.01	18.05	18.18	0-5	5

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LTE FDD Band 2 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 MHz	18900 Ch. 1880 MHz	19150 Ch. 1905 MHz		
10 MHz	QPSK	1	0	22.93	22.98	22.99	0	0
		1	24	22.82	22.89	23.05	0	0
		1	49	22.91	22.86	23.13	0	0
		25	0	22.04	22.11	22.26	0-1	1
		25	12	22.11	22.15	22.32	0-1	1
		25	24	22.12	22.12	22.37	0-1	1
		50	0	22.14	22.21	22.39	0-1	1
	16QAM	1	0	22.18	22.27	22.44	0-1	1
		1	24	22.13	22.18	22.23	0-1	1
		1	49	22.33	22.28	22.54	0-1	1
		25	0	21.05	21.10	21.22	0-2	2
		25	12	21.08	21.15	21.28	0-2	2
		25	24	21.09	21.11	21.31	0-2	2
		50	0	21.06	21.16	21.29	0-2	2
	64QAM	1	0	21.22	21.26	21.31	0-2	2
		1	24	21.20	21.25	21.45	0-2	2
		1	49	21.30	21.30	21.51	0-2	2
		25	0	20.01	20.08	20.24	0-3	3
		25	12	20.04	20.07	20.27	0-3	3
		25	24	20.06	20.05	20.28	0-3	3
		50	0	20.06	20.11	20.31	0-3	3
	256QAM	1	0	18.15	18.24	18.33	0-5	5
		1	24	18.09	18.14	18.33	0-5	5
		1	49	18.25	18.21	18.48	0-5	5
		25	0	17.97	18.04	18.20	0-5	5
		25	12	17.99	18.07	18.22	0-5	5
		25	24	18.02	18.08	18.24	0-5	5
		50	0	18.03	18.10	18.26	0-5	5

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LTE FDD Band 2 _ 15 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 MHz	18900 Ch. 1880 MHz	19125 Ch. 1902.5 MHz		
15 MHz	QPSK	1	0	22.76	22.82	23.07	0	0
		1	36	22.88	22.92	23.14	0	0
		1	74	22.95	22.93	23.22	0	0
		36	0	22.02	22.08	22.25	0-1	1
		36	18	22.02	22.13	22.28	0-1	1
		36	39	22.08	22.12	22.33	0-1	1
		75	0	22.06	22.09	22.31	0-1	1
	16QAM	1	0	22.15	22.13	22.45	0-1	1
		1	36	22.31	22.27	22.39	0-1	1
		1	74	22.36	22.34	22.56	0-1	1
		36	0	21.04	21.15	21.30	0-2	2
		36	18	21.04	21.12	21.27	0-2	2
		36	39	21.08	21.09	21.31	0-2	2
		75	0	21.01	21.03	21.26	0-2	2
	64QAM	1	0	21.17	21.23	21.41	0-2	2
		1	36	20.99	20.94	21.22	0-2	2
		1	74	21.22	21.23	21.45	0-2	2
		36	0	20.04	20.13	20.32	0-3	3
		36	18	20.12	20.14	20.33	0-3	3
		36	39	20.13	20.13	20.38	0-3	3
		75	0	20.04	20.11	20.27	0-3	3
	256QAM	1	0	18.15	18.17	18.25	0-5	5
		1	36	18.17	18.13	18.33	0-5	5
		1	74	18.16	18.23	18.49	0-5	5
		36	0	18.03	18.12	18.25	0-5	5
		36	18	18.08	18.13	18.28	0-5	5
		36	39	18.09	18.10	18.34	0-5	5
		75	0	18.01	18.08	18.25	0-5	5

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LTE FDD Band 2 _ 20 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 MHz	18900 Ch. 1880 MHz	19100 Ch. 1900 MHz		
20 MHz	QPSK	1	0	22.66	22.88	22.96	0	0
		1	49	22.81	22.96	23.02	0	0
		1	99	22.85	22.79	23.06	0	0
		50	0	22.03	22.18	22.24	0-1	1
		50	25	22.09	22.21	22.27	0-1	1
		50	49	22.10	22.15	22.29	0-1	1
		100	0	22.04	22.10	22.25	0-1	1
	16QAM	1	0	22.06	22.20	22.40	0-1	1
		1	49	22.02	22.06	22.18	0-1	1
		1	99	22.15	22.27	22.50	0-1	1
		50	0	20.98	21.10	21.21	0-2	2
		50	25	21.10	21.12	21.25	0-2	2
		50	49	21.08	21.13	21.23	0-2	2
		100	0	20.99	21.08	21.20	0-2	2
	64QAM	1	0	21.05	21.09	21.31	0-2	2
		1	49	21.21	21.20	21.38	0-2	2
		1	99	21.18	21.19	21.45	0-2	2
		50	0	19.98	20.13	20.26	0-3	3
		50	25	20.04	20.13	20.30	0-3	3
		50	49	20.08	20.12	20.29	0-3	3
		100	0	19.99	20.07	20.21	0-3	3
	256QAM	1	0	17.95	18.18	18.29	0-5	5
		1	49	18.13	18.13	18.29	0-5	5
		1	99	18.12	18.15	18.36	0-5	5
		50	0	17.98	18.08	18.20	0-5	5
		50	25	18.03	18.10	18.20	0-5	5
		50	49	18.09	18.08	18.22	0-5	5
		100	0	18.01	18.06	18.20	0-5	5

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LTE FDD Band 2 (Upper) Conducted Power _ Measured RSI = 0, RSI = 1_ Antenna D

LTE FDD Band 2 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 MHz	18900 Ch. 1880 MHz	19193 Ch. 1909.3 MHz		
1.4 MHz	QPSK	1	0	19.50	19.47	19.58	0	0
		1	3	19.51	19.42	19.50	0	0
		1	5	19.59	19.50	19.64	0	0
		3	0	19.50	19.47	19.62	0	0
		3	1	19.59	19.53	19.65	0	0
		3	3	19.58	19.47	19.63	0	0
		6	0	19.55	19.49	19.63	0-1	1
	16QAM	1	0	19.82	19.84	19.90	0-1	1
		1	3	19.83	19.68	19.88	0-1	1
		1	5	19.90	19.85	19.93	0-1	1
		3	0	19.55	19.58	19.82	0-1	1
		3	1	19.66	19.58	19.82	0-1	1
		3	3	19.57	19.58	19.73	0-1	1
		6	0	19.67	19.56	19.66	0-2	2
	64QAM	1	0	19.66	19.60	19.83	0-2	2
		1	3	19.77	19.59	19.83	0-2	2
		1	5	19.73	19.65	19.80	0-2	2
		3	0	19.62	19.53	19.68	0-2	2
		3	1	19.58	19.49	19.65	0-2	2
		3	3	19.55	19.60	19.70	0-2	2
		6	0	19.64	19.52	19.70	0-3	3
	256QAM	1	0	18.10	18.10	18.28	0-5	5
		1	3	18.06	17.97	18.16	0-5	5
		1	5	18.12	18.03	18.19	0-5	5
		3	0	18.02	18.07	18.21	0-5	5
		3	1	18.09	18.04	18.20	0-5	5
		3	3	18.15	18.08	18.24	0-5	5
		6	0	18.02	18.00	18.16	0-5	5

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LTE FDD Band 2 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 MHz	18900 Ch. 1880 MHz	19185 Ch. 1908.5 MHz		
3 MHz	QPSK	1	0	19.45	19.54	19.66	0	0
		1	7	19.46	19.47	19.62	0	0
		1	14	19.40	19.53	19.60	0	0
		8	0	19.57	19.57	19.73	0-1	1
		8	3	19.61	19.58	19.75	0-1	1
		8	7	19.58	19.62	19.80	0-1	1
		15	0	19.60	19.63	19.76	0-1	1
	16QAM	1	0	19.80	19.86	20.00	0-1	1
		1	7	19.85	19.88	20.03	0-1	1
		1	14	19.82	19.86	20.02	0-1	1
		8	0	19.66	19.63	19.78	0-2	2
		8	3	19.70	19.66	19.81	0-2	2
		8	7	19.64	19.62	19.81	0-2	2
		15	0	19.55	19.57	19.74	0-2	2
	64QAM	1	0	19.72	19.69	19.87	0-2	2
		1	7	19.66	19.57	19.77	0-2	2
		1	14	19.80	19.86	20.02	0-2	2
		8	0	19.64	19.61	19.73	0-3	3
		8	3	19.70	19.61	19.82	0-3	3
		8	7	19.58	19.60	19.81	0-3	3
		15	0	19.62	19.64	19.78	0-3	3
	256QAM	1	0	18.11	18.17	18.25	0-5	5
		1	7	18.19	18.15	18.29	0-5	5
		1	14	18.22	18.28	18.40	0-5	5
		8	0	18.07	18.07	18.25	0-5	5
		8	3	18.15	18.11	18.30	0-5	5
		8	7	18.08	18.08	18.27	0-5	5
		15	0	18.06	18.10	18.22	0-5	5

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LTE FDD Band 2 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 MHz	18900 Ch. 1880 MHz	19175 Ch. 1907.5 MHz		
5 MHz	QPSK	1	0	19.47	19.48	19.58	0	0
		1	12	19.42	19.43	19.61	0	0
		1	24	19.51	19.53	19.71	0	0
		12	0	19.58	19.60	19.75	0-1	1
		12	6	19.58	19.63	19.77	0-1	1
		12	11	19.56	19.58	19.79	0-1	1
		25	0	19.55	19.59	19.73	0-1	1
	16QAM	1	0	19.81	19.90	20.01	0-1	1
		1	12	19.80	19.88	20.04	0-1	1
		1	24	19.75	19.91	20.01	0-1	1
		12	0	19.65	19.72	19.88	0-2	2
		12	6	19.71	19.71	19.89	0-2	2
		12	11	19.78	19.72	19.95	0-2	2
		25	0	19.58	19.61	19.77	0-2	2
	64QAM	1	0	19.72	19.91	20.02	0-2	2
		1	12	19.57	19.60	19.79	0-2	2
		1	24	19.79	19.81	19.99	0-2	2
		12	0	19.61	19.64	19.78	0-3	3
		12	6	19.58	19.55	19.79	0-3	3
		12	11	19.68	19.67	19.89	0-3	3
		25	0	19.53	19.56	19.71	0-3	3
	256QAM	1	0	18.22	18.19	18.41	0-5	5
		1	12	18.11	18.14	18.31	0-5	5
		1	24	18.19	18.20	18.45	0-5	5
		12	0	18.12	18.19	18.31	0-5	5
		12	6	18.11	18.13	18.26	0-5	5
		12	11	18.16	18.15	18.35	0-5	5
		25	0	18.05	18.06	18.22	0-5	5

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LTE FDD Band 2 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 MHz	18900 Ch. 1880 MHz	19150 Ch. 1905 MHz		
10 MHz	QPSK	1	0	19.49	19.45	19.64	0	0
		1	24	19.46	19.43	19.57	0	0
		1	49	19.47	19.46	19.66	0	0
		25	0	19.53	19.58	19.74	0-1	1
		25	12	19.56	19.63	19.77	0-1	1
		25	24	19.61	19.62	19.78	0-1	1
		50	0	19.56	19.61	19.80	0-1	1
	16QAM	1	0	19.81	19.81	20.01	0-1	1
		1	24	19.63	19.65	19.92	0-1	1
		1	49	19.90	19.87	20.12	0-1	1
		25	0	19.56	19.60	19.77	0-2	2
		25	12	19.56	19.62	19.79	0-2	2
		25	24	19.62	19.60	19.82	0-2	2
		50	0	19.56	19.59	19.77	0-2	2
	64QAM	1	0	19.67	19.75	19.89	0-2	2
		1	24	19.73	19.81	19.93	0-2	2
		1	49	19.87	19.82	20.00	0-2	2
		25	0	19.51	19.58	19.74	0-3	3
		25	12	19.52	19.59	19.72	0-3	3
		25	24	19.59	19.60	19.81	0-3	3
		50	0	19.60	19.62	19.81	0-3	3
	256QAM	1	0	18.11	18.22	18.39	0-5	5
		1	24	18.00	18.20	18.28	0-5	5
		1	49	18.24	18.23	18.49	0-5	5
		25	0	18.02	18.07	18.17	0-5	5
		25	12	17.98	18.07	18.21	0-5	5
		25	24	18.01	18.07	18.31	0-5	5
		50	0	18.04	18.11	18.24	0-5	5

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LTE FDD Band 2 _ 15 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 MHz	18900 Ch. 1880 MHz	19125 Ch. 1902.5 MHz		
15 MHz	QPSK	1	0	19.43	19.44	19.69	0	0
		1	36	19.44	19.44	19.67	0	0
		1	74	19.44	19.51	19.74	0	0
		36	0	19.50	19.58	19.72	0-1	1
		36	18	19.52	19.62	19.77	0-1	1
		36	39	19.59	19.58	19.81	0-1	1
		75	0	19.54	19.58	19.76	0-1	1
	16QAM	1	0	19.74	19.85	20.00	0-1	1
		1	36	19.82	19.79	20.00	0-1	1
		1	74	19.87	19.82	20.05	0-1	1
		36	0	19.53	19.62	19.76	0-2	2
		36	18	19.56	19.62	19.80	0-2	2
		36	39	19.63	19.63	19.87	0-2	2
		75	0	19.52	19.55	19.76	0-2	2
	64QAM	1	0	19.68	19.79	19.91	0-2	2
		1	36	19.56	19.56	19.80	0-2	2
		1	74	19.74	19.71	20.05	0-2	2
		36	0	19.54	19.60	19.78	0-3	3
		36	18	19.58	19.64	19.83	0-3	3
		36	39	19.59	19.60	19.84	0-3	3
		75	0	19.52	19.59	19.77	0-3	3
	256QAM	1	0	18.12	18.17	18.28	0-5	5
		1	36	18.20	18.11	18.36	0-5	5
		1	74	18.15	18.21	18.42	0-5	5
		36	0	18.06	18.11	18.29	0-5	5
		36	18	18.08	18.15	18.27	0-5	5
		36	39	18.11	18.13	18.32	0-5	5
		75	0	18.01	18.07	18.25	0-5	5

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LTE FDD Band 2 _ 20 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 MHz	18900 Ch. 1880 MHz	19100 Ch. 1900 MHz		
20 MHz	QPSK	1	0	19.32	19.44	19.51	0	0
		1	49	19.40	19.46	19.60	0	0
		1	99	19.38	19.41	19.63	0	0
		50	0	19.44	19.57	19.65	0-1	1
		50	25	19.52	19.59	19.69	0-1	1
		50	49	19.51	19.55	19.72	0-1	1
		100	0	19.47	19.56	19.69	0-1	1
	16QAM	1	0	19.63	19.87	19.85	0-1	1
		1	49	19.67	19.74	19.81	0-1	1
		1	99	19.79	19.80	19.98	0-1	1
		50	0	19.47	19.56	19.69	0-2	2
		50	25	19.55	19.60	19.75	0-2	2
		50	49	19.58	19.56	19.74	0-2	2
		100	0	19.48	19.58	19.67	0-2	2
	64QAM	1	0	19.62	19.65	19.80	0-2	2
		1	49	19.67	19.77	19.91	0-2	2
		1	99	19.73	19.74	19.98	0-2	2
		50	0	19.47	19.60	19.71	0-3	3
		50	25	19.56	19.63	19.77	0-3	3
		50	49	19.59	19.60	19.78	0-3	3
		100	0	19.50	19.56	19.70	0-3	3
	256QAM	1	0	17.97	18.13	18.24	0-5	5
		1	49	18.13	18.18	18.23	0-5	5
		1	99	18.15	18.17	18.31	0-5	5
		50	0	17.94	18.10	18.19	0-5	5
		50	25	18.06	18.11	18.21	0-5	5
		50	49	18.06	18.07	18.24	0-5	5
		100	0	17.99	18.08	18.18	0-5	5

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11.3.2 LTE FDD Band 4 Maximum Conducted Output Power

LTE FDD Band 4 Conducted Power _ Measured *Pmax*, RSI = 1 _Antenna B

LTE FDD Band 4 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19957 Ch. 1710.7 MHz	20175 Ch. 1732.5 MHz	20393 Ch. 1754.3 MHz		
1.4 MHz	QPSK	1	0	22.87	23.01	23.08	0	0
		1	3	22.85	23.01	23.03	0	0
		1	5	22.52	23.09	23.18	0	0
		3	0	22.98	23.14	23.20	0	0
		3	1	22.96	23.15	23.17	0	0
		3	3	22.89	23.06	23.12	0	0
		6	0	22.06	22.16	22.25	0-1	1
	16QAM	1	0	22.28	22.27	22.38	0-1	1
		1	3	22.21	22.22	22.19	0-1	1
		1	5	22.27	22.22	22.42	0-1	1
		3	0	21.98	22.07	22.16	0-1	1
		3	1	22.05	22.13	22.20	0-1	1
		3	3	22.06	22.19	22.33	0-1	1
		6	0	21.12	21.23	21.33	0-2	2
	64QAM	1	0	21.10	21.24	21.31	0-2	2
		1	3	21.10	21.19	21.31	0-2	2
		1	5	21.12	21.25	21.35	0-2	2
		3	0	21.01	21.15	21.28	0-2	2
		3	1	20.90	20.73	21.34	0-2	2
		3	3	21.05	21.23	21.36	0-2	2
		6	0	20.05	20.28	20.29	0-3	3
	256QAM	1	0	18.20	18.35	18.46	0-5	5
		1	3	18.23	18.36	18.42	0-5	5
		1	5	18.31	18.23	18.46	0-5	5
		3	0	18.14	18.34	18.31	0-5	5
		3	1	18.01	18.28	18.29	0-5	5
		3	3	18.11	18.38	18.40	0-5	5
		6	0	18.10	18.29	18.27	0-5	5

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LTE FDD Band 4 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19965 Ch. 1711.5 MHz	20175 Ch. 1732.5 MHz	20385 Ch. 1753.5 MHz		
3 MHz	QPSK	1	0	22.88	23.03	23.09	0	0
		1	7	22.72	22.92	22.94	0	0
		1	14	22.84	22.98	22.99	0	0
		8	0	22.01	22.19	22.23	0-1	1
		8	3	22.06	22.20	22.25	0-1	1
		8	7	22.01	22.22	22.25	0-1	1
		15	0	22.08	22.18	22.25	0-1	1
	16QAM	1	0	22.24	22.03	22.42	0-1	1
		1	7	22.14	22.19	22.25	0-1	1
		1	14	22.16	22.31	22.28	0-1	1
		8	0	21.02	21.27	21.26	0-2	2
		8	3	21.14	21.21	21.36	0-2	2
		8	7	21.07	21.17	21.32	0-2	2
		15	0	21.09	21.19	21.28	0-2	2
	64QAM	1	0	21.21	21.39	21.44	0-2	2
		1	7	21.23	21.22	21.43	0-2	2
		1	14	21.32	21.39	21.50	0-2	2
		8	0	20.00	20.21	20.28	0-3	3
		8	3	20.01	20.24	20.29	0-3	3
		8	7	20.04	20.24	20.32	0-3	3
		15	0	20.12	20.23	20.35	0-3	3
	256QAM	1	0	18.24	18.42	18.37	0-5	5
		1	7	18.17	18.32	18.35	0-5	5
		1	14	18.23	18.30	18.40	0-5	5
		8	0	17.90	18.19	18.21	0-5	5
		8	3	17.97	18.15	18.16	0-5	5
		8	7	17.97	18.15	18.25	0-5	5
		15	0	18.07	18.21	18.29	0-5	5

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LTE FDD Band 4 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19975 Ch. 1712.5 MHz	20175 Ch. 1732.5 MHz	20375 Ch. 1752.5 MHz		
5 MHz	QPSK	1	0	22.81	22.92	23.01	0	0
		1	12	22.73	22.89	22.92	0	0
		1	24	22.87	23.01	23.08	0	0
		12	0	22.04	22.18	22.24	0-1	1
		12	6	22.06	22.20	22.25	0-1	1
		12	11	22.07	22.23	22.29	0-1	1
		25	0	22.06	22.26	22.32	0-1	1
	16QAM	1	0	22.11	22.25	22.48	0-1	1
		1	12	22.08	22.18	22.30	0-1	1
		1	24	22.31	22.30	22.42	0-1	1
		12	0	21.07	21.16	21.28	0-2	2
		12	6	21.15	21.24	21.29	0-2	2
		12	11	21.04	21.19	21.29	0-2	2
		25	0	21.04	21.21	21.27	0-2	2
	64QAM	1	0	21.23	21.20	21.46	0-2	2
		1	12	21.08	21.25	21.47	0-2	2
		1	24	21.17	21.42	21.51	0-2	2
		12	0	20.08	20.23	20.34	0-3	3
		12	6	20.04	20.19	20.27	0-3	3
		12	11	20.09	20.19	20.30	0-3	3
		25	0	20.04	20.24	20.25	0-3	3
	256QAM	1	0	17.99	18.38	18.53	0-5	5
		1	12	18.16	18.31	18.26	0-5	5
		1	24	18.25	18.35	18.32	0-5	5
		12	0	18.02	18.19	18.36	0-5	5
		12	6	18.03	18.25	18.21	0-5	5
		12	11	18.08	18.29	18.27	0-5	5
		25	0	18.04	18.25	18.29	0-5	5

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LTE FDD Band 4 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20000 Ch. 1715 MHz	20175 Ch. 1732.5 MHz	20350 Ch. 1750 MHz		
10 MHz	QPSK	1	0	22.84	22.98	23.05	0	0
		1	24	22.80	22.91	23.01	0	0
		1	49	22.81	22.96	23.01	0	0
		25	0	22.04	22.27	22.32	0-1	1
		25	12	22.08	22.29	22.32	0-1	1
		25	24	22.09	22.34	22.33	0-1	1
		50	0	22.12	22.34	22.35	0-1	1
	16QAM	1	0	22.13	22.22	22.23	0-1	1
		1	24	22.21	22.29	22.30	0-1	1
		1	49	22.13	22.21	22.41	0-1	1
		25	0	21.04	21.16	21.27	0-2	2
		25	12	21.03	21.20	21.24	0-2	2
		25	24	21.01	21.17	21.25	0-2	2
		50	0	21.11	21.32	21.32	0-2	2
	64QAM	1	0	21.21	21.38	21.27	0-2	2
		1	24	21.18	21.27	21.43	0-2	2
		1	49	21.23	21.32	21.36	0-2	2
		25	0	20.03	20.19	20.25	0-3	3
		25	12	20.05	20.18	20.26	0-3	3
		25	24	20.08	20.22	20.29	0-3	3
		50	0	20.07	20.23	20.36	0-3	3
	256QAM	1	0	18.22	18.52	18.57	0-5	5
		1	24	18.25	18.41	18.64	0-5	5
		1	49	18.35	18.43	18.55	0-5	5
		25	0	18.07	18.22	18.31	0-5	5
		25	12	18.12	18.24	18.35	0-5	5
		25	24	18.11	18.27	18.36	0-5	5
		50	0	18.06	18.24	18.27	0-5	5

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LTE FDD Band 4 _ 15 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20025 Ch. 1717.5 MHz	20175 Ch. 1732.5 MHz	20325 Ch. 1747.5 MHz		
15 MHz	QPSK	1	0	22.69	22.89	22.88	0	0
		1	36	22.73	22.88	22.86	0	0
		1	74	22.80	22.96	23.01	0	0
		36	0	22.02	22.19	22.21	0-1	1
		36	18	22.01	22.23	22.23	0-1	1
		36	39	22.05	22.21	22.21	0-1	1
		75	0	22.02	22.23	22.23	0-1	1
	16QAM	1	0	22.18	22.13	22.15	0-1	1
		1	36	22.06	21.78	21.98	0-1	1
		1	74	22.14	22.17	22.22	0-1	1
		36	0	21.01	21.16	21.17	0-2	2
		36	18	21.03	21.14	21.18	0-2	2
		36	39	21.03	21.20	21.22	0-2	2
		75	0	21.02	21.15	21.19	0-2	2
	64QAM	1	0	20.97	21.16	21.24	0-2	2
		1	36	21.05	21.11	21.24	0-2	2
		1	74	21.05	21.30	21.37	0-2	2
		36	0	20.05	20.23	20.18	0-3	3
		36	18	20.10	20.23	20.22	0-3	3
		36	39	20.06	20.24	20.25	0-3	3
		75	0	20.03	20.17	20.20	0-3	3
	256QAM	1	0	18.01	18.48	18.16	0-5	5
		1	36	18.10	18.28	18.31	0-5	5
		1	74	18.14	18.38	18.43	0-5	5
		36	0	18.01	18.20	18.18	0-5	5
		36	18	18.01	18.15	18.19	0-5	5
		36	39	18.01	18.20	18.24	0-5	5
		75	0	18.02	18.23	18.24	0-5	5

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LTE FDD Band 4 _ 20 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20175 ch. 1732.5 MHz			
20 MHz	QPSK	1	0		22.88		0	0
		1	49		22.93		0	0
		1	99		22.85		0	0
		50	0		22.21		0-1	1
		50	25		22.34		0-1	1
		50	49		22.32		0-1	1
		100	0		22.23		0-1	1
	16QAM	1	0		22.21		0-1	1
		1	49		22.25		0-1	1
		1	99		22.27		0-1	1
		50	0		21.21		0-2	2
		50	25		21.28		0-2	2
		50	49		21.24		0-2	2
		100	0		21.16		0-2	2
	64QAM	1	0		21.11		0-2	2
		1	49		21.13		0-2	2
		1	99		21.18		0-2	2
		50	0		20.26		0-3	3
		50	25		20.25		0-3	3
		50	49		20.25		0-3	3
		100	0		20.17		0-3	3
	256QAM	1	0		18.26		0-5	5
		1	49		18.33		0-5	5
		1	99		18.28		0-5	5
		50	0		18.16		0-5	5
		50	25		18.25		0-5	5
		50	49		18.20		0-5	5
		100	0		18.24		0-5	5

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LTE FDD Band 4 Conducted Power _ Measured RSI = 0 _ Antenna B

LTE FDD Band 4 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19957 Ch. 1710.7 MHz	20175 Ch. 1732.5 MHz	20393 Ch. 1754.3 MHz		
1.4 MHz	QPSK	1	0	19.47	19.65	19.66	0	0
		1	3	19.48	19.65	19.68	0	0
		1	5	19.59	19.75	19.77	0	0
		3	0	19.57	19.78	19.86	0	0
		3	1	19.63	19.77	19.86	0	0
		3	3	19.55	19.77	19.80	0	0
		6	0	19.65	19.81	19.80	0-1	1
	16QAM	1	0	19.78	20.00	19.96	0-1	1
		1	3	19.67	19.80	20.01	0-1	1
		1	5	19.74	19.85	20.00	0-1	1
		3	0	19.64	19.75	19.94	0-1	1
		3	1	19.71	19.77	19.91	0-1	1
		3	3	19.75	19.83	19.90	0-1	1
		6	0	19.67	19.74	19.92	0-2	2
	64QAM	1	0	19.77	19.92	20.03	0-2	2
		1	3	19.67	19.81	19.92	0-2	2
		1	5	19.71	19.89	20.06	0-2	2
		3	0	19.71	19.80	19.86	0-2	2
		3	1	19.63	19.79	19.86	0-2	2
		3	3	19.67	19.86	19.88	0-2	2
		6	0	19.70	19.73	19.83	0-3	3
	256QAM	1	0	18.19	18.44	18.47	0-5	5
		1	3	18.22	18.30	18.48	0-5	5
		1	5	18.32	18.36	18.44	0-5	5
		3	0	18.18	18.31	18.39	0-5	5
		3	1	18.20	18.30	18.45	0-5	5
		3	3	18.22	18.39	18.48	0-5	5
		6	0	18.18	18.39	18.39	0-5	5

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LTE FDD Band 4 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19965 Ch. 1711.5 MHz	20175 Ch. 1732.5 MHz	20385 Ch. 1753.5 MHz		
3 MHz	QPSK	1	0	19.46	19.70	19.73	0	0
		1	7	19.36	19.58	19.66	0	0
		1	14	19.42	19.63	19.69	0	0
		8	0	19.58	19.78	19.80	0-1	1
		8	3	19.64	19.85	19.92	0-1	1
		8	7	19.62	19.82	19.90	0-1	1
		15	0	19.60	19.83	19.84	0-1	1
	16QAM	1	0	19.81	20.02	19.99	0-1	1
		1	7	19.74	19.83	19.96	0-1	1
		1	14	19.77	20.01	19.99	0-1	1
		8	0	19.69	19.78	19.78	0-2	2
		8	3	19.60	19.84	19.90	0-2	2
		8	7	19.67	19.85	19.95	0-2	2
		15	0	19.64	19.79	19.82	0-2	2
	64QAM	1	0	19.75	19.99	19.99	0-2	2
		1	7	19.71	19.80	19.87	0-2	2
		1	14	19.72	19.89	19.88	0-2	2
		8	0	19.55	19.78	19.92	0-3	3
		8	3	19.58	19.76	19.86	0-3	3
		8	7	19.62	19.79	19.89	0-3	3
		15	0	19.61	19.84	19.88	0-3	3
	256QAM	1	0	18.34	18.51	18.44	0-5	5
		1	7	18.21	18.26	18.21	0-5	5
		1	14	18.41	18.48	18.39	0-5	5
		8	0	17.96	18.16	18.14	0-5	5
		8	3	17.98	18.25	18.24	0-5	5
		8	7	18.02	18.23	18.21	0-5	5
		15	0	18.06	18.31	18.34	0-5	5

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LTE FDD Band 4 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19975 Ch. 1712.5 MHz	20175 Ch. 1732.5 MHz	20375 Ch. 1752.5 MHz		
5 MHz	QPSK	1	0	19.36	19.60	19.66	0	0
		1	12	19.29	19.51	19.58	0	0
		1	24	19.50	19.68	19.73	0	0
		12	0	19.58	19.80	19.86	0-1	1
		12	6	19.64	19.82	19.87	0-1	1
		12	11	19.64	19.83	19.88	0-1	1
		25	0	19.59	19.83	19.87	0-1	1
	16QAM	1	0	19.72	19.99	20.02	0-1	1
		1	12	19.65	19.95	19.81	0-1	1
		1	24	19.72	19.99	19.96	0-1	1
		12	0	19.64	19.76	19.88	0-2	2
		12	6	19.71	19.85	19.91	0-2	2
		12	11	19.65	19.86	19.90	0-2	2
		25	0	19.61	19.74	19.86	0-2	2
	64QAM	1	0	19.75	19.90	19.97	0-2	2
		1	12	19.64	19.87	19.98	0-2	2
		1	24	19.74	19.94	20.01	0-2	2
		12	0	19.57	19.79	19.88	0-3	3
		12	6	19.63	19.82	19.86	0-3	3
		12	11	19.63	19.81	19.88	0-3	3
		25	0	19.58	19.80	19.85	0-3	3
	256QAM	1	0	18.27	18.51	18.54	0-5	5
		1	12	18.09	18.48	18.51	0-5	5
		1	24	18.26	18.48	18.57	0-5	5
		12	0	18.05	18.28	18.32	0-5	5
		12	6	18.10	18.28	18.37	0-5	5
		12	11	18.17	18.28	18.36	0-5	5
		25	0	18.13	18.31	18.36	0-5	5

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LTE FDD Band 4 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20000 Ch. 1715 MHz	20175 Ch. 1732.5 MHz	20350 Ch. 1750 MHz		
10 MHz	QPSK	1	0	19.46	19.66	19.66	0	0
		1	24	19.41	19.58	19.61	0	0
		1	49	19.43	19.60	19.63	0	0
		25	0	19.58	19.78	19.80	0-1	1
		25	12	19.57	19.83	19.81	0-1	1
		25	24	19.64	19.83	19.84	0-1	1
		50	0	19.59	19.87	19.88	0-1	1
	16QAM	1	0	19.72	19.91	20.00	0-1	1
		1	24	19.78	19.80	19.98	0-1	1
		1	49	19.83	19.92	20.07	0-1	1
		25	0	19.62	19.76	19.85	0-2	2
		25	12	19.63	19.81	19.78	0-2	2
		25	24	19.64	19.83	19.81	0-2	2
		50	0	19.66	19.84	19.88	0-2	2
	64QAM	1	0	19.83	19.96	20.03	0-2	2
		1	24	19.61	19.89	19.93	0-2	2
		1	49	19.61	19.97	20.15	0-2	2
		25	0	19.57	19.77	19.88	0-3	3
		25	12	19.62	19.79	19.83	0-3	3
		25	24	19.60	19.79	19.88	0-3	3
		50	0	19.63	19.80	19.92	0-3	3
	256QAM	1	0	18.34	18.52	18.48	0-5	5
		1	24	18.37	18.47	18.40	0-5	5
		1	49	18.31	18.54	18.56	0-5	5
		25	0	18.11	18.31	18.34	0-5	5
		25	12	18.12	18.29	18.39	0-5	5
		25	24	18.09	18.30	18.38	0-5	5
		50	0	18.09	18.29	18.34	0-5	5

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LTE FDD Band 4 _ 15 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20025 Ch. 1717.5 MHz	20175 Ch. 1732.5 MHz	20325 Ch. 1747.5 MHz		
15 MHz	QPSK	1	0	19.37	19.54	19.52	0	0
		1	36	19.28	19.54	19.56	0	0
		1	74	19.43	19.64	19.60	0	0
		36	0	19.59	19.76	19.78	0-1	1
		36	18	19.59	19.77	19.83	0-1	1
		36	39	19.61	19.81	19.76	0-1	1
		75	0	19.57	19.80	19.81	0-1	1
	16QAM	1	0	19.71	19.94	19.74	0-1	1
		1	36	19.62	19.94	19.92	0-1	1
		1	74	19.75	19.91	19.91	0-1	1
		36	0	19.60	19.79	19.80	0-2	2
		36	18	19.58	19.76	19.81	0-2	2
		36	39	19.60	19.80	19.83	0-2	2
		75	0	19.56	19.74	19.77	0-2	2
	64QAM	1	0	19.51	19.93	19.98	0-2	2
		1	36	19.74	19.93	19.97	0-2	2
		1	74	19.71	19.97	19.97	0-2	2
		36	0	19.61	19.81	19.78	0-3	3
		36	18	19.66	19.80	19.82	0-3	3
		36	39	19.65	19.81	19.85	0-3	3
		75	0	19.56	19.73	19.79	0-3	3
	256QAM	1	0	17.98	18.08	18.23	0-5	5
		1	36	18.24	18.36	18.42	0-5	5
		1	74	18.28	18.35	18.49	0-5	5
		36	0	18.05	18.25	18.23	0-5	5
		36	18	18.07	18.28	18.28	0-5	5
		36	39	18.13	18.29	18.24	0-5	5
		75	0	18.10	18.31	18.31	0-5	5

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LTE FDD Band 4 _ 20 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20175 ch. 1732.5 MHz			
20 MHz	QPSK	1	0		19.50		0	0
		1	49		19.52		0	0
		1	99		19.52		0	0
		50	0		19.77		0-1	1
		50	25		19.81		0-1	1
		50	49		19.79		0-1	1
		100	0		19.76		0-1	1
	16QAM	1	0		19.88		0-1	1
		1	49		19.78		0-1	1
		1	99		19.95		0-1	1
		50	0		19.79		0-2	2
		50	25		19.82		0-2	2
		50	49		19.84		0-2	2
		100	0		19.73		0-2	2
	64QAM	1	0		19.92		0-2	2
		1	49		19.92		0-2	2
		1	99		19.88		0-2	2
		50	0		19.79		0-3	3
		50	25		19.84		0-3	3
		50	49		19.79		0-3	3
		100	0		19.73		0-3	3
	256QAM	1	0		18.37		0-5	5
		1	49		18.38		0-5	5
		1	99		18.41		0-5	5
		50	0		18.29		0-5	5
		50	25		18.29		0-5	5
		50	49		18.29		0-5	5
		100	0		18.27		0-5	5

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11.3.3 LTE FDD Band 5 Maximum Conducted Output Power

LTE FDD Band 5 Conducted Power _ Measured *Pmax*, RSI = 1_ Antenna A

LTE FDD Band 5 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20407 Ch. 824.7 MHz	20525 Ch. 836.5 MHz	20643 Ch. 848.3 MHz		
1.4 MHz	QPSK	1	0	24.37	24.12	23.82	0	0
		1	3	24.31	24.22	23.81	0	0
		1	5	24.47	24.30	23.90	0	0
		3	0	24.42	24.30	23.94	0	0
		3	1	24.46	24.36	23.95	0	0
		3	3	24.53	24.42	24.04	0	0
		6	0	23.51	23.40	23.00	0-1	1
	16QAM	1	0	23.58	23.61	23.12	0-1	1
		1	3	23.65	23.52	23.18	0-1	1
		1	5	23.71	23.47	23.08	0-1	1
		3	0	23.52	23.37	23.03	0-1	1
		3	1	23.63	23.47	23.10	0-1	1
		3	3	23.55	23.51	23.05	0-1	1
		6	0	22.59	22.48	22.08	0-2	2
	64QAM	1	0	22.63	22.65	22.17	0-2	2
		1	3	22.51	22.53	22.13	0-2	2
		1	5	22.63	22.51	22.10	0-2	2
		3	0	22.53	22.40	22.04	0-2	2
		3	1	22.48	22.45	22.04	0-2	2
		3	3	22.59	22.40	22.10	0-2	2
		6	0	21.57	21.48	21.02	0-3	3
	256QAM	1	0	19.79	19.49	19.17	0-5	5
		1	3	19.62	19.42	19.03	0-5	5
		1	5	19.63	19.46	19.21	0-5	5
		3	0	19.58	19.41	19.02	0-5	5
		3	1	19.53	19.49	18.99	0-5	5
		3	3	19.58	19.51	19.07	0-5	5
		6	0	19.52	19.46	19.04	0-5	5

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LTE FDD Band 5 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20415 Ch. 825.5 MHz	20525 Ch. 836.5 MHz	20635 Ch. 847.5 MHz		
3 MHz	QPSK	1	0	24.37	24.27	23.90	0	0
		1	7	24.20	24.09	23.70	0	0
		1	14	24.31	24.17	23.79	0	0
		8	0	23.46	23.39	23.01	0-1	1
		8	3	23.51	23.42	22.98	0-1	1
		8	7	23.48	23.42	22.98	0-1	1
		15	0	23.54	23.39	22.97	0-1	1
	16QAM	1	0	23.45	23.48	23.05	0-1	1
		1	7	23.50	23.39	22.86	0-1	1
		1	14	23.68	23.49	23.04	0-1	1
		8	0	22.57	22.44	22.04	0-2	2
		8	3	22.60	22.44	22.06	0-2	2
		8	7	22.57	22.41	21.99	0-2	2
		15	0	22.55	22.36	21.99	0-2	2
	64QAM	1	0	22.75	22.75	22.16	0-2	2
		1	7	22.65	22.65	21.94	0-2	2
		1	14	22.74	22.62	22.05	0-2	2
		8	0	21.57	21.41	21.00	0-3	3
		8	3	21.57	21.39	21.05	0-3	3
		8	7	21.59	21.38	21.07	0-3	3
		15	0	21.50	21.38	21.04	0-3	3
	256QAM	1	0	19.68	19.67	19.21	0-5	5
		1	7	19.70	19.49	19.17	0-5	5
		1	14	19.77	19.50	19.15	0-5	5
		8	0	19.37	19.24	18.85	0-5	5
		8	3	19.36	19.23	18.85	0-5	5
		8	7	19.40	19.27	18.89	0-5	5
		15	0	19.41	19.28	18.92	0-5	5

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LTE FDD Band 5 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20425 Ch. 826.5 MHz	20525 Ch. 836.5 MHz	20625 Ch. 846.5 MHz		
5 MHz	QPSK	1	0	24.26	24.15	23.78	0	0
		1	12	24.21	24.11	23.79	0	0
		1	24	24.36	24.23	23.93	0	0
		12	0	23.46	23.35	23.05	0-1	1
		12	6	23.46	23.39	23.04	0-1	1
		12	11	23.56	23.41	23.07	0-1	1
		25	0	23.50	23.38	23.01	0-1	1
	16QAM	1	0	23.64	23.53	23.21	0-1	1
		1	12	23.53	23.55	23.14	0-1	1
		1	24	23.57	23.65	23.19	0-1	1
		12	0	22.54	22.40	22.12	0-2	2
		12	6	22.50	22.37	22.08	0-2	2
		12	11	22.53	22.39	22.08	0-2	2
		25	0	22.54	22.37	22.10	0-2	2
	64QAM	1	0	22.70	22.60	22.17	0-2	2
		1	12	22.67	22.49	22.23	0-2	2
		1	24	22.81	22.63	22.32	0-2	2
		12	0	21.50	21.43	21.11	0-3	3
		12	6	21.56	21.41	21.02	0-3	3
		12	11	21.53	21.45	21.05	0-3	3
		25	0	21.49	21.39	21.04	0-3	3
	256QAM	1	0	19.58	19.65	19.15	0-5	5
		1	12	19.59	19.47	19.06	0-5	5
		1	24	19.56	19.62	19.20	0-5	5
		12	0	19.46	19.33	18.98	0-5	5
		12	6	19.47	19.33	19.02	0-5	5
		12	11	19.46	19.39	19.06	0-5	5
		25	0	19.50	19.39	19.04	0-5	5

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LTE FDD Band 5 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20525 Ch.			
					836.5 MHz			
10 MHz	QPSK	1	0		24.22		0	0
		1	24		24.13		0	0
		1	49		24.17		0	0
		25	0		23.38		0-1	1
		25	12		23.37		0-1	1
		25	24		23.36		0-1	1
		50	0		23.37		0-1	1
	16QAM	1	0		23.63		0-1	1
		1	24		23.58		0-1	1
		1	49		23.56		0-1	1
		25	0		22.52		0-2	2
		25	12		22.35		0-2	2
		25	24		22.32		0-2	2
		50	0		22.40		0-2	2
	64QAM	1	0		22.54		0-2	2
		1	24		22.63		0-2	2
		1	49		22.65		0-2	2
		25	0		21.37		0-3	3
		25	12		21.35		0-3	3
		25	24		21.35		0-3	3
		50	0		21.44		0-3	3
	256QAM	1	0		19.50		0-5	5
		1	24		19.43		0-5	5
		1	49		19.46		0-5	5
		25	0		19.35		0-5	5
		25	12		19.33		0-5	5
		25	24		19.33		0-5	5
		50	0		19.38		0-5	5

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LTE FDD Band 5 Conducted Power _ Measured RSI = 0_Antenna A

LTE FDD Band 5 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20407 Ch. 824.7 MHz	20525 Ch. 836.5 MHz	20643 Ch. 848.3 MHz		
1.4 MHz	QPSK	1	0	19.15	19.03	18.69	0	0
		1	3	19.10	19.04	18.66	0	0
		1	5	19.25	19.12	18.75	0	0
		3	0	19.28	19.15	18.70	0	0
		3	1	19.29	19.21	18.79	0	0
		3	3	19.24	19.13	18.75	0	0
		6	0	19.26	19.17	18.85	0-1	1
	16QAM	1	0	19.32	19.19	18.78	0-1	1
		1	3	19.13	19.08	18.82	0-1	1
		1	5	19.44	19.07	18.77	0-1	1
		3	0	19.09	19.00	18.61	0-1	1
		3	1	19.25	19.10	18.81	0-1	1
		3	3	19.29	19.17	18.62	0-1	1
		6	0	19.15	19.02	18.67	0-2	2
	64QAM	1	0	19.19	19.18	18.79	0-2	2
		1	3	19.08	19.16	18.74	0-2	2
		1	5	19.21	19.21	18.79	0-2	2
		3	0	19.11	19.06	18.63	0-2	2
		3	1	19.02	19.07	18.64	0-2	2
		3	3	19.16	19.06	18.64	0-2	2
		6	0	19.13	18.95	18.61	0-3	3
	256QAM	1	0	19.10	19.21	18.71	0-5	5
		1	3	19.24	19.11	18.79	0-5	5
		1	5	19.31	19.20	18.74	0-5	5
		3	0	19.03	18.96	18.63	0-5	5
		3	1	19.08	18.92	18.65	0-5	5
		3	3	19.16	19.01	18.65	0-5	5
		6	0	19.09	19.02	18.68	0-5	5

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LTE FDD Band 5 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20415 Ch. 825.5 MHz	20525 Ch. 836.5 MHz	20635 Ch. 847.5 MHz		
3 MHz	QPSK	1	0	19.18	19.02	18.69	0	0
		1	7	18.98	18.92	18.53	0	0
		1	14	19.06	18.93	18.61	0	0
		8	0	19.32	19.22	18.82	0-1	1
		8	3	19.29	19.23	18.84	0-1	1
		8	7	19.28	19.17	18.78	0-1	1
		15	0	19.33	19.18	18.81	0-1	1
	16QAM	1	0	19.27	19.10	18.89	0-1	1
		1	7	19.17	18.97	18.66	0-1	1
		1	14	19.31	19.15	18.79	0-1	1
		8	0	19.19	19.03	18.70	0-2	2
		8	3	19.21	19.06	18.72	0-2	2
		8	7	19.13	19.07	18.77	0-2	2
		15	0	19.07	18.99	18.59	0-2	2
	64QAM	1	0	19.39	19.17	18.94	0-2	2
		1	7	19.29	19.11	18.82	0-2	2
		1	14	19.34	19.26	18.92	0-2	2
		8	0	19.11	19.02	18.60	0-3	3
		8	3	19.10	18.97	18.66	0-3	3
		8	7	19.04	18.98	18.62	0-3	3
		15	0	19.09	19.05	18.59	0-3	3
	256QAM	1	0	19.31	19.31	18.93	0-5	5
		1	7	19.29	19.03	18.87	0-5	5
		1	14	19.41	19.24	18.94	0-5	5
		8	0	18.91	18.88	18.48	0-5	5
		8	3	18.92	18.84	18.43	0-5	5
		8	7	18.88	18.87	18.41	0-5	5
		15	0	19.09	18.88	18.56	0-5	5

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LTE FDD Band 5 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20425 Ch. 826.5 MHz	20525 Ch. 836.5 MHz	20625 Ch. 846.5 MHz		
5 MHz	QPSK	1	0	19.08	18.95	18.62	0	0
		1	12	18.92	18.90	18.54	0	0
		1	24	19.16	19.03	18.69	0	0
		12	0	19.25	19.17	18.80	0-1	1
		12	6	19.21	19.16	18.81	0-1	1
		12	11	19.25	19.18	18.84	0-1	1
		25	0	19.27	19.17	18.82	0-1	1
	16QAM	1	0	19.34	19.36	18.97	0-1	1
		1	12	19.27	19.11	18.78	0-1	1
		1	24	19.29	19.25	18.95	0-1	1
		12	0	19.18	19.04	18.68	0-2	2
		12	6	19.14	18.99	18.63	0-2	2
		12	11	19.11	19.00	18.63	0-2	2
		25	0	19.05	18.99	18.62	0-2	2
	64QAM	1	0	19.13	19.35	18.90	0-2	2
		1	12	19.03	19.15	18.76	0-2	2
		1	24	19.13	19.09	18.84	0-2	2
		12	0	19.13	19.02	18.72	0-3	3
		12	6	19.13	19.03	18.66	0-3	3
		12	11	19.12	19.06	18.70	0-3	3
		25	0	19.04	18.93	18.64	0-3	3
	256QAM	1	0	19.34	19.26	18.92	0-5	5
		1	12	19.18	19.23	18.90	0-5	5
		1	24	19.32	19.27	18.95	0-5	5
		12	0	19.09	18.95	18.60	0-5	5
		12	6	19.06	19.01	18.66	0-5	5
		12	11	19.11	18.98	18.64	0-5	5
		25	0	19.06	18.99	18.60	0-5	5

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LTE FDD Band 5 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20525 Ch.			
					836.5 MHz			
10 MHz	QPSK	1	0		19.07		0	0
		1	24		18.89		0	0
		1	49		18.95		0	0
		25	0		19.21		0-1	1
		25	12		19.22		0-1	1
		25	24		19.18		0-1	1
		50	0		19.04		0-1	1
	16QAM	1	0		19.31		0-1	1
		1	24		19.21		0-1	1
		1	49		19.14		0-1	1
		25	0		19.06		0-2	2
		25	12		19.04		0-2	2
		25	24		19.01		0-2	2
		50	0		19.32		0-2	2
	64QAM	1	0		19.32		0-2	2
		1	24		19.18		0-2	2
		1	49		19.16		0-2	2
		25	0		19.01		0-3	3
		25	12		19.00		0-3	3
		25	24		18.98		0-3	3
		50	0		19.22		0-3	3
	256QAM	1	0		19.31		0-5	5
		1	24		19.26		0-5	5
		1	49		19.23		0-5	5
		25	0		18.96		0-5	5
		25	12		18.97		0-5	5
		25	24		18.94		0-5	5
		50	0		19.23		0-5	5

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11.3.4 LTE FDD Band 12 Maximum Conducted Output Power

LTE FDD Band 12 Conducted Power _ Measured *Pmax,* RSI = 0 (RCV)_Antenna A

LTE FDD Band 12 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23017 Ch. 699.7 MHz	23095 Ch. 707.5 MHz	23173 Ch. 715.3 MHz		
1.4 MHz	QPSK	1	0	24.42	24.65	24.60	0	0
		1	3	24.42	24.63	24.58	0	0
		1	5	24.56	24.75	24.68	0	0
		3	0	24.58	24.78	24.70	0	0
		3	1	24.56	24.75	24.73	0	0
		3	3	24.47	24.85	24.76	0	0
		6	0	23.58	23.88	23.78	0-1	1
	16QAM	1	0	23.79	24.00	23.93	0-1	1
		1	3	23.88	23.88	23.91	0-1	1
		1	5	23.75	24.00	23.95	0-1	1
		3	0	23.65	23.84	23.75	0-1	1
		3	1	23.72	23.93	23.86	0-1	1
		3	3	23.68	23.94	23.85	0-1	1
		6	0	22.73	22.93	22.88	0-2	2
	64QAM	1	0	22.82	23.07	22.84	0-2	2
		1	3	22.61	22.87	22.98	0-2	2
		1	5	22.77	23.08	22.93	0-2	2
		3	0	22.73	23.00	22.89	0-2	2
		3	1	22.81	22.95	22.94	0-2	2
		3	3	22.69	22.90	22.78	0-2	2
		6	0	21.72	21.85	21.89	0-3	3
	256QAM	1	0	19.73	19.97	19.90	0-5	5
		1	3	19.70	19.90	19.99	0-5	5
		1	5	19.78	19.94	19.95	0-5	5
		3	0	19.71	19.94	19.87	0-5	5
		3	1	19.70	19.88	19.83	0-5	5
		3	3	19.69	19.93	19.89	0-5	5
		6	0	19.65	19.83	19.84	0-5	5

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LTE FDD Band 12 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23025 Ch. 700.5 MHz	23095 Ch. 707.5 MHz	23165 Ch. 714.5 MHz		
3 MHz	QPSK	1	0	24.49	24.68	24.65	0	0
		1	7	24.37	24.59	24.49	0	0
		1	14	24.40	24.59	24.50	0	0
		8	0	23.61	23.85	23.73	0-1	1
		8	3	23.65	23.83	23.79	0-1	1
		8	7	23.63	23.86	23.77	0-1	1
		15	0	23.58	23.88	23.78	0-1	1
	16QAM	1	0	23.90	23.92	23.85	0-1	1
		1	7	23.72	23.85	23.79	0-1	1
		1	14	24.00	23.96	23.82	0-1	1
		8	0	22.66	22.88	22.84	0-2	2
		8	3	22.77	22.90	22.87	0-2	2
		8	7	22.73	22.95	22.87	0-2	2
		15	0	22.68	22.87	22.78	0-2	2
	64QAM	1	0	22.74	23.18	23.10	0-2	2
		1	7	22.89	23.09	22.83	0-2	2
		1	14	22.80	23.19	22.95	0-2	2
		8	0	21.71	21.84	21.85	0-3	3
		8	3	21.61	21.92	21.84	0-3	3
		8	7	21.74	21.79	21.83	0-3	3
		15	0	21.66	21.81	21.88	0-3	3
	256QAM	1	0	20.02	20.01	20.09	0-5	5
		1	7	19.94	19.97	20.16	0-5	5
		1	14	19.86	19.97	19.87	0-5	5
		8	0	19.57	19.74	19.65	0-5	5
		8	3	19.55	19.77	19.68	0-5	5
		8	7	19.55	19.74	19.72	0-5	5
		15	0	19.64	19.78	19.72	0-5	5

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LTE FDD Band 12 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23035 Ch. 701.5 MHz	23095 Ch. 707.5 MHz	23155 Ch. 713.5 MHz		
5 MHz	QPSK	1	0	24.42	24.61	24.60	0	0
		1	12	24.37	24.58	24.57	0	0
		1	24	24.46	24.71	24.58	0	0
		12	0	23.69	23.86	23.82	0-1	1
		12	6	23.65	23.87	23.85	0-1	1
		12	11	23.69	23.89	23.87	0-1	1
		25	0	23.68	23.86	23.84	0-1	1
	16QAM	1	0	23.84	24.00	24.01	0-1	1
		1	12	23.86	23.97	23.98	0-1	1
		1	24	23.91	24.06	24.04	0-1	1
		12	0	22.71	22.91	22.87	0-2	2
		12	6	22.75	22.88	22.87	0-2	2
		12	11	22.79	22.95	22.87	0-2	2
		25	0	22.65	22.86	22.79	0-2	2
	64QAM	1	0	23.05	23.07	23.20	0-2	2
		1	12	22.84	23.08	23.10	0-2	2
		1	24	22.98	23.14	23.03	0-2	2
		12	0	21.69	21.92	21.93	0-3	3
		12	6	21.75	21.92	21.90	0-3	3
		12	11	21.74	21.95	21.92	0-3	3
		25	0	21.65	21.82	21.85	0-3	3
	256QAM	1	0	19.90	20.05	19.95	0-5	5
		1	12	19.72	19.92	19.89	0-5	5
		1	24	19.75	20.01	19.98	0-5	5
		12	0	19.65	19.89	19.83	0-5	5
		12	6	19.69	19.85	19.80	0-5	5
		12	11	19.68	19.83	19.86	0-5	5
		25	0	19.66	19.85	19.81	0-5	5

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LTE FDD Band 12 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23095 Ch. 707.5 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 MHz	QPSK	1	0	24.72	0	0
		1	24	24.60	0	0
		1	49	24.58	0	0
		25	0	23.89	0-1	1
		25	12	23.82	0-1	1
		25	24	23.83	0-1	1
		50	0	23.88	0-1	1
	16QAM	1	0	23.96	0-1	1
		1	24	24.00	0-1	1
		1	49	23.97	0-1	1
		25	0	22.84	0-2	2
		25	12	22.84	0-2	2
		25	24	22.86	0-2	2
		50	0	22.90	0-2	2
	64QAM	1	0	23.06	0-2	2
		1	24	23.10	0-2	2
		1	49	23.12	0-2	2
		25	0	21.90	0-3	3
		25	12	21.88	0-3	3
		25	24	21.85	0-3	3
		50	0	21.90	0-3	3
	256QAM	1	0	20.16	0-5	5
		1	24	20.06	0-5	5
		1	49	20.09	0-5	5
		25	0	19.86	0-5	5
		25	12	19.84	0-5	5
		25	24	19.86	0-5	5
		50	0	19.86	0-5	5

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LTE FDD Band 12 Conducted Power _ Measured RSI = 0_Antenna A

LTE FDD Band 12 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23017 Ch. 699.7 MHz	23095 Ch. 707.5 MHz	23173 Ch. 715.3 MHz		
1.4 MHz	QPSK	1	0	19.55	19.86	19.81	0	0
		1	3	19.51	19.83	19.79	0	0
		1	5	19.66	19.95	19.86	0	0
		3	0	19.64	19.96	19.89	0	0
		3	1	19.73	19.88	19.83	0	0
		3	3	19.68	19.91	19.85	0	0
		6	0	19.75	20.01	19.89	0-1	1
	16QAM	1	0	19.81	19.99	19.93	0-1	1
		1	3	19.54	19.78	19.76	0-1	1
		1	5	19.71	19.90	19.80	0-1	1
		3	0	19.53	19.75	19.75	0-1	1
		3	1	19.50	19.78	19.84	0-1	1
		3	3	19.59	19.85	19.76	0-1	1
		6	0	19.54	19.84	19.77	0-2	2
	64QAM	1	0	19.73	19.96	19.85	0-2	2
		1	3	19.74	19.94	19.88	0-2	2
		1	5	19.74	19.98	19.92	0-2	2
		3	0	19.54	19.81	19.76	0-2	2
		3	1	19.59	19.89	19.79	0-2	2
		3	3	19.60	19.85	19.81	0-2	2
		6	0	19.47	19.82	19.81	0-3	3
	256QAM	1	0	19.07	19.47	19.42	0-5	5
		1	3	18.99	19.42	19.42	0-5	5
		1	5	19.17	19.33	19.32	0-5	5
		3	0	18.96	19.29	19.20	0-5	5
		3	1	18.96	19.28	19.16	0-5	5
		3	3	19.00	19.24	19.26	0-5	5
		6	0	19.00	19.33	19.29	0-5	5

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LTE FDD Band 12 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23025 Ch. 700.5 MHz	23095 Ch. 707.5 MHz	23165 Ch. 714.5 MHz		
3 MHz	QPSK	1	0	19.65	19.80	19.80	0	0
		1	7	19.49	19.70	19.67	0	0
		1	14	19.54	19.76	19.72	0	0
		8	0	19.73	19.93	19.94	0-1	1
		8	3	19.73	19.98	19.93	0-1	1
		8	7	19.72	19.93	19.89	0-1	1
		15	0	19.73	19.96	19.95	0-1	1
	16QAM	1	0	19.52	20.03	19.64	0-1	1
		1	7	19.57	19.87	19.87	0-1	1
		1	14	19.60	19.87	20.00	0-1	1
		8	0	19.59	19.75	19.80	0-2	2
		8	3	19.64	19.87	19.81	0-2	2
		8	7	19.60	19.80	19.83	0-2	2
		15	0	19.56	19.83	19.75	0-2	2
	64QAM	1	0	19.75	20.03	19.99	0-2	2
		1	7	19.61	19.91	19.84	0-2	2
		1	14	19.84	19.93	19.99	0-2	2
		8	0	19.54	19.76	19.75	0-3	3
		8	3	19.53	19.75	19.77	0-3	3
		8	7	19.50	19.73	19.70	0-3	3
		15	0	19.53	19.80	19.76	0-3	3
	256QAM	1	0	19.17	19.53	19.41	0-5	5
		1	7	19.05	19.34	19.36	0-5	5
		1	14	19.07	19.38	19.48	0-5	5
		8	0	18.93	19.18	19.15	0-5	5
		8	3	18.98	19.18	19.14	0-5	5
		8	7	18.93	19.13	19.13	0-5	5
		15	0	18.98	19.21	19.19	0-5	5

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LTE FDD Band 12 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23035 Ch. 701.5 MHz	23095 Ch. 707.5 MHz	23155 Ch. 713.5 MHz		
5 MHz	QPSK	1	0	19.60	19.78	19.76	0	0
		1	12	19.53	19.71	19.70	0	0
		1	24	19.60	19.80	19.80	0	0
		12	0	19.80	20.00	20.01	0-1	1
		12	6	19.80	19.96	19.99	0-1	1
		12	11	19.77	19.96	20.00	0-1	1
		25	0	19.73	19.96	19.96	0-1	1
	16QAM	1	0	19.89	19.96	19.96	0-1	1
		1	12	19.79	19.76	19.92	0-1	1
		1	24	19.79	19.92	19.89	0-1	1
		12	0	19.63	19.84	19.85	0-2	2
		12	6	19.61	19.80	19.84	0-2	2
		12	11	19.65	19.76	19.92	0-2	2
		25	0	19.56	19.76	19.76	0-2	2
	64QAM	1	0	19.86	20.25	20.15	0-2	2
		1	12	19.70	20.25	20.05	0-2	2
		1	24	19.72	20.17	20.05	0-2	2
		12	0	19.65	19.83	19.80	0-3	3
		12	6	19.57	19.73	19.74	0-3	3
		12	11	19.66	19.73	19.73	0-3	3
		25	0	19.55	19.73	19.79	0-3	3
	256QAM	1	0	19.40	19.49	19.47	0-5	5
		1	12	19.22	19.26	19.40	0-5	5
		1	24	19.35	19.43	19.34	0-5	5
		12	0	19.07	19.22	19.20	0-5	5
		12	6	19.09	19.21	19.26	0-5	5
		12	11	19.07	19.20	19.27	0-5	5
		25	0	18.98	19.23	19.20	0-5	5

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LTE FDD Band 12 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23095 Ch. 707.5 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 MHz	QPSK	1	0	19.87	0	0
		1	24	19.75	0	0
		1	49	19.71	0	0
		25	0	20.05	0-1	1
		25	12	19.98	0-1	1
		25	24	20.00	0-1	1
		50	0	19.87	0-1	1
	16QAM	1	0	19.89	0-1	1
		1	24	19.75	0-1	1
		1	49	19.87	0-1	1
		25	0	19.87	0-2	2
		25	12	19.88	0-2	2
		25	24	19.80	0-2	2
		50	0	19.72	0-2	2
	64QAM	1	0	20.10	0-2	2
		1	24	20.14	0-2	2
		1	49	20.09	0-2	2
		25	0	19.84	0-3	3
		25	12	19.78	0-3	3
		25	24	19.77	0-3	3
		50	0	20.08	0-3	3
	256QAM	1	0	19.48	0-5	5
		1	24	19.38	0-5	5
		1	49	19.42	0-5	5
		25	0	19.26	0-5	5
		25	12	19.20	0-5	5
		25	24	19.20	0-5	5
		50	0	19.47	0-5	5

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11.3.5 LTE FDD Band 13 Maximum Conducted Output Power

LTE FDD Band 13 Conducted Power _ Measured *Pmax,* RSI = 1 _Antenna A

LTE FDD Band 13 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23205 779.5 MHz	23230 Ch. 782 MHz	23255 784.5 MHz		
5 MHz	QPSK	1	0	24.07	23.96	23.88	0	0
		1	12	24.01	23.95	23.88	0	0
		1	24	24.15	24.05	23.96	0	0
		12	0	23.29	23.22	23.15	0-1	1
		12	6	23.30	23.23	23.12	0-1	1
		12	11	23.36	23.29	23.18	0-1	1
		25	0	23.33	23.19	23.13	0-1	1
	16QAM	1	0	23.37	23.55	23.25	0-1	1
		1	12	23.32	23.42	23.29	0-1	1
		1	24	23.33	23.34	23.45	0-1	1
		12	0	22.37	22.28	22.25	0-2	2
		12	6	22.46	22.33	22.24	0-2	2
		12	11	22.42	22.34	22.27	0-2	2
		25	0	22.33	22.28	22.15	0-2	2
	64QAM	1	0	22.59	22.38	22.54	0-2	2
		1	12	22.71	22.45	22.39	0-2	2
		1	24	22.62	22.55	22.39	0-2	2
		12	0	21.39	21.36	21.18	0-3	3
		12	6	21.43	21.33	21.23	0-3	3
		12	11	21.41	21.33	21.23	0-3	3
		25	0	21.34	21.23	21.15	0-3	3
	256QAM	1	0	19.62	19.59	19.42	0-5	5
		1	12	19.46	19.31	19.40	0-5	5
		1	24	19.66	19.49	19.56	0-5	5
		12	0	19.34	19.27	19.19	0-5	5
		12	6	19.40	19.29	19.20	0-5	5
		12	11	19.41	19.26	19.15	0-5	5
		25	0	19.35	19.25	19.06	0-5	5

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LTE FDD Band 13 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23230 Ch. 782 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	24.05	0	0
		1	24	23.97	0	0
		1	49	24.00	0	0
		25	0	23.23	0-1	1
		25	12	23.20	0-1	1
		25	24	23.22	0-1	1
		50	0	23.23	0-1	1
	16QAM	1	0	23.57	0-1	1
		1	24	23.48	0-1	1
		1	49	23.52	0-1	1
		25	0	22.23	0-2	2
		25	12	22.26	0-2	2
		25	24	22.24	0-2	2
		50	0	22.24	0-2	2
	64QAM	1	0	22.35	0-2	2
		1	24	22.31	0-2	2
		1	49	22.35	0-2	2
		25	0	21.23	0-3	3
		25	12	21.28	0-3	3
		25	24	21.27	0-3	3
		50	0	21.34	0-3	3
	256QAM	1	0	19.44	0-5	5
		1	24	19.33	0-5	5
		1	49	19.37	0-5	5
		25	0	19.26	0-5	5
		25	12	19.27	0-5	5
		25	24	19.24	0-5	5
		50	0	19.23	0-5	5

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LTE FDD Band 13 Conducted Power _ Measured RSI = 0_Antenna A

LTE FDD Band 13 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23205 779.5 MHz	23230 Ch. 782 MHz	23255 784.5 MHz		
5 MHz	QPSK	1	0	19.39	19.30	19.19	0	0
		1	12	19.32	19.26	19.14	0	0
		1	24	19.46	19.34	19.27	0	0
		12	0	19.62	19.51	19.48	0-1	1
		12	6	19.60	19.52	19.41	0-1	1
		12	11	19.63	19.59	19.48	0-1	1
		25	0	19.58	19.47	19.37	0-1	1
	16QAM	1	0	19.64	19.40	19.23	0-1	1
		1	12	19.38	19.35	19.33	0-1	1
		1	24	19.55	19.49	19.42	0-1	1
		12	0	19.45	19.26	19.25	0-2	2
		12	6	19.48	19.28	19.18	0-2	2
		12	11	19.42	19.26	19.23	0-2	2
		25	0	19.32	19.30	19.19	0-2	2
	64QAM	1	0	19.67	19.54	19.40	0-2	2
		1	12	19.54	19.54	19.29	0-2	2
		1	24	19.71	19.49	19.44	0-2	2
		12	0	19.41	19.32	19.17	0-3	3
		12	6	19.35	19.30	19.24	0-3	3
		12	11	19.39	19.31	19.26	0-3	3
		25	0	19.32	19.23	19.17	0-3	3
	256QAM	1	0	19.11	19.02	18.87	0-5	5
		1	12	19.03	18.97	18.80	0-5	5
		1	24	19.21	18.98	18.99	0-5	5
		12	0	18.78	18.71	18.64	0-5	5
		12	6	18.82	18.71	18.66	0-5	5
		12	11	18.82	18.73	18.63	0-5	5
		25	0	18.76	18.69	18.62	0-5	5

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LTE FDD Band 13 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23230 Ch. 782 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	19.39	0	0
		1	24	19.30	0	0
		1	49	19.26	0	0
		25	0	19.56	0-1	1
		25	12	19.56	0-1	1
		25	24	19.58	0-1	1
		50	0	19.39	0-1	1
	16QAM	1	0	19.35	0-1	1
		1	24	19.31	0-1	1
		1	49	19.17	0-1	1
		25	0	19.01	0-2	2
		25	12	18.92	0-2	2
		25	24	19.02	0-2	2
		50	0	19.12	0-2	2
	64QAM	1	0	19.30	0-2	2
		1	24	19.28	0-2	2
		1	49	19.32	0-2	2
		25	0	19.01	0-3	3
		25	12	19.05	0-3	3
		25	24	18.99	0-3	3
		50	0	19.16	0-3	3
	256QAM	1	0	18.84	0-5	5
		1	24	18.66	0-5	5
		1	49	18.83	0-5	5
		25	0	18.43	0-5	5
		25	12	18.42	0-5	5
		25	24	18.41	0-5	5
		50	0	18.84	0-5	5

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11.3.6 LTE FDD Band 17 Maximum Conducted Output Power

LTE FDD Band 17 Conducted Power _ Measured *Pmax,* RSI = 1_Antenna A

LTE FDD Band 17 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23790 Ch. 710 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
5 MHz	QPSK	1	0	24.61	0	0
		1	12	24.54	0	0
		1	24	24.59	0	0
		12	0	23.86	0-1	1
		12	6	23.83	0-1	1
		12	11	23.86	0-1	1
		25	0	23.80	0-1	1
	16QAM	1	0	24.02	0-1	1
		1	12	23.95	0-1	1
		1	24	24.07	0-1	1
		12	0	22.82	0-2	2
		12	6	22.89	0-2	2
		12	11	22.89	0-2	2
		25	0	22.83	0-2	2
	64QAM	1	0	23.06	0-2	2
		1	12	22.89	0-2	2
		1	24	22.82	0-2	2
		12	0	21.91	0-3	3
		12	6	21.81	0-3	3
		12	11	21.87	0-3	3
		25	0	21.85	0-3	3
	256QAM	1	0	20.09	0-5	5
		1	12	20.02	0-5	5
		1	24	20.12	0-5	5
		12	0	19.78	0-5	5
		12	6	19.78	0-5	5
		12	11	19.78	0-5	5
		25	0	19.81	0-5	5

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LTE FDD Band 17 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23790 Ch. 710 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	24.71	0	0
		1	24	24.59	0	0
		1	49	24.53	0	0
		25	0	23.84	0-1	1
		25	12	23.82	0-1	1
		25	24	23.81	0-1	1
		50	0	23.84	0-1	1
	16QAM	1	0	24.00	0-1	1
		1	24	23.89	0-1	1
		1	49	23.88	0-1	1
		25	0	22.87	0-2	2
		25	12	22.87	0-2	2
		25	24	22.80	0-2	2
		50	0	22.87	0-2	2
	64QAM	1	0	23.03	0-2	2
		1	24	22.85	0-2	2
		1	49	22.87	0-2	2
		25	0	21.84	0-3	3
		25	12	21.83	0-3	3
		25	24	21.78	0-3	3
		50	0	21.84	0-3	3
	256QAM	1	0	20.06	0-5	5
		1	24	20.02	0-5	5
		1	49	20.05	0-5	5
		25	0	19.86	0-5	5
		25	12	19.82	0-5	5
		25	24	19.78	0-5	5
		50	0	19.79	0-5	5

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LTE FDD Band 17 Conducted Power _ Measured RSI = 0 _Antenna A

LTE FDD Band 17 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23790 Ch. 710 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
5 MHz	QPSK	1	0	19.77	0	0
		1	12	19.69	0	0
		1	24	19.82	0	0
		12	0	20.00	0-1	1
		12	6	19.98	0-1	1
		12	11	20.01	0-1	1
		25	0	19.95	0-1	1
	16QAM	1	0	20.01	0-1	1
		1	12	19.97	0-1	1
		1	24	20.03	0-1	1
		12	0	19.80	0-2	2
		12	6	19.86	0-2	2
		12	11	19.83	0-2	2
		25	0	19.79	0-2	2
	64QAM	1	0	20.06	0-2	2
		1	12	20.10	0-2	2
		1	24	20.01	0-2	2
		12	0	19.80	0-3	3
		12	6	19.80	0-3	3
		12	11	19.81	0-3	3
		25	0	19.78	0-3	3
	256QAM	1	0	19.52	0-5	5
		1	12	19.25	0-5	5
		1	24	19.37	0-5	5
		12	0	19.25	0-5	5
		12	6	19.29	0-5	5
		12	11	19.31	0-5	5
		25	0	19.28	0-5	5

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LTE FDD Band 17 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23790 Ch. 710 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 MHz	QPSK	1	0	19.82	0	0
		1	24	19.69	0	0
		1	49	19.71	0	0
		25	0	20.07	0-1	1
		25	12	20.05	0-1	1
		25	24	20.02	0-1	1
		50	0	19.83	0-1	1
	16QAM	1	0	20.08	0-1	1
		1	24	19.86	0-1	1
		1	49	19.85	0-1	1
		25	0	19.87	0-2	2
		25	12	19.93	0-2	2
		25	24	19.83	0-2	2
		50	0	20.07	0-2	2
	64QAM	1	0	20.11	0-2	2
		1	24	20.08	0-2	2
		1	49	19.95	0-2	2
		25	0	19.83	0-3	3
		25	12	19.88	0-3	3
		25	24	19.85	0-3	3
		50	0	20.10	0-3	3
	256QAM	1	0	19.55	0-5	5
		1	24	19.48	0-5	5
		1	49	19.46	0-5	5
		25	0	19.32	0-5	5
		25	12	19.32	0-5	5
		25	24	19.28	0-5	5
		50	0	19.55	0-5	5

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11.3.7 LTE FDD Band 26 Maximum Conducted Output Power

LTE FDD Band 26 Conducted Power _ Measured *Pmax,* RSI = 1 _Antenna A

LTE FDD Band 26 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26697 Ch. 814.7 MHz	26865 Ch. 831.5 MHz	27033 Ch. 848.3 MHz		
1.4 MHz	QPSK	1	0	22.41	22.71	22.28	0	0
		1	3	22.41	22.71	22.29	0	0
		1	5	22.54	22.84	22.38	0	0
		3	0	22.49	22.86	22.42	0	0
		3	1	22.46	22.73	22.44	0	0
		3	3	22.53	22.87	22.43	0	0
		6	0	21.64	21.92	21.48	0-1	1
	16QAM	1	0	21.85	22.14	21.73	0-1	1
		1	3	21.71	22.21	21.66	0-1	1
		1	5	21.80	22.05	21.62	0-1	1
		3	0	21.63	21.95	21.48	0-1	1
		3	1	21.73	22.12	21.54	0-1	1
		3	3	21.76	21.98	21.57	0-1	1
		6	0	20.74	20.94	20.59	0-2	2
	64QAM	1	0	20.85	21.05	20.64	0-2	2
		1	3	20.76	21.03	20.59	0-2	2
		1	5	20.86	21.07	20.66	0-2	2
		3	0	20.58	20.95	20.53	0-2	2
		3	1	20.72	21.00	20.56	0-2	2
		3	3	20.65	20.94	20.45	0-2	2
		6	0	19.68	19.86	19.47	0-3	3
	256QAM	1	0	17.82	18.08	17.53	0-5	5
		1	3	17.78	18.02	17.44	0-5	5
		1	5	17.69	18.03	17.56	0-5	5
		3	0	17.60	17.95	17.53	0-5	5
		3	1	17.57	17.97	17.49	0-5	5
		3	3	17.59	17.95	17.60	0-5	5
		6	0	17.64	17.96	17.41	0-5	5

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LTE FDD Band 26 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26705 Ch. 815.5 MHz	26865 Ch. 831.5 MHz	27025 Ch. 847.5 MHz		
3 MHz	QPSK	1	0	22.52	22.77	22.30	0	0
		1	7	22.32	22.60	22.17	0	0
		1	14	22.41	22.64	22.20	0	0
		8	0	21.65	21.89	21.41	0-1	1
		8	3	21.61	21.92	21.49	0-1	1
		8	7	21.68	21.92	21.43	0-1	1
		15	0	21.71	21.90	21.48	0-1	1
	16QAM	1	0	21.76	22.19	21.59	0-1	1
		1	7	21.88	22.01	21.59	0-1	1
		1	14	22.00	22.11	21.78	0-1	1
		8	0	20.70	20.96	20.52	0-2	2
		8	3	20.69	20.93	20.47	0-2	2
		8	7	20.64	20.87	20.58	0-2	2
		15	0	20.66	20.90	20.40	0-2	2
	64QAM	1	0	20.83	21.02	20.62	0-2	2
		1	7	20.74	21.00	20.60	0-2	2
		1	14	20.70	21.16	20.61	0-2	2
		8	0	19.67	19.94	19.43	0-3	3
		8	3	19.63	19.91	19.50	0-3	3
		8	7	19.66	19.96	19.49	0-3	3
		15	0	19.63	19.88	19.53	0-3	3
	256QAM	1	0	17.66	17.96	17.71	0-5	5
		1	7	17.66	18.05	17.57	0-5	5
		1	14	17.72	18.10	17.76	0-5	5
		8	0	17.50	17.74	17.34	0-5	5
		8	3	17.52	17.71	17.39	0-5	5
		8	7	17.57	17.72	17.34	0-5	5
		15	0	17.58	17.85	17.44	0-5	5

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LTE FDD Band 26 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26715 Ch. 816.5 MHz	26865 Ch. 831.5 MHz	27015 Ch. 846.5 MHz		
5 MHz	QPSK	1	0	22.41	22.63	22.21	0	0
		1	12	22.41	22.63	22.18	0	0
		1	24	22.50	22.72	22.32	0	0
		12	0	21.66	21.94	21.48	0-1	1
		12	6	21.71	21.88	21.52	0-1	1
		12	11	21.70	21.92	21.50	0-1	1
		25	0	21.67	21.89	21.49	0-1	1
	16QAM	1	0	21.92	21.98	21.81	0-1	1
		1	12	21.67	22.01	21.70	0-1	1
		1	24	21.89	22.31	21.78	0-1	1
		12	0	20.74	21.00	20.52	0-2	2
		12	6	20.69	20.93	20.49	0-2	2
		12	11	20.71	20.94	20.54	0-2	2
		25	0	20.65	20.82	20.46	0-2	2
	64QAM	1	0	20.97	21.14	20.70	0-2	2
		1	12	20.96	21.08	20.65	0-2	2
		1	24	21.05	21.13	20.66	0-2	2
		12	0	19.68	19.88	19.54	0-3	3
		12	6	19.68	19.89	19.44	0-3	3
		12	11	19.71	19.92	19.53	0-3	3
		25	0	19.65	19.85	19.50	0-3	3
	256QAM	1	0	17.95	18.08	17.70	0-5	5
		1	12	17.65	18.06	17.61	0-5	5
		1	24	17.88	18.06	17.71	0-5	5
		12	0	17.66	17.83	17.51	0-5	5
		12	6	17.68	17.90	17.53	0-5	5
		12	11	17.68	17.90	17.53	0-5	5
		25	0	17.60	17.83	17.48	0-5	5

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LTE FDD Band 26 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26740 Ch. 819 MHz	26865 Ch. 831.5 MHz	26990 Ch. 844 MHz		
10 MHz	QPSK	1	0	22.57	22.75	22.39	0	0
		1	24	22.55	22.65	22.28	0	0
		1	49	22.55	22.67	22.31	0	0
		25	0	21.74	21.90	21.52	0-1	1
		25	12	21.69	21.89	21.49	0-1	1
		25	24	21.73	21.87	21.54	0-1	1
		50	0	21.72	21.90	21.51	0-1	1
	16QAM	1	0	22.27	22.02	21.59	0-1	1
		1	24	21.85	22.27	21.83	0-1	1
		1	49	22.04	22.23	21.86	0-1	1
		25	0	20.79	20.90	20.51	0-2	2
		25	12	20.75	20.87	20.54	0-2	2
		25	24	20.76	20.90	20.53	0-2	2
		50	0	20.73	20.89	20.61	0-2	2
	64QAM	1	0	20.78	21.33	20.85	0-2	2
		1	24	20.95	21.14	20.69	0-2	2
		1	49	20.93	21.11	20.71	0-2	2
		25	0	19.72	19.88	19.54	0-3	3
		25	12	19.79	19.87	19.53	0-3	3
		25	24	19.78	19.92	19.53	0-3	3
		50	0	19.78	19.90	19.54	0-3	3
	256QAM	1	0	17.96	18.21	17.74	0-5	5
		1	24	17.91	18.07	17.63	0-5	5
		1	49	18.01	18.04	17.63	0-5	5
		25	0	17.75	17.86	17.46	0-5	5
		25	12	17.71	17.90	17.49	0-5	5
		25	24	17.71	17.84	17.52	0-5	5
		50	0	17.75	17.90	17.56	0-5	5

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LTE FDD Band 26 _ 15 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 26865 Ch. 831.5 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
15 MHz	QPSK	1	0	22.60	0	0
		1	36	22.62	0	0
		1	74	22.67	0	0
		36	0	21.89	0-1	1
		36	18	21.90	0-1	1
		36	39	21.85	0-1	1
		75	0	21.88	0-1	1
	16QAM	1	0	22.08	0-1	1
		1	36	22.13	0-1	1
		1	74	22.16	0-1	1
		36	0	20.88	0-2	2
		36	18	20.93	0-2	2
		36	39	20.96	0-2	2
		75	0	20.87	0-2	2
	64QAM	1	0	21.21	0-2	2
		1	36	20.95	0-2	2
		1	74	20.98	0-2	2
		36	0	19.93	0-3	3
		36	18	19.94	0-3	3
		36	39	19.91	0-3	3
		75	0	19.82	0-3	3
	256QAM	1	0	18.26	0-5	5
		1	36	18.12	0-5	5
		1	74	18.08	0-5	5
		36	0	17.82	0-5	5
		36	18	17.85	0-5	5
		36	39	17.83	0-5	5
		75	0	17.90	0-5	5

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LTE FDD Band 26 Conducted Power _ Measured RSI = 0_Antenna A

LTE FDD Band 26 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26697 Ch. 814.7 MHz	26865 Ch. 831.5 MHz	27033 Ch. 848.3 MHz		
1.4 MHz	QPSK	1	0	18.85	19.12	18.69	0	0
		1	3	18.83	19.13	18.62	0	0
		1	5	18.93	19.16	18.77	0	0
		3	0	18.93	19.19	18.77	0	0
		3	1	18.94	19.23	18.74	0	0
		3	3	18.93	19.19	18.82	0	0
		6	0	19.00	19.26	18.87	0-1	1
	16QAM	1	0	19.11	19.42	18.92	0-1	1
		1	3	19.07	19.17	18.86	0-1	1
		1	5	19.09	19.21	18.84	0-1	1
		3	0	18.91	19.17	18.72	0-1	1
		3	1	18.97	19.28	18.86	0-1	1
		3	3	18.97	19.25	18.71	0-1	1
		6	0	18.97	19.20	18.78	0-2	2
	64QAM	1	0	19.21	19.30	18.91	0-2	2
		1	3	19.00	19.13	18.80	0-2	2
		1	5	19.12	19.35	18.97	0-2	2
		3	0	18.87	19.24	18.71	0-2	2
		3	1	18.83	19.21	18.84	0-2	2
		3	3	18.93	19.13	18.71	0-2	2
		6	0	18.91	19.17	18.79	0-3	3
	256QAM	1	0	17.52	17.76	17.40	0-5	5
		1	3	17.44	17.84	17.36	0-5	5
		1	5	17.65	17.81	17.33	0-5	5
		3	0	17.43	17.67	17.22	0-5	5
		3	1	17.41	17.65	17.18	0-5	5
		3	3	17.44	17.71	17.33	0-5	5
		6	0	17.37	17.62	17.24	0-5	5

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LTE FDD Band 26 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26705 Ch. 815.5 MHz	26865 Ch. 831.5 MHz	27025 Ch. 847.5 MHz		
3 MHz	QPSK	1	0	18.81	19.11	18.67	0	0
		1	7	18.72	18.95	18.57	0	0
		1	14	18.72	18.93	18.53	0	0
		8	0	18.97	19.18	18.80	0-1	1
		8	3	18.99	19.26	18.89	0-1	1
		8	7	18.98	19.19	18.78	0-1	1
		15	0	19.02	19.21	18.85	0-1	1
	16QAM	1	0	18.91	19.21	18.85	0-1	1
		1	7	18.77	18.97	18.70	0-1	1
		1	14	19.20	19.23	18.88	0-1	1
		8	0	18.98	19.19	18.83	0-2	2
		8	3	18.95	19.21	18.72	0-2	2
		8	7	18.99	19.20	18.72	0-2	2
		15	0	18.91	19.13	18.73	0-2	2
	64QAM	1	0	19.16	19.37	18.85	0-2	2
		1	7	18.92	19.21	18.82	0-2	2
		1	14	19.14	19.27	18.97	0-2	2
		8	0	18.90	19.09	18.65	0-3	3
		8	3	18.89	19.09	18.64	0-3	3
		8	7	18.88	19.09	18.66	0-3	3
		15	0	18.91	19.10	18.68	0-3	3
	256QAM	1	0	17.77	17.79	17.53	0-5	5
		1	7	17.62	17.84	17.33	0-5	5
		1	14	17.69	17.78	17.45	0-5	5
		8	0	17.28	17.44	17.04	0-5	5
		8	3	17.21	17.43	17.05	0-5	5
		8	7	17.20	17.43	17.03	0-5	5
		15	0	17.33	17.53	17.09	0-5	5

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LTE FDD Band 26 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26715 Ch. 816.5 MHz	26865 Ch. 831.5 MHz	27015 Ch. 846.5 MHz		
5 MHz	QPSK	1	0	18.79	19.01	18.59	0	0
		1	12	18.71	18.93	18.56	0	0
		1	24	18.85	19.03	18.66	0	0
		12	0	18.99	19.22	18.80	0-1	1
		12	6	18.99	19.18	18.79	0-1	1
		12	11	19.02	19.21	18.81	0-1	1
		25	0	18.94	19.18	18.76	0-1	1
	16QAM	1	0	19.09	19.41	18.90	0-1	1
		1	12	18.86	19.11	18.84	0-1	1
		1	24	18.95	19.12	18.71	0-1	1
		12	0	18.87	19.15	18.71	0-2	2
		12	6	18.89	19.18	18.72	0-2	2
		12	11	18.83	19.19	18.77	0-2	2
		25	0	18.90	19.04	18.68	0-2	2
	64QAM	1	0	19.09	19.41	18.95	0-2	2
		1	12	19.10	19.40	18.85	0-2	2
		1	24	19.18	19.39	18.89	0-2	2
		12	0	18.95	19.12	18.67	0-3	3
		12	6	18.97	19.07	18.69	0-3	3
		12	11	18.99	19.16	18.74	0-3	3
		25	0	18.87	19.06	18.66	0-3	3
	256QAM	1	0	17.77	17.94	17.30	0-5	5
		1	12	17.49	17.83	17.25	0-5	5
		1	24	17.57	17.91	17.35	0-5	5
		12	0	17.31	17.55	17.13	0-5	5
		12	6	17.36	17.57	17.17	0-5	5
		12	11	17.39	17.56	17.16	0-5	5
		25	0	17.38	17.57	17.13	0-5	5

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LTE FDD Band 26 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26740 Ch. 819 MHz	26865 Ch. 831.5 MHz	26990 Ch. 844 MHz		
10 MHz	QPSK	1	0	18.92	19.03	18.79	0	0
		1	24	18.79	18.99	18.62	0	0
		1	49	18.80	18.94	18.65	0	0
		25	0	19.07	19.21	18.93	0-1	1
		25	12	19.08	19.24	18.91	0-1	1
		25	24	19.04	19.21	18.86	0-1	1
		50	0	18.93	19.11	18.79	0-1	1
	16QAM	1	0	19.13	19.37	19.10	0-1	1
		1	24	18.92	19.22	19.01	0-1	1
		1	49	19.07	19.42	18.91	0-1	1
		25	0	18.98	19.19	18.85	0-2	2
		25	12	19.02	19.19	18.80	0-2	2
		25	24	18.95	19.15	18.80	0-2	2
		50	0	19.04	19.40	18.99	0-2	2
	64QAM	1	0	19.12	19.32	19.00	0-2	2
		1	24	19.07	19.36	18.97	0-2	2
		1	49	19.19	19.40	19.02	0-2	2
		25	0	18.99	19.13	18.79	0-3	3
		25	12	18.93	19.06	18.83	0-3	3
		25	24	18.94	19.09	18.79	0-3	3
		50	0	19.16	19.45	18.93	0-3	3
	256QAM	1	0	17.77	17.77	17.55	0-5	5
		1	24	17.62	17.82	17.53	0-5	5
		1	49	17.66	17.87	17.53	0-5	5
		25	0	17.45	17.52	17.21	0-5	5
		25	12	17.47	17.58	17.28	0-5	5
		25	24	17.45	17.54	17.25	0-5	5
		50	0	17.77	17.79	17.69	0-5	5

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LTE FDD Band 26 _ 15 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 26865 Ch. 831.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
15 ㎒	QPSK	1	0	19.01	0	0
		1	36	19.00	0	0
		1	74	19.02	0	0
		36	0	19.22	0-1	1
		36	18	19.20	0-1	1
		36	39	19.17	0-1	1
		75	0	19.00	0-1	1
	16QAM	1	0	19.28	0-1	1
		1	36	19.12	0-1	1
		1	74	19.15	0-1	1
		36	0	19.08	0-2	2
		36	18	19.03	0-2	2
		36	39	19.02	0-2	2
		75	0	19.16	0-2	2
	64QAM	1	0	19.37	0-2	2
		1	36	19.28	0-2	2
		1	74	19.17	0-2	2
		36	0	19.13	0-3	3
		36	18	19.16	0-3	3
		36	39	19.11	0-3	3
		75	0	19.39	0-3	3
	256QAM	1	0	17.74	0-5	5
		1	36	17.69	0-5	5
		1	74	17.70	0-5	5
		36	0	17.51	0-5	5
		36	18	17.54	0-5	5
		36	39	17.54	0-5	5
		75	0	17.57	0-5	5

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11.3.8 LTE TDD Band 41 Maximum Conducted Output Power

LTE TDD Band 41 Conducted Power _Measured *Pmax*, RSI = 1 _ Antenna B

LTE TDD Band 41 _ 5 MHz Bandwidth Conducted Power - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
5 MHz	QPSK	1	0	22.90	22.78	23.14	23.28	23.29	0	0
		1	12	22.77	22.66	22.96	23.10	23.19	0	0
		1	24	22.88	22.77	23.08	23.24	23.29	0	0
		12	0	21.99	21.84	22.20	22.39	22.40	0-1	1
		12	6	21.98	21.85	22.18	22.41	22.40	0-1	1
		12	11	22.01	21.84	22.20	22.40	22.40	0-1	1
		25	0	21.97	21.83	22.18	22.34	22.38	0-1	1
	16QAM	1	0	22.28	21.96	22.21	22.59	22.37	0-1	1
		1	12	22.23	21.95	22.14	22.51	22.26	0-1	1
		1	24	22.28	21.97	22.18	22.57	22.31	0-1	1
		12	0	21.05	20.82	21.22	21.44	21.45	0-2	2
		12	6	21.03	20.90	21.21	21.46	21.43	0-2	2
		12	11	21.05	20.90	21.20	21.46	21.46	0-2	2
		25	0	21.08	20.90	21.29	21.38	21.36	0-2	2
	64QAM	1	0	22.14	21.36	21.73	21.48	21.65	0-2	2
		1	12	22.10	21.28	21.58	21.45	21.38	0-2	2
		1	24	22.13	21.40	21.81	21.50	21.50	0-2	2
		12	0	21.00	19.98	20.30	20.46	20.50	0-3	3
		12	6	21.00	19.97	20.29	20.49	20.47	0-3	3
		12	11	21.01	20.00	20.32	20.49	20.49	0-3	3
		25	0	21.05	19.92	20.27	20.47	20.43	0-3	3
	256QAM	1	0	18.00	17.91	18.16	18.39	18.06	0-5	5
		1	12	17.79	17.82	18.06	18.04	17.89	0-5	5
		1	24	18.04	17.95	18.14	18.39	18.16	0-5	5
		12	0	18.12	17.99	18.43	18.60	18.56	0-5	5
		12	6	18.08	17.97	18.41	18.59	18.52	0-5	5
		12	11	18.12	18.01	18.42	18.62	18.55	0-5	5
		25	0	18.13	17.95	18.32	18.57	18.57	0-5	5

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LTE TDD Band 41 _ 10 MHz Bandwidth Conducted Power - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	22.93	22.80	23.15	23.35	23.32	0	0
		1	24	22.83	22.70	23.04	23.26	23.27	0	0
		1	49	22.89	22.78	23.05	23.29	23.33	0	0
		25	0	21.98	21.84	22.19	22.39	22.40	0-1	1
		25	12	21.99	21.83	22.18	22.38	22.40	0-1	1
		25	24	21.96	21.83	22.14	22.37	22.42	0-1	1
		50	0	22.00	21.87	22.19	22.48	22.50	0-1	1
	16QAM	1	0	22.12	22.00	21.99	22.38	22.44	0-1	1
		1	24	22.05	21.90	21.81	22.30	22.24	0-1	1
		1	49	22.03	21.94	21.86	22.31	22.32	0-1	1
		25	0	21.01	20.92	21.20	21.45	21.51	0-2	2
		25	12	20.99	20.91	21.18	21.45	21.51	0-2	2
		25	24	20.97	20.91	21.16	21.45	21.51	0-2	2
		50	0	20.95	20.87	21.13	21.44	21.43	0-2	2
	64QAM	1	0	21.15	21.20	21.51	21.75	21.65	0-2	2
		1	24	21.07	21.28	21.48	21.61	21.62	0-2	2
		1	49	21.05	21.33	21.35	21.60	21.58	0-2	2
		25	0	20.07	19.95	20.27	20.54	20.53	0-3	3
		25	12	20.06	19.93	20.25	20.51	20.50	0-3	3
		25	24	20.06	19.94	20.23	20.49	20.51	0-3	3
		50	0	20.04	19.91	20.19	20.48	20.51	0-3	3
	256QAM	1	0	17.60	17.95	18.26	18.46	18.33	0-5	5
		1	24	17.54	17.95	18.22	18.41	18.28	0-5	5
		1	49	17.55	17.91	18.14	18.42	18.33	0-5	5
		25	0	18.14	17.98	18.34	18.57	18.55	0-5	5
		25	12	18.11	17.94	18.31	18.54	18.55	0-5	5
		25	24	18.09	17.95	18.27	18.52	18.56	0-5	5
		50	0	18.12	17.98	18.30	18.57	18.56	0-5	5

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LTE TDD Band 41 _ 15 MHz Bandwidth Conducted Power - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	22.96	22.83	23.21	23.39	23.32	0	0
		1	36	22.73	22.68	22.99	23.18	23.22	0	0
		1	74	22.89	22.79	23.05	23.30	23.34	0	0
		36	0	22.02	21.90	22.26	22.49	22.46	0-1	1
		36	18	22.02	21.89	22.23	22.48	22.49	0-1	1
		36	39	22.00	21.88	22.19	22.45	22.49	0-1	1
		75	0	22.01	21.87	22.22	22.46	22.47	0-1	1
	16QAM	1	0	22.08	22.10	22.19	22.44	22.48	0-1	1
		1	36	21.87	21.82	22.08	22.32	22.48	0-1	1
		1	74	22.35	21.85	22.05	22.36	22.51	0-1	1
		36	0	21.01	20.91	21.28	21.48	21.44	0-2	2
		36	18	21.00	20.90	21.25	21.47	21.44	0-2	2
		36	39	20.96	20.89	21.22	21.43	21.44	0-2	2
		75	0	21.03	20.92	21.29	21.48	21.50	0-2	2
	64QAM	1	0	21.38	21.51	21.32	21.85	21.89	0-2	2
		1	36	21.23	21.43	21.31	21.70	21.73	0-2	2
		1	74	21.36	21.48	21.21	21.80	21.92	0-2	2
		36	0	20.06	19.92	20.32	20.52	20.47	0-3	3
		36	18	20.05	19.93	20.29	20.51	20.50	0-3	3
		36	39	20.04	19.91	20.24	20.49	20.48	0-3	3
		75	0	20.10	19.95	20.30	20.53	20.54	0-3	3
	256QAM	1	0	17.90	17.83	18.18	18.46	18.52	0-5	5
		1	36	18.03	17.78	17.94	18.10	18.45	0-5	5
		1	74	18.16	17.81	18.02	18.37	18.53	0-5	5
		36	0	18.09	17.96	18.34	18.55	18.50	0-5	5
		36	18	18.07	17.97	18.32	18.56	18.52	0-5	5
		36	39	18.04	17.95	18.27	18.52	18.52	0-5	5
		75	0	18.09	17.96	18.32	18.54	18.52	0-5	5

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LTE TDD Band 41 _ 20 MHz Bandwidth Conducted Power - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
20 MHz	QPSK	1	0	22.94	22.84	23.22	23.39	23.33	0	0
		1	49	22.83	22.73	23.07	23.26	23.26	0	0
		1	99	22.85	22.77	23.02	23.28	23.32	0	0
		50	0	22.03	21.88	22.27	22.49	22.48	0-1	1
		50	25	22.00	21.87	22.22	22.47	22.47	0-1	1
		50	49	21.97	21.86	22.18	22.45	22.44	0-1	1
		100	0	22.02	21.87	22.24	22.48	22.48	0-1	1
	16QAM	1	0	22.19	22.26	22.48	22.65	22.54	0-1	1
		1	49	22.05	22.07	22.26	22.44	22.45	0-1	1
		1	99	22.09	22.23	22.27	22.51	22.55	0-1	1
		50	0	20.98	20.87	21.26	21.45	21.42	0-2	2
		50	25	20.94	20.86	21.20	21.44	21.43	0-2	2
		50	49	20.92	20.83	21.14	21.40	21.44	0-2	2
		100	0	21.06	20.95	21.29	21.54	21.52	0-2	2
	64QAM	1	0	21.15	21.39	21.57	21.74	21.66	0-2	2
		1	49	21.14	21.31	21.47	21.65	21.65	0-2	2
		1	99	21.05	21.30	21.35	21.61	21.64	0-2	2
		50	0	20.05	19.88	20.27	20.46	20.43	0-3	3
		50	25	20.04	19.88	20.22	20.44	20.44	0-3	3
		50	49	19.99	19.86	20.18	20.40	20.44	0-3	3
		100	0	20.05	19.89	20.26	20.48	20.48	0-3	3
	256QAM	1	0	17.70	17.85	18.33	18.60	18.42	0-5	5
		1	49	17.68	17.77	18.19	18.38	18.38	0-5	5
		1	99	17.63	17.79	18.11	18.40	18.44	0-5	5
		50	0	18.10	17.97	18.36	18.55	18.51	0-5	5
		50	25	18.09	17.97	18.32	18.53	18.52	0-5	5
		50	49	18.08	17.96	18.27	18.52	18.54	0-5	5
		100	0	18.05	17.94	18.31	18.52	18.51	0-5	5

Note; LTE TDD Band 41 has 5 required test channels per FCC KDB 447498 D04v01.

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LTE TDD Band 41 Conducted Power (Power Class 3)_Measured RSI = 0_ Antenna B

LTE TDD Band 41 _ 5 MHz Bandwidth Conducted Power - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
5 MHz	QPSK	1	0	17.82	17.64	18.00	18.14	18.13	0	0
		1	12	17.82	17.77	17.99	18.17	18.19	0	0
		1	24	17.85	17.71	18.04	18.18	18.22	0	0
		12	0	17.89	17.72	18.07	18.21	18.20	0-1	1
		12	6	17.85	17.70	18.06	18.18	18.23	0-1	1
		12	11	17.87	17.72	18.08	18.20	18.25	0-1	1
		25	0	17.86	17.68	18.05	18.20	18.20	0-1	1
	16QAM	1	0	17.82	17.67	18.05	18.16	18.14	0-1	1
		1	12	17.72	17.61	17.92	18.12	18.03	0-1	1
		1	24	17.87	17.67	18.00	18.17	18.14	0-1	1
		12	0	17.85	17.71	18.03	18.22	18.24	0-2	2
		12	6	17.86	17.66	18.00	18.19	18.26	0-2	2
		12	11	17.89	17.70	18.03	18.21	18.24	0-2	2
		25	0	17.93	17.69	18.04	18.23	18.26	0-2	2
	64QAM	1	0	17.85	17.70	18.07	18.42	18.33	0-2	2
		1	12	17.67	17.61	17.96	18.36	18.31	0-2	2
		1	24	17.85	17.69	18.05	18.36	18.40	0-2	2
		12	0	17.86	17.72	18.07	18.24	18.18	0-3	3
		12	6	17.83	17.70	18.05	18.20	18.19	0-3	3
		12	11	17.85	17.70	18.07	18.23	18.25	0-3	3
		25	0	17.85	17.68	18.02	18.22	18.23	0-3	3
	256QAM	1	0	17.87	17.62	17.98	18.19	18.14	0-5	5
		1	12	17.73	17.59	17.89	18.18	18.05	0-5	5
		1	24	17.84	17.60	17.95	18.17	18.15	0-5	5
		12	0	17.94	17.76	18.10	18.26	18.25	0-5	5
		12	6	17.94	17.75	18.10	18.25	18.28	0-5	5
		12	11	17.97	17.78	18.12	18.26	18.30	0-5	5
		25	0	17.94	17.76	18.13	18.30	18.30	0-5	5

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LTE TDD Band 41 _ 10 MHz Bandwidth Conducted Power - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	17.92	17.74	18.10	18.27	18.19	0	0
		1	24	17.80	17.64	17.99	18.15	18.14	0	0
		1	49	17.78	17.64	17.95	18.15	18.20	0	0
		25	0	17.88	17.69	18.06	18.22	18.18	0-1	1
		25	12	17.84	17.69	18.02	18.23	18.22	0-1	1
		25	24	17.85	17.71	18.03	18.23	18.25	0-1	1
		50	0	17.85	17.71	18.02	18.22	18.21	0-1	1
	16QAM	1	0	17.80	17.68	18.04	18.17	18.16	0-1	1
		1	24	17.68	17.57	17.89	18.02	18.14	0-1	1
		1	49	17.74	17.63	17.98	18.06	18.18	0-1	1
		25	0	17.87	17.73	18.09	18.25	18.23	0-2	2
		25	12	17.86	17.72	18.05	18.21	18.22	0-2	2
		25	24	17.85	17.72	18.03	18.21	18.24	0-2	2
		50	0	17.86	17.73	18.04	18.24	18.20	0-2	2
	64QAM	1	0	17.98	17.85	18.22	18.39	18.26	0-2	2
		1	24	17.98	17.77	18.13	18.25	18.27	0-2	2
		1	49	17.99	17.82	18.15	18.27	18.37	0-2	2
		25	0	17.89	17.69	18.06	18.25	18.21	0-3	3
		25	12	17.85	17.68	18.03	18.24	18.20	0-3	3
		25	24	17.86	17.68	18.04	18.23	18.25	0-3	3
		50	0	17.90	17.74	18.08	18.27	18.25	0-3	3
	256QAM	1	0	17.89	17.61	18.07	18.14	17.97	0-5	5
		1	24	17.77	17.56	17.94	18.04	18.00	0-5	5
		1	49	17.79	17.62	17.98	18.07	18.11	0-5	5
		25	0	17.97	17.78	18.14	18.32	18.29	0-5	5
		25	12	17.92	17.78	18.09	18.30	18.29	0-5	5
		25	24	17.92	17.77	18.09	18.30	18.31	0-5	5
		50	0	17.96	17.79	18.13	18.34	18.31	0-5	5

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LTE TDD Band 41 _ 15 MHz Bandwidth Conducted Power - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	17.89	17.69	18.06	18.26	18.12	0	0
		1	36	17.82	17.74	18.02	18.29	18.18	0	0
		1	74	17.83	17.71	18.01	18.23	18.26	0	0
		36	0	17.90	17.73	18.10	18.27	18.20	0-1	1
		36	18	17.90	17.71	18.07	18.24	18.25	0-1	1
		36	39	17.85	17.72	18.04	18.24	18.26	0-1	1
		75	0	17.84	17.68	18.02	18.20	18.20	0-1	1
	16QAM	1	0	17.88	17.74	18.13	18.30	18.12	0-1	1
		1	36	17.70	17.64	17.92	18.11	18.04	0-1	1
		1	74	17.79	17.74	18.04	18.23	18.24	0-1	1
		36	0	17.87	17.69	18.08	18.26	18.18	0-2	2
		36	18	17.86	17.69	18.04	18.23	18.21	0-2	2
		36	39	17.83	17.71	18.00	18.23	18.23	0-2	2
		75	0	17.87	17.71	18.05	18.22	18.19	0-2	2
	64QAM	1	0	18.03	17.81	18.22	18.40	18.28	0-2	2
		1	36	17.79	17.67	17.98	18.32	18.12	0-2	2
		1	74	17.93	17.80	18.08	18.38	18.34	0-2	2
		36	0	17.92	17.73	18.10	18.27	18.21	0-3	3
		36	18	17.90	17.71	18.09	18.25	18.25	0-3	3
		36	39	17.86	17.71	18.05	18.25	18.27	0-3	3
		75	0	17.89	17.73	18.06	18.25	18.23	0-3	3
	256QAM	1	0	17.76	17.72	17.97	18.16	18.17	0-5	5
		1	36	17.63	17.67	17.86	18.09	18.14	0-5	5
		1	74	17.73	17.73	17.87	18.09	18.26	0-5	5
		36	0	17.95	17.79	18.15	18.34	18.26	0-5	5
		36	18	17.94	17.74	18.14	18.30	18.29	0-5	5
		36	39	17.91	17.77	18.09	18.31	18.32	0-5	5
		75	0	17.89	17.72	18.05	18.25	18.26	0-5	5

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LTE TDD Band 41 _ 20 ㎒ Bandwidth Conducted Power - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
20 ㎒	QPSK	1	0	17.92	17.72	18.10	18.29	18.14	0	0
		1	49	17.80	17.63	17.99	18.17	18.14	0	0
		1	99	17.74	17.65	17.91	18.17	18.25	0	0
		50	0	17.89	17.69	18.06	18.27	18.18	0-1	1
		50	25	17.86	17.68	18.02	18.24	18.21	0-1	1
		50	49	17.81	17.66	17.98	18.22	18.26	0-1	1
		100	0	17.83	17.69	18.00	18.25	18.22	0-1	1
	16QAM	1	0	18.08	17.62	18.28	18.17	18.08	0-1	1
		1	49	17.96	17.49	18.17	18.03	18.08	0-1	1
		1	99	17.98	17.60	18.12	18.08	18.27	0-1	1
		50	0	17.92	17.69	18.08	18.26	18.17	0-2	2
		50	25	17.87	17.68	18.03	18.25	18.21	0-2	2
		50	49	17.86	17.67	18.00	18.22	18.25	0-2	2
		100	0	17.88	17.77	18.08	18.30	18.29	0-2	2
	64QAM	1	0	17.75	17.92	18.19	18.48	18.29	0-2	2
		1	49	17.67	17.82	18.04	18.41	18.33	0-2	2
		1	99	17.70	17.87	18.02	18.46	18.42	0-2	2
		50	0	17.93	17.76	18.13	18.31	18.24	0-3	3
		50	25	17.87	17.74	18.07	18.30	18.26	0-3	3
		50	49	17.83	17.72	18.03	18.27	18.29	0-3	3
		100	0	17.87	17.70	18.04	18.26	18.22	0-3	3
	256QAM	1	0	17.87	17.63	18.05	18.25	18.11	0-5	5
		1	49	17.77	17.61	17.93	18.12	18.11	0-5	5
		1	99	17.81	17.64	17.91	18.15	18.22	0-5	5
		50	0	17.98	17.80	18.16	18.35	18.27	0-5	5
		50	25	17.93	17.79	18.13	18.34	18.31	0-5	5
		50	49	17.91	17.78	18.09	18.32	18.35	0-5	5
		100	0	17.88	17.72	18.07	18.27	18.27	0-5	5

Note; LTE TDD Band 41 has 5 required test channels per FCC KDB 447498 D04v01.

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11.3.9 LTE FDD Band 66 Maximum Conducted Output Power

LTE FDD Band 66 Conducted Power_ Measured *Pmax*, RSI = 1 _Antenna B

LTE FDD Band 66 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979Ch. 1710.7 MHz	132322 Ch. 1745 MHz	132665 Ch. 1779.3 MHz		
1.4 MHz	QPSK	1	0	22.28	22.38	22.28	0	0
		1	3	22.22	22.43	22.25	0	0
		1	5	22.39	22.52	22.34	0	0
		3	0	22.36	22.53	22.35	0	0
		3	1	22.40	22.47	22.47	0	0
		3	3	22.29	22.52	22.40	0	0
		6	0	21.48	21.59	21.43	0-1	1
	16QAM	1	0	21.62	21.69	21.53	0-1	1
		1	3	21.56	21.50	21.46	0-1	1
		1	5	21.60	21.54	21.67	0-1	1
		3	0	21.44	21.55	21.41	0-1	1
		3	1	21.58	21.63	21.53	0-1	1
		3	3	21.60	21.60	21.46	0-1	1
		6	0	20.62	20.69	20.50	0-2	2
	64QAM	1	0	20.50	20.79	20.60	0-2	2
		1	3	20.47	20.65	20.61	0-2	2
		1	5	20.64	20.70	20.64	0-2	2
		3	0	20.44	20.62	20.48	0-2	2
		3	1	20.56	20.65	20.62	0-2	2
		3	3	20.58	20.69	20.59	0-2	2
		6	0	19.59	19.62	19.48	0-3	3
	256QAM	1	0	17.66	17.84	17.55	0-5	5
		1	3	17.66	17.69	17.53	0-5	5
		1	5	17.58	17.82	17.61	0-5	5
		3	0	17.55	17.82	17.47	0-5	5
		3	1	17.51	17.75	17.45	0-5	5
		3	3	17.62	17.82	17.52	0-5	5
		6	0	17.61	17.71	17.52	0-5	5

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LTE FDD Band 66 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131987 Ch. 1711.5 MHz	132322 Ch. 1745 MHz	132657 Ch. 1778.5 MHz		
3 MHz	QPSK	1	0	22.29	22.46	22.28	0	0
		1	7	22.12	22.30	22.18	0	0
		1	14	22.24	22.36	22.21	0	0
		8	0	21.47	21.59	21.45	0-1	1
		8	3	21.49	21.62	21.47	0-1	1
		8	7	21.47	21.62	21.48	0-1	1
		15	0	21.51	21.66	21.46	0-1	1
	16QAM	1	0	21.55	21.56	21.50	0-1	1
		1	7	21.72	21.50	21.49	0-1	1
		1	14	21.62	21.66	21.57	0-1	1
		8	0	20.52	20.68	20.47	0-2	2
		8	3	20.50	20.71	20.50	0-2	2
		8	7	20.56	20.68	20.51	0-2	2
		15	0	20.47	20.65	20.52	0-2	2
	64QAM	1	0	20.58	20.81	20.56	0-2	2
		1	7	20.61	20.56	20.58	0-2	2
		1	14	20.61	20.53	20.51	0-2	2
		8	0	19.51	19.66	19.49	0-3	3
		8	3	19.55	19.68	19.51	0-3	3
		8	7	19.63	19.68	19.47	0-3	3
		15	0	19.52	19.65	19.50	0-3	3
	256QAM	1	0	17.61	17.90	17.64	0-5	5
		1	7	17.65	17.74	17.41	0-5	5
		1	14	17.48	17.71	17.45	0-5	5
		8	0	17.35	17.55	17.34	0-5	5
		8	3	17.37	17.56	17.37	0-5	5
		8	7	17.39	17.55	17.41	0-5	5
		15	0	17.49	17.63	17.49	0-5	5

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LTE FDD Band 66 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131997 Ch. 1712.5 MHz	132322Ch. 1745 MHz	132647 Ch. 1777.5 MHz		
5 MHz	QPSK	1	0	22.20	22.34	22.19	0	0
		1	12	22.14	22.33	22.20	0	0
		1	24	22.31	22.45	22.34	0	0
		12	0	21.42	21.63	21.45	0-1	1
		12	6	21.43	21.61	21.45	0-1	1
		12	11	21.42	21.68	21.49	0-1	1
		25	0	21.49	21.71	21.50	0-1	1
	16QAM	1	0	21.68	21.61	21.52	0-1	1
		1	12	21.45	21.52	21.48	0-1	1
		1	24	21.45	21.77	21.53	0-1	1
		12	0	20.50	20.61	20.49	0-2	2
		12	6	20.49	20.65	20.51	0-2	2
		12	11	20.55	20.63	20.55	0-2	2
		25	0	20.47	20.70	20.53	0-2	2
	64QAM	1	0	20.63	20.75	20.56	0-2	2
		1	12	20.47	20.72	20.48	0-2	2
		1	24	20.58	20.84	20.53	0-2	2
		12	0	19.48	19.65	19.51	0-3	3
		12	6	19.54	19.64	19.51	0-3	3
		12	11	19.57	19.70	19.57	0-3	3
		25	0	19.50	19.67	19.47	0-3	3
	256QAM	1	0	17.57	17.95	17.72	0-5	5
		1	12	17.45	17.95	17.73	0-5	5
		1	24	17.70	18.05	17.74	0-5	5
		12	0	17.57	17.61	17.51	0-5	5
		12	6	17.55	17.63	17.56	0-5	5
		12	11	17.55	17.68	17.63	0-5	5
		25	0	17.51	17.65	17.46	0-5	5

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LTE FDD Band 66 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132022 Ch. 1715 MHz	132322 Ch. 1745 MHz	132622 Ch. 1775 MHz		
10 MHz	QPSK	1	0	22.26	22.40	22.33	0	0
		1	24	22.24	22.36	22.28	0	0
		1	49	22.24	22.42	22.28	0	0
		25	0	21.48	21.74	21.49	0-1	1
		25	12	21.46	21.70	21.52	0-1	1
		25	24	21.53	21.68	21.54	0-1	1
		50	0	21.53	21.75	21.58	0-1	1
	16QAM	1	0	21.58	21.65	21.66	0-1	1
		1	24	21.60	21.62	21.58	0-1	1
		1	49	21.70	21.85	21.71	0-1	1
		25	0	20.48	20.67	20.54	0-2	2
		25	12	20.46	20.62	20.52	0-2	2
		25	24	20.49	20.67	20.57	0-2	2
		50	0	20.52	20.71	20.57	0-2	2
	64QAM	1	0	20.69	20.71	20.68	0-2	2
		1	24	20.68	20.68	20.73	0-2	2
		1	49	20.70	20.77	20.64	0-2	2
		25	0	19.50	19.61	19.52	0-3	3
		25	12	19.52	19.67	19.54	0-3	3
		25	24	19.54	19.66	19.54	0-3	3
		50	0	19.53	19.71	19.57	0-3	3
	256QAM	1	0	17.82	17.60	17.49	0-5	5
		1	24	17.63	17.88	17.58	0-5	5
		1	49	17.65	17.85	17.58	0-5	5
		25	0	17.50	17.64	17.51	0-5	5
		25	12	17.50	17.68	17.52	0-5	5
		25	24	17.52	17.67	17.54	0-5	5
		50	0	17.52	17.66	17.56	0-5	5

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LTE FDD Band 66 _ 15 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132047 Ch. 1717.5 MHz	132322 Ch. 1745 MHz	132597 Ch. 1772.5 MHz		
15 MHz	QPSK	1	0	22.13	22.29	22.21	0	0
		1	36	22.15	22.33	22.24	0	0
		1	74	22.22	22.42	22.30	0	0
		36	0	21.44	21.61	21.52	0-1	1
		36	18	21.43	21.62	21.50	0-1	1
		36	39	21.48	21.65	21.57	0-1	1
		75	0	21.44	21.64	21.49	0-1	1
	16QAM	1	0	21.53	21.54	21.56	0-1	1
		1	36	21.46	21.68	21.60	0-1	1
		1	74	21.44	21.96	21.78	0-1	1
		36	0	20.44	20.63	20.52	0-2	2
		36	18	20.48	20.63	20.54	0-2	2
		36	39	20.49	20.67	20.54	0-2	2
		75	0	20.43	20.62	20.52	0-2	2
	64QAM	1	0	20.46	20.66	20.42	0-2	2
		1	36	20.51	20.52	20.65	0-2	2
		1	74	20.58	20.65	20.70	0-2	2
		36	0	19.48	19.62	19.52	0-3	3
		36	18	19.52	19.66	19.58	0-3	3
		36	39	19.52	19.66	19.60	0-3	3
		75	0	19.45	19.59	19.52	0-3	3
	256QAM	1	0	17.35	17.68	17.82	0-5	5
		1	36	17.52	17.67	17.74	0-5	5
		1	74	17.42	17.78	17.81	0-5	5
		36	0	17.47	17.60	17.50	0-5	5
		36	18	17.42	17.63	17.56	0-5	5
		36	39	17.47	17.62	17.55	0-5	5
		75	0	17.48	17.64	17.56	0-5	5

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LTE FDD Band 66 _ 20 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 MHz	132322 Ch. 1745 MHz	132572 Ch. 1770 MHz		
20 MHz	QPSK	1	0	22.14	22.28	22.26	0	0
		1	49	22.20	22.33	22.32	0	0
		1	99	22.12	22.31	22.25	0	0
		50	0	21.43	21.70	21.53	0-1	1
		50	25	21.53	21.73	21.58	0-1	1
		50	49	21.51	21.67	21.55	0-1	1
		100	0	21.45	21.64	21.51	0-1	1
	16QAM	1	0	21.51	21.59	21.66	0-1	1
		1	49	21.58	21.72	21.58	0-1	1
		1	99	21.53	21.75	21.59	0-1	1
		50	0	20.47	20.64	20.53	0-2	2
		50	25	20.51	20.69	20.60	0-2	2
		50	49	20.54	20.63	20.61	0-2	2
		100	0	20.41	20.60	20.51	0-2	2
	64QAM	1	0	20.39	20.66	20.61	0-2	2
		1	49	20.60	20.56	20.71	0-2	2
		1	99	20.60	20.67	20.63	0-2	2
		50	0	19.43	19.65	19.58	0-3	3
		50	25	19.51	19.68	19.60	0-3	3
		50	49	19.53	19.64	19.57	0-3	3
		100	0	19.41	19.60	19.54	0-3	3
	256QAM	1	0	17.53	17.72	17.69	0-5	5
		1	49	17.62	17.67	17.81	0-5	5
		1	99	17.55	17.66	17.72	0-5	5
		50	0	17.41	17.64	17.51	0-5	5
		50	25	17.50	17.65	17.57	0-5	5
		50	49	17.48	17.64	17.54	0-5	5
		100	0	17.44	17.63	17.60	0-5	5

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LTE FDD Band 66 Conducted Power_ Measured RSI = 0_Antenna B

LTE FDD Band 66 _ 1.4 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979Ch. 1710.7 MHz	132322 Ch. 1745 MHz	132665 Ch. 1779.3 MHz		
1.4 MHz	QPSK	1	0	18.89	19.14	18.92	0	0
		1	3	18.91	19.08	18.88	0	0
		1	5	19.03	19.22	18.99	0	0
		3	0	19.01	19.21	19.03	0	0
		3	1	19.10	19.14	18.96	0	0
		3	3	19.06	19.21	19.05	0	0
		6	0	19.10	19.33	19.06	0-1	1
	16QAM	1	0	19.31	19.38	19.22	0-1	1
		1	3	19.16	19.44	19.10	0-1	1
		1	5	19.31	19.35	19.18	0-1	1
		3	0	19.09	19.29	19.19	0-1	1
		3	1	19.17	19.29	19.11	0-1	1
		3	3	19.15	19.34	19.10	0-1	1
		6	0	19.15	19.39	19.15	0-2	2
	64QAM	1	0	19.26	19.41	19.24	0-2	2
		1	3	19.17	19.21	19.13	0-2	2
		1	5	19.24	19.24	19.23	0-2	2
		3	0	19.08	19.22	18.99	0-2	2
		3	1	18.93	19.28	19.01	0-2	2
		3	3	19.13	19.21	19.16	0-2	2
		6	0	19.13	19.23	19.06	0-3	3
	256QAM	1	0	17.70	17.85	17.71	0-5	5
		1	3	17.74	17.68	17.62	0-5	5
		1	5	17.74	17.88	17.49	0-5	5
		3	0	17.62	17.76	17.62	0-5	5
		3	1	17.64	17.82	17.59	0-5	5
		3	3	17.73	17.81	17.66	0-5	5
		6	0	17.64	17.84	17.65	0-5	5

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LTE FDD Band 66 _ 3 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131987 Ch. 1711.5 MHz	132322 Ch. 1745 MHz	132657 Ch. 1778.5 MHz		
3 MHz	QPSK	1	0	18.90	19.12	18.94	0	0
		1	7	18.76	19.04	18.82	0	0
		1	14	18.85	19.07	18.83	0	0
		8	0	19.07	19.28	19.03	0-1	1
		8	3	19.12	19.30	19.08	0-1	1
		8	7	19.06	19.31	19.04	0-1	1
		15	0	19.09	19.27	19.04	0-1	1
	16QAM	1	0	19.22	19.52	19.22	0-1	1
		1	7	19.01	19.31	19.19	0-1	1
		1	14	19.17	19.43	19.27	0-1	1
		8	0	19.17	19.22	18.99	0-2	2
		8	3	19.21	19.31	19.12	0-2	2
		8	7	19.16	19.25	19.12	0-2	2
		15	0	19.11	19.29	19.10	0-2	2
	64QAM	1	0	19.21	19.29	19.23	0-2	2
		1	7	19.10	19.47	19.19	0-2	2
		1	14	19.20	19.46	19.23	0-2	2
		8	0	19.21	19.28	19.05	0-3	3
		8	3	19.10	19.30	19.13	0-3	3
		8	7	19.18	19.30	19.07	0-3	3
		15	0	19.12	19.26	19.10	0-3	3
	256QAM	1	0	17.83	17.86	17.72	0-5	5
		1	7	17.74	17.73	17.60	0-5	5
		1	14	17.72	17.94	17.74	0-5	5
		8	0	17.48	17.73	17.44	0-5	5
		8	3	17.48	17.70	17.47	0-5	5
		8	7	17.51	17.75	17.52	0-5	5
		15	0	17.55	17.76	17.55	0-5	5

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LTE FDD Band 66 _ 5 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131997 Ch. 1712.5 MHz	132322Ch. 1745 MHz	132647 Ch. 1777.5 MHz		
5 MHz	QPSK	1	0	18.82	18.98	18.88	0	0
		1	12	18.74	18.99	18.81	0	0
		1	24	18.93	19.13	18.97	0	0
		12	0	19.04	19.28	19.08	0-1	1
		12	6	19.03	19.23	19.12	0-1	1
		12	11	19.06	19.33	19.15	0-1	1
		25	0	19.07	19.29	19.10	0-1	1
	16QAM	1	0	19.18	19.43	19.25	0-1	1
		1	12	19.11	19.29	19.16	0-1	1
		1	24	19.18	19.42	19.23	0-1	1
		12	0	19.13	19.21	19.08	0-2	2
		12	6	19.13	19.26	19.18	0-2	2
		12	11	19.08	19.29	19.14	0-2	2
		25	0	19.09	19.32	19.10	0-2	2
	64QAM	1	0	19.10	19.41	19.30	0-2	2
		1	12	19.10	19.28	19.21	0-2	2
		1	24	19.18	19.43	19.23	0-2	2
		12	0	19.13	19.28	19.12	0-3	3
		12	6	19.12	19.21	19.13	0-3	3
		12	11	19.17	19.26	19.15	0-3	3
		25	0	19.08	19.31	19.12	0-3	3
	256QAM	1	0	17.94	18.04	17.88	0-5	5
		1	12	17.80	17.92	17.76	0-5	5
		1	24	17.92	18.05	17.85	0-5	5
		12	0	17.55	17.82	17.64	0-5	5
		12	6	17.61	17.81	17.60	0-5	5
		12	11	17.61	17.81	17.62	0-5	5
		25	0	17.59	17.74	17.59	0-5	5

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LTE FDD Band 66 _ 10 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132022 Ch. 1715 MHz	132322 Ch. 1745 MHz	132622 Ch. 1775 MHz		
10 MHz	QPSK	1	0	18.91	19.07	18.95	0	0
		1	24	18.85	18.98	18.93	0	0
		1	49	18.92	19.04	19.00	0	0
		25	0	19.03	19.21	19.11	0-1	1
		25	12	19.06	19.27	19.13	0-1	1
		25	24	19.10	19.30	19.18	0-1	1
		50	0	19.08	19.32	19.13	0-1	1
	16QAM	1	0	19.22	19.42	19.26	0-1	1
		1	24	19.23	19.43	19.11	0-1	1
		1	49	19.21	19.43	19.25	0-1	1
		25	0	19.09	19.24	19.16	0-2	2
		25	12	19.13	19.25	19.17	0-2	2
		25	24	19.09	19.31	19.16	0-2	2
		50	0	19.08	19.29	19.16	0-2	2
	64QAM	1	0	19.02	19.30	19.23	0-2	2
		1	24	19.09	19.27	19.28	0-2	2
		1	49	19.20	19.47	19.35	0-2	2
		25	0	19.05	19.23	19.14	0-3	3
		25	12	19.09	19.23	19.12	0-3	3
		25	24	19.09	19.22	19.15	0-3	3
		50	0	19.10	19.32	19.16	0-3	3
	256QAM	1	0	17.65	17.91	17.79	0-5	5
		1	24	17.80	17.95	17.76	0-5	5
		1	49	18.01	17.98	17.85	0-5	5
		25	0	17.58	17.75	17.63	0-5	5
		25	12	17.57	17.76	17.64	0-5	5
		25	24	17.58	17.74	17.66	0-5	5
		50	0	17.56	17.75	17.60	0-5	5

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LTE FDD Band 66 _ 15 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132047 Ch. 1717.5 MHz	132322 Ch. 1745 MHz	132597 Ch. 1772.5 MHz		
15 MHz	QPSK	1	0	18.77	18.96	18.92	0	0
		1	36	18.78	18.96	18.97	0	0
		1	74	18.89	19.07	19.05	0	0
		36	0	19.05	19.27	19.12	0-1	1
		36	18	19.09	19.25	19.17	0-1	1
		36	39	19.11	19.25	19.14	0-1	1
		75	0	19.03	19.22	19.09	0-1	1
	16QAM	1	0	19.02	19.29	19.36	0-1	1
		1	36	18.88	19.13	19.19	0-1	1
		1	74	18.89	19.36	19.31	0-1	1
		36	0	19.02	19.21	19.17	0-2	2
		36	18	19.06	19.22	19.15	0-2	2
		36	39	19.13	19.27	19.19	0-2	2
		75	0	19.05	19.26	19.11	0-2	2
	64QAM	1	0	19.23	19.38	19.26	0-2	2
		1	36	19.24	19.41	19.29	0-2	2
		1	74	19.25	19.40	19.19	0-2	2
		36	0	19.11	19.22	19.15	0-3	3
		36	18	19.14	19.28	19.19	0-3	3
		36	39	19.11	19.29	19.20	0-3	3
		75	0	19.04	19.17	19.15	0-3	3
	256QAM	1	0	17.77	17.89	17.85	0-5	5
		1	36	17.67	17.94	17.84	0-5	5
		1	74	17.73	18.06	18.01	0-5	5
		36	0	17.57	17.75	17.61	0-5	5
		36	18	17.55	17.73	17.68	0-5	5
		36	39	17.61	17.75	17.67	0-5	5
		75	0	17.56	17.72	17.68	0-5	5

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LTE FDD Band 66 _ 20 MHz Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 MHz	132322 Ch. 1745 MHz	132572 Ch. 1770 MHz		
20 MHz	QPSK	1	0	18.78	18.95	18.89	0	0
		1	49	18.86	19.01	18.95	0	0
		1	99	18.79	18.99	18.93	0	0
		50	0	19.04	19.23	19.12	0-1	1
		50	25	19.10	19.27	19.16	0-1	1
		50	49	19.10	19.24	19.18	0-1	1
		100	0	19.01	19.25	19.12	0-1	1
	16QAM	1	0	19.12	19.33	19.34	0-1	1
		1	49	19.16	19.33	19.36	0-1	1
		1	99	19.17	19.39	19.37	0-1	1
		50	0	19.05	19.25	19.19	0-2	2
		50	25	19.10	19.26	19.20	0-2	2
		50	49	19.11	19.22	19.22	0-2	2
		100	0	19.02	19.19	19.17	0-2	2
	64QAM	1	0	19.10	19.31	19.05	0-2	2
		1	49	19.02	19.31	19.19	0-2	2
		1	99	18.96	19.35	19.34	0-2	2
		50	0	19.08	19.27	19.19	0-3	3
		50	25	19.12	19.28	19.20	0-3	3
		50	49	19.12	19.30	19.23	0-3	3
		100	0	19.04	19.20	19.12	0-3	3
	256QAM	1	0	17.63	17.80	17.66	0-5	5
		1	49	17.74	17.93	17.75	0-5	5
		1	99	17.76	17.89	17.73	0-5	5
		50	0	17.52	17.72	17.64	0-5	5
		50	25	17.54	17.77	17.69	0-5	5
		50	49	17.58	17.76	17.68	0-5	5
		100	0	17.59	17.77	17.69	0-5	5

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