TEST REPORT

FCC SAR Part 1 Test for SM-S931U
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-SR-2410-FC008-R4

DATE OF ISSUE
November 12, 2024

Tested by
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FCC Part 1 SAR Test for certification

REPORT NO.
HCT-SR-2410-FC008-R4

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Nov. 12, 2024

FCC ID
A3LSMS931U

Applicant	SAMSUNG Electronics Co., Ltd 129, Samsung-ro, Yeongtong-gu, Suwon-Si, Gyeonggi-do, 16677, Korea
Product Name	Mobile Phone
Model Name	SM-S931U
Additional Model Name	SM-S931U1
Date of Test	Aug. 27, 2024~ Oct. 28, 2024
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	Oct. 28, 2024	Initial Release
1	Oct. 31, 2024	Revised BW for NR n7/41/66/71 and Pmax for n66/70
2	Nov. 04, 2024	Revised Page 8,9, 21, 23,26,27,33 and 276, 277 Page 78 of Appendix .B
3	Nov. 06, 2024	Revised Page 17, 188, 189, 190
4	Nov. 12, 2024	Revised BT version

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 2019 TCBC Workshop Notes (IEEE 802.11 ax)
- April 2018 TCBC Workshop Notes (LTE UL CA, DL CA SAR Test Exclusion)
- April 2019 and Oct 2020 TCBC Workshop Notes (Dynamic Antenna tuning)

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FCC RF Exposure evaluation of U-NII 6 -7 ㎓ Band of this device were measured by referring to the interim procedures in TCB Workshop document of Oct 2020, IEC/IEEE 62209-1528:2020 and also the App Note of SPEAG, the manufacturer of measuring equipment.
SAR Testing was performed using 6.5 ㎓ SAR Probe calibration factor according to FCC TCBC Document.

November 2017, October 2018, April 2019, November 2019, October 2020, October 2022, TCBC Workshop Notes.
SPEAG DASY6 System Handbook
SPEAG DASY6 Application Note (Interim Procedures for Operating at 6 -10 ㎓) (ver.9)
IEEE 1528-2013
IEC TR 63170:2018
IEC 62479:2010
IEC/IEEE 63195-1:2022

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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-S931U
Additional Model Name	SM-S931U1
Equipment Type	Mobile Phone
FCC ID	A3LSMS931U
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	0.63	0.79	0.79	N/A
GSM/GPRS/EDGE 1900	1 850.2 MHz ~ 1 909.8 MHz	PCE	0.10	0.76	0.68	N/A
UMTS Band 5	826.4 MHz ~ 846.6 MHz	PCE	0.88	0.59	0.59	N/A
UMTS Band 4	1 712.4 MHz ~ 1 752.6 MHz	PCE	0.18	0.86	0.57	N/A
UMTS Band 2	1 852.4 MHz ~ 1 907.6 MHz	PCE	0.17	0.99	0.54	N/A
LTE FDD Band 2 (PCS)	1 850.7 MHz ~ 1 909.3 MHz	PCE	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
LTE FDD Band 7	2 502.5 MHz ~ 2 567.5 MHz	PCE	0.63	0.31	0.29	N/A
LTE FDD Band 12	699.7 MHz ~ 715.3 MHz	PCE	0.96	0.75	0.75	N/A
LTE FDD Band 13	779.5 MHz ~ 784.5 MHz	PCE	0.90	0.33	0.33	N/A
LTE FDD Band 14	790.5 MHz ~ 795.5 MHz	PCE	0.91	0.50	0.50	N/A
LTE FDD Band 25 (PCS)	1 850.7 MHz ~ 1 914.3 MHz	PCE	0.46	0.67	0.33	N/A
LTE FDD Band 26 (Cell)	814.7 MHz ~ 848.3 MHz	PCE	1.07	0.44	0.44	N/A
LTE FDD Band 30	2 307.5 MHz ~ 2 312.5 MHz	PCE	0.87	1.06	0.60	N/A
LTE TDD Band 38	2 572.5 MHz ~ 2 617.5 MHz	PCE	N/A	N/A	N/A	N/A
LTE TDD Band 41	2 498.5 MHz ~ 2 687.5 MHz	PCE	0.77	0.31	0.30	N/A
LTE TDD Band 48	3 552.5 MHz ~ 3 697.5 MHz	CBE	**0.76**	**0.67**	**0.48**	N/A
LTE FDD Band 66 (AWS)	1 710.7 MHz ~ 1 779.3 MHz	PCE	**1.13**	0.80	0.49	N/A
LTE FDD Band 71	665.5 MHz ~ 695.5 MHz	PCE	0.95	0.72	0.72	N/A
NR FDD Band n2 (PCS)	1 852.5 MHz ~ 1 907.5 MHz	PCE	N/A	N/A	N/A	N/A
NR FDD Band n5	826.5 MHz ~ 846.5 MHz	PCE	N/A	N/A	N/A	N/A
NR FDD Band n7	2 502.5 MHz ~ 2 567.5 MHz	PCE	0.66	0.33	0.28	N/A
NR FDD Band n12	701.5 MHz ~ 713.5 MHz	PCE	0.86	0.66	0.66	N/A
NR FDD Band n14	790.5 MHz ~795.5 MHz	PCE	0.77	0.54	0.54	N/A
NR FDD Band n25 (PCS)	1 852.5 MHz ~ 1 912.5 MHz	PCE	0.47	0.94	0.75	N/A
NR FDD Band n26	816.5 MHz ~ 846.5 MHz	PCE	0.97	0.53	0.44	N/A
NR FDD Band n30	2 307.5 MHz ~ 2 312.5 MHz	PCE	0.83	0.83	0.50	N/A
NR TDD Band n38	2 575 MHz ~ 2 615 MHz	PCE	N/A	N/A	N/A	N/A
NR TDD Band n41	2 506.02 MHz ~ 2 679.99 MHz	PCE	1.10	0.98	0.52	N/A
NR TDD Band n48	3 555 MHz ~ 3 695.01 MHz	CBE	0.86	0.78	0.64	N/A
NR FDD Band n66	1 712.5 MHz ~ 1 777.5 MHz	PCE	0.80	0.78	0.67	N/A
NR FDD Band n70	1 697.5 MHz ~ 1 707.5 MHz	PCE	1.06	**1.08**	**0.81**	N/A
NR FDD Band n71	665.5 MHz ~ 695.5 MHz	PCE	0.83	0.55	0.55	N/A
NR TDD Band n77	3 445.01 MHz ~ 3 544.98 MHz 3 705 MHz ~ 3 975 MHz	PCE	0.87	0.92	0.92	N/A
NR TDD Band n78	3 445.01 MHz ~ 3 544.98 MHz 3 705 MHz ~ 3 975 MHz	PCE	N/A	N/A	N/A	N/A
2.4 GHz WLAN	2 412 MHz ~ 2 462 MHz	DTS	**0.55**	**0.81**	**0.74**	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	0.80	N/A	0.61	2.88
U-NII-2C	5 500 MHz ~ 5 720 MHz	NII	0.72	N/A	**0.68**	**2.99**
U-NII-3	5 745 MHz ~ 5 825 MHz	NII	**0.92**	**0.83**	0.62	N/A
U-NII-4	5 845 MHz ~ 5 885 MHz	NII	0.83	N/A	0.60	2.54
6 GHz WLAN	5 925 MHz ~ 7 115 MHz	6CD/6VL	0.19	**0.11**	<0.10	0.37
Bluetooth	2 402 MHz ~ 2 480 MHz	DSS/DTS	**0.93**	**0.34**	**0.34**	N/A
NFC	13.56 MHz	DXX	N/A	N/A	N/A	**<0.10**
MSS	1 626.5 MHz ~1 660.5 MHz	TNB	N/A	N/A	**0.76**	**2.60**
Simultaneous SAR per KDB 690783 D01v01r03			**1.46**	**1.54**	**1.51**	**2.99**
Date(s) of Tests:	Aug. 27, 2024~ Oct. 28, 2024					

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The Highest Reported APD/PD						
Band	Tx. Frequency	Equipment Class	APD (4 ㎠)			
			mW/㎠ Head	mW/㎠ Hotspot	mW/㎠ Body-Worn	mW/㎠ Extremity
6 GHz WLAN	5 925 MHz ~ 7 115 MHz	6CD/6VL	0.081	0.056	0.032	0.697
Band	Tx. Frequency	Equipment Class	iPD (4 ㎠)			
			mW/㎠ psPD			
6 GHz WLAN	5 925 MHz ~ 7 115 MHz	6CD/6VL	0.79			
Date(s) of Tests:	Sep. 23, 2024 ~ Oct. 09, 2024					

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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 7	Voice / Data	2 502.5 MHz ~ 2 567.5 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 14	Voice / Data	790.5 MHz ~ 795.5 MHz
LTE FDD Band 25	Voice / Data	1 850.7 MHz ~ 1 914.3 MHz
LTE FDD Band 26	Voice / Data	814.7 MHz ~ 848.3 MHz
LTE FDD Band 30	Voice / Data	2 307.5 MHz ~ 2 312.5 MHz
LTE TDD Band 38	Voice / Data	2 572.5 MHz ~ 2 617.5 MHz
LTE TDD Band 41	Voice / Data	2 498.5 MHz ~ 2 687.5 MHz
LTE TDD Band 48	Voice / Data	3 552.5 MHz ~ 3 697.5 MHz
LTE FDD Band 66 (AWS)	Voice / Data	1 710.7 MHz ~ 1 779.3 MHz
LTE FDD Band 71	Voice / Data	665.5 MHz ~ 695.5 MHz
NR FDD Band n2 (PCS)	Voice / Data	1 852.5 MHz ~ 1 907.5 MHz
NR FDD Band n5	Voice / Data	826.5 MHz ~ 846.5 MHz
NR FDD Band n7	Voice / Data	2 502.5 MHz ~ 2 567.5 MHz
NR FDD Band n12	Voice / Data	701.5 MHz ~ 713.5 MHz
NR FDD Band n14	Voice / Data	790.5 MHz ~795.5 MHz
NR FDD Band n25 (PCS)	Voice / Data	1 852.5 MHz ~ 1 912.5 MHz
NR FDD Band n26	Voice / Data	816.5 MHz ~ 846.5 MHz
NR FDD Band n30	Voice / Data	2 307.5 MHz ~ 2 312.5 MHz
NR TDD Band n38	Voice / Data	2 575 MHz ~ 2 615 MHz
NR TDD Band n41	Voice / Data	2 501.01 MHz ~ 2 685 MHz
NR TDD Band n48	Voice / Data	3 555 MHz ~ 3 695.01 MHz
NR FDD Band n66	Voice / Data	1 712.5 MHz ~ 1 777.5 MHz
NR FDD Band n70	Voice / Data	1 697.5 MHz ~ 1 707.5 MHz
NR FDD Band n71	Voice / Data	665.5 MHz ~ 695.5 MHz
NR TDD Band n77	Voice / Data	3 705 MHz ~ 3 975 MHz
NR TDD Band n77 DoD	Voice / Data	3 445.01 MHz ~ 3 544.98 MHz
NR TDD Band n78	Voice / Data	3 705 MHz ~ 3 795 MHz
NR TDD Band n78 DoD	Voice / Data	3 455.01 MHz ~ 3 544.98 MHz
NR Band n258	Data	24 250 MHz ~ 24 450 MHz; 24 750 MHz ~ 25 250 MHz
NR Band n260	Data	37 000 MHz ~ 40 000 MHz
NR Band n261	Data	27 500 MHz ~ 28 350 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
U-NII-5	Voice / Data	5 925 MHz – 6 425 MHz
U-NII-6	Voice / Data	6 425 MHz – 6 525 MHz
U-NII-7	Voice / Data	6 525 MHz – 6 865 MHz
U-NII-8	Voice / Data	6 865 MHz – 7 115 MHz
2.4 GHz WLAN	Voice / Data	2 412 MHz ~ 2 462 MHz
Bluetooth / LE 5.4	Data	2 402 MHz ~ 2 480 MHz
NFC	Data	13.56 MHz
WPC	Data	110 kHz ~ 148 kHz
NTN (Non terrestrial Networks)	Data	1 626.5 MHz ~1 660.5 MHz

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Device Description		
Battery	EB-BS931ABY (SDI)	
Device Serial Numbers	Mode	Serial Number
	GSM850, GSM1900, UMTS Band 2,4,5	XHK0120M, XHK0100M
	LTE Band 12,13,14,26,71 NR Band n12, 14 26,30,71	XHK0094M, XHK0099M
	LTE Band 66,25,30,7 NR Band n41 SRS2, n48 SRS1/2, n77 SRS 1/2	XJ90526M, XJA1828M, XJA1617M, XHK0100M, XHK0147M,XJL1050M
	LTE Band 41, 48	XHK0094M, XHK0100M, XJL1050M
	NR Band n7,25,30,41,48, 66,70, 77 NR Band n41 SRS 1/3, n48 SRS3, n77 SRS3	XJ90526M, XJA1828M, XJA1617M, XHK0147M, XJL1050M, XJL1056M
	WLAN 2.4G, 5G, BT, NFC	XHK0101M, XJL1056M
	WLAN 6E	XHK0101M
	NTN	XJN0623M, XJAL1056M
	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 Qualcomm® Smart Transmit Gen2 feature. 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 Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target, below the predefined time-averaged power limit (i.e., Plimit for sub-6 radio and WLAN/BT), for each characterized technology and band (see SAR Part 0 Test Report). The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target or PD_design_target, below the predefined time-averaged power limit (i.e., Plimit for sub-6 radio and WLAN/BT, and input.power.limit for 5G mmW NR), for each characterized technology and band (see SAR Part 0 Test Report).
SARchar for WIFI 6 GHz can be found in the 6-8 GHz RF Exposure Report

Smart Transmit allows 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 EFS settings and maximum tune up output power Pmax configured for this EUT for various transmit conditions (Device State Index DSI).

Note that the device uncertainty for sub-6 GHz WWAN and WLAN/BT is 1.0 dB for this EUT.

All MIMO Pmax and Plimit are defined per Antenna chain.

*Note all Plimit EFS 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, GFSK, OFDM modulation schemes (e.g. GSM and LTE TDD and WLAN/BT).
*Maximum tune up output power Pmax is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum Tune up output power + 1 dB device design uncertainty. The maximum time-averaged output power (dBm) for any 2G/3G/4G/5G Sub6 WWAN and WLAN/BT technology, band, and DSI = minimum of "Plimit EFS" and "Maximum tune up output power Pmax" + 1 dB device uncertainty.

SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB Publication 447498 D01v06. The purpose of this report (SAR Part 1 test) is to demonstrate that the EUT meets FCC SAR limits when transmitting in static transmission scenario at maximum allowable time-averaged power levels.

Measurement Condition: All conducted power and SAR measurements in this report (SAR Part 1 test) were performed by setting Reserve_power_margin (Smart Transmit EFS entry) to 0 dB

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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) 2.5W/kg(10g) SAR_Design_target							Pmax
SAR Exposure Position			Body-worn	Head	Hotspot	Phablet	Maximum Tune-up Output Power (Frame Averaged Power) [dBm]
Averaging volume			1g	1g	1g	10g	
seperation Distance			10 mm	0 mm	10 mm	0 mm	
Mode	Band	Antenna	DSI=0	DSI=1	DSI=0	DSI=0	
GSM/GPRS/EDGE	850	Sub 1	26.8	20.8	26.8	29.4	24.8
GSM/GPRS/EDGE	850	MAIN 1	31.8	34.6	30.7	28.8	24.8
GSM/GPRS/EDGE	1900	MAIN 1	19.3	32.0	19.3	19.3	20.8
UMTS	2	MAIN 1	19.0	31.7	19.0	19.0	23.0
UMTS	4	MAIN 1	19.0	31.5	19.0	19.0	23.0
UMTS	5	Sub 1	27.5	21.0	27.5	26.8	24.0
UMTS	5	MAIN 1	30.0	29.1	30.0	27.5	24.0
LTE FDD	25(2)	MAIN 1	19.0	31.7	19.0	19.0	23.5
LTE FDD	25(2)	Sub 2	18.5	16.9	18.5	18.5	23.5
LTE FDD	66(4)	MAIN 1	19.5	31.5	19.5	19.5	24.0
LTE FDD	66(4)	Sub 2	19.5	17.0	19.5	19.5	24.0
LTE FDD	7	MAIN 2	20.5	36.3	20.5	19.5	23.0
LTE FDD	7	Sub 2	19.5	16.5	19.5	19.5	23.0
LTE FDD	12	MAIN 1	30.3	35.6	30.3	30.8	24.0
LTE FDD	12	Sub 1	26.3	20.5	26.3	26.8	24.0
LTE FDD	13	MAIN 1	32.4	36.4	31.4	30.6	24.0
LTE FDD	13	Sub 1	23.0	21.0	23.0	23.0	24.0
LTE FDD	14	MAIN 1	23.0	37.0	23.0	23.0	24.0
LTE FDD	14	Sub 1	22.0	21.0	22.0	22.0	24.0
LTE FDD	26(5)	Sub 1	28.6	21.5	28.6	27.0	24.0
LTE FDD	26(5)	MAIN 1	29.2	34.5	29.2	28.1	24.0
LTE FDD	30	Sub 2	19.5	17.0	19.5	19.5	22.5
LTE FDD	30	MAIN 1	20.5	34.3	20.5	20.5	22.5
LTE TDD PC3	41(38)	MAIN 2	20.5	20.0	20.5	20.5	22.0
LTE TDD PC3	41	Sub 2	18.5	15.5	18.5	18.5	22.0
LTE TDD PC3	48	Sub 2	18.5	14.0	18.5	18.5	20.0
LTE FDD	71	MAIN 1	28.9	35.4	28.9	28.6	0.0
LTE FDD	71	Sub 1	26.9	21.0	26.9	26.3	0.0
NR FDD	25(2)	MAIN 1	19.5	29.7	19.5	19.5	24.0
NR FDD	25(2)	Sub 2	18.5	16.5	18.5	18.5	24.0
NR FDD	7	MAIN 2	21.0	36.2	21.0	21.0	23.0
NR FDD	7	Sub 2	18.5	16.5	18.5	18.5	23.0
NR FDD	12	MAIN 1	31.1	36.2	31.1	29.8	24.0
NR FDD	12	Sub 1	26.9	20.5	26.9	26.8	24.0
NR FDD	14	MAIN 1	33.1	38.4	31.5	29.8	24.0
NR FDD	14	Sub 1	28.0	20.5	28.0	27.0	24.0
NR FDD	26(5)	Sub 1	28.7	22.0	28.0	24.5	24.0
NR FDD	26(5)	MAIN 1	31.2	35.2	31.2	27.3	24.0
NR FDD	30	Sub 2	19.0	16.5	19.0	19.0	22.0
NR FDD	30	MAIN 1	20.0	36.4	20.0	20.0	22.5
NR TDD PC2	41	Sub 2	19.5	15.0	19.5	19.5	26.0
NR TDD SRS 2	41	MAIN 2	20.0	15.0	20.0	20.0	23.0
NR TDD SRS 3	41	Sub 1	19.0	13.5	19.0	19.0	24.0
NR TDD SRS 4	41	MAIN 4	19.0	13.5	19.0	19.0	20.0
NR TDD PC2	41	MAIN 2	21.0	19.0	21.0	21.0	26.0
NR TDD SRS 2	41	Sub 2	35.6	19.0	31.6	28.0	20.0
NR TDD SRS 3	41	MAIN 4	19.0	18.0	19.0	19.0	22.5
NR TDD SRS 4	41	Sub 1	18.0	17.0	18.0	18.0	19.5
NR TDD PC3	48	Sub 2	19.5	14.5	19.5	17.9	22.0
NR TDD SRS 2	48	MAIN 3	13.0	8.5	13.0	13.0	16.0
NR TDD SRS 3	48	SUB 5	17.0	12.0	17.0	17.0	19.5
NR TDD SRS 4	48	MAIN 4	12.5	7.5	12.5	12.5	15.0
NR FDD	66	MAIN 1	19.0	30.3	19.0	19.0	24.5
NR FDD	66	Sub 2	20.0	16.5	20.0	20.0	24.0
NR FDD	70	MAIN 1	20.0	31.0	20.0	20.0	23.5
NR FDD	70	Sub 2	21.0	17.0	21.0	21.0	23.5
NR FDD	71	MAIN 1	30.3	36.0	30.3	28.4	24.5
NR FDD	71	Sub 1	27.8	21.0	27.8	27.2	23.5
NR TDD PC2	77/78	Sub 2	16.5	14.5	16.5	16.5	26.0
NR TDD SRS 2	77/78	MAIN 3	6.0	3.5	6.0	6.0	15.5
NR TDD SRS 3	77/78	SUB 5	9.5	7.0	9.5	9.5	18.5
NR TDD SRS 4	77/78	MAIN 4	4.5	3.0	4.5	4.5	14.5
NR TDD DoD PC2	77/78	Sub 2	16.5	14.5	16.5	16.5	26.0
NR TDD SRS 2 DoD	77/78	MAIN 3	6.0	3.5	6.0	6.0	15.5
NR TDD SRS 3 DoD	77/78	SUB 5	9.5	7.0	9.5	9.5	18.5
NR TDD SRS 4 DoD	77/78	MAIN 4	4.5	3.0	4.5	4.5	14.5
WLAN	2.4	Sub 4	23.4	14.0	20.9	20.9	19.0
WLAN	2.4	Sub 6	24.2	14.0	24.2	21.3	19.0
WLAN	2.4	Sub 4,6	21.3	14.0	21.1	20.0	19.0
WLAN	5	Sub 4	20.8	14.0	19.1	17.9	17.0
WLAN	5	Sub 1	21.5	14.0	24.7	22.3	17.0
WLAN	5	Sub 1,4	20.0	14.0	20.4	18.3	17.0
WLAN	6	Sub 4	9.0	9.0	9.0	9.0	16.0
WLAN	6	Sub 1	9.0	9.0	9.0	9.0	16.0
WLAN	6	Sub 1,4	9.0	9.0	9.0	9.0	16.0
BT	2.4	Sub 4	24.7	16.0	24.7	23.5	18.0
BT	2.4	Sub 6	26.8	16.0	26.8	23.6	18.0
BT LE	2.4	Sub 4	22.1	16.0	22.1	21.2	18.0
BT LE	2.4	Sub 6	27.4	16.0	27.4	21.1	18.0

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Note:

1. Compared with the Plimt (Tune up Powers) declared in each DSI by the manufacturer and the plimt (calculation) calculated by the SAR measurement of each DSI, the lower power were applied to the EFS as the plimit at each DSI configurations.
2. When *Pmax* < *Plimit*, the DUT will operate at a power level up to *Pmax*.
3. Maximum Tune up Power,P*max*: Is configured in NV settings in EUT to limit maximum transmitting power. This power is converted into peak power in NV setting for TDD schemes.(GPRS, LTE TDD and WLAN/BT) The EUT maximum allowed output power is equal to Pmax +1dB device uncertainty

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4.3 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.

4.3.1 2G/3G/4G/5G Nominal Output Power

A. GSM Modes

GSM/GPRS/EDGE 850 _MAIN1									
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	32	32	31	29	27	26.5	24.5	23.5	23
DSI = 0 (free)	32	32	31	29	27	26.5	24.5	23.5	23
DSI = 1 (RCV)	32	32	31	29	27	26.5	24.5	23.5	23

GSM/GPRS/EDGE 850 _SUB1									
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	32	32	31	29	27	26.5	24.5	22.5	22.5
DSI = 0 (free)	32	32	31	29	27	26.5	24.5	22.5	22.5
DSI = 1 (RCV)	30	30	27	25	23.5	25.5	23.5	21.5	20.5

GSM/GPRS/EDGE 1900_ MAIN1									
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	29	29	27	25.5	23.5	25	24	23	22.5
DSI = 0 (free)	28	28	25.5	23	21.5	25	23.5	22.5	21.5
DSI = 1 (RCV)	29	29	27	25.5	23.5	25	24	23	22.5

Tolerance: -1.5 dB ~ +1.0 dB

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B. UMTS Modes

UMTS Band 5 (850 ㎒)_ MAIN1				
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	23	23	23
DSI = 0 (free)	24	23	23	23
DSI = 1 (RCV)	24	23	23	23

UMTS Band 5 (850 ㎒)_ SUB1				
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	23	23	23
DSI = 0 (free)	24	23	23	23
DSI = 1 (RCV)	21	20	20	20

UMTS Band 4 (1750 ㎒)_ MAIN1				
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	23	23	22	22
DSI = 0 (free)	19	19	18	18
DSI = 1 (RCV)	23	23	22	22

UMTS Band 2 (1900 ㎒)_ MAIN1				
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	23	22	22	22
DSI = 0 (free)	19	18	18	18
DSI = 1 (RCV)	23	22	22	22

Tolerance: -1.5 dB ~ +1.0 dB

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C. LTE Modes

Mode / Band	Antenna	Modulated Average Output Power (in dBm)		
		Pmax	DSI 0 (free)	DSI 1 (RCV)
LTE B2	M1	23.5	19	23.5
LTE B2	S2	23.5	18.5	17.5
LTE B4	M1	23.5	19	23.5
LTE B4	S2	23.5	19.5	17
LTE B5	M1	24	24	24
LTE B5	S1	24	24	21
LTE B7	M2	23	20.5	23
LTE B7	S2	23	19.5	16.5
LTE B12	M1	24	24	24
LTE B12	S1	24	24	20.5
LTE B13	M1	24	24	24
LTE B13	S1	24	23	21
LTE B14	M1	24	23	24
LTE B14	S1	24	22	21
LTE B25	M1	23.5	19	23.5
LTE B25	S2	23.5	18.5	17.5
LTE B26	M1	24	24	24
LTE B26	S1	24	24	21.5
LTE B30	M1	22.5	20.5	22.5
LTE B30	S2	22.5	19.5	17
LTE B66	M1	24	19.5	24
LTE B66	S2	24	19.5	17
LTE B71	M1	24.5	24.5	24.5
LTE B71	S1	24.5	24.5	21
LTE B38	M2	24	21.5	21
LTE B38	S2	24	20	17.5
LTE B48	S2	20.5	20.5	16
LTE B41	M2	24	22.5	22
LTE B41	S2	24	20.5	17.5
NTN B255	S2	22.0	22.0	22.0

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	DSI 0 (free)	DSI 1 (RCV)
N2	M1	23.5	19	23.5
N2	S2	23.5	18.5	16.5
N5	M1	24	24	24
N5	S1	24	24	21
N7	M2	23	21	23
N7	S2	23	18.5	16.5
N12	M1	24	24	24
N12	S1	24	24	20.5
N14	M1	24	24	24
N14	S1	24	24	20.5
N25	M1	24	19.5	24
N25	S2	24	18.5	16.5
N26	M1	24	24	24
N26	S1	24	24	22
N30	M1	22.5	20	22.5
N30	S2	22	19	16.5
N66	M1	24.5	19	24.5
N66	S2	24.0	19.5	16.5
N70	M1	23.5	20	23.5
N70	S2	23.5	21	17
N71	M1	24.5	24.5	24.5
N71	S1	23.5	23.5	21
N38	S2	24	19	15
N41 PC2	S2	26	19.5	15
N41 PC2(NSA)	S2	24	19.5	15
N41 PC2 [SRS #2]	M2	23	20	15
N41 PC2 [SRS #3]	S1	24	19	13.5
N41 PC2 [SRS #4]	M4	20	19	13.5
N41 PC2	M2	26	21	19
N41 PC2(NSA)	M2	24	21	19
N41 PC2 [SRS #2]	S2	20	20	19
N41 PC2 [SRS #3]	M4	22.5	19	18
N41 PC2 [SRS #4]	S1	19.5	18	17
N48	S2	20.5	19.5	14.5
N48 [SRS #2]	M3	16	13	8.5
N48[SRS #3]	S5	19.5	17	12
N48[SRS #4]	M4	15	12.5	7.5
N77 PC2	S2	26	16.5	14.5
N77 PC2 [SRS #2]	M3	15.5	6	3.5
N77 PC2 [SRS #3]	S5	18.5	9.5	7
N77 PC2 [SRS #4]	M4	14.5	4.5	3
N78 PC2	S2	26	16.5	14.5
N78 PC2 [SRS #2]	M3	15.5	6	3.5
N78 PC2 [SRS #3]	S5	18.5	9.5	7
N78 PC2 [SRS #4]	M4	14.5	4.5	3

Tolerance: -1.5 dB ~ +1.0 dB

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4.3.2 Maximum 2.4 GHz, 5 GHz WIFI output power

a. Maximum Power Pmax

Mode	Band	SISO(ANT 1)							SISO(ANT 2)							MIMO						
		a	b	g	n	ac	ax (SU)	be (SU)	a	b	g	n	ac	ax (SU)	be (SU)	a	b	g	n	ac	ax(SU)	be(SU)
2.4GHz	2.45GHz		19 (RSDB : 9.5)	17 Ch.1: 15 Ch.2 : 15.5 Ch.11: 15.5 (RSDB : 9.5)	17 Ch.1: 14.5 Ch.2 : 15.5 Ch.11: 15 (RSDB : 9.5)	17 Ch.1: 14.5 Ch.2 : 15.5 Ch.11: 15 (RSDB : 9.5)	17 Ch.1: 14 Ch.11: 14 (RSDB : 9.5)	17 Ch.1: 14 Ch.11: 14 (RSDB : 9.5)		Same as ant1	Same as ant1	Same as ant1	Same as ant1	Same as ant1	Same as ant1		Ant1+2	Ant1+2	Ant1+2	Ant1+2	Ant1+2	Ant1+2	Ant1+2
5GHZ (20MHz)	UNII 1	17			17	17 Ch36 :16.5	17 Ch36 : 16	17 Ch36 : 16	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 2A	17 Ch64 : 16			17 Ch64 : 16	17 Ch60, 64 : 16	17 Ch64 : 16	17 Ch64 : 16	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 2C	17 Ch100 : 16			17 Ch100 : 16	17 Ch100 : 16	17 Ch100 : 16	17 Ch100 : 16	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 3	17			17	17	17	17	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 4	17			17	17	17	17	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
5GHZ (40MHz)	UNII 1				17 Ch38 : 13	17 Ch38 : 14	17 Ch38 : 11	17 Ch38 : 11				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 2A				17 Ch62 : 13	17 Ch62 : 13	17 Ch62 : 15	17 Ch62 : 15				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 2C				17 Ch102: 12	17 Ch102: 12	17 Ch102 : 13	17 Ch102 : 13				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 3				17	17	17	17				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 4				17	17	17	17				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
5GHZ (80MHz)	UNII 1					12	13	13					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 2A					12	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 2C					17 Ch106 : 12	17 Ch106 : 12	17 Ch106 : 12					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 3					17	17	17					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 4					17	17	17					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
5GHz (160MHz)	UNII 1					13	15	15					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 2A					13	15	15					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 2C					12	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 3					14	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 4					14	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
6GHz_LPI (20MHz)	U-NII-5	8					8 ch2 : 6	8 ch2 : 6	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-6	9					9	9	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-7	9					9	9	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-8	9 Ch233 : 5					9 ch233 : 5	9 ch233 : 5	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
6GHz_LPI (40MHz)	U-NII-5						11	11						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-6						12	12						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						12	12						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-8						12	12						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_LPI (80MHz)	U-NII-5						14	14						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-6						15	15						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						15	15						Same as ant1	Same as ant1						Ant1+2	Ant1+2

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	U-NII-8						15	15						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_LPI (160MHz)	U-NII-5						16	16						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-6						16	16						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						16	16						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-8						16 Ch207 :13	16 Ch207 :13						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_LPI (320MHz)	U-NII-5							16														
	U-NII-6							16														
	U-NII-7																					
	U-NII-8							16 Ch.191:14														
6GHz_SP (20MHz)	U-NII-5	16 Ch2:8					16 Ch2 :6	16 Ch2 :6	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-7	16					16	16	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
6GHz_SP (40MHz)	U-NII-5						16	16						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						16	16						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_SP (80MHz)	U-NII-5						16	16						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						16	16						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_SP (160MHz)	U-NII-5						16	16						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						16	16						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_SP (320MHz)	U-NII-5							16							Same as ant1							Ant1+2
6GHz_VLP (20MHz)	U-NII-5	4					4	4	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-7	6					6	6	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
6GHz_ VLP (40MHz)	U-NII-5						7	7						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						8	8						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_ VLP (80MHz)	U-NII-5						10	10						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						11	11						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_ VLP (160MHz)	U-NII-5						11	11						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						11	11						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_ VLP (320MHz)	U-NII-5							11							Same as ant1							Ant1+2

(Upper tolerance: target +1.0 dB)

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b. Body [Plimit(DSI=0)]

Mode	Band	SISO(ANT 1)							SISO(ANT 2)							MIMO						
		a	b	g	n	ac	ax (SU)	be (SU)	a	b	g	n	ac	ax (SU)	be (SU)	a	b	g	n	ac	ax(SU)	be(SU)
2.4GHz	2.45GHz		19 (RSDB : 9.5)	17 Ch.1: 15 Ch.2 : 15.5 Ch.11: 15.5 (RSDB : 9.5)	17 Ch.1: 14.5 Ch.2 : 15.5 Ch.11: 15 (RSDB : 9.5)	17 Ch.1: 14.5 Ch.2 : 15.5 Ch.11: 15 (RSDB : 9.5)	17 Ch.1: 14 Ch.11: 14 (RSDB : 9.5)	17 Ch.1: 14 Ch.11: 14 (RSDB : 9.5)		Same as ant1	Same as ant1	Same as ant1	Same as ant1	Same as ant1	Same as ant1		Ant1+2	Ant1+2	Ant1+2	Ant1+2	Ant1+2	Ant1+2	Ant1+2
5GHZ (20MHz)	UNII 1	17			17	17 Ch36 :16.5	17 Ch36 : 16	17 Ch36 : 16	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 2A	17 Ch64 : 16			17 Ch64 : 16	17 Ch60, 64 : 16	17 Ch64 : 16	17 Ch64 : 16	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 2C	17 Ch100 : 16			17 Ch100 : 16	17 Ch100 : 16	17 Ch100 : 16	17 Ch100 : 16	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 3	17			17	17	17	17	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 4	17			17	17	17	17	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Ant1+2
5GHZ (40MHz)	UNII 1				17 Ch38 : 13	17 Ch38 : 14	17 Ch38 : 11	17 Ch38 : 11				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 2A				17 Ch62 : 13	17 Ch62 : 13	17 Ch62 : 15	17 Ch62 : 15				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 2C				17 Ch102: 12	17 Ch102: 12	17 Ch102 : 13	17 Ch102 : 13				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 3				17	17	17	17				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
	UNII 4				17	17	17	17				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Ant1+2
5GHZ (80MHz)	UNII 1					12	13	13					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 2A					12	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 2C					17 Ch106 : 12	17 Ch106 : 12	17 Ch106 : 12					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 3					17	17	17					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 4					17	17	17					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
5GHz (160MHz)	UNII 1					13	15	15					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 2A					13	15	15					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 2C					12	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 3					14	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
	UNII 4					14	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Ant1+2
6GHz_LPI (20MHz)	U-NII-5	8					8 ch2 : 6	8 ch2 : 6	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-6	9					9	9	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-7	9					9	9	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-8	9 Ch233 : 5					9 ch233 : 5	9 ch233 : 5	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
6GHz_LPI (40MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-6						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-8						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_LPI (80MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-6						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-8						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_LPI (160MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-6						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-8						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_LPI (320MHz)	U-NII-5							9														
	U-NII-6							9														
	U-NII-7																					
	U-NII-8							9														
6GHz_SP (20MHz)	U-NII-5	9 Ch2:8					9 Ch2:6	9 Ch2:6	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-7	9					9	9	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
6GHz_SP (40MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_SP	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2

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(80MHz)	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_SP (160MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_SP (320MHz)	U-NII-5							9							Same as ant1							
6GHz_VLP (20MHz)	U-NII-5	4					4	4	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
	U-NII-7	6					6	6	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Ant1+2
6GHz_ VLP (40MHz)	U-NII-5						7	7						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						8	8						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_ VLP (80MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_ VLP (160MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Ant1+2
6GHz_ VLP (320MHz)	U-NII-5							9														

(Upper tolerance: target +1.0 dB)

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c. Head [Plimit(DSI=1)]

Mode	Band	SISO(ANT 1)							SISO(ANT 2)							MIMO						
		a	b	g	n	ac	ax (SU)	be (SU)	a	b	g	n	ac	ax (SU)	be (SU)	a	b	g	n	ac	ax(SU)	be(SU)
2.4GHz	2.45GHz		14 (RSDB : 9.5)	14 (RSDB : 9.5)	14 (RSDB : 9.5)	14 (RSDB : 9.5)	14 (RSDB : 9.5)	14 (RSDB : 9.5)		Same as ant1	Same as ant1	Same as ant1	Same as ant1	Same as ant1	Same as ant1		Ant1+2	Ant1+2	Ant1+2	Ant1+2	Ant1+2	Same as ant1
5GHZ (20MHz)	UNII 1	14			14	14	14	14	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Same as ant1
	UNII 2A	14			14	14	14	14	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Same as ant1
	UNII 2C	14			14	14	14	14	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Same as ant1
	UNII 3	14			14	14	14	14	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Same as ant1
	UNII 4	14			14	14	14	14	Same as ant1			Same as ant1	Same as ant1	Same as ant1	Same as ant1	Ant1+2			Ant1+2	Ant1+2	Ant1+2	Same as ant1
5GHZ (40MHz)	UNII 1				14 Ch38 : 13	14	14 Ch38 : 11	14 Ch38 : 11				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Same as ant1
	UNII 2A				14 Ch62 : 13	14 Ch62 : 13	14	14				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Same as ant1
	UNII 2C				14 Ch102: 12	14 Ch102: 12	14 Ch102: 13	14 Ch102: 13				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Same as ant1
	UNII 3				14	14	14	14				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Same as ant1
	UNII 4				14	14	14	14				Same as ant1	Same as ant1	Same as ant1	Same as ant1				Ant1+2	Ant1+2	Ant1+2	Same as ant1
5GHZ (80MHz)	UNII 1					12	13	13					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
	UNII 2A					12	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
	UNII 2C					14 Ch106 : 12	14 Ch106 : 12	14 Ch106 : 12					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
	UNII 3					14	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
	UNII 4					14	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
5GHz (160MHz)	UNII 1					13	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
	UNII 2A					13	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
	UNII 2C					12	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
	UNII 3					14	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
	UNII 4					14	14	14					Same as ant1	Same as ant1	Same as ant1					Ant1+2	Ant1+2	Same as ant1
6GHz_LPI (20MHz)	U-NII-5	8					8 ch2 : 6	8 ch2 : 6	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Same as ant1
	U-NII-6	9					9	9	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Same as ant1
	U-NII-7	9					9	9	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Same as ant1
	U-NII-8	9 Ch233 : 5					9 ch233 : 5	9 ch233 : 5	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Same as ant1
6GHz_LPI (40MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-6						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-8						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
6GHz_LPI (80MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-6						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-8						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
6GHz_LPI (160MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-6						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-8						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
6GHz_LPI (320MHz)	U-NII-5							9														
	U-NII-6							9														
	U-NII-7																					
	U-NII-8							9														
6GHz_SP (20MHz)	U-NII-5	9 Ch2:8					9 Ch2:6	9 Ch2:6	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Same as ant1
	U-NII-7	9					9	9	Same as ant1					Same as ant1	Same as ant1	Ant1+2					Ant1+2	Same as ant1
6GHz_SP (40MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
6GHz_SP (80MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
6GHz_SP (160MHz)	U-NII-5						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1
	U-NII-7						9	9						Same as ant1	Same as ant1						Ant1+2	Same as ant1

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6GHz_SP (320MHz)	U-NII-5						9							Same as ant1						
6GHz_VLP (20MHz)	U-NII-5	4				4	4	Same as ant1					Same as ant1	Same as ant1	Ant1+2				Ant1+2	Same as ant1
	U-NII-7	6				6	6	Same as ant1					Same as ant1	Same as ant1	Ant1+2				Ant1+2	Same as ant1
6GHz_ VLP (40MHz)	U-NII-5					7	7						Same as ant1	Same as ant1					Ant1+2	Same as ant1
	U-NII-7					8	8						Same as ant1	Same as ant1					Ant1+2	Same as ant1
6GHz_ VLP (80MHz)	U-NII-5					9	9						Same as ant1	Same as ant1					Ant1+2	Same as ant1
	U-NII-7					9	9						Same as ant1	Same as ant1					Ant1+2	Same as ant1
6GHz_ VLP (160MHz)	U-NII-5					9	9						Same as ant1	Same as ant1					Ant1+2	Same as ant1
	U-NII-7					9	9						Same as ant1	Same as ant1					Ant1+2	Same as ant1
6GHz_ VLP (320MHz)	U-NII-5						9							Same as ant1						Same as ant1

(Upper tolerance: target +1.0 dB)

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d. 11ax/be RU Tx power Tables (Pmax)

SISO /in dBm (ANT1=ANT2)

Tones	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	5G/160Mhz	6G/20Mhz LPI	6G/40Mhz LPI	6G/80Mhz LPI	6G/160Mhz LPI	6G/320Mhz LPI	6G/20Mhz SP	6G/40Mhz SP	6G/80Mhz SP	6G/160Mhz SP	6G/320Mhz SP	6G/20Mhz VLP	6G/40Mhz VLP	6G/80Mhz VLP	6G/160MhV LP	6G/320Mhz VLP
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T	13 (RSDB : 9.5)	9	9	9	9	-1	-1	-1	-1	-1	UNII 5&7 13 ch2 : 1	UNII 5&7 13	UNII 5&7 13	UNII 5&7 13	UNII 5&7 13	UNII 5&7 -5	UNII 5&7 -5	UNII 5&7 -5	UNII 5&7 -5	UNII5 : -5
52T	14 (RSDB : 9.5)	12	12	12	12	2	2	2	2	2	UNII 5&7 13 ch2 : 3	UNII 5&7 13	UNII 5&7 13	UNII 5&7 13	UNII 5&7 13	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII5 : -2
106T	15 (RSDB : 9.5)	15	15	15	15	5	5	5	5	5	UNII 5&7 13 ch2 : 5	UNII 5&7 13	UNII 5&7 13	UNII 5&7 13	UNII 5&7 13	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII5 : 1
242T	17 Ch.1: 13.5 Ch.2 : 15.5 Ch.10 : 16 Ch.11: 13.5 (RSDB : 9.5)	17 Ch36, 64, 100 : 16	17 Ch38 : 15.5, Ch62, 102 : 16	17 Ch42, 58 : 15, Ch106 : 16	16 Ch50, 163 : 15	9 UNII5 : 8 Ch2 : 6 ch233 : 5	9 UNII5 : 8	9 UNII5 : 8	9 UNII5 : 8	9 UNII5 : 8	UNII 5&7 16 **ch2 : 6**	UNII 5&7 16	UNII 5&7 16	UNII 5&7 16	UNII 5&7 16	UNII5 : 4 UNII7 : 6	UNII5 : 4 UNII7 : 6	UNII5 : 4 UNII7 : 6	UNII5 : 4 UNII7 : 6	UNII5 : 4
484T			17 Ch38 : 11, Ch62 : 14, Ch102 : 13	17 Ch42 : 12, Ch58 : 12, Ch106 : 11	14 Ch50 : 12, Ch114 : 11		12 UNII5 : 11	12 UNII5 : 11	12 UNII5 : 11	12 UNII5 : 11		UNII 5&7 16	UNII 5&7 16	UNII 5&7 16	UNII 5&7 16		UNII5 : 7 UNII7 : 8	UNII5 : 7 UNII7 : 8	UNII5 : 7 UNII7 : 8	UNII5 : 7
996T				17 Ch42, 58 : 13, Ch106 : 12	13 Ch163 : 12			15 UNII5 : 14	15 UNII5 : 14 Ch207 : 12	15 UNII5 : 14 Ch191 : 12			UNII 5&7 16	UNII 5&7 16	UNII 5&7 16			UNII5 : 10 UNII7 : 11	UNII5 : 10 UNII7 : 11	UNII5 : 10
996Tx2					15 Ch114 : 14, Ch163 : 13				16 ch207 : 13	16 Ch191 : 13				UNII 5&7 16	UNII 5&7 16				UNII 5&7 11	UNII5 : 11
996Tx4										16 Ch191:13					UNII 5 16					UNII5 : 11

MIMO /in dBm

Tones	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	5G/160Mhz	6G/20Mhz LPI	6G/40Mhz LPI	6G/80Mhz LPI	6G/160Mhz LPI	6G/320Mhz LPI	6G/20Mhz SP	6G/40Mhz SP	6G/80Mhz SP	6G/160Mhz SP	6G/320Mhz SP	6G/20Mhz VLP	6G/40Mhz VLP	6G/80Mhz VLP	6G/160MhV LP	6G/320Mhz VLP
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T	16 (RSDB : 12.5)	12	12	12	12	2	2	2	2	2	UNII 5&7 16 ch2 : 4	UNII 5&7 16	UNII 5&7 16	UNII 5&7 16	UNII 5&7 16	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII5 : -2
52T	17 (RSDB : 12.5)	15	15	15	15	5	5	5	5	5	UNII 5&7 16 ch2 : 6	UNII 5&7 16	UNII 5&7 16	UNII 5&7 16	UNII 5&7 16	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII5 : 1
106T	18 (RSDB : 12.5)	18	18	18	18	8	8	8	8	8	UNII 5&7 16 ch2 : 8	UNII 5&7 16	UNII 5&7 16	UNII 5&7 16	UNII 5&7 16	UNII 5&7 4	UNII 5&7 4	UNII 5&7 4	UNII 5&7 4	UNII5 : 4
242T	20 Ch.1: 16.5 Ch.2 : 18.5 Ch.10 : 19 Ch.11: 16.5 (RSDB : 12.5)	20 Ch36, 64, 100 : 19	20 Ch38 :18.5, Ch62, 102 : 19	20 Ch42, 58 : 18, Ch106 : 19	19 Ch50, 163 : 18	12 UNII5 : 11 Ch2 : 9 Ch233 : 8	12 UNII5 : 11	12 UNII5 : 11	12 UNII5 : 11	12 UNII5 : 11	UNII 5&7 19 ch2 : 9	UNII 5&7 19	UNII 5&7 19	UNII 5&7 19	UNII 5&7 19	UNII5 : 7 UNII7 : 9	UNII5 : 7 UNII7 : 9	UNII5 : 7 UNII7 : 9	UNII5 : 7 UNII7 : 9	UNII5 : 7
484T			20 Ch38 : 14, Ch62 : 17, Ch102 : 16	20 Ch42 : 15, Ch58 : 15, Ch106 : 14	17 Ch50 : 15 Ch114 : 14		15 UNII5 : 14	15 UNII5 : 14	15 UNII5 : 14	15 UNII5 : 14		UNII 5&7 19	UNII 5&7 19	UNII 5&7 19	UNII 5&7 19		UNII5 : 10 UNII7 : 11	UNII5 : 10 UNII7 : 11	UNII5 : 10 UNII7 : 11	UNII5 : 10
996T				20 Ch42, 58 : 16, Ch106 : 15	16 Ch163 : 15			18 UNII5 : 17	18 UNII5 : 17 Ch207 : 15	18 UNII5 : 17 Ch191 : 15			UNII 5&7 19	UNII 5&7 19	UNII 5&7 19			UNII5 : 13 UNII7 : 14	UNII5 : 13 UNII7 : 14	UNII5 : 13
996Tx2					18 Ch114 : 17, Ch163 : 16				19 ch207 : 16	19 Ch191 : 16				UNII 5&7 19	UNII 5&7 19				UNII 5&7 14	UNII5 : 14
996Tx4										19					UNII 5 19					UNII5 : 14

(Upper tolerance: target +1.0 dB)

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e. 11ax/be RU Plimit Tables – Body (DSI = 0)

SISO /in dBm (ANT1=ANT2)

Tones	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	5G/160Mhz	6G/20Mhz LPI	6G/40Mhz LPI	6G/80Mhz LPI	6G/160Mhz LPI	6G/320Mhz LPI	6G/20Mhz SP	6G/40Mhz SP	6G/80Mhz SP	6G/160Mhz SP	6G/320Mhz SP	6G/20Mhz VLP	6G/40Mhz VLP	6G/80Mhz VLP	6G/160MhV LP	6G/320Mhz VLP
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T	13 (RSDB : 9.5)	9	9	9	9	-1	-1	-1	-1	-1	UNII 5&7 9 ch2 : 1	UNII 5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9	UNII 5&7 -5	UNII 5&7 -5	UNII 5&7 -5	UNII 5&7 -5	UNII5 : -5
52T	14 (RSDB : 9.5)	12	12	12	12	2	2	2	2	2	UNII 5&7 9 ch2 : 3	UNII5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII5 : -2
106T	15 (RSDB : 9.5)	15	15	15	15	5	5	5	5	5	UNII 5&7 9 ch2 : 5	UNII5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII5 : 1
242T	17 Ch.1: 13.5 Ch.2 : 15.5 Ch.10 : 16 Ch.11: 13.5 (RSDB : 9.5)	17 Ch36, 64, 100 : 16	17 Ch38 : 15.5, Ch62, 102 : 16	17 Ch42, 58 : 15, Ch106 : 16	16 Ch50, 163 : 15	9 UNII5 : 8 Ch2 : 6 ch233 : 5	9 UNII5 : 8	9 UNII5 : 8	9 UNII5 : 8	9 UNII5 : 8	UNII 5&7 :9 ch2 : 6	UNII 5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9	UNII5 : 4 UNII7 : 6	UNII5 : 4 UNII7 : 6	UNII5 : 4 UNII7 : 6	UNII5 : 4 UNII7 : 6	UNII5 : 4
484T			17 Ch38 : 11, Ch62 : 14, Ch102 : 13	17 Ch42 : 12, Ch58 : 12, Ch106 : 11	14 Ch50 : 12, Ch114 : 11		9	9	9	9		UNII 5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9		UNII5 : 7 UNII7 : 8	UNII5 : 7 UNII7 : 8	UNII5 : 7 UNII7 : 8	UNII5 : 7
996T				17 Ch42, 58 : 13, Ch106 : 12	13 Ch163 : 12			9	9	9			UNII 5&7 9	UNII 5&7 9	UNII 5 9			UNII 5&7 9	UNII 5&7 9	UNII 5 9
996Tx2					15 Ch114 : 14, Ch163 : 13				9	9				UNII 5&7 9	UNII 5 9				UNII 5&7 9	UNII 5 9
996Tx4										9					UNII 5 9					UNII 5 9

MIMO /in dBm

Tones	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	5G/160Mhz	6G/20Mhz LPI	6G/40Mhz LPI	6G/80Mhz LPI	6G/160Mhz LPI	6G/320Mhz LPI	6G/20Mhz SP	6G/40Mhz SP	6G/80Mhz SP	6G/160Mhz SP	6G/320Mhz SP	6G/20Mhz VLP	6G/40Mhz VLP	6G/80Mhz VLP	6G/160MhV LP	6G/320Mhz VLP
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T	16 (RSDB : 12.5)	12	12	12	12	2	2	2	2	2	UNII 5&7 12 ch2 : 4	UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII5 : -2
52T	17 (RSDB : 12.5)	15	15	15	15	5	5	5	5	5	UNII 5&7 12 ch2 : 6	UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII5 : 1
106T	18 (RSDB : 12.5)	18	18	18	18	8	8	8	8	8	UNII 5&7 12 ch2 : 8	UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12	UNII 5&7 4	UNII 5&7 4	UNII 5&7 4	UNII 5&7 4	UNII5 : 4
242T	20 Ch.1: 16.5 Ch.2 : 18.5 Ch.10 : 19 Ch.11: 16.5 (RSDB : 12.5)	20 Ch36, 64, 100 : 19	20 Ch38 :18.5, Ch62, 102 : 19	20 Ch42, 58 : 18, Ch106 : 19	19 Ch50, 163 : 18	12 UNII5 : 11 Ch2 : 9 Ch233 : 8	12 UNII5 : 11	12 UNII5 : 11	12 UNII5 : 11	12 UNII5 : 11	UNII 5&7 12 ch2 : 9	UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12	UNII5 : 7 UNII7 : 9	UNII5 : 7 UNII7 : 9	UNII5 : 7 UNII7 : 9	UNII5 : 7 UNII7 : 9	UNII5 : 7
484T			20 Ch38 : 14, Ch62 : 17, Ch102 : 16	20 Ch42 : 15, Ch58 : 15, Ch106 : 14	17 Ch50 : 15 Ch114 : 14		12	12	12	12		UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12		UNII5 : 10 UNII7 : 11	UNII5 : 10 UNII7 : 11	UNII5 : 10 UNII7 : 11	UNII5 : 10
996T				20 Ch42, 58 : 16, Ch106 : 15	16 Ch163 : 15			12	12	12			UNII 5&7 12	UNII 5&7 12	UNII 5 12			UNII 5&7 12	UNII 5&7 12	UNII 5 12
996Tx2					18 Ch114 : 17, Ch163 : 16				12	12				UNII 5&7 12	UNII 5 12				UNII 5&7 12	UNII 5 12
996Tx4										12					UNII 5 12					UNII 5 12

(Upper tolerance: target +1.0 dB)

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f. 11ax/be RU Plimit Tables –Head (DSI = 1)

SISO /in dBm (ANT1=ANT2)

Tones	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	5G/160Mhz	6G/20Mhz LPI	6G/40Mhz LPI	6G/80Mhz LPI	6G/160Mhz LPI	6G/320Mhz LPI	6G/20Mhz SP	6G/40Mhz SP	6G/80Mhz SP	6G/160Mhz SP	6G/320Mhz SP	6G/20Mhz VLP	6G/40Mhz VLP	6G/80Mhz VLP	6G/160MhVLP	6G/320Mhz VLP
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T	13 (RSDB : 9.5)	9	9	9	9	-1	-1	-1	-1	-1	UNII 5&7 9 ch2 : 1	UNII 5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9	UNII 5&7 -5	UNII 5&7 -5	UNII 5&7 -5	UNII 5&7 -5	UNII 5 -5
52T	14 (RSDB : 9.5)	12	12	12	12	2	2	2	2	2	UNII 5&7 9 ch2 : 3	UNII 5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII 5 -2
106T	14 (RSDB : 9.5)	14	14	14	14	5	5	5	5	5	UNII 5&7 9 ch2 : 5	UNII 5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII 5 1
242T	14 **Ch.1: 13.5 Ch.11: 13.5** (RSDB : 9.5)	14	14	14	14	9 UNII5 : 8 Ch2 : 6 ch233 : 5	9 UNII5 : 8	9 UNII5 : 8	9 UNII5 : 8	9 UNII5 : 8	UNII 5&7 9 ch2 : 6	UNII 5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9	UNII5 : 4 UNII7 : 6	UNII5 : 4 UNII7 : 6	UNII5 : 4 UNII7 : 6	UNII5 : 4 UNII7 : 6	UNII5 : 4
484T			14 Ch38 : 11, Ch102 : 13	14 Ch42 : 12, Ch58 : 12, Ch106 : 11	14 Ch50 : 12, Ch114 : 11		9	9	9	9		UNII 5&7 9	UNII 5&7 9	UNII 5&7 9	UNII 5 9		UNII5 : 7 UNII7 : 8	UNII5 : 7 UNII7 : 8	UNII5 : 7 UNII7 : 8	UNII5 : 7
996T				14 Ch42, 58 : 13, Ch106 : 12	13 Ch163 : 12			9	9	9			UNII 5&7 9	UNII 5&7 9	UNII 5 9			UNII 5&7 9	UNII 5&7 9	UNII 5 9
996Tx2					14 Ch163 : 13				9	9				UNII 5&7 9	UNII 5 9				UNII 5&7 9	UNII 5 9
996Tx4										9					UNII 5 9					UNII 5 9

MIMO /in dBm

Tones	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	5G/160Mhz	6G/20Mhz LPI	6G/40Mhz LPI	6G/80Mhz LPI	6G/160Mhz LPI	6G/320Mhz LPI	6G/20Mhz SP	6G/40Mhz SP	6G/80Mhz SP	6G/160Mhz SP	6G/320Mhz SP	6G/20Mhz VLP	6G/40Mhz VLP	6G/80Mhz VLP	6G/160MhVLP	6G/320Mhz VLP
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
26T	16 (RSDB : 12.5)	12	12	12	12	2	2	2	2	2	UNII 5&7 12 ch2 : 4	UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII 5&7 -2	UNII5 : -2
52T	17 (RSDB : 12.5)	15	15	15	15	5	5	5	5	5	UNII 5&7 12 ch2 : 6	UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII 5&7 1	UNII5 : 1
106T	17 (RSDB : 12.5)	17	17	17	17	8	8	8	8	8	UNII 5&7 12 ch2 : 8	UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12	UNII 5&7 4	UNII 5&7 4	UNII 5&7 4	UNII 5&7 4	UNII5 : 4
242T	17 **Ch.1: 16.5 Ch.11: 16.5** (RSDB : 12.5)	17	17	17	17	12 UNII5 : 11 Ch2 : 9 ch233 : 8	12 UNII5 : 11	12 UNII5 : 11	12 UNII5 : 11	12 UNII5 : 11	UNII 5&7 12 ch2 : 9	UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12	UNII5 : 7 UNII7 : 9	UNII5 : 7 UNII7 : 9	UNII5 : 7 UNII7 : 9	UNII5 : 7 UNII7 : 9	UNII5 : 7
484T			17 Ch38 : 14, Ch102 : 16	17 Ch42 : 15, Ch58 : 15, Ch106 : 14	17 Ch50 : 15, Ch114 : 14		12	12	12	12		UNII 5&7 12	UNII 5&7 12	UNII 5&7 12	UNII 5 12		UNII5 : 10 UNII7 : 11	UNII5 : 10 UNII7 : 11	UNII5 : 10 UNII7 : 11	UNII5 : 10
996T				17 Ch42, 58 : 16, Ch106 : 15	16 Ch163 : 15			12	12	12			UNII 5&7 12	UNII 5&7 12	UNII 5 12			UNII 5&7 12	UNII 5&7 12	UNII 5 12
996Tx2					17 Ch163 : 16				12	12				UNII 5&7 12	UNII 5 12				UNII 5&7 12	UNII 5 12
996Tx4										12					UNII 5 12					UNII 5 12

(Upper tolerance: target +1.0 dB)

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g. MRU Power

SISO /in dBm(ANT1=ANT2)

Tones	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	5G/160Mhz	6G_SP /20Mhz	6G_SP /40Mhz	6G_SP /80Mhz	6G_SP /160Mhz	6G_SP /320Mhz	6G_LPI /20Mhz	6G_LPI /40Mhz	6G_LPI /80Mhz	6G_LPI /160Mhz	6G_LPI /320Mhz	6G_VLP /20MHz	6G_VLP /40MHz	6G_VLP /80MHz	6G_VLP /160MHz	6G_VLP /320MHz
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
52+26T	14 Same as 52T **(RSDB : 9.5)**	12 Same as 52T	12 Same as 52T	12 Same as 52T	12 Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T
106+26T	15 Same as 106T **(RSDB : 9.5)**	15 Same as 106T	15 Same as 106T	15 Same as 106T	15 Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T
484+242T				17 Ch42, 58 : 12 Ch106 : 11 Same as EHT40 SU	14 Ch50 : 12 Ch114 : 11			(EHT40 SU)	(EHT40 SU)	(EHT40 SU)			(EHT40 SU)	(EHT40 SU)	(EHT40 SU)			(EHT40 SU)	(EHT40 SU)	(EHT40 SU)
996+484T					13				(EHT80 SU)	(EHT80 SU)				(EHT80 SU) Ch.207:12	(EHT80 SU) Ch.191:12				(EHT80 SU)	(EHT80 SU)
996+484+242T					13 Ch163 : 12				(EHT80 SU)					(EHT80 SU) Ch.207:12					(EHT80 SU)	
996x2+484T										(EHT160 SU)					(EHT160 SU)					(EHT160 SU)
996Tx3										(EHT160 SU)					(EHT160 SU)					(EHT160 SU)
996Tx3+484T										(EHT160 SU)					(EHT160 SU)					(EHT160 SU)

MIMO /in dBm

Tones	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	5G/160Mhz	6G_SP /20Mhz	6G_SP /40Mhz	6G_SP /80Mhz	6G_SP /160Mhz	6G_SP /320Mhz	6G_LPI /20Mhz	6G_LPI /40Mhz	6G_LPI /80Mhz	6G_LPI /160Mhz	6G_LPI /320Mhz	6G_VLP /20MHz	6G_VLP /40MHz	6G_VLP /80MHz	6G_VLP /160MHz	6G_VLP /320MHz
	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index	Ch & RU index
52+26T	17 Same as 52T **(RSDB : 12.5)**	15 Same as 52T	15 Same as 52T	15 Same as 52T	15 Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T	Same as 52T
106+26T	18 Same as 106T **(RSDB : 12.5)**	18 Same as 106T	18 Same as 106T	18 Same as 106T	18 Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T	Same as 106T
484+242T				20 Ch42, 58 : 15 Ch106 : 14 Same as EHT40 SU	17 Ch50 : 15 Ch114 : 14			(EHT40 SU)	(EHT40 SU)	(EHT40 SU)			(EHT40 SU)	(EHT40 SU)	(EHT40 SU)			(EHT40 SU)	(EHT40 SU)	(EHT40 SU)
996+484T					16				(EHT80 SU)	(EHT80 SU)				(EHT80 SU) Ch.207:15	(EHT80 SU) Ch.207:15				(EHT80 SU)	(EHT80 SU)
996+484+242T					**16** Ch163 : 15				(EHT80 SU)					(EHT80 SU) Ch.207:15					(EHT80 SU)	
996x2+484T										(EHT160 SU)					(EHT160 SU)					(EHT160 SU)
996Tx3										(EHT160 SU)					(EHT160 SU)					(EHT160 SU)
996Tx3+484T										(EHT160 SU)					(EHT160 SU)					(EHT160 SU)

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4.3.3 Bluetooth Maximum Conducted Output Power in Conducted Mode

Maximum (= Pmax)

MODE	DATA RATE	PL11		PL10		PL9		Dual(each chain PL10+PL10)
		ANT1	ANT2	ANT1	ANT2	ANT1	ANT2	Dual
BDR(in dBm)	1Mbps	18	18	12.5	12.5			15.5
EDR(in dBm)	2Mbps	14	14	9	9			12
	3Mbps	14	14	9	9			12
LE	1M	18	18	12.5	12.5	9	9	15.5
	2M	18	18	12.5	12.5	9	9	15.5
	125K	n/a	n/a	n/a	n/a	9	9	n/a
	500k	n/a	n/a	n/a	n/a	9	9	n/a

(Upper tolerance: target +1.0dB)

Body (DSI=0)

MODE	DATA RATE	PL11		PL10		PL9		Dual(each chain PL10+PL10)
		ANT1	ANT2	ANT1	ANT2	ANT1	ANT2	Dual
BDR(in dBm)	1Mbps	18	18	12.5	12.5			15.5
EDR(in dBm)	2Mbps	14	14	9	9			12
	3Mbps	14	14	9	9			12
LE	1M	18	18	12.5	12.5	9	9	15.5
	2M	18	18	12.5	12.5	9	9	15.5
	125K	n/a	n/a	n/a	n/a	9	9	n/a
	500k	n/a	n/a	n/a	n/a	9	9	n/a

(Upper tolerance: target +1.0dB)

Receiver Active (DSI=1)

MODE	DATA RATE	PL11		PL10		PL9		Dual(each chain PL10+PL10)
		ANT1	ANT2	ANT1	ANT2	ANT1	ANT2	Dual
BDR(in dBm)	1Mbps	16	16	12.5	12.5			15.5
EDR(in dBm)	2Mbps	14	14	9	9			12
	3Mbps	14	14	9	9			12
LE	1M	16	16	12.5	12.5	9	9	15.5
	2M	16	16	12.5	12.5	9	9	15.5
	125K	n/a	n/a	n/a	n/a	9	9	n/a
	500k	n/a	n/a	n/a	n/a	9	9	n/a

(Upper tolerance: target +1.0dB)

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4.4 LTE Information

Item.		Description
Frequency Range	LTE FDD Band 2 (PCS)	1 850.7 ㎒ ~ 1 909.3 ㎒
	LTE FDD Band 4 (AWS)	1 710.7 ㎒ ~ 1 754.3 ㎒
	LTE FDD Band 5 (Cell)	824.7 ㎒ ~ 848.3 ㎒
	LTE FDD Band 7	2 502.5 ㎒ ~ 2 567.5 ㎒
	LTE FDD Band 12	699.7 ㎒ ~ 715.3 ㎒
	LTE FDD Band 13	779.5 ㎒ ~ 784.5 ㎒
	LTE FDD Band 14	790.5 ㎒ ~ 795.5 ㎒
	LTE FDD Band 25	1 850.7 ㎒ ~ 1 914.3 ㎒
	LTE FDD Band 26	814.7 ㎒ ~ 848.3 ㎒
	LTE FDD Band 30	2 307.5 ㎒ ~ 2 312.5 ㎒
	LTE TDD Band 38	2 572.5 ㎒ ~ 2 617.5 ㎒
	LTE TDD Band 41	2 498.5 ㎒ ~ 2 687.5 ㎒
	LTE TDD Band 48	3 552.5 ㎒ ~ 3 697.5 ㎒
	LTE FDD Band 66 (AWS)	1 710.7 ㎒ ~ 1 779.3 ㎒
	LTE FDD Band 71	665.5 ㎒ ~ 695.5 ㎒
Channel Bandwidths	LTE FDD Band 2 (PCS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE FDD Band 4 (AWS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE FDD Band 5 (Cell)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒
	LTE FDD Band 7	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE FDD Band 12	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒
	LTE FDD Band 13	5 ㎒, 10 ㎒
	LTE FDD Band 14	5 ㎒, 10 ㎒
	LTE FDD Band 25	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE FDD Band 26	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒
	LTE FDD Band 30	5 ㎒, 10 ㎒
	LTE TDD Band 38	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE TDD Band 41	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE TDD Band 48	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE FDD Band 66 (AWS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE FDD Band 71	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒

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Ch. No.& Freq.(㎒)		Low / Low-Mid	Mid	Mid-High / High
LTE FDD Band 2 (PCS)	1.4 ㎒	1 850.7 (18607)	1 880.0 (18900)	1 909.3 (19193)
	3 ㎒	1 851.5 (18615)	1 880.0 (18900)	1 908.5 (19185)
	5 ㎒	1 852.5 (18625)	1 880.0 (18900)	1 907.5 (19175)
	10 ㎒	1 855.0 (18650)	1 880.0 (18900)	1 905.0 (19150)
	15 ㎒	1 857.5 (18675)	1 880.0 (18900)	1 902.5 (19125)
	20 ㎒	1 860.0 (18700)	1 880.0 (18900)	1 900.0 (19100)
LTE FDD Band 4 (AWS)	1.4 ㎒	1 710.7 (19957)	1 732.5 (20175)	1 754.3 (20393)
	3 ㎒	1 711.5 (19965)	1 732.5 (20175)	1 753.5 (20385)
	5 ㎒	1 712.5 (19975)	1 732.5 (20175)	1 752.5 (20375)
	10 ㎒	1 715.0 (20000)	1 732.5 (20175)	1 750.0 (20350)
	15 ㎒	1 717.5 (20025)	1 732.5 (20175)	1 747.5 (20325)
	20 ㎒		1 732.5 (20175)	
LTE FDD Band 5 (Cell)	1.4 ㎒	824.7 (20407)	836.5 (20525)	848.3 (20643)
	3 ㎒	825.5 (20415)	836.5 (20525)	847.5 (20635)
	5 ㎒	826.5 (20425)	836.5 (20525)	846.5 (20625)
	10 ㎒		836.5 (20525)	
LTE FDD Band 7	5 ㎒	2 502.5 (20775)	2 535 (21100)	2 567.5 (21425)
	10 ㎒	2 505 (20800)	2 535 (21100)	2 565 (21400)
	15 ㎒	2 507.5 (20825)	2 535 (21100)	2 562.5 (21375)
	20 ㎒	2 510 (20850)	2 535 (21100)	2 560 (21350)
LTE FDD Band 12	1.4 ㎒	699.7 (23017)	707.5 (23095)	715.3 (23173)
	3 ㎒	700.5 (23025)	707.5 (23095)	714.5 (23165)
	5 ㎒	701.5 (23035)	707.5 (23095)	713.5 (23155)
	10 ㎒		707.5 (23095)	
LTE FDD Band 13	5 ㎒		782 (23230)	
	10 ㎒		782 (23230)	
LTE FDD Band 14	5 ㎒		793 (23330)	
	10 ㎒		793 (23330)	
LTE FDD Band 25(PCS)	1.4 ㎒	1 850.7 (26047)	1 882.5 (26365)	1 914.3 (26683)
	3 ㎒	1 851.5 (26055)	1 882.5 (26365)	1 913.5 (26675)
	5 ㎒	1 852.5 (26065)	1 882.5 (26365)	1 912.5 (26665)
	10 ㎒	1 855 (26090)	1 882.5 (26365)	1 910 (26640)
	15 ㎒	1 857.5 (26115)	1 882.5 (26365)	1 907.5 (26615)
	20 ㎒	1 860 (26140)	1 882.5 (26365)	1 905 (26590)
LTE FDD Band 26 (Cell)	1.4 ㎒	814.7 (26697)	831.5 (26865)	848.3 (27033)
	3 ㎒	815.5 (26705)	831.5 (26865)	847.5 (27025)
	5 ㎒	816.5 (26715)	831.5 (26865)	846.5 (27015)
	10 ㎒	819.0 (26740)	831.5 (26865)	844.0 (26990)
	15 ㎒		831.5 (26865)	
LTE FDD Band 30	5 ㎒	2 307.5 (27685)	2 310 (27710)	2 312.5 (27735)
	10 ㎒		2 310 (27710)	
LTE TDD Band 38	5 ㎒	2 572.5 (37775)	2 595 (38000)	2 617.5 (38225)
	10 ㎒	2 575 (37800)	2 595 (38000)	2 615 (38200)
	15 ㎒	2 577.5 (37825)	2 595 (38000)	2 612.5 (38175)
	20 ㎒	2 580 (37850)	2 595 (38000)	2 610 (38150)

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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 FDD Band 71	5 MHz	665.5 (133147)		680.5 (133297)		695.5 (133447)	
	10 MHz	668 (133172)		680.5 (133297)		693 (133422)	
	15 MHz	670.5 (133197)		680.5 (133297)		690.5 (133397)	
	20 MHz			680.5 (133297)			
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)	
LTE TDD Band 48	5 MHz	3 552.5(55265)	3 600.8(55748)	3 649.2(56232)	3 697.5(56715)		
	10 MHz	3 555(55290)	3 601.7(55757)	3 648.3(56223)	3 695(56690)		
	15 MHz	3 557.5(55315)	3 602.5(55765)	3 647.5(56215)	3 692.5(56665)		
	20 MHz	3 560(55340)	3 603.3(55773)	3 646.7(56207)	3 690(56640)		

UE Category	LTE Rel. 17, DL: Category 20, 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 & Intra -Band UL-link Carrier aggregations.
LTE Release information	This device does not support full CA features on 3GPP Release 17. It supports carrier aggregation, downlink MIMO. All other uplink communications are identical to the release 8 specifications. The following LTE Release 17 Features are not supported: Relay, Hetnet, Enhanced eICI, MDH, cross-carrier Scheduling, Enhanced SC-FDMA.

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4.5 5G NR SUB 6 Information

Item.		Description
Frequency Range	NR FDD Band n2 (PCS)	1 852.5 ㎒ ~ 1 907.5 ㎒
	NR FDD Band n5	826.5 ㎒ ~ 846.5 ㎒
	NR FDD Band n7	2502.5 ㎒ ~ 2567.5 ㎒
	NR FDD Band n12	701.5 ㎒ ~ 713.5 ㎒
	NR FDD Band n14	790.5 ㎒ ~795.5 ㎒
	NR FDD Band n25 (PCS)	1 852.5 ㎒ ~ 1 912.5 ㎒
	NR FDD Band n26	816.5 ㎒ ~ 846.5 ㎒
	NR FDD Band n30	2 307.5 ㎒ ~ 2 312.5 ㎒
	NR TDD Band n38	2 575 ㎒ ~ 2 615 ㎒
	NR TDD Band n41	2 501.01 ㎒ ~ 2 685 ㎒
	NR TDD Band n48	3 555 ㎒ ~ 3 695.01 ㎒
	NR FDD Band n66	1 712.5 ㎒ ~ 1 777.5 ㎒
	NR FDD Band n70	1 697.5 ㎒ ~ 1 707.5 ㎒
	NR FDD Band n71	665.5 ㎒ ~ 695.5 ㎒
	NR TDD Band n77	3 705 ㎒ ~ 3 975 ㎒
	NR TDD Band n77 DoD	3 445.01 ㎒ ~ 3 544.98 ㎒
	NR TDD Band n78	3 705 ㎒ ~ 3 795 ㎒
	NR TDD Band n78 DoD	3 455.01 ㎒ ~ 3 544.98 ㎒
Channel Bandwidths	NR FDD Band n2 (PCS)	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 35 ㎒, 40 ㎒
	NR FDD Band n5	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	NR FDD Band n7	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 35 ㎒, 40 ㎒
	NR FDD Band n12	5 ㎒, 10 ㎒, 15 ㎒
	NR FDD Band n14	5 ㎒, 10 ㎒
	NR FDD Band n25 (PCS)	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 35 ㎒, 40 ㎒
	NR FDD Band n26	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	NR FDD Band n30	5 ㎒, 10 ㎒
	NR TDD Band n38	10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 40 ㎒
	NR TDD Band n41	10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 40 ㎒, 50 ㎒, 60 ㎒, 70 ㎒, 80 ㎒, 90 ㎒, 100 ㎒
	NR TDD Band n48	10 ㎒, 15 ㎒, 20 ㎒, 30 ㎒, 40 ㎒,
	NR FDD Band n66	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 35 ㎒, 40 ㎒
	NR FDD Band n70	5 ㎒, 10 ㎒, 15 ㎒
	NR FDD Band n71	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	NR TDD Band n77	10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 40 ㎒, 50 ㎒, 60 ㎒, 70 ㎒, 80 ㎒, 90 ㎒, 100 ㎒
	NR TDD Band n77 DoD	10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 40 ㎒, 50 ㎒, 60 ㎒, 70 ㎒, 80 ㎒, 90 ㎒, 100 ㎒
	NR TDD Band n78	10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 40 ㎒, 50 ㎒, 60 ㎒, 70 ㎒, 80 ㎒, 90 ㎒, 100 ㎒
	NR TDD Band n78 DoD	10 ㎒, 15 ㎒, 20 ㎒, 25 ㎒, 30 ㎒, 40 ㎒, 50 ㎒, 60 ㎒, 70 ㎒, 80 ㎒, 90 ㎒, 100 ㎒

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Ch. No.& Freq.(MHz)		Low / Low-Mid		Mid		Mid-High / High	
NR FDD Band n2 (PCS)	5 MHz	1 852.5(370500)		1 880(376000)		1 907.5(381500)	
	10 MHz	1 855(371000)		1 880(376000)		1 905(381000)	
	15 MHz	1 857.5(371500)		1 880(376000)		1 902.5(380500)	
	20 MHz	1 860(372000)		1 880(376000)		1 900(380000)	
	25 MHz	1 862.5(372500)		1 880(376000)		1 897.5(379500)	
	30 MHz	1 865(373000)		1 880(376000)		1 895(379000)	
	35 MHz	1 867.5(373500)		1 880(376000)		1 892.5(378500)	
	40 MHz	1 870(374000)		1 880(376000)		1 890(378000)	
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 n7	5 MHz	2 502.5(500500)		2 535(507000)		2 567.5(513500)	
	10 MHz	2 505(501000)		2 535(507000)		2 565(513000)	
	15 MHz	2 507.5(501500)		2 535(507000)		2 562.5(512500)	
	20 MHz	2 510(502000)		2 535(507000)		2 560(512000)	
	25 MHz	2 512.5(502500)		2 535(507000)		2 557.5(511500)	
	30 MHz	2 515(503000)		2 535(507000)		2 555(511000)	
	35 MHz	2 517.5(503500)		2 535(507000)		2 552.5(510500)	
	40 MHz			2 535(507000)			
NR FDD Band n12	5 MHz	701.5 (140300)		707.5 (141500)		713.5 (142700)	
	10 MHz			707.5 (141500)			
	15 MHz			707.5 (141500)			
NR FDD Band n14	5 MHz			793 (158600)			
	10 MHz			793 (158600)			
NR FDD Band n25	5 MHz	1 852.5(370500)		1 882.5(376500)		1 912.5(382500)	
	10 MHz	1 855(371000)		1 882.5(376500)		1 910(382000)	
	15 MHz	1 857.5(371500)		1 882.5(376500)		1 907.5(381500)	
	20 MHz	1 860(372000)		1 882.5(376500)		1 905(381000)	
	25 MHz	1 862.5(372500)		1 882.5(376500)		1 902.5(380500)	
	30 MHz	1 865(373000)		1 882.5(376500)		1 900(380000)	
	35 MHz			1 882.5(376500)			
	40 MHz			1 882.5(376500)			
NR FDD Band n26	5 MHz	816.5(163300)		831.5(166300)		846.5(169300)	
	10 MHz	819(163800)		831.5(166300)		844(168800)	
	15 MHz	821.5(164300)				841.5(168300)	
	20 MHz			831.5(166300)			
NR FDD Band n30	5 MHz			2 310 (462000)			
	10 MHz			2 310 (462000)			
NR TDD Band n38	10 MHz	2 575(515000)		2 595(519000)		2 615(523000)	
	15 MHz	2 577.5(515500)		2 595(519000)		2 612.5(522500)	
	20 MHz	2 580(516000)		2 595(519000)		2 610(522000)	
	25 MHz	2 582.5(516500)				2 607.5(521500)	
	30 MHz	2 585(517000)				2 605(521000)	
	40 MHz			2 595(519000)			
NR TDD Band n48	10 MHz	3 555(637000)	3 602.01(640134)		3 648(643200)		3 695.01(646334)
	15 MHz	3 557.49(637166)	3 602.49(640166)		3 647.49(643166)		3 692.49(646166)
	20 MHz	3 560.01(637334)	3 603.33(640222)		3 646.65(643110)		3 690(646000)
	30 MHz	3 565.02 (637668)	3 605.01(640334)		3 645(643000)		3 684.99(645666)
	40 MHz	3 570(638000)	3 624.99(641666)				3 679.98(645332)
NR TDD Band n41	10 MHz	2 501.01(500202)	2 547(509400)	2 592.99(518598)	2 639.01(527802)	2 685(537000)	
	15 MHz	2 503.5(500700)	2 548.26(509652	2 592.99(518598)	2 637.75(527550)	2 682.51(536502)	
	20 MHz	2 506.02(501204)	2 549.49(509898)	2 592.99(518598)	2 636.49(527298)	2 679.99(535998)	
	25 MHz	2 508.48(501696)	2 550.75(510150)	2 592.99(518598)	2 635.23(527046)	2 677.50(535500)	
	30 MHz	2 511(502200)	2 552.01(510402)	2 592.99(518598)	2 634(526800)	2 674.98(534996)	
	40 MHz	2 516.01(503202)	2 567.34(513468)		2 618.67(523734)	2 670(534000)	
	50 MHz	2 521.02(504204)		2 592.99(518598)		2 664.99(532998)	
	60 MHz	2 526(505200)		2 592.99(518598)		2 659.98(531996)	
	70 MHz	2 531.01(506202)				2 655(531000)	
	80 MHz	2 536.02(507204)				2 649.99(529998)	
	90 MHz	2 541(508200)				2 644.98(528996)	
	100 MHz			2 592.99(518598)			

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Ch. No.& Freq.(MHz)		Low / Low-Mid		Mid		Mid-High / High	
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)			
	35 MHz			1 745(349000)			
	40 MHz			1 745(349000)			
NR FDD Band n70	5 MHz	1 697.5(339500)		1 702.5(340500)		1 707.5(341500)	
	10 MHz	1 700(340000)		1 702.5(340500)		1 705(341000)	
	15 MHz			1 702.5(340500)			
NR FDD Band n71	5 MHz	665.5(133100)		680.5(136100)		695.5(139100)	
	10 MHz	668(133600)		680.5(136100)		693(138600)	
	15 MHz			680.5(136100)			
	20 MHz			680.5(136100)			
NR TDD Band n77	10 MHz	3 705(647000)	3 759(650600)	3 813(654200)	3 867(657800)	3 921(661400)	3 975(665000)
	15 MHz	3 707.52(647168)	3 760.5(650700)	3 813.51(654234	3 866.49(657766)	3 919.5(661300)	3 972.48(664832)
	20 MHz	3 710.01(647334)	3 762(650800)	3 813.99(654266)	3 866.01(657734)	3 918(661200)	3 969.99(664666)
	25 MHz	3 712.5(647500)	3 763.5(650900)	3 814.5(654300)	3 865.5(657700)	3 916.5(661100)	3 967.5(664500)
	30 MHz	3 715.02(647668)	3 765(651000)	3 815.01(654334)	3 864.99(657666)	3 915(661000)	3 964.98(664332)
	40 MHz	3 720(648000)	3 768(651200)	3 816(654400)	3 864(657600)	3 912(660800)	3 960(664000)
	50 MHz	3 725.01(648334)	3 782.49(652166)	3 840(656000)		3 897.51(659834)	3 954.99(663666)
	60 MHz	3 730.02(648668)	3 803.34(653556)			3 876.66(658444)	3 949.98(663332)
	70 MHz	3 735(649000)	3 804.99(654336)			3 875.01(658334)	3 945(663000)
	80 MHz	3 740.01(649334)		3 840(656000)			3 939.99(662666)
	90 MHz	3 745.02(649668)		3 840(656000)		3 934.98(662332)	
	100 MHz	3 750(650000)		3 840(656000)		3 930(662000)	
NR TDD Band n77 (DoD)	10 MHz	3 455.01(630334)		3 500.01(633334)		3 544.98(636332)	
	15 MHz	3 457.5(630500)		3 500.01(633334)		3 542.49(636166)	
	20 MHz	3 460.02(630668)		3 500.01(633334)		3 540(636000)	
	25 MHz	3 462.99(630866)		3 500.01(633334)		3 537(635800)	
	30 MHz	3 465(631000)		3 500.01(633334)		3 534.99(635666)	
	40 MHz	3 470.01(631334)				3 529.98(635332)	
	50 MHz	3 475.02(631668)				3 525(635000)	
	60 MHz			3 500.01(633334)			
	70 MHz			3 500.01(633334)			
	80 MHz			3 500.01(633334)			
	90 MHz			3 500.01(633334)			
	100 MHz			3 500.01(633334)			
NR TDD Band n78	10 MHz	3 705(647000)		3 750(650000)		3 795(653000)	
	15 MHz	3 707.5(647166)		3 750(650000)		3 792.48(652832)	
	20 MHz	3 710.01(647334)		3 750(650000)		3 789.99(652666)	
	25 MHz	3 712.5(647500)		3 750(650000)		3 787.5(652500)	
	30 MHz	3 715(647666)		3 750(650000)		3 784.98(652332)	
	40 MHz	3 720(647800)				3 780(652000)	
	50 MHz	3 725.01(648334)				3 774.99(651666)	
	60 MHz			3 750(650000)			
	70 MHz			3 750(650000)			
	80 MHz			3 750(650000)			
	90 MHz			3 750(650000)			
	100 MHz			3 750(650000)			

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Ch. No.& Freq.(㎒)		Low / Low-Mid	Mid	Mid-High / High
NR TDD Band n78 (DoD)	10 ㎒	3 455.01(630334)	3 500.01(633334)	3 544.98(636332)
	15 ㎒	3 457.5(630500)	3 500.01(633334)	3 542.49(636166)
	20 ㎒	3 460.02(630668)	3 500.01(633334)	3 540(636000)
	25 ㎒	3 462.99(630866)	3 500.01(633334)	3 537(635800)
	30 ㎒	3 465(631000)	3 500.01(633334)	3 534.99(635666)
	40 ㎒	3 470.01(631334)		3 529.98(635332)
	50 ㎒	3 475.02(631668)		3 525(635000)
	60 ㎒		3 500.01(633334)	
	70 ㎒		3 500.01(633334)	
	80 ㎒		3 500.01(633334)	
	90 ㎒		3 500.01(633334)	
	100 ㎒		3 500.01(633334)	

Item.	Description
NR FDD Band n2/n5/n7/n12/n14/n25/n26/n30/n66/n70/n71 SCS	15 ㎑
NR TDD Band n38/n41/n48/n77/n78 SCS	30 ㎑
3GPP Rel.	Rel.16
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, n2, n5, n7, n25, n41, n66, n71, n77, n78 are supported to NSA and SA Connectivity. N12, n14, n26, n30, n38, n48, n70 is only supported to SA connectivity More detailed specifications of the 5G NR bands are contained in the Technical description document.	
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations
LTE Anchor Bands for NR Band n2 (PCS)	LTE Band 4/5/7/12/13/14/30/48/66/71
LTE Anchor Bands for NR Band n5 (Cell)	LTE Band 2/4/7/30/48/66
LTE Anchor Bands for NR Band n7	LTE Band 2/5/66
LTE Anchor Bands for NR Band n12	N/A
LTE Anchor Bands for NR Band n14	N/A
LTE Anchor Bands for NR Band n25	LTE Band 12
LTE Anchor Bands for NR Band n26	N/A
LTE Anchor Bands for NR Band n30	N/A
LTE Anchor Bands for NR Band n38	N/A
LTE Anchor Bands for NR Band n41	LTE Band 2/4/5/12/25/66/71
LTE Anchor Bands for NR Band n48	N/A
LTE Anchor Bands for NR Band n66 (AWS)	LTE Band 2/5/7/12/13/14/30/48/71
LTE Anchor Bands for NR Band n70	N/A
LTE Anchor Bands for NR Band n71	LTE Band 2/7/48/66
LTE Anchor Bands for NR Band n77	LTE Band 2/5/7/12/13/14/30/66/71
LTE Anchor Bands for NR Band n78	LTE Band 2/4/5/7/12/13/38/41/66/71

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4.6 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
MAIN1	GSM/GPRS/EDGE 850	Yes	Yes	Yes	Yes	Yes	No
SUB1	GSM/GPRS/EDGE 850	Yes	Yes	No	Yes	No	Yes
MAIN1	GSM/GPRS/EDGE 1900	Yes	Yes	Yes	Yes	Yes	No
MAIN1	UMTS Band 5	Yes	Yes	Yes	Yes	Yes	No
SUB1	UMTS Band 5	Yes	Yes	No	Yes	No	Yes
MAIN1	UMTS Band 4	Yes	Yes	Yes	Yes	Yes	No
MAIN1	UMTS Band 2	Yes	Yes	Yes	Yes	Yes	No
MAIN1	LTE FDD Band 2 (PCS)	Yes	Yes	Yes	Yes	Yes	No
SUB2	LTE FDD Band 2 (PCS)	Yes	Yes	Yes	No	No	Yes
MAIN1	LTE FDD Band 4 (AWS)	Yes	Yes	Yes	Yes	Yes	No
SUB2	LTE FDD Band 4 (AWS)	Yes	Yes	Yes	No	No	Yes
MAIN1	LTE FDD Band 5	Yes	Yes	Yes	Yes	Yes	No
SUB1	LTE FDD Band 5	Yes	Yes	No	Yes	No	Yes
Main2	LTE FDD Band 7	Yes	Yes	Yes	No	Yes	No
SUB2	LTE FDD Band 7	Yes	Yes	Yes	No	No	Yes
MAIN1	LTE FDD Band 12	Yes	Yes	Yes	Yes	Yes	No
SUB1	LTE FDD Band 12	Yes	Yes	No	Yes	No	Yes
MAIN1	LTE FDD Band 13	Yes	Yes	Yes	Yes	Yes	No
SUB1	LTE FDD Band 13	Yes	Yes	No	Yes	No	Yes
MAIN1	LTE FDD Band 14	Yes	Yes	Yes	Yes	Yes	No
SUB1	LTE FDD Band 14	Yes	Yes	No	Yes	No	Yes
MAIN1	LTE FDD Band 25 (PCS)	Yes	Yes	Yes	Yes	Yes	No
SUB2	LTE FDD Band 25 (PCS)	Yes	Yes	Yes	No	No	Yes
MAIN1	LTE FDD Band 26 (Cell)	Yes	Yes	Yes	Yes	Yes	No
SUB1	LTE FDD Band 26 (Cell)	Yes	Yes	No	Yes	No	Yes
MAIN1	LTE FDD Band 30	Yes	Yes	Yes	Yes	Yes	No
SUB2	LTE FDD Band 30	Yes	Yes	Yes	No	No	Yes
Main2	LTE TDD Band 38	Yes	Yes	Yes	No	Yes	No
SUB2	LTE TDD Band 38	Yes	Yes	Yes	No	No	Yes
Main2	LTE TDD Band 41 (PC3)	Yes	Yes	Yes	No	Yes	No
SUB2	LTE TDD Band 41 (PC3)	Yes	Yes	Yes	No	No	Yes
SUB2	LTE TDD Band 48	Yes	Yes	Yes	No	No	Yes
MAIN1	LTE FDD Band 66 (AWS)	Yes	Yes	Yes	Yes	Yes	No
SUB2	LTE FDD Band 66 (AWS)	Yes	Yes	No	Yes	No	Yes
MAIN1	LTE FDD Band 71	Yes	Yes	Yes	Yes	Yes	No
SUB1	LTE FDD Band 71	Yes	Yes	No	Yes	No	Yes
MAIN1	NR FDD Band n2 (PCS)	Yes	Yes	Yes	Yes	Yes	No
SUB 2	NR FDD Band n2 (PCS)	Yes	Yes	Yes	No	No	Yes
MAIN1	NR FDD Band n5	Yes	Yes	Yes	Yes	Yes	No
SUB1	NR FDD Band n5	Yes	Yes	No	Yes	No	Yes

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Antenna	Mode	Rear	Front	Left	Right	Bottom	Top
MAIN2	NR FDD Band n7	Yes	Yes	Yes	No	Yes	No
SUB2	NR FDD Band n7	Yes	Yes	Yes	No	No	Yes
MAIN1	NR FDD Band n12	Yes	Yes	Yes	Yes	Yes	No
SUB1	NR FDD Band n12	Yes	Yes	No	Yes	No	Yes
MAIN1	NR FDD Band n14	Yes	Yes	Yes	Yes	Yes	No
SUB1	NR FDD Band n14	Yes	Yes	No	Yes	No	Yes
MAIN1	NR FDD Band n25 (PCS)	Yes	Yes	Yes	Yes	Yes	No
SUB2	NR FDD Band n25 (PCS)	Yes	Yes	Yes	No	No	Yes
MAIN1	NR FDD Band n26	Yes	Yes	Yes	Yes	Yes	No
SUB1	NR FDD Band n26	Yes	Yes	No	Yes	No	Yes
MAIN1	NR FDD Band n30	Yes	Yes	Yes	Yes	Yes	No
SUB2	NR FDD Band n30	Yes	Yes	Yes	No	No	Yes
SUB2	NR TDD Band n38	Yes	Yes	Yes	No	No	Yes
MAIN2	NR TDD Band n41 (PC2)	Yes	Yes	Yes	No	Yes	No
SUB2	NR TDD Band n41 (PC2) SRS #2	Yes	Yes	Yes	No	No	Yes
MAIN4	NR TDD Band n41 (PC2) SRS #3	Yes	Yes	No	Yes	Yes	No
SUB1	NR TDD Band n41 (PC2) SRS #4	Yes	Yes	No	Yes	No	Yes
SUB2	NR TDD Band n41 (PC2)	Yes	Yes	Yes	No	No	Yes
MAIN2	NR TDD Band n41 (PC2) SRS #2	Yes	Yes	Yes	No	Yes	No
SUB1	NR TDD Band n41 (PC2) SRS #3	Yes	Yes	No	Yes	No	Yes
MAIN4	NR TDD Band n41 (PC2) SRS #4	Yes	Yes	No	Yes	Yes	No
SUB2	NR TDD Band n48	Yes	Yes	Yes	No	No	Yes
MAIN3	NRTDD Band n48 SRS #2	Yes	Yes	Yes	No	Yes	No
SUB5	NR TDD Band n48 SRS #3	Yes	Yes	Yes	No	No	No
MAIN4	NRTDD Band n48 SRS #4	Yes	Yes	No	Yes	Yes	No
MAIN1	NR FDD Band n66	Yes	Yes	Yes	Yes	Yes	No
SUB2	NR FDD Band n66	Yes	Yes	Yes	No	No	Yes
MAIN1	NR FDD Band n70	Yes	Yes	Yes	Yes	Yes	No
SUB2	NR FDD Band n70	Yes	Yes	Yes	No	No	Yes
MAIN1	NR FDD Band n71	Yes	Yes	Yes	Yes	Yes	No
SUB1	NR FDD Band n71	Yes	Yes	No	Yes	No	Yes
SUB2	NR TDD Band n77 (PC2)	Yes	Yes	Yes	No	No	Yes
MAIN3	NR TDD Band n77 (PC2) SRS #2	Yes	Yes	Yes	No	Yes	No
SUB5	NR TDD Band n77 (PC2) SRS #3	Yes	Yes	Yes	No	No	No
MAIN4	NR TDD Band n77 (PC2) SRS #4	Yes	Yes	No	Yes	Yes	No
SUB2	NR TDD Band n77 DoD (PC2)	Yes	Yes	Yes	No	No	Yes
MAIN3	NR TDD Band n77 DoD (PC2) SRS #2	Yes	Yes	Yes	No	Yes	No
SUB5	NR TDD Band n77 DoD (PC2) SRS #3	Yes	Yes	Yes	No	No	No
MAIN4	NR TDD Band n77 DoD (PC2) SRS #4	Yes	Yes	No	Yes	Yes	No
SUB2	NR TDD Band n78 (PC2)	Yes	Yes	Yes	No	No	Yes
MAIN3	NR TDD Band n78 (PC2) SRS #2	Yes	Yes	Yes	No	Yes	No
SUB5	NR TDD Band n78 (PC2) SRS #3	Yes	Yes	Yes	No	No	No
MAIN4	NR TDD Band n78 (PC2) SRS #4	Yes	Yes	No	Yes	Yes	No
SUB2	NR TDD Band n78 DoD (PC2)	Yes	Yes	Yes	No	No	Yes
MAIN3	NR TDD Band n78 DoD (PC2) SRS #2	Yes	Yes	Yes	No	Yes	No
SUB5	NR TDD Band n78 DoD (PC2) SRS #3	Yes	Yes	Yes	No	No	No
MAIN4	NR TDD Band n78 DoD (PC2) SRS #4	Yes	Yes	No	Yes	Yes	No
Sub 4 (WiFi1)	2.4 GHz WLAN	Yes	Yes	Yes	No	No	Yes
Sub 6 (WiFi2)	2.4 GHz WLAN	Yes	Yes	No	Yes	No	Yes
Sub 4 (WiFi1)	Bluetooth	Yes	Yes	Yes	No	No	Yes
Sub 6 (WiFi2)	Bluetooth	Yes	Yes	No	Yes	No	Yes
Sub 4 (WiFi1)	5 GHz WLAN	Yes	Yes	Yes	No	No	Yes

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Sub 1 (WiFi2)	5 ㎓ WLAN	Yes	Yes	No	Yes	No	Yes
Sub 4 (WiFi1)	6 ㎓ WLAN	Yes	Yes	Yes	No	No	Yes
Sub 1 (WiFi2)	6 ㎓ WLAN	Yes	Yes	No	Yes	No	Yes
Sub 2	NTN B255	Yes	Yes	Yes	No	No	Yes
NFC Ant	NFC	Yes	Yes	Yes	Yes	Yes	Yes

Particular EUT edges were not required to be evaluated for Bluetooth Tethering and Hotspot SAR if the edges were > 25 mm 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.

4.7 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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4.8 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.

Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Phablet
GSM voice + 2.4GHz Bluetooth SISO/MIMO	Yes^	Yes	Yes^	Yes
GSM voice + 2.4GHz WI-FI SISO/MIMO	Yes	Yes	N/A	Yes
GSM voice + 5GHz WI-FI SISO/MIMO	Yes	Yes	N/A	Yes
GSM voice + 6GHz WI-FI SISO/MIMO	Yes	Yes	N/A	Yes
GSM voice + 2.4GHz WI-FI SISO/MIMO + 5GHz WI-FI MIMO	Yes	Yes	N/A	Yes
GSM voice + 2.4GHz WI-FI SISO/MIMO + 6GHz WI-FI MIMO	Yes	Yes	N/A	Yes
GSM voice + 2.4GHz Bluetooth SISO/MIMO + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
GSM voice + 2.4GHz Bluetooth SISO/MIMO+ 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
GSM voice + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2	Yes^	Yes	Yes^	Yes
GSM voice + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
GSM voice + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
UMTS + 2.4GHz Bluetooth SISO/MIMO	Yes^	Yes	Yes^	Yes
UMTS + 2.4GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
UMTS + 5GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
UMTS + 6GHz WI-FI MIMO SISO/MIMO	Yes	Yes	Yes	Yes
UMTS + 2.4GHz WI-FI SISO/MIMO + 5GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
UMTS + 2.4GHz WI-FI SISO/MIMO + 6GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
UMTS + 2.4GHz Bluetooth SISO/MIMO + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
UMTS + 2.4GHz Bluetooth SISO/MIMO + 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
UMTS + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2	Yes^	Yes	Yes^	Yes
UMTS + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
UMTS + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth SISO/MIMO	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
LTE + 5GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
LTE + 6GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
LTE + 2.4GHz WI-FI SISO/MIMO + 5GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
LTE + 2.4GHz WI-FI SISO/MIMO + 6GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
LTE + 2.4GHz Bluetooth SISO/MIMO + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth SISO/MIMO + 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes

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Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Phablet
LTE + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
LTE + 5GNR	Yes	Yes	N/A	Yes
LTE + 2.4GHz Bluetooth SISO/MIMO + 5GNR	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz WI-FI SISO/MIMO + 5GNR	Yes	Yes	Yes	Yes
LTE + 5GHz WI-FI SISO/MIMO + 5GNR	Yes	Yes	Yes	Yes
LTE + 6GHz WI-FI SISO/MIMO + 5GNR	Yes	Yes	Yes	Yes
LTE + 2.4GHz WI-FI SISO/MIMO + 5GHz WI-FI SISO/MIMO + 5GNR	Yes	Yes	Yes	Yes
LTE + 2.4GHz WI-FI SISO/MIMO + 6GHz WI-FI SISO/MIMO + 5GNR	Yes	Yes	Yes	Yes
LTE + 2.4GHz Bluetooth SISO/MIMO + 5GHz WI-FI SISO/MIMO + 5GNR	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth SISO/MIMO + 6GHz WI-FI SISO/MIMO + 5GNR	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 5GNR	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 5GHz WI-FI SISO/MIMO + 5GNR	Yes^	Yes	Yes^	Yes
LTE + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 6GHz WI-FI SISO/MIMO + 5GNR	Yes^	Yes	Yes^	Yes
GPRS/EDGE Data + 2.4GHz Bluetooth SISO/MIMO	Yes^	Yes	Yes^	Yes
GPRS/EDGE Data + 2.4GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
GPRS/EDGE Data + 5GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
GPRS/EDGE Data + 6GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
GPRS/EDGE Data + 2.4GHz WI-FI SISO/MIMO + 5GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
GPRS/EDGE Data + 2.4GHz WI-FI SISO/MIMO + 6GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
GPRS/EDGE Data + 2.4GHz Bluetooth SISO/MIMO + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
GPRS/EDGE Data + 2.4GHz Bluetooth SISO/MIMO + 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
GPRS/EDGE Data + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2	Yes^	Yes	Yes^	Yes
GPRS/EDGE Data + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
GPRS/EDGE Data + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
5GNR + 2.4GHz Bluetooth SISO/MIMO	Yes^	Yes	Yes^	Yes
5GNR + 2.4GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
5GNR + 5GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
5GNR + 6GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
5GNR + 2.4GHz WI-FI SISO/MIMO + 5GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
5GNR + 2.4GHz WI-FI SISO/MIMO + 6GHz WI-FI SISO/MIMO	Yes	Yes	Yes	Yes
5GNR + 2.4GHz Bluetooth SISO/MIMO + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
5GNR + 2.4GHz Bluetooth SISO/MIMO + 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
5GNR + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2	Yes^	Yes	Yes^	Yes
5GNR + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 5GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
5GNR + 2.4GHz Bluetooth Ant.1+ 2.4GHz WI-FI Ant 2 + 6GHz WI-FI SISO/MIMO	Yes^	Yes	Yes^	Yes
NTN+2.4GHz Bluetooth SISO/MIMO	NA	Yes	NA	Yes

Note:

1. 2.4GHz WLAN and 2.4GHz Bluetooth share the same antenna path. So, this DUT can only transmit together 2.4GHz WLAN Ant.2 and Bluetooth Ant.1.
2. 5 GHz WLAN and 6 GHz WLAN share the same antenna path and cannot transmit simultaneously.
3. When the user utilizes multiple services in UMTS 3G mode it uses multi-Radio Access Bearer or multi- RAB. The power control is based on a physical control channel (Dedicated Physical Control Channel [DPCCH]) and power control will be adjusted to meet the needs of both services. Therefore, the UMTS+WLAN scenario also represents the UMTS Voice/DATA + WLAN Hotspot scenario.
4. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held-to-ear or body worn

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accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFI direct beyond that listed in the above table.

5. 5 GHz Wireless Router is only supported for the U-NII-3 by S/W, therefore U-NII-1, U-NII-2A, U-NII-2C, and U-NII-4 were not evaluated for wireless router conditions.
6. VLP function supported on U-NII-5/7 with WLAN 6E
7. This device supports 2x2 MIMO Tx for WLAN 802.11a/b/g/n/ac/ax/be. 802.11a/b/g/n/ac/ax/be supports CDD and STBC and 802.11n/ac/ax additionally supports SDM.
8. This device supports VoWIFI/VoLTE/VoNR
9. This device supports Bluetooth Tethering in SISO/MIMO
10. LTE + 5G NR FR1 Scenarios are limited to EN-DC combinations with anchor bands as shown in the NR FR1 checklist.
11. NFC was evaluated for phablet based on expected usage conditions.
12. NTN B255 mode does not transmit simultaneously with all WWAN/WLAN modes

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4.9 SAR Test Considerations

4.9.1 WiFi/BT

Since wireless router operations are not allowed by the chipset firmware using U-NII-1, U-NII-2A & U-NII-2C and U-NII-4 WiFi and 6Ghz, Hotspot SAR test and combinations are considered only 2.4 GHz and U-NII-3, WLAN 6E U-NII-5/7 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/be with the following features:

a) Up to 160 MHz Bandwidth only for 5/6 GHz
b) Up to 320 MHz Bandwidth only for 6 GHz
c) Up to 20 MHz Bandwidth only for 2.4 GHz
d) 2Tx antenna output
e) Up to 4KQAM is supported
f) TDWR and Band gap channels are supported for 5/6 GHz
g) MU-MIMO UL Operations are not supported

For more information about the technical specifications of WLAN, please refer to the technical documentation.

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is greater than 160mm and less than 200 mm. Phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. Because wireless router operations are not supported for U-NII-1, U-NII-2A & U-NII-2C WLAN, phablet SAR tests were performed. Phablet SAR was not evaluated for 2.4 GHz WIFI, 2.4 GHz Bluetooth, and U-NII-3 WLAN operations since wireless router 1g SAR was < 1.2 W/kg.

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

Per Oct. 2020 TCBC Workshop note, SAR was performed using 6.5 GHz SAR probe calibration factors for WIFI 6GHz. FCC KDB 648474, FCC KDB 941225 D07 and FCC KDB 248227 were followed for test positions, distances, and modes. Absorbed power density (APD) using a 4cm2 averaging area is reported based on SAR measurements. Incident power density is evaluated at 2mm ensuring that the resolution is sufficient such that integrated power density(iPD) between d=2mm and d=λ/5mm is ≥ -1dB per equipment manufacturer guidance. Power density results are scaled up for uncertainty above 30%. Per TCB workshop October 2020 notes, 5 channels were tested for WIFI 6GHz.

DASY6 Module mmWave is optimized for incident Power Density (PD) evaluations EUT at distances as close as 2mm for frequencies in the 6–110 GHz range.
The software Module mmWave V3.0+ features the novel Equivalent Source Reconstruction (ESR) method:
This new method will greatly simplify compliance testing for distances as close as λ/25 (2mm at 6 GHz) from any surface and improve the overall flexibility and precision.
With this method, the reconstruction uncertainty (REC) is below 0.6 dB for d > λ/25, corresponding to a test distance of 2mm at 6 GHz. The above-mentioned REC value is valid if the following conditions on the grid

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resolution (ℓ_{grid}) and grid extent (ν_{arid}) are met:

$$\ell_{\text{grid}} = \begin{cases} 1.25d & \text{for } d < \lambda/10 \\ \lambda/8 & \text{for } d \geq \lambda/10 \end{cases}.$$

$$\nu_{\text{grid}} \geq 2\lambda$$

In accordance with the October 2020 TCBC document, the novel Equivalent Source Reconstruction (ESR), a post-processing technology of SPEAG's The Module mmWave V3.0+, a source reconstruction method, was used to evaluate the IPD of a portable device in the 6-8.5 GHz band, and the measurement uncertainty was evaluated to be 1.51 dB.

4.9.2 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 ㎜ and less than 200 ㎜. 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 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 5 (824.7 ㎒ ~ 848.3㎒) is covered by LTE Band 26(814.7 ㎒ ~ 848.3 ㎒), LTE Band 4 (1 710.7 ㎒ ~ 1 754.3㎒) is covered by LTE Band 66(1 710.7 ㎒ ~ 1 779.3 ㎒), LTE Band 2(1 850.7 ㎒ ~ 1 909.3㎒) is covered by LTE Band 25(1 850.7 ㎒ ~ 1 914.3㎒), LTE Band 38(2 572.5 ㎒ ~ 2 617.5㎒) is covered by LTE Band 41(2 498.5 ㎒ ~ 2 687.5㎒) of this model each both LTE bands have the same target powers.
NR capabilities with overlapping transmission frequency ranges were applied to n2(1 852.5 ㎒ ~ 1 907.5㎒) is covered by n25(1 852.5 ㎒ ~ 1 912.5㎒), n5(826.5 ㎒ ~ 846.5㎒) is covered by n26(816.5 ㎒ ~ 846.5㎒), n38(2 572.5 ㎒ ~ 2 617.5㎒) is covered by n41(2 498.5 ㎒ ~ 2 687.5㎒), n78(3 705 ㎒ ~ 3 795㎒) is covered

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by n77(3 705 ㎒ ~ 3 795㎒), n78 DoD(3 455.01 ㎒ ~ 3 544.98㎒) is covered by n77 DoD(3 455.01 ㎒ ~ 3 544.98㎒)of this model each both NR 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 product supported Intra-band LTE Carrier Aggregation for 48C with two component carriers in the uplink. SAR Measurement and conducted Powers were measured according to Nov 2019 TCBC Workshop guide.

Per FCC Guidance, C-Band for NR n77 (3705 –3975 MHz) was fully tested according to FCC procedures. For each exposure condition and antenna, the worst-case position was additionally evaluated for the NR n77 DoD (3455.01 –3544.98 MHz).
This device uses two transmit pathways for n41 operations (Path 1 and Path 2). For each exposure condition, the pathway with the highest target power was fully evaluated. The worst case for each antenna and exposure condition was additionally evaluated using the other path.

NR implementation supports SA and NSA mode. In EN-DC mode, NR operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.
SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4
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.

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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 DASY4 & 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.

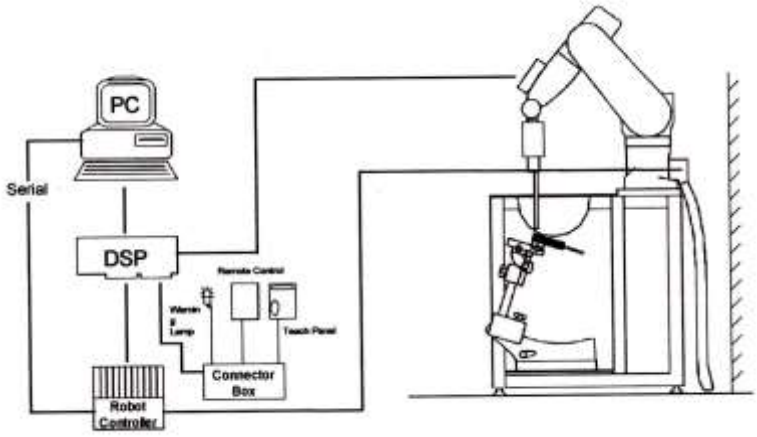


Figure 2. HCT SAR Lab. Test Measurement Set-up

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.

<table>
<tr><td colspan="3"></td><td>≤ 3 GHz</td><td>> 3 GHz</td></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5±1 mm</td><td>·δ·ln(2)±0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30°±1°</td><td>20°±1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan Spatial resolution: $\Delta x_{Area}, \Delta y_{Area}$</td><td>≤ 2 GHz: ≤15 mm
2-3 GHz: ≤12 mm</td><td>3-4 GHz: ≤12 mm
4-6 GHz: ≤10 mm</td></tr>
<tr><td colspan="2">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.</td></tr>
<tr><td colspan="3">Maximum zoom scan Spatial resolution: $\Delta x_{zoom}, \Delta y_{zoom}$</td><td>≤ 2 GHz: ≤8mm
2-3 GHz: ≤5mm*</td><td>3-4 GHz: ≤5 mm*
4-6 GHz: ≤4 mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan Spatial resolution normal to phantom surface</td><td colspan="2">uniform grid:$\Delta z_{zoom}(n)$</td><td>≤ 5 mm</td><td>3-4 GHz: ≤4 mm
4-5 GHz: ≤3 mm
5-6 GHz: ≤2 mm</td></tr>
<tr><td rowspan="2">graded grid</td><td>$\Delta z_{zoom}(1)$: between1st two Points closest to phantom surface</td><td>≤ 4 mm</td><td>3-4 GHz: ≤3 mm
4-5 GHz: ≤2.5 mm
5-6 GHz: ≤2 mm</td></tr>
<tr><td>$\Delta z_{zoom}(n>1)$:between subsequent Points</td><td colspan="2">≤1.5·$\Delta z_{zoom}(n-1)$</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">x, y, z</td><td>≥ 30 mm</td><td>3-4 GHz: ≥28 mm
4-5 GHz: ≥25 mm
5-6 GHz: ≥22 mm</td></tr>
<tr><td colspan="5">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.</td></tr>
</table>

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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.

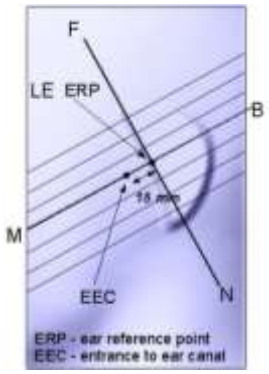


Figure 8-1
Close-up side view of ERP

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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

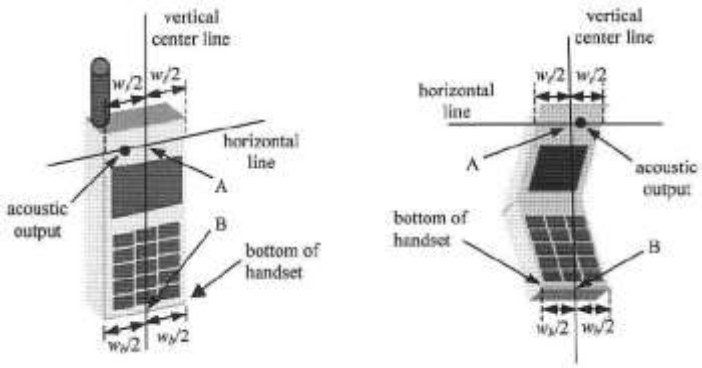


Figure 8-3. Handset vertical and horizontal reference lines

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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.

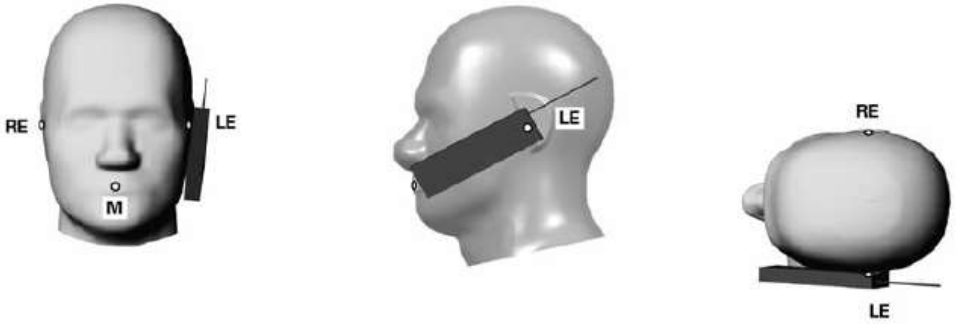


Figure 8.4 Touch/ Touch position of the wireless device

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

RF Exposure Limits for Frequencies below 6 GHz.

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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RF Exposure Limits for Frequencies Above 6 ㎓.

Per §1.1310 (d)(3), the MPE limits are applied for frequencies above 6 GHz. Power Density is expressed in units of mW/㎠ or W/㎡.
Peak Spatially Averaged Power Density was evaluated over a circular area of 4 ㎠ per interim.
FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

HUMAN EXPOSURE	Limits For Occupational / Controlled Environments	Limits For General Population / Uncontrolled Environments
Frequency Range[MHz]	1,500 – 100,000	1,500 – 100,000
Power Density[mW/㎠]	5.0	1.0
Average Time[Minutes]	6	30

NOTES: 1.0 mW/㎠ is 10 W/㎡

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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.

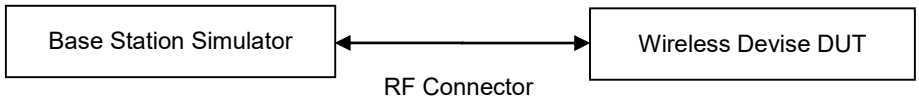
10.3.5 DC-HSDPA

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.

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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.



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.

10.4.6 LTE Uplink Carrier Aggregation SAR Measurement Procedure

This device is specified with the same maximum output power and Tune-up tolerances for intra-band contiguous up-link LTE CA_48C. LTE Band 41 single carrier are operating with Power class 3.

For intra-band contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that aggregate maximum allowed output power is equivalent to the single carrier scenario.

The measured power results of single carrier LTE B48 and intra-band contiguous up-link LTE CA_48C satisfy Maximum output power and Tune-up tolerances.

Per Fall 2017 TCB Workshop Notes, the output Power with uplink CA active was measured for the configuration with the Highest Reported SAR with standalone condition.

UL CA SAR is not required for all required test channels, Because the reported SAR for UL CA configuration is > 1.2 W/kg

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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.

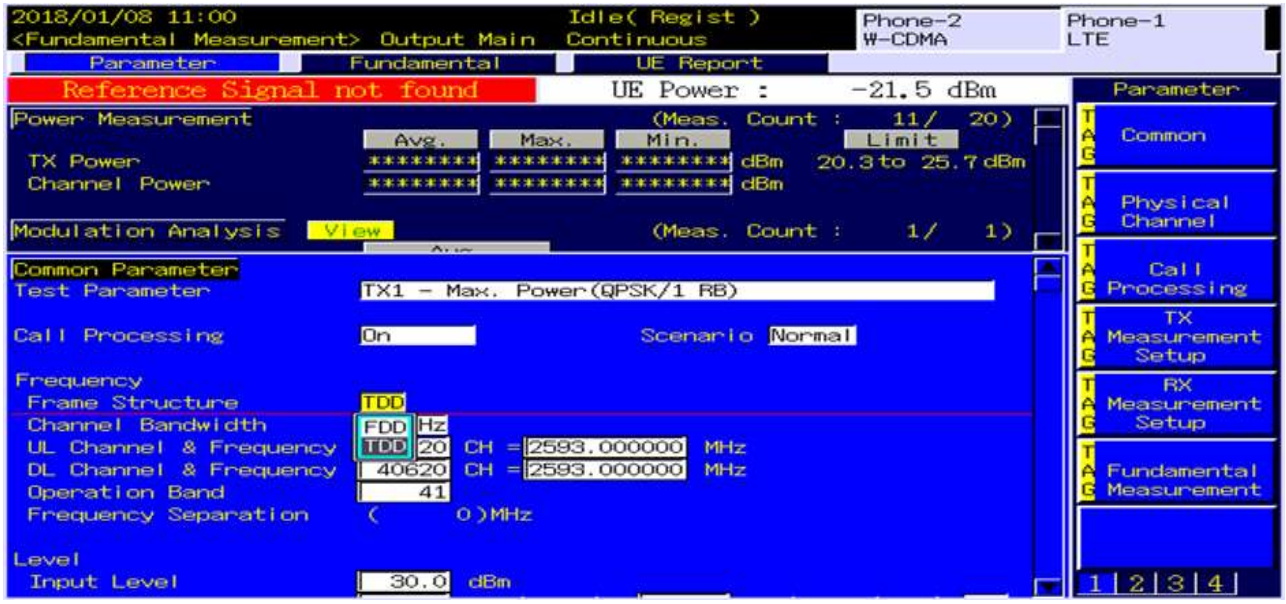
Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U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

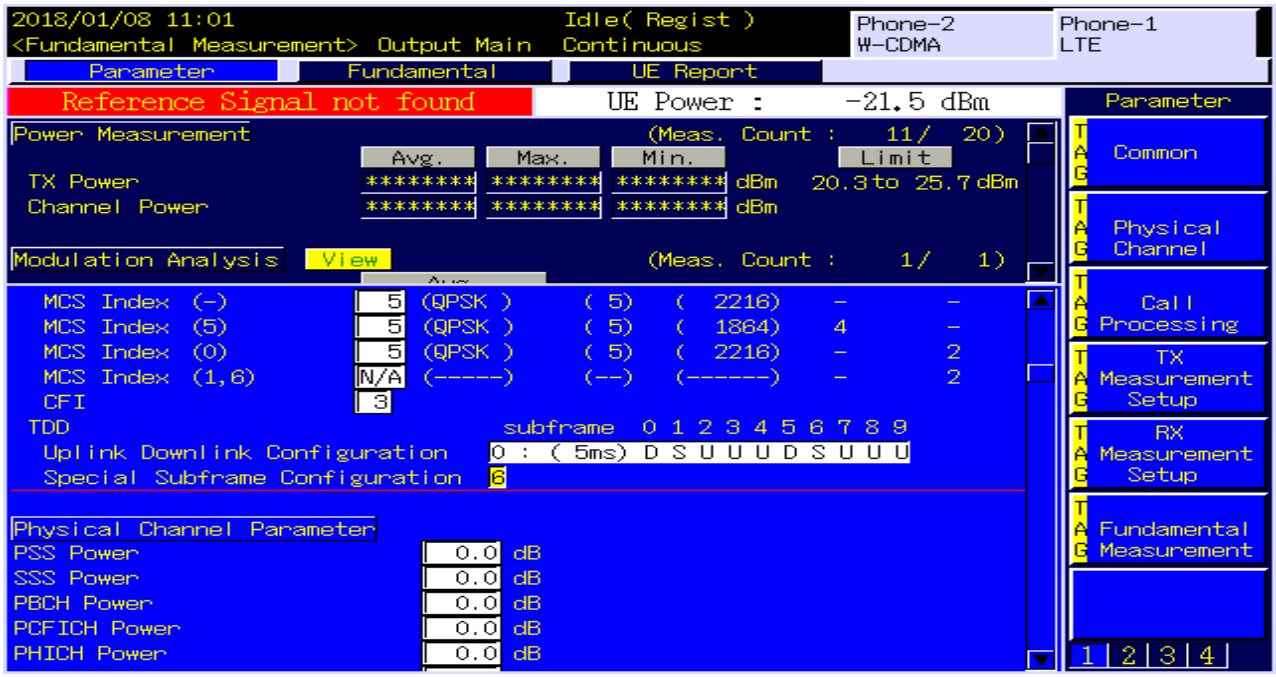
Example for calculated Duty Cycle for Uplink-Downlink Configuration 0:
Calculated Duty Cycle = (5120 x (1/(15000 x 2048)) x 2 + 0.006)/0.01 = 63.33 %
Where
T_s = 1/(15000 x 2048) seconds

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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 ㎒ (5.47 ㎓ – 5.85 ㎓), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 ㎓ – 5.65 ㎓ 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 ㎓ SAR test Requirements

SAR is measured for 2.4 ㎓ 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 ㎓ 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 ㎓ Band, the Initial Test Configuration Procedures should be followed.

10.5.6 OFDM Transmission Mode and SAR Test Channel Selection

For the 2.4 ㎓ and 5 ㎓ 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 ㎓ and 5 ㎓ 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.

10.5.9 MIMO SAR Considerations

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

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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

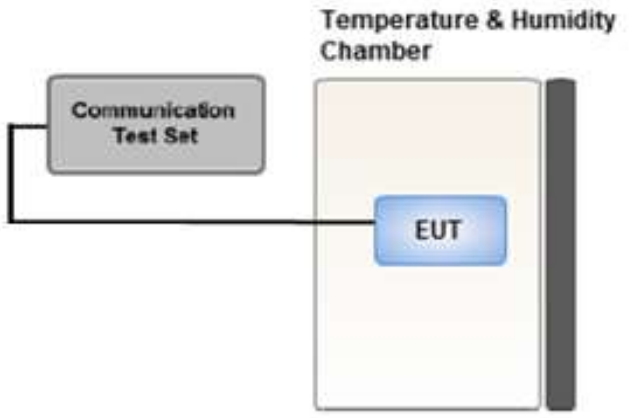
According to ANSI C63.26-2015 Section 5.2.1 when measuring the maximum RF output power from such devices, control over the EUT must be provided either through special test software (provided by manufacturer specifically for compliance testing, but not accessible by an end user) or through use of a base 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 GSM 850 Maximum Conducted Output Power

GSM 850 – MAIN1 Antenna

Measured *Pmax*, DSI = 0 (free), DSI = 1 (RCV)

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	32.00	30.00	28.00	27.50	25.50	24.50	24.00
Nominal		32.00	32.00	31.00	29.00	27.00	26.50	24.50	23.50	23.00
GSM 850	128	31.35	31.18	30.55	28.24	25.62	25.47	23.84	23.17	22.87
	190	31.81	31.72	30.90	28.62	26.54	25.74	24.25	23.57	23.30
	251	32.17	32.07	31.04	28.86	26.83	26.01	24.39	23.71	23.43

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	25.98	25.74	24.99	18.47	19.48	20.24	20.99
Nominal		22.97	22.97	24.98	24.74	23.99	17.47	18.48	19.24	19.99
GSM 850	128	22.32	22.15	24.53	23.98	22.61	16.44	17.82	18.91	19.86
	190	22.78	22.69	24.88	24.36	23.53	16.71	18.23	19.31	20.29
	251	23.14	23.04	25.02	24.6	23.82	16.98	18.37	19.45	20.42

GSM Conducted output powers (Frame-Average)

GSM 850 – SUB1 Antenna

Measured *Pmax*, DSI = 0 (free)

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	32.00	30.00	28.00	27.50	25.50	23.50	23.50
Nominal		32.00	32.00	31.00	29.00	27.00	26.50	24.50	22.50	22.50
GSM 850	128	31.44	31.13	30.19	27.92	25.90	25.03	23.38	22.63	22.50
	190	31.61	31.36	30.21	28.14	26.11	25.33	23.89	23.17	22.92
	251	32.07	31.86	30.90	28.70	26.28	25.64	24.10	23.41	23.18

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	25.98	25.74	24.99	18.47	19.48	19.24	20.49
Nominal		22.97	22.97	24.98	24.74	23.99	17.47	18.48	18.24	19.49
GSM 850	128	22.41	22.1	24.17	23.66	22.89	16.00	17.36	18.37	19.49
	190	22.58	22.33	24.19	23.88	23.10	16.30	17.87	18.91	19.91
	251	23.04	22.83	24.88	24.44	23.27	16.61	18.08	19.15	20.17

GSM Conducted output powers (Frame-Average)

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GSM 850 – SUB1 Antenna

Measured DSI = 1 (RCV)

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	24.50	26.50	24.50	22.50	21.50
Nominal		30.00	30.00	27.00	25.00	23.50	25.50	23.50	21.50	20.50
GSM 850	128	29.64	29.64	26.64	24.22	22.50	25.17	23.67	21.52	20.53
	190	29.60	29.60	26.85	24.58	23.18	25.37	23.92	21.84	20.93
	251	30.40	30.40	27.11	25.07	23.66	25.70	24.30	22.04	21.25

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	21.49	17.47	18.48	18.24	18.49
Nominal		20.97	20.97	20.98	20.74	20.49	16.47	17.48	17.24	17.49
GSM 850	128	20.61	20.61	20.62	19.96	19.49	16.14	17.65	17.26	17.52
	190	20.57	20.57	20.83	20.32	20.17	16.34	17.90	17.58	17.92
	251	21.37	21.37	21.09	20.81	20.65	16.67	18.28	17.78	18.24

GSM Conducted output powers (Frame-Average)

11.1.2 GSM 1900 Maximum Conducted Output Power

GSM1900 – MAIN1 Antenna

Measured *Pmax*, DSI = 1 (RCV)

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		30.00	30.00	28.00	26.50	24.50	26.00	25.00	24.00	23.50
Nominal		29.00	29.00	27.00	25.50	23.50	25.00	24.00	23.00	22.50
GSM 1900	512	28.80	28.79	27.79	25.78	24.11	24.69	23.57	22.89	22.70
	661	29.10	28.89	28.17	26.26	24.24	25.50	24.40	23.67	23.48
	810	28.89	28.83	27.67	25.73	24.25	25.03	23.75	23.06	22.42

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		20.97	20.97	21.98	22.24	21.49	16.97	18.98	19.74	20.49
Nominal		19.97	19.97	20.98	21.24	20.49	15.97	17.98	18.74	19.49
GSM 1900	512	19.77	19.76	21.77	21.52	21.10	15.66	17.55	18.63	19.69
	661	20.07	19.86	22.15	22.00	21.23	16.47	18.38	19.41	20.47
	810	19.86	19.80	21.65	21.47	21.24	16.00	17.73	18.80	19.41

GSM Conducted output powers (Frame-Average)

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Measured DSI = 0 (free)

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		29.00	29.00	26.50	24.00	22.50	26.00	24.50	23.50	22.50
Nominal		28.00	28.00	25.50	23.00	21.50	25.00	23.50	22.50	21.50
GSM 1900	512	27.88	27.87	25.32	22.89	21.65	24.91	23.78	22.82	21.41
	661	28.45	28.43	25.28	23.40	21.71	25.45	24.35	23.40	22.07
	810	27.84	27.82	25.34	22.53	21.10	25.10	23.87	22.91	21.51

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		19.97	19.97	20.48	19.74	19.49	16.97	18.48	19.24	19.49
Nominal		18.97	18.97	19.48	18.74	18.49	15.97	17.48	18.24	18.49
GSM 1900	512	18.85	18.84	19.30	18.63	18.64	15.88	17.76	18.56	18.40
	661	19.42	19.40	19.26	19.14	18.70	16.42	18.33	19.14	19.06
	810	18.81	18.79	19.32	18.27	18.09	16.07	17.85	18.65	18.50

GSM Conducted output powers (Frame-Average)

Note:

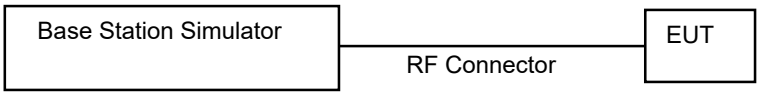
Time slot average factor is as follows:

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 – MAIN1 Antenna

Measured *Pmax*, DSI = 0 (free), DSI = 1 (RCV)

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	23.62	23.78	23.61	-
99		12.2 kbps AMR	23.65	23.83	23.60	-
5	HSDPA	Subtest 1	22.63	22.78	22.58	0
5		Subtest 2	22.65	22.81	22.60	0
5		Subtest 3	22.14	22.22	22.10	0.5
5		Subtest 4	22.13	22.30	22.08	0.5
6	HSUPA	Subtest 1	22.36	22.56	22.34	0
6		Subtest 2	20.31	20.55	20.32	2
6		Subtest 3	21.34	21.57	21.34	1
6		Subtest 4	20.36	20.48	20.36	2
6		Subtest 5	22.38	22.55	22.36	0
8	DC-HSDPA	Subtest1	22.22	22.45	22.26	0
8		Subtest2	22.24	22.48	22.23	0
8		Subtest3	21.73	21.95	21.73	0.5
8		Subtest4	21.77	21.96	21.72	0.5

UMTS Average Conducted output powers

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UMTS Band 5 Maximum Conducted Output Power – SUB1 Antenna

Measured *Pmax*, DSI = 0 (free)

3GPP Release Version	Mode	3GPP 34.121 Subtest	UMTS Band 5 [dBm] UL4132 DL4357	UL4183 DL4408	UL4233 DL4458	3GPP MPR
99	UMTS	12.2 kbps RMC	23.44	23.60	23.37	-
99		12.2 kbps AMR	23.45	23.64	23.42	-
5	HSDPA	Subtest 1	22.43	22.61	22.37	0
5		Subtest 2	22.44	22.60	22.38	0
5		Subtest 3	21.93	22.11	21.88	0.5
5		Subtest 4	21.92	22.10	21.87	0.5
6	HSUPA	Subtest 1	22.15	22.35	22.03	0
6		Subtest 2	20.15	20.28	20.06	2
6		Subtest 3	21.13	21.32	21.05	1
6		Subtest 4	20.15	20.27	20.08	2
6		Subtest 5	22.12	22.27	22.07	0
8	DC-HSDPA	Subtest1	22.31	22.49	22.25	0
8		Subtest2	22.33	22.51	22.23	0
8		Subtest3	21.85	22.01	21.77	0.5
8		Subtest4	21.82	22.00	21.76	0.5

UMTS Average Conducted output powers

Measured DSI = 1 (RCV)

3GPP Release Version	Mode	3GPP 34.121 Subtest	UMTS Band 5 [dBm] UL4132 DL4357	UL4183 DL4408	UL4233 DL4458	3GPP MPR
99	UMTS	12.2 kbps RMC	20.57	20.77	20.55	-
99		12.2 kbps AMR	20.53	20.77	20.56	-
5	HSDPA	Subtest 1	19.57	19.76	19.54	0
5		Subtest 2	19.59	19.77	19.48	0
5		Subtest 3	19.10	19.25	19.04	0.5
5		Subtest 4	19.07	19.24	19.03	0.5
6	HSUPA	Subtest 1	19.31	19.48	19.21	0
6		Subtest 2	17.26	17.46	17.24	2
6		Subtest 3	18.27	18.48	18.25	1
6		Subtest 4	17.30	17.49	17.20	2
6		Subtest 5	19.27	19.44	19.20	0
8	DC-HSDPA	Subtest1	19.52	19.67	19.42	0
8		Subtest2	19.51	19.64	19.43	0
8		Subtest3	19.02	19.16	18.92	0.5
8		Subtest4	19.03	19.18	18.93	0.5

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 – MAIN1 Antenna

Measured *Pmax*, DSI = 1 (RCV)

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	22.84	22.56	22.54	-
99		12.2 kbps AMR	22.81	22.51	22.59	-
5	HSDPA	Subtest 1	21.81	21.51	21.56	0
5		Subtest 2	21.82	21.50	21.57	0
5		Subtest 3	21.32	21.00	21.07	0.5
5		Subtest 4	21.33	21.01	21.07	0.5
6	HSUPA	Subtest 1	21.84	21.51	21.54	0
6		Subtest 2	19.85	19.52	19.51	2
6		Subtest 3	20.85	20.50	20.48	1
6		Subtest 4	19.89	19.55	19.52	2
6		Subtest 5	21.86	21.55	21.50	0
8	DC-HSDPA	Subtest1	22.05	21.77	21.78	0
8		Subtest2	22.11	21.81	21.76	0
8		Subtest3	21.61	21.27	21.26	0.5
8		Subtest4	21.63	21.26	21.24	0.5

UMTS Average Conducted output powers

Measured DSI = 0 (free)

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	19.28	18.97	19.02	-
99		12.2 kbps AMR	19.30	18.96	19.04	-
5	HSDPA	Subtest 1	18.25	17.95	18.02	0
5		Subtest 2	18.26	17.94	18.02	0
5		Subtest 3	17.78	17.45	17.50	0.5
5		Subtest 4	17.77	17.46	17.51	0.5
6	HSUPA	Subtest 1	18.34	17.96	18.03	0
6		Subtest 2	16.38	16.02	16.06	2
6		Subtest 3	17.42	17.00	17.04	1
6		Subtest 4	16.33	16.03	16.05	2
6		Subtest 5	18.40	18.03	18.09	0
8	DC-HSDPA	Subtest1	18.62	18.15	18.20	0
8		Subtest2	18.51	18.10	18.18	0
8		Subtest3	18.03	17.67	16.70	0.5
8		Subtest4	18.04	17.66	16.71	0.5

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 – MAIN1 Antenna

Measured *Pmax*, DSI = 1 (RCV)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	
99	UMTS	12.2 kbps RMC	23.17	23.25	23.48	-
99		12.2 kbps AMR	23.16	23.24	23.47	-
5	HSDPA	Subtest 1	22.15	22.24	22.48	0
5		Subtest 2	22.17	22.25	22.50	0
5		Subtest 3	21.64	21.78	21.99	0.5
5		Subtest 4	21.65	21.79	22.00	0.5
6	HSUPA	Subtest 1	22.14	22.24	22.44	0
6		Subtest 2	20.16	20.22	20.43	2
6		Subtest 3	21.17	21.25	21.42	1
6		Subtest 4	20.16	20.24	20.40	2
6		Subtest 5	22.13	22.24	22.45	0
8	DC-HSDPA	Subtest 1	22.13	22.34	22.43	0
8		Subtest2	22.23	22.32	22.46	0
8		Subtest3	21.74	21.82	21.91	0.5
8		Subtest4	21.73	21.84	21.93	0.5

UMTS Average Conducted output powers

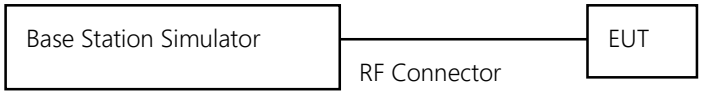
Measured DSI = 0 (free)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	
99	UMTS	12.2 kbps RMC	19.60	19.72	19.95	-
99		12.2 kbps AMR	19.62	19.71	19.94	-
5	HSDPA	Subtest 1	18.58	18.69	18.94	0
5		Subtest 2	18.57	18.71	18.93	0
5		Subtest 3	18.08	18.20	18.45	0.5
5		Subtest 4	18.08	18.18	18.44	0.5
6	HSUPA	Subtest 1	18.59	18.77	18.83	0
6		Subtest 2	16.63	16.71	16.89	2
6		Subtest 3	17.60	17.75	17.97	1
6		Subtest 4	16.61	16.71	16.94	2
6		Subtest 5	18.60	18.74	18.95	0
8	DC-HSDPA	Subtest 1	18.63	18.74	18.95	0
8		Subtest2	18.66	18.71	18.92	0
8		Subtest3	18.08	18.16	18.44	0.5
8		Subtest4	18.09	18.20	18.43	0.5

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*, DSI = 1 (RCV) _ MAIN1 Antenna

LTE FDD Band 2 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 ㎒	18900 Ch. 1880 ㎒	19100 Ch. 1900 ㎒		
20 ㎒	QPSK	1	0	23.30	23.12	22.97	0	0
		1	49	23.13	23.18	23.43	0	0
		1	99	22.96	23.09	23.14	0	0
		50	0	22.28	21.79	22.22	0-1	1
		50	25	22.03	22.16	22.53	0-1	1
		50	49	22.01	22.05	21.85	0-1	1
		100	0	22.02	22.04	22.15	0-1	1
	16QAM	1	0	22.09	22.13	22.24	0-1	1
		1	49	22.19	22.42	22.83	0-1	1
		1	99	22.25	22.57	22.06	0-1	1
		50	0	21.16	21.22	21.34	0-2	2
		50	25	21.01	21.14	21.26	0-2	2
		50	49	21.05	21.22	21.36	0-2	2
		100	0	21.10	21.22	21.19	0-2	2
	64QAM	1	0	21.24	21.05	21.19	0-2	2
		1	49	21.27	21.31	21.61	0-2	2
		1	99	21.05	21.12	21.28	0-2	2
		50	0	19.97	20.70	20.00	0-3	3
		50	25	19.93	20.23	20.12	0-3	3
		50	49	19.99	20.22	20.24	0-3	3
		100	0	19.88	20.12	19.90	0-3	3
	256QAM	1	0	18.00	18.13	18.18	0-5	5
		1	49	18.14	18.31	18.38	0-5	5
		1	99	17.99	18.28	18.19	0-5	5
		50	0	17.99	18.05	18.20	0-5	5
		50	25	18.11	18.19	18.30	0-5	5
		50	49	18.02	18.20	18.27	0-5	5
		100	0	18.11	18.20	18.16	0-5	5

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LTE FDD Band 2 Conducted Power _ Measured DSI = 0 (free) _ MAIN1 Antenna

LTE FDD Band 2 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 ㎒	18900 Ch. 1880 ㎒	19100 Ch. 1900 ㎒		
20 ㎒	QPSK	1	0	19.65	19.66	19.83	0	0
		1	49	19.49	19.64	19.81	0	0
		1	99	19.48	19.75	19.89	0	0
		50	0	19.36	19.38	19.67	0-1	0
		50	25	19.44	19.48	19.70	0-1	0
		50	49	19.42	19.57	19.73	0-1	0
		100	0	19.42	19.40	19.75	0-1	0
	16QAM	1	0	19.48	19.59	19.94	0-1	0
		1	49	19.51	19.56	19.84	0-1	0
		1	99	19.59	19.70	19.92	0-1	0
		50	0	19.35	19.36	19.66	0-2	0
		50	25	19.43	19.55	19.80	0-2	0
		50	49	19.37	19.54	19.75	0-2	0
		100	0	19.40	19.44	19.79	0-2	0
	64QAM	1	0	19.55	19.66	19.81	0-2	0
		1	49	19.46	19.90	19.91	0-2	0
		1	99	19.51	19.84	19.88	0-2	0
		50	0	19.41	19.33	19.60	0-3	0
		50	25	19.47	19.52	19.77	0-3	0
		50	49	19.41	19.54	19.78	0-3	0
		100	0	19.44	19.47	19.76	0-3	0
	256QAM	1	0	19.06	19.05	19.24	0-5	0.3
		1	49	19.08	19.24	19.56	0-5	0.3
		1	99	18.89	19.15	19.50	0-5	0.3
		50	0	19.01	18.98	19.31	0-5	0.3
		50	25	19.05	19.08	19.36	0-5	0.3
		50	49	19.00	19.15	19.36	0-5	0.3
		100	0	19.00	19.10	19.30	0-5	0.3

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LTE FDD Band 2 Conducted Power _ Measured *Pmax* _ SUB2 Antenna

LTE FDD Band 2 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 ㎒	18900 Ch. 1880 ㎒	19100 Ch. 1900 ㎒		
20 ㎒	QPSK	1	0	23.69	23.93	23.96	0	0
		1	49	24.07	24.23	23.97	0	0
		1	99	24.03	23.78	23.63	0	0
		50	0	22.82	22.81	22.63	0-1	1
		50	25	22.89	22.82	22.77	0-1	1
		50	49	22.85	22.85	22.71	0-1	1
		100	0	22.83	22.75	22.72	0-1	1
	16QAM	1	0	23.18	23.34	23.06	0-1	1
		1	49	23.43	22.99	22.81	0-1	1
		1	99	23.20	22.96	22.83	0-1	1
		50	0	21.87	21.84	21.72	0-2	2
		50	25	21.92	21.79	21.74	0-2	2
		50	49	21.97	21.81	21.76	0-2	2
		100	0	21.89	21.80	21.76	0-2	2
	64QAM	1	0	21.91	22.45	21.79	0-2	2
		1	49	22.31	21.92	21.86	0-2	2
		1	99	21.82	22.25	21.81	0-2	2
		50	0	20.88	20.81	20.67	0-3	3
		50	25	20.94	20.81	20.79	0-3	3
		50	49	20.85	20.83	20.73	0-3	3
		100	0	20.93	20.72	20.76	0-3	3
	256QAM	1	0	18.91	18.90	18.85	0-5	5
		1	49	19.05	19.03	18.73	0-5	5
		1	99	18.92	18.76	18.84	0-5	5
		50	0	18.83	18.79	18.65	0-5	5
		50	25	18.96	18.79	18.72	0-5	5
		50	49	18.87	18.80	18.64	0-5	5
		100	0	18.93	18.72	18.71	0-5	5

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LTE FDD Band 2 Conducted Power _ Measured DSI = 0 (free)_ SUB2 Antenna

LTE FDD Band 2 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 ㎒	18900 Ch. 1880 ㎒	19100 Ch. 1900 ㎒		
20 ㎒	QPSK	1	0	19.09	19.24	19.27	0	0
		1	49	19.20	19.21	19.17	0	0
		1	99	19.20	19.10	19.10	0	0
		50	0	19.09	19.20	19.02	0-1	0
		50	25	19.24	19.21	19.10	0-1	0
		50	49	19.16	19.26	19.03	0-1	0
		100	0	19.25	19.13	19.03	0-1	0
	16QAM	1	0	19.54	19.50	19.35	0-1	0
		1	49	19.36	19.37	19.05	0-1	0
		1	99	19.41	19.21	19.25	0-1	0
		50	0	19.22	19.21	19.06	0-2	0
		50	25	19.37	19.19	19.17	0-2	0
		50	49	19.20	19.19	19.18	0-2	0
		100	0	19.17	19.18	19.09	0-2	0
	64QAM	1	0	19.53	19.33	19.25	0-2	0
		1	49	19.50	19.40	19.30	0-2	0
		1	99	19.36	19.18	19.17	0-2	0
		50	0	19.26	19.27	19.06	0-3	0
		50	25	19.31	19.19	19.07	0-3	0
		50	49	19.20	19.20	19.11	0-3	0
		100	0	19.24	19.21	19.18	0-3	0
	256QAM	1	0	19.18	19.12	19.07	0-5	0
		1	49	19.39	19.50	19.25	0-5	0
		1	99	19.39	19.06	19.18	0-5	0
		50	0	18.72	19.22	19.03	0-5	0
		50	25	19.27	19.38	19.15	0-5	0
		50	49	19.23	19.20	19.09	0-5	0
		100	0	19.22	19.03	19.16	0-5	0

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 2 Conducted Power _ Measured DSI = 1 (RCV)_ SUB2 Antenna

LTE FDD Band 2 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 ㎒	18900 Ch. 1880 ㎒	19100 Ch. 1900 ㎒		
20 ㎒	QPSK	1	0	17.55	17.57	17.37	0	0
		1	49	17.37	17.45	17.43	0	0
		1	99	17.41	17.54	17.58	0	0
		50	0	17.52	17.39	17.35	0-1	0
		50	25	17.45	17.57	17.60	0-1	0
		50	49	17.57	17.42	17.52	0-1	0
		100	0	17.47	17.43	17.56	0-1	0
	16QAM	1	0	17.96	17.67	17.59	0-1	0
		1	49	17.73	17.74	17.68	0-1	0
		1	99	17.64	17.60	17.73	0-1	0
		50	0	17.54	17.36	17.49	0-2	0
		50	25	17.56	17.55	17.58	0-2	0
		50	49	17.47	17.46	17.55	0-2	0
		100	0	17.51	17.49	17.54	0-2	0
	64QAM	1	0	17.64	17.66	17.40	0-2	0
		1	49	17.62	17.69	17.63	0-2	0
		1	99	17.72	17.71	17.62	0-2	0
		50	0	17.53	17.38	17.45	0-3	0
		50	25	17.51	17.50	17.56	0-3	0
		50	49	17.55	17.53	17.47	0-3	0
		100	0	17.58	17.49	17.62	0-3	0
	256QAM	1	0	17.54	17.43	17.41	0-5	0
		1	49	17.48	17.67	17.62	0-5	0
		1	99	17.50	17.48	17.71	0-5	0
		50	0	17.55	17.38	17.44	0-5	0
		50	25	17.47	17.45	17.52	0-5	0
		50	49	17.40	17.53	17.55	0-5	0
		100	0	17.54	17.45	17.50	0-5	0

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11.3.2 LTE FDD Band 4 Maximum Conducted Output Power

LTE FDD Band 4 Conducted Power _ Measured *Pmax*, DSI = 1 (RCV) _ MAIN1 Antenna

LTE FDD Band 4 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20175 ch. 1732.5 ㎒			
20 ㎒	QPSK	1	0		23.62		0	0
		1	49		24.02		0	0
		1	99		23.72		0	0
		50	0		22.23		0-1	1
		50	25		22.75		0-1	1
		50	49		22.69		0-1	1
		100	0		22.72		0-1	1
	16QAM	1	0		22.95		0-1	1
		1	49		23.43		0-1	1
		1	99		22.81		0-1	1
		50	0		21.79		0-2	2
		50	25		21.76		0-2	2
		50	49		21.67		0-2	2
		100	0		21.78		0-2	2
	64QAM	1	0		21.85		0-2	2
		1	49		22.00		0-2	2
		1	99		21.86		0-2	2
		50	0		20.44		0-3	3
		50	25		20.70		0-3	3
		50	49		20.75		0-3	3
		100	0		20.69		0-3	3
	256QAM	1	0		18.80		0-5	5
		1	49		18.93		0-5	5
		1	99		18.75		0-5	5
		50	0		18.72		0-5	5
		50	25		18.72		0-5	5
		50	49		18.76		0-5	5
		100	0		18.74		0-5	5

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LTE FDD Band 4 Conducted Power _ Measured DSI = 0 (free) _ MAIN1 Antenna

LTE FDD Band 4 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20175 ch. 1732.5 ㎒			
20 ㎒	QPSK	1	0		18.83		0	0
		1	49		18.98		0	0
		1	99		18.76		0	0
		50	0		18.80		0-1	0
		50	25		18.83		0-1	0
		50	49		18.76		0-1	0
		100	0		18.75		0-1	0
	16QAM	1	0		18.95		0-1	0
		1	49		19.09		0-1	0
		1	99		19.06		0-1	0
		50	0		18.80		0-2	0
		50	25		18.83		0-2	0
		50	49		18.84		0-2	0
		100	0		18.77		0-2	0
	64QAM	1	0		18.99		0-2	0
		1	49		19.09		0-2	0
		1	99		18.96		0-2	0
		50	0		18.84		0-3	0
		50	25		18.80		0-3	0
		50	49		18.77		0-3	0
		100	0		18.88		0-3	0
	256QAM	1	0		18.39		0-5	0.3
		1	49		18.57		0-5	0.3
		1	99		18.62		0-5	0.3
		50	0		18.48		0-5	0.3
		50	25		18.43		0-5	0.3
		50	49		18.44		0-5	0.3
		100	0		18.42		0-5	0.3

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LTE FDD Band 4 Conducted Power _ Measured *Pmax* _ SUB2 Antenna

LTE FDD Band 4 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20175 ch. 1732.5 ㎒			
20 ㎒	QPSK	1	0		24.02		0	0
		1	49		24.18		0	0
		1	99		23.87		0	0
		50	0		22.85		0-1	1
		50	25		22.84		0-1	1
		50	49		22.75		0-1	1
		100	0		22.84		0-1	1
	16QAM	1	0		23.19		0-1	1
		1	49		23.03		0-1	1
		1	99		22.71		0-1	1
		50	0		21.88		0-2	2
		50	25		21.80		0-2	2
		50	49		21.87		0-2	2
		100	0		21.82		0-2	2
	64QAM	1	0		21.84		0-2	2
		1	49		22.21		0-2	2
		1	99		21.96		0-2	2
		50	0		20.87		0-3	3
		50	25		20.90		0-3	3
		50	49		20.85		0-3	3
		100	0		20.82		0-3	3
	256QAM	1	0		18.69		0-5	5
		1	49		18.92		0-5	5
		1	99		18.97		0-5	5
		50	0		18.79		0-5	5
		50	25		18.86		0-5	5
		50	49		18.87		0-5	5
		100	0		18.85		0-5	5

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LTE FDD Band 4 Conducted Power _ Measured DSI = 0 (free)_ SUB2 Antenna

LTE FDD Band 4 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20175 ch. 1732.5 ㎒			
20 ㎒	QPSK	1	0		19.85		0	0
		1	49		19.81		0	0
		1	99		19.90		0	0
		50	0		19.69		0-1	0
		50	25		19.77		0-1	0
		50	49		19.83		0-1	0
		100	0		19.80		0-1	0
	16QAM	1	0		19.94		0-1	0
		1	49		20.02		0-1	0
		1	99		19.94		0-1	0
		50	0		19.74		0-2	0
		50	25		19.83		0-2	0
		50	49		19.89		0-2	0
		100	0		19.74		0-2	0
	64QAM	1	0		20.06		0-2	0
		1	49		19.94		0-2	0
		1	99		19.98		0-2	0
		50	0		19.68		0-3	0
		50	25		19.73		0-3	0
		50	49		19.81		0-3	0
		100	0		19.69		0-3	0
	256QAM	1	0		19.09		0-5	0.5
		1	49		19.20		0-5	0.5
		1	99		19.09		0-5	0.5
		50	0		18.99		0-5	0.5
		50	25		19.06		0-5	0.5
		50	49		19.13		0-5	0.5
		100	0		18.97		0-5	0.5

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LTE FDD Band 4 Conducted Power _ Measured DSI = 1 (RCV)_ SUB2 Antenna

LTE FDD Band 4 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20175 ch. 1732.5 ㎒			
20 ㎒	QPSK	1	0		16.85		0	0
		1	49		16.80		0	0
		1	99		16.72		0	0
		50	0		16.88		0-1	0
		50	25		16.79		0-1	0
		50	49		16.79		0-1	0
		100	0		16.79		0-1	0
	16QAM	1	0		16.96		0-1	0
		1	49		16.95		0-1	0
		1	99		17.00		0-1	0
		50	0		16.95		0-2	0
		50	25		16.84		0-2	0
		50	49		16.79		0-2	0
		100	0		16.72		0-2	0
	64QAM	1	0		16.93		0-2	0
		1	49		16.93		0-2	0
		1	99		16.90		0-2	0
		50	0		16.82		0-3	0
		50	25		16.77		0-3	0
		50	49		16.82		0-3	0
		100	0		16.73		0-3	0
	256QAM	1	0		16.97		0-5	0
		1	49		16.91		0-5	0
		1	99		16.78		0-5	0
		50	0		16.83		0-5	0
		50	25		16.75		0-5	0
		50	49		16.71		0-5	0
		100	0		16.84		0-5	0

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11.3.3 LTE FDD Band 5 Maximum Conducted Output Power

LTE FDD Band 5 Conducted Power _ Measured *Pmax*, DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

LTE FDD Band 5 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20525 Ch.			
					836.5 ㎒			
10 ㎒	QPSK	1	0		24.63		0	0
		1	24		24.35		0	0
		1	49		24.34		0	0
		25	0		23.34		0-1	1
		25	12		23.31		0-1	1
		25	24		23.33		0-1	1
		50	0		23.27		0-1	1
	16QAM	1	0		23.39		0-1	1
		1	24		23.65		0-1	1
		1	49		23.24		0-1	1
		25	0		22.34		0-2	2
		25	12		22.34		0-2	2
		25	24		22.40		0-2	2
		50	0		22.36		0-2	2
	64QAM	1	0		22.43		0-2	2
		1	24		22.42		0-2	2
		1	49		22.43		0-2	2
		25	0		21.29		0-3	3
		25	12		21.29		0-3	3
		25	24		21.34		0-3	3
		50	0		21.24		0-3	3
	256QAM	1	0		19.23		0-5	5
		1	24		19.48		0-5	5
		1	49		19.39		0-5	5
		25	0		19.27		0-5	5
		25	12		19.33		0-5	5
		25	24		19.33		0-5	5
		50	0		19.19		0-5	5

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LTE FDD Band 5 Conducted Power _ Measured *Pmax,* DSI = 0 (free) _ SUB1 Antenna

LTE FDD Band 5 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20525 Ch.			
					836.5 ㎒			
10 ㎒	QPSK	1	0		24.24		0	0
		1	24		23.90		0	0
		1	49		23.84		0	0
		25	0		22.93		0-1	1
		25	12		22.91		0-1	1
		25	24		22.86		0-1	1
		50	0		22.88		0-1	1
	16QAM	1	0		23.58		0-1	1
		1	24		23.08		0-1	1
		1	49		23.01		0-1	1
		25	0		21.86		0-2	2
		25	12		21.98		0-2	2
		25	24		21.83		0-2	2
		50	0		21.93		0-2	2
	64QAM	1	0		22.67		0-2	2
		1	24		21.89		0-2	2
		1	49		22.10		0-2	2
		25	0		21.02		0-3	3
		25	12		20.93		0-3	3
		25	24		20.92		0-3	3
		50	0		20.93		0-3	3
	256QAM	1	0		18.98		0-5	5
		1	24		19.04		0-5	5
		1	49		18.88		0-5	5
		25	0		18.93		0-5	5
		25	12		18.92		0-5	5
		25	24		18.93		0-5	5
		50	0		18.90		0-5	5

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LTE FDD Band 5 Conducted Power _ Measured DSI = 1 (RCV) _ SUB1 Antenna

LTE FDD Band 5 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20450 Ch.	20525 Ch.			
					836.5 ㎒			
10 ㎒	QPSK	1	0		20.86		0	0
		1	24		20.76		0	0
		1	49		20.60		0	0
		25	0		20.67		0-1	0
		25	12		20.73		0-1	0
		25	24		20.75		0-1	0
		50	0		20.73		0-1	0
	16QAM	1	0		20.81		0-1	0
		1	24		20.90		0-1	0
		1	49		20.80		0-1	0
		25	0		20.74		0-2	0
		25	12		20.80		0-2	0
		25	24		20.68		0-2	0
		50	0		20.68		0-2	0
	64QAM	1	0		20.90		0-2	0
		1	24		20.70		0-2	0
		1	49		20.84		0-2	0
		25	0		20.74		0-3	0
		25	12		20.81		0-3	0
		25	24		20.72		0-3	0
		50	0		20.79		0-3	0
	256QAM	1	0		18.94		0-5	2
		1	24		19.12		0-5	2
		1	49		19.02		0-5	2
		25	0		18.96		0-5	2
		25	12		18.99		0-5	2
		25	24		18.96		0-5	2
		50	0		18.96		0-5	2

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11.3.4 LTE FDD Band 7 Maximum Conducted Output Power

LTE FDD Band 7 Conducted Power Measured *Pmax*, DSI = 1 (RCV) _ MAIN2 Antenna

LTE FDD Band 7 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20850 Ch. 2510 ㎒	21100 Ch. 2535 ㎒	21350 Ch. 2560 ㎒		
20 ㎒	QPSK	1	0	22.63	22.76	22.48	0	0
		1	49	22.53	22.39	22.30	0	0
		1	99	22.43	22.43	22.23	0	0
		50	0	21.60	21.49	21.43	0-1	1
		50	25	21.61	21.41	21.37	0-1	1
		50	49	21.62	21.42	21.23	0-1	1
		100	0	21.70	21.46	21.32	0-1	1
	16QAM	1	0	21.98	21.65	21.61	0-1	1
		1	49	21.82	21.79	21.44	0-1	1
		1	99	21.79	21.57	21.45	0-1	1
		50	0	20.62	20.42	20.33	0-2	2
		50	25	20.69	20.54	20.35	0-2	2
		50	49	20.71	20.48	20.19	0-2	2
		100	0	20.67	20.47	20.33	0-2	2
	64QAM	1	0	20.90	20.49	20.47	0-2	2
		1	49	20.91	20.81	20.40	0-2	2
		1	99	20.57	20.66	20.25	0-2	2
		50	0	19.53	19.50	19.44	0-3	3
		50	25	19.68	19.53	19.33	0-3	3
		50	49	19.59	19.40	19.24	0-3	3
		100	0	19.69	19.50	19.38	0-3	3
	256QAM	1	0	17.67	17.31	17.37	0-5	5
		1	49	17.72	17.55	17.38	0-5	5
		1	99	17.61	17.51	17.36	0-5	5
		50	0	17.61	17.53	17.45	0-5	5
		50	25	17.76	17.45	17.35	0-5	5
		50	49	17.61	17.43	17.35	0-5	5
		100	0	17.67	17.49	17.38	0-5	5

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LTE FDD Band 7 Conducted Power _ Measured DSI = 0 (free) _ MAIN2 Antenna

LTE FDD Band 7 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20850 Ch. 2510 ㎒	21100 Ch. 2535 ㎒	21350 Ch. 2560 ㎒		
20 ㎒	QPSK	1	0	19.87	20.08	19.95	0	0
		1	49	19.96	19.93	19.61	0	0
		1	99	19.86	19.81	19.70	0	0
		50	0	19.92	19.86	19.80	0-1	0
		50	25	20.02	19.84	19.79	0-1	0
		50	49	20.01	19.90	19.65	0-1	0
		100	0	20.07	19.83	19.76	0-1	0
	16QAM	1	0	20.31	19.97	20.05	0-1	0
		1	49	20.11	19.96	19.89	0-1	0
		1	99	20.20	19.98	19.81	0-1	0
		50	0	20.01	19.89	19.91	0-2	0
		50	25	20.02	19.87	19.76	0-2	0
		50	49	20.03	19.85	19.66	0-2	0
		100	0	20.11	19.81	19.76	0-2	0
	64QAM	1	0	20.00	20.11	19.82	0-2	0
		1	49	20.10	20.02	19.72	0-2	0
		1	99	20.19	19.87	19.68	0-2	0
		50	0	19.14	18.98	18.91	0-3	1
		50	25	19.13	18.93	18.86	0-3	1
		50	49	19.13	19.00	18.80	0-3	1
		100	0	19.20	18.84	18.90	0-3	1
	256QAM	1	0	17.11	16.89	17.15	0-5	3
		1	49	17.03	17.12	17.04	0-5	3
		1	99	17.12	16.99	16.68	0-5	3
		50	0	17.09	16.93	16.97	0-5	3
		50	25	17.15	16.96	16.87	0-5	3
		50	49	17.15	17.00	16.79	0-5	3
		100	0	17.17	16.96	16.91	0-5	3

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LTE FDD Band 7 Conducted Power Measured *Pmax* _ SUB2 Antenna

LTE FDD Band 7 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20850 Ch. 2510 ㎒	21100 Ch. 2535 ㎒	21350 Ch. 2560 ㎒		
20 ㎒	QPSK	1	0	23.05	23.04	22.85	0	0
		1	49	23.09	23.07	22.81	0	0
		1	99	23.06	23.10	22.66	0	0
		50	0	21.92	21.99	21.75	0-1	1
		50	25	21.95	21.99	21.65	0-1	1
		50	49	21.94	21.97	21.51	0-1	1
		100	0	21.92	21.98	21.67	0-1	1
	16QAM	1	0	22.29	22.08	21.90	0-1	1
		1	49	21.99	22.17	21.92	0-1	1
		1	99	21.96	21.97	22.24	0-1	1
		50	0	20.95	21.02	20.75	0-2	2
		50	25	21.05	21.02	20.66	0-2	2
		50	49	20.96	21.03	20.56	0-2	2
		100	0	20.97	20.95	20.70	0-2	2
	64QAM	1	0	21.25	20.99	20.72	0-2	2
		1	49	21.36	21.11	20.62	0-2	2
		1	99	21.28	20.77	20.56	0-2	2
		50	0	19.88	19.98	19.71	0-3	3
		50	25	20.03	19.99	19.73	0-3	3
		50	49	19.97	20.01	19.52	0-3	3
		100	0	20.06	20.00	19.65	0-3	3
	256QAM	1	0	17.84	18.06	17.70	0-5	5
		1	49	18.08	18.13	17.85	0-5	5
		1	99	17.98	17.84	17.48	0-5	5
		50	0	17.89	17.99	17.72	0-5	5
		50	25	17.99	17.96	17.69	0-5	5
		50	49	18.02	17.93	17.48	0-5	5
		100	0	17.92	17.98	17.68	0-5	5

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LTE FDD Band 7 Conducted Power Measured Measured DSI = 0 (free) _ SUB2 Antenna

LTE FDD Band 7 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20850 Ch. 2510 ㎒	21100 Ch. 2535 ㎒	21350 Ch. 2560 ㎒		
20 ㎒	QPSK	1	0	18.95	18.95	18.96	0	0
		1	49	18.91	19.19	18.60	0	0
		1	99	18.85	18.99	18.43	0	0
		50	0	18.87	19.06	18.79	0-1	0
		50	25	18.96	18.96	18.65	0-1	0
		50	49	18.92	18.95	18.48	0-1	0
		100	0	19.01	18.94	18.72	0-1	0
	16QAM	1	0	19.04	19.03	18.99	0-1	0
		1	49	19.26	19.22	18.88	0-1	0
		1	99	19.05	18.92	18.46	0-1	0
		50	0	18.90	18.97	18.75	0-2	0
		50	25	19.09	19.01	18.66	0-2	0
		50	49	19.01	18.99	18.53	0-2	0
		100	0	19.07	18.98	18.74	0-2	0
	64QAM	1	0	19.06	19.31	18.83	0-2	0
		1	49	19.04	19.11	18.80	0-2	0
		1	99	19.11	18.86	18.66	0-2	0
		50	0	18.95	19.01	18.67	0-3	0
		50	25	19.03	18.97	18.68	0-3	0
		50	49	18.97	19.00	18.52	0-3	0
		100	0	18.95	18.75	18.63	0-3	0
	256QAM	1	0	17.75	17.77	17.53	0-5	1.5
		1	49	17.82	17.86	17.47	0-5	1.5
		1	99	17.82	17.70	17.18	0-5	1.5
		50	0	17.66	17.75	17.50	0-5	1.5
		50	25	17.75	17.76	17.39	0-5	1.5
		50	49	17.75	17.67	17.17	0-5	1.5
		100	0	17.79	17.73	17.36	0-5	1.5

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LTE FDD Band 7 Conducted Power Measured DSI = 1 (RCV) _ SUB2 Antenna

LTE FDD Band 7 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20850 Ch. 2510 ㎒	21100 Ch. 2535 ㎒	21350 Ch. 2560 ㎒		
20 ㎒	QPSK	1	0	15.90	15.79	15.63	0	0
		1	49	15.68	15.66	15.42	0	0
		1	99	15.67	15.75	15.10	0	0
		50	0	15.87	15.80	15.59	0-1	0
		50	25	15.85	15.79	15.44	0-1	0
		50	49	15.84	15.74	15.36	0-1	0
		100	0	15.82	15.76	15.42	0-1	0
	16QAM	1	0	15.99	15.92	15.63	0-1	0
		1	49	15.92	15.97	15.62	0-1	0
		1	99	15.88	15.90	15.41	0-1	0
		50	0	15.92	15.77	15.57	0-2	0
		50	25	15.84	15.82	15.47	0-2	0
		50	49	15.83	15.74	15.33	0-2	0
		100	0	15.89	15.77	15.45	0-2	0
	64QAM	1	0	15.91	15.94	15.71	0-2	0
		1	49	15.87	15.99	15.59	0-2	0
		1	99	15.79	15.90	15.22	0-2	0
		50	0	15.91	15.90	15.59	0-3	0
		50	25	15.92	15.82	15.56	0-3	0
		50	49	15.92	15.81	15.38	0-3	0
		100	0	15.86	15.82	15.50	0-3	0
	256QAM	1	0	15.95	15.79	15.77	0-5	0
		1	49	15.94	15.95	15.46	0-5	0
		1	99	15.96	15.81	15.26	0-5	0
		50	0	15.99	15.86	15.55	0-5	0
		50	25	15.95	15.82	15.60	0-5	0
		50	49	15.89	15.81	15.41	0-5	0
		100	0	15.89	15.81	15.55	0-5	0

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11.3.5 LTE FDD Band 12 Maximum Conducted Output Power

LTE FDD Band 12 Conducted Power _ Measured *Pmax,* DSI = 0 (free), DSI = 1 (RCV)
_ MAIN1 Antenna

LTE FDD Band 12 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23095 Ch. 707.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	24.41	0	0
		1	24	24.41	0	0
		1	49	24.83	0	0
		25	0	23.38	0-1	1
		25	12	23.51	0-1	1
		25	24	23.41	0-1	1
		50	0	23.39	0-1	1
	16QAM	1	0	23.96	0-1	1
		1	24	23.89	0-1	1
		1	49	23.60	0-1	1
		25	0	22.44	0-2	2
		25	12	22.46	0-2	2
		25	24	22.41	0-2	2
		50	0	22.47	0-2	2
	64QAM	1	0	22.72	0-2	2
		1	24	22.67	0-2	2
		1	49	22.40	0-2	2
		25	0	21.41	0-3	3
		25	12	21.36	0-3	3
		25	24	21.46	0-3	3
		50	0	21.38	0-3	3
	256QAM	1	0	19.37	0-5	5
		1	24	19.59	0-5	5
		1	49	19.47	0-5	5
		25	0	19.49	0-5	5
		25	12	19.34	0-5	5
		25	24	19.37	0-5	5
		50	0	19.38	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 12 Conducted Power _ Measured *Pmax,* DSI = 0 (free) _ SUB1 Antenna

LTE FDD Band 12 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23095 Ch. 707.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	24.02	0	0
		1	24	23.91	0	0
		1	49	23.75	0	0
		25	0	22.87	0-1	1
		25	12	22.90	0-1	1
		25	24	22.94	0-1	1
		50	0	22.91	0-1	1
	16QAM	1	0	23.38	0-1	1
		1	24	23.12	0-1	1
		1	49	22.78	0-1	1
		25	0	21.96	0-2	2
		25	12	21.85	0-2	2
		25	24	21.95	0-2	2
		50	0	22.01	0-2	2
	64QAM	1	0	22.18	0-2	2
		1	24	22.04	0-2	2
		1	49	22.09	0-2	2
		25	0	20.84	0-3	3
		25	12	20.84	0-3	3
		25	24	21.02	0-3	3
		50	0	20.98	0-3	3
	256QAM	1	0	18.90	0-5	5
		1	24	19.07	0-5	5
		1	49	18.74	0-5	5
		25	0	18.89	0-5	5
		25	12	18.94	0-5	5
		25	24	18.93	0-5	5
		50	0	18.97	0-5	5

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LTE FDD Band 12 Conducted Power _ Measured DSI = 1 (RCV) _ SUB1 Antenna

LTE FDD Band 12 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23095 Ch. 707.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	19.90	0	0
		1	24	19.86	0	0
		1	49	19.89	0	0
		25	0	19.89	0-1	0
		25	12	19.87	0-1	0
		25	24	19.94	0-1	0
		50	0	19.90	0-1	0
	16QAM	1	0	20.07	0-1	0
		1	24	20.08	0-1	0
		1	49	20.03	0-1	0
		25	0	19.86	0-2	0
		25	12	19.92	0-2	0
		25	24	19.92	0-2	0
		50	0	19.93	0-2	0
	64QAM	1	0	20.25	0-2	0
		1	24	20.12	0-2	0
		1	49	19.95	0-2	0
		25	0	19.81	0-3	0
		25	12	19.89	0-3	0
		25	24	19.89	0-3	0
		50	0	19.88	0-3	0
	256QAM	1	0	18.92	0-5	1.3
		1	24	18.98	0-5	1.3
		1	49	18.87	0-5	1.3
		25	0	18.88	0-5	1.3
		25	12	18.79	0-5	1.3
		25	24	18.94	0-5	1.3
		50	0	18.97	0-5	1.3

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11.3.6 LTE FDD Band 13 Maximum Conducted Output Power

LTE FDD Band 13 Conducted Power _ Measured *Pmax,* DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

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	22.73	0	0
		1	24	24.11	0	0
		1	49	24.38	0	0
		25	0	22.89	0-1	1
		25	12	23.32	0-1	1
		25	24	23.19	0-1	1
		50	0	23.06	0-1	1
	16QAM	1	0	21.93	0-1	1
		1	24	23.39	0-1	1
		1	49	23.19	0-1	1
		25	0	21.88	0-2	2
		25	12	22.29	0-2	2
		25	24	22.41	0-2	2
		50	0	22.11	0-2	2
	64QAM	1	0	21.01	0-2	2
		1	24	22.36	0-2	2
		1	49	22.37	0-2	2
		25	0	20.94	0-3	3
		25	12	21.32	0-3	3
		25	24	21.22	0-3	3
		50	0	21.21	0-3	3
	256QAM	1	0	18.51	0-5	5
		1	24	19.46	0-5	5
		1	49	19.33	0-5	5
		25	0	19.20	0-5	5
		25	12	19.39	0-5	5
		25	24	19.29	0-5	5
		50	0	19.20	0-5	5

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LTE FDD Band 13 Conducted Power _ Measured *Pmax* _ SUB1 Antenna

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	23.77	0	0
		1	24	23.44	0	0
		1	49	23.53	0	0
		25	0	22.76	0-1	1
		25	12	22.56	0-1	1
		25	24	22.56	0-1	1
		50	0	22.47	0-1	1
	16QAM	1	0	22.58	0-1	1
		1	24	22.84	0-1	1
		1	49	22.70	0-1	1
		25	0	21.57	0-2	2
		25	12	21.88	0-2	2
		25	24	21.60	0-2	2
		50	0	21.51	0-2	2
	64QAM	1	0	21.17	0-2	2
		1	24	22.01	0-2	2
		1	49	21.71	0-2	2
		25	0	20.63	0-3	3
		25	12	20.99	0-3	3
		25	24	20.62	0-3	3
		50	0	20.55	0-3	3
	256QAM	1	0	18.60	0-5	5
		1	24	19.09	0-5	5
		1	49	18.45	0-5	5
		25	0	18.73	0-5	5
		25	12	19.07	0-5	5
		25	24	18.63	0-5	5
		50	0	18.73	0-5	5

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LTE FDD Band 13 Conducted Power _ Measured DSI = 0 (free) _ SUB1 Antenna

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	23.84	0	0
		1	24	23.54	0	0
		1	49	23.78	0	0
		25	0	22.86	0-1	1
		25	12	22.84	0-1	1
		25	24	22.82	0-1	1
		50	0	22.80	0-1	1
	16QAM	1	0	22.01	0-1	1
		1	24	22.90	0-1	1
		1	49	22.80	0-1	1
		25	0	21.95	0-2	2
		25	12	21.88	0-2	2
		25	24	21.83	0-2	2
		50	0	21.94	0-2	2
	64QAM	1	0	21.24	0-2	2
		1	24	21.89	0-2	2
		1	49	21.79	0-2	2
		25	0	20.84	0-3	3
		25	12	20.97	0-3	3
		25	24	20.80	0-3	3
		50	0	20.80	0-3	3
	256QAM	1	0	18.77	0-5	5
		1	24	18.86	0-5	5
		1	49	18.75	0-5	5
		25	0	18.79	0-5	5
		25	12	18.86	0-5	5
		25	24	18.80	0-5	5
		50	0	18.76	0-5	5

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LTE FDD Band 13 Conducted Power _ Measured DSI = 1 (RCV) _ SUB1 Antenna

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	20.92	0	0
		1	24	20.90	0	0
		1	49	20.68	0	0
		25	0	20.91	0-1	0
		25	12	20.88	0-1	0
		25	24	20.76	0-1	0
		50	0	20.88	0-1	0
	16QAM	1	0	20.99	0-1	0
		1	24	21.19	0-1	0
		1	49	20.97	0-1	0
		25	0	20.92	0-2	0
		25	12	20.95	0-2	0
		25	24	20.78	0-2	0
		50	0	20.86	0-2	0
	64QAM	1	0	20.50	0-2	0
		1	24	20.99	0-2	0
		1	49	20.89	0-2	0
		25	0	20.64	0-3	0
		25	12	20.93	0-3	0
		25	24	20.72	0-3	0
		50	0	20.63	0-3	0
	256QAM	1	0	18.65	0-5	2
		1	24	19.17	0-5	2
		1	49	18.62	0-5	2
		25	0	18.89	0-5	2
		25	12	19.20	0-5	2
		25	24	18.67	0-5	2
		50	0	18.77	0-5	2

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11.3.7 LTE FDD Band 14 Maximum Conducted Output Power

LTE FDD Band 14 Conducted Power _ Measured *Pmax,* DSI = 1 (RCV) _ MAIN1 Antenna

LTE FDD Band 14 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23330 Ch. 793 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	24.81	0	0
		1	24	24.77	0	0
		1	49	24.85	0	0
		25	0	23.61	0-1	1
		25	12	23.67	0-1	1
		25	24	23.61	0-1	1
		50	0	23.65	0-1	1
	16QAM	1	0	23.98	0-1	1
		1	24	23.92	0-1	1
		1	49	23.82	0-1	1
		25	0	22.70	0-2	2
		25	12	22.69	0-2	2
		25	24	22.63	0-2	2
		50	0	22.65	0-2	2
	64QAM	1	0	22.72	0-2	2
		1	24	22.89	0-2	2
		1	49	22.57	0-2	2
		25	0	21.63	0-3	3
		25	12	21.66	0-3	3
		25	24	21.64	0-3	3
		50	0	21.58	0-3	3
	256QAM	1	0	19.54	0-5	5
		1	24	19.77	0-5	5
		1	49	19.64	0-5	5
		25	0	19.59	0-5	5
		25	12	19.62	0-5	5
		25	24	19.65	0-5	5
		50	0	19.56	0-5	5

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LTE FDD Band 14 Conducted Power _ Measured DSI = 0 (free)_ MAIN1 Antenna

LTE FDD Band 14 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23330 Ch. 793 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	23.03	0	0
		1	24	23.13	0	0
		1	49	23.00	0	0
		25	0	23.03	0-1	1
		25	12	23.15	0-1	1
		25	24	23.06	0-1	1
		50	0	23.10	0-1	1
	16QAM	1	0	23.17	0-1	1
		1	24	23.44	0-1	1
		1	49	23.24	0-1	1
		25	0	22.36	0-2	2
		25	12	22.59	0-2	2
		25	24	22.46	0-2	2
		50	0	22.53	0-2	2
	64QAM	1	0	22.58	0-2	2
		1	24	22.68	0-2	2
		1	49	22.62	0-2	2
		25	0	21.49	0-3	3
		25	12	21.57	0-3	3
		25	24	21.50	0-3	3
		50	0	21.51	0-3	3
	256QAM	1	0	19.55	0-5	5
		1	24	19.48	0-5	5
		1	49	19.44	0-5	5
		25	0	19.38	0-5	5
		25	12	19.46	0-5	5
		25	24	19.55	0-5	5
		50	0	19.48	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 14 Conducted Power _ Measured *Pmax*, _ SUB1 Antenna

LTE FDD Band 14 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23330 Ch. 793 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	24.37	0	0
		1	24	24.27	0	0
		1	49	24.26	0	0
		25	0	23.31	0-1	1
		25	12	23.38	0-1	1
		25	24	23.34	0-1	1
		50	0	23.32	0-1	1
	16QAM	1	0	23.66	0-1	1
		1	24	23.49	0-1	1
		1	49	23.52	0-1	1
		25	0	22.36	0-2	2
		25	12	22.49	0-2	2
		25	24	22.37	0-2	2
		50	0	22.42	0-2	2
	64QAM	1	0	22.18	0-2	2
		1	24	22.59	0-2	2
		1	49	22.36	0-2	2
		25	0	21.25	0-3	3
		25	12	21.47	0-3	3
		25	24	21.40	0-3	3
		50	0	21.38	0-3	3
	256QAM	1	0	19.18	0-5	5
		1	24	19.45	0-5	5
		1	49	19.42	0-5	5
		25	0	19.28	0-5	5
		25	12	19.31	0-5	5
		25	24	19.33	0-5	5
		50	0	19.36	0-5	5

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LTE FDD Band 14 Conducted Power _ Measured DSI = 0 (free) _ SUB1 Antenna

LTE FDD Band 14 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23330 Ch. 793 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	22.69	0	0
		1	24	22.59	0	0
		1	49	22.60	0	0
		25	0	22.62	0-1	1
		25	12	22.70	0-1	1
		25	24	22.68	0-1	1
		50	0	22.63	0-1	1
	16QAM	1	0	22.83	0-1	1
		1	24	22.99	0-1	1
		1	49	22.89	0-1	1
		25	0	22.17	0-2	2
		25	12	22.18	0-2	2
		25	24	22.30	0-2	2
		50	0	22.15	0-2	2
	64QAM	1	0	22.24	0-2	2
		1	24	22.30	0-2	2
		1	49	22.24	0-2	2
		25	0	21.16	0-3	3
		25	12	21.28	0-3	3
		25	24	21.26	0-3	3
		50	0	21.18	0-3	3
	256QAM	1	0	19.13	0-5	5
		1	24	19.31	0-5	5
		1	49	19.06	0-5	5
		25	0	19.17	0-5	5
		25	12	19.12	0-5	5
		25	24	19.14	0-5	5
		50	0	19.15	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 14 Conducted Power _ Measured DSI = 1 (RCV) _ SUB1 Antenna

LTE FDD Band 14 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23330 Ch. 793 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	21.06	0	0
		1	24	20.82	0	0
		1	49	20.68	0	0
		25	0	20.68	0-1	0
		25	12	20.89	0-1	0
		25	24	20.73	0-1	0
		50	0	20.75	0-1	0
	16QAM	1	0	20.97	0-1	0
		1	24	20.84	0-1	0
		1	49	20.97	0-1	0
		25	0	20.76	0-2	0
		25	12	20.88	0-2	0
		25	24	20.88	0-2	0
		50	0	20.84	0-2	0
	64QAM	1	0	20.96	0-2	0
		1	24	21.06	0-2	0
		1	49	20.97	0-2	0
		25	0	20.86	0-3	0
		25	12	20.83	0-3	0
		25	24	20.66	0-3	0
		50	0	20.82	0-3	0
	256QAM	1	0	19.46	0-5	2
		1	24	19.42	0-5	2
		1	49	19.31	0-5	2
		25	0	19.29	0-5	2
		25	12	19.42	0-5	2
		25	24	19.32	0-5	2
		50	0	19.36	0-5	2

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11.3.8 LTE FDD Band 25 Maximum Conducted Output Power

LTE FDD Band 25 Conducted Power_ Measured *Pmax*, DSI = 1 (RCV) _ MAIN1 Antenna

LTE FDD Band 25 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 ㎒	26365 Ch. 1882.5 ㎒	26590 Ch. 1905 ㎒		
20 ㎒	QPSK	1	0	23.15	22.71	22.88	0	0
		1	49	22.64	23.14	22.93	0	0
		1	99	22.79	23.04	22.92	0	0
		50	0	22.16	22.38	22.39	0-1	1
		50	25	22.35	22.22	22.24	0-1	1
		50	49	22.11	22.02	21.98	0-1	1
		100	0	22.00	22.06	22.18	0-1	1
	16QAM	1	0	22.03	22.21	21.77	0-1	1
		1	49	22.02	22.65	21.79	0-1	1
		1	99	21.92	22.28	21.55	0-1	1
		50	0	21.12	21.08	20.90	0-2	2
		50	25	21.09	21.01	21.03	0-2	2
		50	49	21.08	20.99	21.03	0-2	2
		100	0	21.04	21.11	21.24	0-2	2
	64QAM	1	0	21.07	21.13	21.11	0-2	2
		1	49	21.06	21.11	21.12	0-2	2
		1	99	20.98	21.08	20.87	0-2	2
		50	0	20.13	20.05	20.05	0-3	3
		50	25	20.06	20.03	20.08	0-3	3
		50	49	20.02	20.02	20.02	0-3	3
		100	0	19.96	19.84	19.92	0-3	3
	256QAM	1	0	17.83	18.00	18.01	0-5	5
		1	49	17.85	18.00	17.95	0-5	5
		1	99	18.24	18.41	17.53	0-5	5
		50	0	17.82	17.89	18.66	0-5	5
		50	25	17.97	18.10	18.53	0-5	5
		50	49	17.91	18.16	18.31	0-5	5
		100	0	17.82	17.99	18.18	0-5	5

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LTE FDD Band 25 Conducted Power_ Measured DSI = 0 (free) _ MAIN1 Antenna

LTE FDD Band 25 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 ㎒	26365 Ch. 1882.5 ㎒	26590 Ch. 1905 ㎒		
20 ㎒	QPSK	1	0	19.54	19.41	19.70	0	0
		1	49	19.47	19.55	19.80	0	0
		1	99	19.43	19.67	19.88	0	0
		50	0	19.55	19.43	19.61	0-1	0
		50	25	19.55	19.47	19.77	0-1	0
		50	49	19.43	19.60	19.82	0-1	0
		100	0	19.48	19.51	19.75	0-1	0
	16QAM	1	0	19.64	19.61	19.99	0-1	0
		1	49	19.62	19.72	19.85	0-1	0
		1	99	19.71	19.80	19.91	0-1	0
		50	0	19.57	19.48	19.58	0-2	0
		50	25	19.57	19.52	19.81	0-2	0
		50	49	19.51	19.61	19.81	0-2	0
		100	0	19.51	19.47	19.81	0-2	0
	64QAM	1	0	19.61	19.70	19.56	0-2	0
		1	49	19.61	19.74	19.98	0-2	0
		1	99	19.77	19.80	19.99	0-2	0
		50	0	19.49	19.38	19.67	0-3	0
		50	25	19.50	19.51	19.77	0-3	0
		50	49	19.50	19.59	19.75	0-3	0
		100	0	19.49	19.42	19.75	0-3	0
	256QAM	1	0	19.16	19.04	19.36	0-5	0.3
		1	49	19.23	19.09	19.44	0-5	0.3
		1	99	19.00	19.33	19.42	0-5	0.3
		50	0	19.14	18.92	19.30	0-5	0.3
		50	25	19.07	19.13	19.33	0-5	0.3
		50	49	19.04	19.17	19.39	0-5	0.3
		100	0	19.08	19.04	19.36	0-5	0.3

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LTE FDD Band 25 Conducted Power_ Measured *Pmax* _ SUB2 Antenna

LTE FDD Band 25 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 ㎒	26365 Ch. 1882.5 ㎒	26590 Ch. 1905 ㎒		
20 ㎒	QPSK	1	0	24.12	24.38	23.62	0	0
		1	49	24.19	24.14	23.63	0	0
		1	99	23.88	23.37	23.50	0	0
		50	0	22.91	22.82	22.66	0-1	1
		50	25	22.96	22.75	22.70	0-1	1
		50	49	22.95	22.74	22.62	0-1	1
		100	0	22.91	22.74	22.60	0-1	1
	16QAM	1	0	23.47	23.19	23.00	0-1	1
		1	49	23.00	22.93	22.64	0-1	1
		1	99	22.77	22.77	22.92	0-1	1
		50	0	21.96	21.75	21.68	0-2	2
		50	25	22.00	21.74	21.73	0-2	2
		50	49	21.87	21.74	21.67	0-2	2
		100	0	21.90	21.83	21.65	0-2	2
	64QAM	1	0	21.92	22.01	22.26	0-2	2
		1	49	21.97	21.89	21.65	0-2	2
		1	99	22.02	21.68	21.56	0-2	2
		50	0	20.91	20.77	20.68	0-3	3
		50	25	20.98	20.76	20.72	0-3	3
		50	49	20.93	20.75	20.67	0-3	3
		100	0	20.89	20.75	20.76	0-3	3
	256QAM	1	0	18.97	18.93	18.86	0-5	5
		1	49	19.02	19.18	18.84	0-5	5
		1	99	18.95	18.67	18.46	0-5	5
		50	0	18.92	18.72	18.70	0-5	5
		50	25	19.00	18.80	18.67	0-5	5
		50	49	18.92	18.71	18.62	0-5	5
		100	0	18.92	18.77	18.59	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 25 Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

LTE FDD Band 25 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 ㎒	26365 Ch. 1882.5 ㎒	26590 Ch. 1905 ㎒		
20 ㎒	QPSK	1	0	19.29	19.25	19.31	0	0
		1	49	19.11	19.33	19.28	0	0
		1	99	19.24	19.20	19.27	0	0
		50	0	19.26	19.37	19.12	0-1	0
		50	25	19.24	19.34	19.29	0-1	0
		50	49	19.22	19.25	19.25	0-1	0
		100	0	19.18	19.20	19.18	0-1	0
	16QAM	1	0	19.34	19.48	19.22	0-1	0
		1	49	19.51	19.47	19.25	0-1	0
		1	99	19.19	19.50	19.66	0-1	0
		50	0	19.18	19.24	19.13	0-2	0
		50	25	19.26	19.30	19.26	0-2	0
		50	49	19.20	19.32	19.33	0-2	0
		100	0	19.13	19.24	19.22	0-2	0
	64QAM	1	0	19.28	19.33	19.16	0-2	0
		1	49	19.51	19.39	19.30	0-2	0
		1	99	19.27	19.49	19.59	0-2	0
		50	0	19.12	19.18	19.15	0-3	0
		50	25	19.28	19.20	19.19	0-3	0
		50	49	19.13	19.32	19.29	0-3	0
		100	0	19.26	19.22	19.16	0-3	0
	256QAM	1	0	19.27	19.25	19.16	0-5	0
		1	49	19.42	19.35	19.26	0-5	0
		1	99	19.37	19.20	19.47	0-5	0
		50	0	19.16	19.20	19.10	0-5	0
		50	25	19.27	19.31	19.25	0-5	0
		50	49	19.30	19.21	19.22	0-5	0
		100	0	19.20	19.28	19.18	0-5	0

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LTE FDD Band 25 Conducted Power _ Measured DSI = 1 (RCV) _ SUB2 Antenna

LTE FDD Band 25 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 ㎒	26365 Ch. 1882.5 ㎒	26590 Ch. 1905 ㎒		
20 ㎒	QPSK	1	0	17.55	17.42	17.54	0	0
		1	49	17.36	17.38	17.38	0	0
		1	99	17.39	17.26	17.40	0	0
		50	0	17.55	17.42	17.41	0-1	0
		50	25	17.56	17.53	17.54	0-1	0
		50	49	17.41	17.50	17.51	0-1	0
		100	0	17.47	17.42	17.46	0-1	0
	16QAM	1	0	17.57	17.84	18.01	0-1	0
		1	49	17.70	17.81	17.53	0-1	0
		1	99	17.56	17.43	17.76	0-1	0
		50	0	17.56	17.34	17.51	0-2	0
		50	25	17.55	17.51	17.49	0-2	0
		50	49	17.58	17.55	17.51	0-2	0
		100	0	17.42	17.43	17.54	0-2	0
	64QAM	1	0	17.50	17.73	17.80	0-2	0
		1	49	17.43	17.62	17.65	0-2	0
		1	99	17.63	17.55	17.54	0-2	0
		50	0	17.45	17.49	17.47	0-3	0
		50	25	17.58	17.55	17.57	0-3	0
		50	49	17.46	17.45	17.62	0-3	0
		100	0	17.49	17.39	17.58	0-3	0
	256QAM	1	0	17.64	17.43	17.61	0-5	0
		1	49	17.62	17.63	17.60	0-5	0
		1	99	17.52	17.49	17.57	0-5	0
		50	0	17.47	17.42	17.43	0-5	0
		50	25	17.58	17.35	17.63	0-5	0
		50	49	17.46	17.47	17.60	0-5	0
		100	0	17.50	17.42	17.52	0-5	0

The report shall not be (partly) reproduced except in full without approval of the laboratory.

11.3.9 LTE FDD Band 26 Maximum Conducted Output Power

LTE FDD Band 26 Conducted Power _ Measured *Pmax*, DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

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	24.45	0	0
		1	36	24.50	0	0
		1	74	24.24	0	0
		36	0	23.28	0-1	1
		36	18	23.21	0-1	1
		36	39	23.30	0-1	1
		75	0	23.22	0-1	1
	16QAM	1	0	23.79	0-1	1
		1	36	23.46	0-1	1
		1	74	23.36	0-1	1
		36	0	22.28	0-2	2
		36	18	22.22	0-2	2
		36	39	22.22	0-2	2
		75	0	22.25	0-2	2
	64QAM	1	0	22.58	0-2	2
		1	36	22.59	0-2	2
		1	74	22.37	0-2	2
		36	0	21.27	0-3	3
		36	18	21.29	0-3	3
		36	39	21.21	0-3	3
		75	0	21.22	0-3	3
	256QAM	1	0	19.46	0-5	5
		1	36	19.54	0-5	5
		1	74	19.26	0-5	5
		36	0	19.24	0-5	5
		36	18	19.23	0-5	5
		36	39	19.15	0-5	5
		75	0	19.26	0-5	5

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LTE FDD Band 26 Conducted Power _ Measured *Pmax*, DSI = 0 (free) _ SUB1 Antenna

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	23.98	0	0
		1	36	24.51	0	0
		1	74	24.02	0	0
		36	0	22.86	0-1	1
		36	18	22.84	0-1	1
		36	39	22.77	0-1	1
		75	0	22.84	0-1	1
	16QAM	1	0	23.64	0-1	1
		1	36	22.91	0-1	1
		1	74	22.89	0-1	1
		36	0	21.89	0-2	2
		36	18	21.88	0-2	2
		36	39	21.79	0-2	2
		75	0	21.89	0-2	2
	64QAM	1	0	21.98	0-2	2
		1	36	22.68	0-2	2
		1	74	21.87	0-2	2
		36	0	20.96	0-3	3
		36	18	20.85	0-3	3
		36	39	20.71	0-3	3
		75	0	20.85	0-3	3
	256QAM	1	0	18.94	0-5	5
		1	36	18.97	0-5	5
		1	74	18.93	0-5	5
		36	0	18.85	0-5	5
		36	18	18.81	0-5	5
		36	39	18.73	0-5	5
		75	0	18.77	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 26 Conducted Power _ Measured DSI = 1 (RCV) _ SUB1 Antenna

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	20.93	0	0
		1	36	20.76	0	0
		1	74	20.52	0	0
		36	0	20.84	0-1	0
		36	18	20.66	0-1	0
		36	39	20.49	0-1	0
		75	0	20.53	0-1	0
	16QAM	1	0	20.73	0-1	0
		1	36	20.81	0-1	0
		1	74	20.66	0-1	0
		36	0	20.67	0-2	0
		36	18	20.74	0-2	0
		36	39	20.22	0-2	0
		75	0	20.49	0-2	0
	64QAM	1	0	20.47	0-2	0
		1	36	20.58	0-2	0
		1	74	20.67	0-2	0
		36	0	20.66	0-3	0
		36	18	20.49	0-3	0
		36	39	20.58	0-3	0
		75	0	20.55	0-3	0
	256QAM	1	0	18.99	0-5	2
		1	36	19.11	0-5	2
		1	74	18.92	0-5	2
		36	0	18.96	0-5	2
		36	18	18.97	0-5	2
		36	39	18.94	0-5	2
		75	0	18.89	0-5	2

The report shall not be (partly) reproduced except in full without approval of the laboratory.

11.3.10 LTE FDD Band 30 Maximum Conducted Output Power

LTE FDD Band 30 Conducted Power_ Measured *Pmax*, DSI = 1 (RCV) _ MAIN1 Antenna

LTE TDD Band 30 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					27710 Ch. 2310 ㎒			
10 ㎒	QPSK	1	0		22.78		0	0
		1	24		22.60		0	0
		1	49		21.96		0	0
		25	0		21.82		0-1	1
		25	12		21.64		0-1	1
		25	24		21.63		0-1	1
		50	0		21.84		0-1	1
	16QAM	1	0		21.72		0-1	1
		1	24		20.87		0-1	1
		1	49		20.67		0-1	1
		25	0		20.87		0-2	2
		25	12		20.66		0-2	2
		25	24		20.61		0-2	2
		50	0		20.85		0-2	2
	64QAM	1	0		20.51		0-2	2
		1	24		20.14		0-2	2
		1	49		19.60		0-2	2
		25	0		19.88		0-3	3
		25	12		19.67		0-3	3
		25	24		19.83		0-3	3
		50	0		19.80		0-3	3
	256QAM	1	0		17.42		0-5	5
		1	24		17.32		0-5	5
		1	49		16.75		0-5	5
		25	0		17.83		0-5	5
		25	12		17.81		0-5	5
		25	24		17.64		0-5	5
		50	0		17.81		0-5	5

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LTE FDD Band 30 Conducted Power_ Measured DSI = 0 (free) _ MAIN1 Antenna

LTE TDD Band 30 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 27710 Ch. 2310 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	20.07	0	0
		1	24	19.96	0	0
		1	49	19.75	0	0
		25	0	20.18	0-1	0
		25	12	20.00	0-1	0
		25	24	19.90	0-1	0
		50	0	20.07	0-1	0
	16QAM	1	0	19.87	0-1	0
		1	24	20.27	0-1	0
		1	49	19.81	0-1	0
		25	0	20.12	0-2	0
		25	12	20.02	0-2	0
		25	24	19.96	0-2	0
		50	0	19.93	0-2	0
	64QAM	1	0	20.15	0-2	0
		1	24	20.11	0-2	0
		1	49	19.30	0-2	0
		25	0	19.70	0-3	0.5
		25	12	19.66	0-3	0.5
		25	24	19.46	0-3	0.5
		50	0	19.51	0-3	0.5
	256QAM	1	0	16.96	0-5	3
		1	24	17.02	0-5	3
		1	49	16.55	0-5	3
		25	0	17.72	0-5	3
		25	12	17.61	0-5	3
		25	24	17.55	0-5	3
		50	0	17.70	0-5	3

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LTE FDD Band 30 Conducted Power_ Measured *Pmax* _ SUB2 Antenna

LTE FDD Band 30 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 27710 Ch. 2310 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	22.98	0	0
		1	24	23.40	0	0
		1	49	22.32	0	0
		25	0	22.07	0-1	1
		25	12	21.99	0-1	1
		25	24	21.95	0-1	1
		50	0	21.97	0-1	1
	16QAM	1	0	22.48	0-1	1
		1	24	22.16	0-1	1
		1	49	21.61	0-1	1
		25	0	21.05	0-2	2
		25	12	21.08	0-2	2
		25	24	21.03	0-2	2
		50	0	21.01	0-2	2
	64QAM	1	0	21.03	0-2	2
		1	24	21.42	0-2	2
		1	49	21.43	0-2	2
		25	0	20.08	0-3	3
		25	12	20.10	0-3	3
		25	24	20.06	0-3	3
		50	0	20.01	0-3	3
	256QAM	1	0	18.08	0-5	5
		1	24	18.42	0-5	5
		1	49	17.93	0-5	5
		25	0	18.12	0-5	5
		25	12	18.07	0-5	5
		25	24	18.02	0-5	5
		50	0	18.04	0-5	5

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LTE FDD Band 30 Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

LTE FDD Band 30 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 27710 Ch. 2310 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	19.16	0	0
		1	24	19.19	0	0
		1	49	18.89	0	0
		25	0	19.18	0-1	0
		25	12	19.03	0-1	0
		25	24	19.03	0-1	0
		50	0	19.09	0-1	0
	16QAM	1	0	19.26	0-1	0
		1	24	19.17	0-1	0
		1	49	19.16	0-1	0
		25	0	19.12	0-2	0
		25	12	19.13	0-2	0
		25	24	19.11	0-2	0
		50	0	19.12	0-2	0
	64QAM	1	0	19.28	0-2	0
		1	24	19.22	0-2	0
		1	49	19.13	0-2	0
		25	0	19.19	0-3	0
		25	12	19.08	0-3	0
		25	24	19.17	0-3	0
		50	0	19.10	0-3	0
	256QAM	1	0	18.01	0-5	1.5
		1	24	18.02	0-5	1.5
		1	49	17.87	0-5	1.5
		25	0	17.85	0-5	1.5
		25	12	17.87	0-5	1.5
		25	24	17.86	0-5	1.5
		50	0	17.91	0-5	1.5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 30 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

LTE FDD Band 30 _ 10 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 27710 Ch. 2310 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	16.47	0	0
		1	24	16.44	0	0
		1	49	16.29	0	0
		25	0	16.49	0-1	0
		25	12	16.41	0-1	0
		25	24	16.40	0-1	0
		50	0	16.47	0-1	0
	16QAM	1	0	16.89	0-1	0
		1	24	16.61	0-1	0
		1	49	16.61	0-1	0
		25	0	16.53	0-2	0
		25	12	16.45	0-2	0
		25	24	16.47	0-2	0
		50	0	16.52	0-2	0
	64QAM	1	0	16.62	0-2	0
		1	24	16.70	0-2	0
		1	49	16.54	0-2	0
		25	0	16.57	0-3	0
		25	12	16.42	0-3	0
		25	24	16.62	0-3	0
		50	0	16.60	0-3	0
	256QAM	1	0	16.62	0-5	0
		1	24	16.71	0-5	0
		1	49	16.56	0-5	0
		25	0	16.58	0-5	0
		25	12	16.49	0-5	0
		25	24	16.56	0-5	0
		50	0	16.56	0-5	0

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11.3.11 LTE TDD Band 38 Maximum Conducted Output Power

LTE TDD Band 38 Conducted Power_ Measured *Pmax* _ MAIN2 Antenna

LTE TDD Band 38 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 2580 ㎒	38000 Ch. 2595 ㎒	38150 2610 ㎒		
20 ㎒	QPSK	1	0	23.23	23.72	23.81	0	0
		1	49	23.59	23.88	23.71	0	0
		1	99	23.68	23.69	23.58	0	0
		50	0	22.32	22.80	22.80	0-1	1
		50	25	22.48	22.83	22.76	0-1	1
		50	49	22.51	22.76	22.61	0-1	1
		100	0	22.49	22.80	22.93	0-1	1
	16QAM	1	0	22.24	22.76	22.84	0-1	1
		1	49	22.47	22.97	22.71	0-1	1
		1	99	22.65	22.69	22.61	0-1	1
		50	0	21.36	21.82	21.82	0-2	2
		50	25	21.51	21.85	21.79	0-2	2
		50	49	21.53	21.80	21.58	0-2	2
		100	0	21.49	21.82	21.76	0-2	2
	64QAM	1	0	21.35	21.77	21.99	0-2	2
		1	49	21.60	21.91	21.86	0-2	2
		1	99	21.65	21.87	21.75	0-2	2
		50	0	20.34	20.79	20.80	0-3	3
		50	25	20.51	20.87	20.80	0-3	3
		50	49	20.55	20.78	20.58	0-3	3
		100	0	20.49	20.79	20.78	0-3	3
	256QAM	1	0	18.10	18.57	18.79	0-5	5
		1	49	18.51	18.93	18.69	0-5	5
		1	99	18.51	18.63	18.42	0-5	5
		50	0	18.38	18.81	18.81	0-5	5
		50	25	18.50	18.84	18.74	0-5	5
		50	49	18.52	18.77	18.62	0-5	5
		100	0	18.48	18.79	18.70	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE TDD Band 38 Conducted Power_ Measured DSI = 0 (free)_ MAIN2 Antenna

LTE TDD Band 38 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 2580 ㎒	38000 Ch. 2595 ㎒	38150 2610 ㎒		
20 ㎒	QPSK	1	0	21.92	22.35	22.40	0	0
		1	49	22.17	22.46	22.44	0	0
		1	99	22.25	22.40	22.38	0	0
		50	0	21.82	22.25	22.30	0-1	0
		50	25	21.97	22.31	22.26	0-1	0
		50	49	22.00	22.25	22.14	0-1	0
		100	0	21.94	22.30	22.29	0-1	0
	16QAM	1	0	21.80	22.20	22.33	0-1	0
		1	49	21.93	22.35	22.26	0-1	0
		1	99	22.02	22.14	22.14	0-1	0
		50	0	20.86	21.30	21.36	0-2	0.5
		50	25	20.96	21.35	21.31	0-2	0.5
		50	49	20.99	21.30	21.12	0-2	0.5
		100	0	20.96	21.30	21.28	0-2	0.5
	64QAM	1	0	20.85	21.23	21.43	0-2	0.5
		1	49	21.04	21.48	21.37	0-2	0.5
		1	99	21.19	21.44	21.27	0-2	0.5
		50	0	19.82	20.28	20.33	0-3	1
		50	25	20.00	20.33	20.27	0-3	1
		50	49	20.00	20.27	20.13	0-3	1
		100	0	19.96	20.29	20.27	0-3	1
	256QAM	1	0	17.61	18.11	18.36	0-5	3
		1	49	18.05	18.45	18.14	0-5	3
		1	99	17.90	18.03	17.92	0-5	3
		50	0	17.83	18.27	18.30	0-5	3
		50	25	18.02	18.32	18.27	0-5	3
		50	49	18.01	18.25	18.12	0-5	3
		100	0	17.95	18.29	18.26	0-5	3

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LTE TDD Band 38 Conducted Power_ Measured DSI = 1 (RCV) _ MAIN2 Antenna

LTE TDD Band 38 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 2580 ㎒	38000 Ch. 2595 ㎒	38150 2610 ㎒		
20 ㎒	QPSK	1	0	21.32	21.77	21.89	0	0
		1	49	21.62	21.97	21.81	0	0
		1	99	21.69	21.81	21.68	0	0
		50	0	21.39	21.84	21.89	0-1	0
		50	25	21.56	21.92	21.88	0-1	0
		50	49	21.62	21.82	21.71	0-1	0
		100	0	21.51	21.86	21.86	0-1	0
	16QAM	1	0	21.27	21.78	21.91	0-1	0
		1	49	21.58	21.93	21.85	0-1	0
		1	99	21.72	21.76	21.72	0-1	0
		50	0	20.82	21.27	21.32	0-2	0
		50	25	20.97	21.30	21.29	0-2	0
		50	49	20.99	21.23	21.11	0-2	0
		100	0	20.95	21.29	21.27	0-2	0
	64QAM	1	0	20.79	21.29	21.37	0-2	0
		1	49	21.22	21.46	21.19	0-2	0
		1	99	21.13	21.28	21.21	0-2	0
		50	0	19.81	20.29	20.31	0-3	0
		50	25	19.98	20.31	20.29	0-3	0
		50	49	20.02	20.25	20.10	0-3	0
		100	0	19.96	20.26	20.25	0-3	0
	256QAM	1	0	17.63	17.98	18.14	0-5	2
		1	49	17.95	18.35	18.18	0-5	2
		1	99	17.94	17.93	17.96	0-5	2
		50	0	17.84	18.23	18.28	0-5	2
		50	25	18.01	18.30	18.26	0-5	2
		50	49	17.98	18.22	18.10	0-5	2
		100	0	17.97	18.25	18.23	0-5	2

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LTE TDD Band 38 Conducted Power_ Measured *Pmax* _ SUB2 Antenna

LTE TDD Band 38 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 2580 ㎒	38000 Ch. 2595 ㎒	38150 2610 ㎒		
20 ㎒	QPSK	1	0	23.04	23.36	23.36	0	0
		1	49	23.33	23.38	23.15	0	0
		1	99	23.29	23.21	22.90	0	0
		50	0	22.33	22.53	22.41	0-1	1
		50	25	22.37	22.52	22.29	0-1	1
		50	49	22.36	22.45	22.12	0-1	1
		100	0	22.37	22.49	22.23	0-1	1
	16QAM	1	0	22.47	22.72	22.36	0-1	1
		1	49	22.49	22.72	22.25	0-1	1
		1	99	22.48	22.45	22.04	0-1	1
		50	0	21.35	21.53	21.41	0-2	2
		50	25	21.45	21.56	21.35	0-2	2
		50	49	21.40	21.48	21.17	0-2	2
		100	0	21.42	21.50	21.34	0-2	2
	64QAM	1	0	21.47	21.66	21.44	0-2	2
		1	49	21.33	21.68	21.26	0-2	2
		1	99	21.44	21.43	21.02	0-2	2
		50	0	20.35	20.54	20.43	0-3	3
		50	25	20.42	20.52	20.34	0-3	3
		50	49	20.42	20.47	20.13	0-3	3
		100	0	20.44	20.52	20.27	0-3	3
	256QAM	1	0	18.23	18.43	18.40	0-5	5
		1	49	18.34	18.46	18.32	0-5	5
		1	99	18.34	18.14	17.90	0-5	5
		50	0	18.35	18.51	18.44	0-5	5
		50	25	18.42	18.55	18.33	0-5	5
		50	49	18.38	18.46	18.20	0-5	5
		100	0	18.40	18.48	18.33	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE TDD Band 38 Conducted Power_ Measured DSI = 0 (free)_ SUB2 Antenna

LTE TDD Band 38 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 2580 ㎒	38000 Ch. 2595 ㎒	38150 2610 ㎒		
20 ㎒	QPSK	1	0	20.43	20.64	20.62	0	0
		1	49	20.63	20.73	20.49	0	0
		1	99	20.65	20.45	20.22	0	0
		50	0	20.56	20.75	20.67	0-1	0
		50	25	20.64	20.75	20.56	0-1	0
		50	49	20.62	20.69	20.42	0-1	0
		100	0	20.59	20.71	20.54	0-1	0
	16QAM	1	0	20.51	20.82	20.67	0-1	0
		1	49	20.75	20.87	20.52	0-1	0
		1	99	20.60	20.56	20.26	0-1	0
		50	0	20.59	20.74	20.65	0-2	0
		50	25	20.67	20.77	20.56	0-2	0
		50	49	20.62	20.69	20.41	0-2	0
		100	0	20.64	20.69	20.53	0-2	0
	64QAM	1	0	20.64	20.83	20.77	0-2	0
		1	49	20.67	20.89	20.66	0-2	0
		1	99	20.70	20.63	20.35	0-2	0
		50	0	20.04	20.27	20.19	0-3	0
		50	25	20.17	20.30	20.05	0-3	0
		50	49	20.13	20.22	19.92	0-3	0
		100	0	20.13	20.23	20.08	0-3	0
	256QAM	1	0	17.97	18.02	18.06	0-5	1
		1	49	18.07	18.24	18.04	0-5	1
		1	99	17.93	17.94	17.65	0-5	1
		50	0	18.09	18.26	18.20	0-5	1
		50	25	18.14	18.25	18.09	0-5	1
		50	49	18.11	18.17	17.94	0-5	1
		100	0	18.14	18.20	18.05	0-5	1

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE TDD Band 38 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

LTE TDD Band 38 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 2580 ㎒	38000 Ch. 2595 ㎒	38150 2610 ㎒		
20 ㎒	QPSK	1	0	16.91	17.10	17.04	0	0
		1	49	16.96	17.17	16.87	0	0
		1	99	16.98	16.90	16.60	0	0
		50	0	16.95	17.14	17.04	0-1	0
		50	25	17.03	17.11	16.93	0-1	0
		50	49	17.01	17.04	16.75	0-1	0
		100	0	17.00	17.10	16.92	0-1	0
	16QAM	1	0	16.90	17.11	17.10	0-1	0
		1	49	16.91	17.23	16.85	0-1	0
		1	99	16.92	16.91	16.56	0-1	0
		50	0	16.96	17.11	17.04	0-2	0
		50	25	17.04	17.18	16.97	0-2	0
		50	49	16.98	17.09	16.75	0-2	0
		100	0	17.04	17.11	16.92	0-2	0
	64QAM	1	0	17.08	17.10	17.08	0-2	0
		1	49	17.08	17.27	16.93	0-2	0
		1	99	17.15	16.93	16.68	0-2	0
		50	0	16.97	17.19	17.03	0-3	0
		50	25	17.03	17.17	16.94	0-3	0
		50	49	17.03	17.08	16.78	0-3	0
		100	0	17.02	17.11	16.90	0-3	0
	256QAM	1	0	16.92	17.11	17.04	0-5	0
		1	49	17.17	17.33	16.86	0-5	0
		1	99	16.85	16.67	16.53	0-5	0
		50	0	17.00	17.19	17.04	0-5	0
		50	25	17.07	17.17	16.92	0-5	0
		50	49	17.04	17.09	16.78	0-5	0
		100	0	17.05	17.16	16.88	0-5	0

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11.3.12 LTE TDD Band 41 Maximum Conducted Output Power

LTE TDD Band 41 Conducted Power (Power Class 3) _ Measured *Pmax* _ MAIN2 Antenna

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	23.65	23.41	23.45	23.76	23.83	0	0
		1	49	23.74	23.37	23.43	23.91	23.76	0	0
		1	99	23.60	23.20	23.34	23.65	23.56	0	0
		50	0	22.62	22.41	22.49	22.85	22.82	0-1	1
		50	25	22.67	22.39	22.53	22.88	22.87	0-1	1
		50	49	22.63	22.26	22.47	22.80	22.76	0-1	1
		100	0	22.64	22.38	22.49	22.83	22.82	0-1	1
	16QAM	1	0	22.75	22.42	22.38	22.97	22.97	0-1	1
		1	49	22.73	22.32	22.44	22.88	22.83	0-1	1
		1	99	22.50	22.16	22.36	22.61	22.73	0-1	1
		50	0	21.67	21.42	21.47	21.86	21.85	0-2	2
		50	25	21.68	21.43	21.54	21.88	21.84	0-2	2
		50	49	21.65	21.25	21.52	21.82	21.77	0-2	2
		100	0	21.65	21.36	21.51	21.86	21.86	0-2	2
	64QAM	1	0	21.74	21.45	21.58	21.90	21.93	0-2	2
		1	49	21.77	21.50	21.54	21.96	21.87	0-2	2
		1	99	21.79	21.34	21.48	21.85	21.64	0-2	2
		50	0	20.62	20.38	20.48	20.86	20.86	0-3	3
		50	25	20.69	20.39	20.54	20.89	20.88	0-3	3
		50	49	20.66	20.27	20.47	20.83	20.82	0-3	3
		100	0	20.66	20.36	20.51	20.88	20.85	0-3	3
	256QAM	1	0	18.62	18.37	18.40	18.91	18.80	0-5	5
		1	49	18.58	18.39	18.48	18.82	18.85	0-5	5
		1	99	18.40	18.14	18.31	18.67	18.56	0-5	5
		50	0	18.62	18.38	18.47	18.85	18.84	0-5	5
		50	25	18.73	18.39	18.51	18.87	18.83	0-5	5
		50	49	18.64	18.26	18.44	18.80	18.75	0-5	5
		100	0	18.64	18.37	18.48	18.85	18.87	0-5	5

Note; LTE Band 41 has 5 required test channels per FCC KDB 447498 D01v06.

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE TDD Band 41 Conducted Power (Power Class 3) _ Measured DSI = 0 (free) _ MAIN2 Antenna

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	22.32	22.08	22.16	22.40	22.47	0	0
		1	49	22.43	22.02	22.19	22.44	22.49	0	0
		1	99	22.30	21.91	22.09	22.37	22.27	0	0
		50	0	22.10	21.90	21.98	22.33	22.37	0-1	0
		50	25	22.18	21.90	22.03	22.38	22.36	0-1	0
		50	49	22.09	21.73	21.93	22.29	22.29	0-1	0
		100	0	22.11	21.83	22.03	22.36	22.38	0-1	0
	16QAM	1	0	22.21	21.92	22.00	22.31	22.37	0-1	0
		1	49	22.04	21.82	22.01	22.32	22.36	0-1	0
		1	99	22.09	21.70	21.99	22.15	22.11	0-1	0
		50	0	21.14	20.87	21.02	21.35	21.36	0-2	1
		50	25	21.18	20.87	21.08	21.39	21.37	0-2	1
		50	49	21.14	20.74	20.97	21.32	21.27	0-2	1
		100	0	21.16	20.87	21.07	21.39	21.35	0-2	1
	64QAM	1	0	21.27	20.98	21.05	21.42	21.46	0-2	1
		1	49	21.26	21.02	21.18	21.45	21.32	0-2	1
		1	99	21.23	20.86	20.95	21.21	21.12	0-2	1
		50	0	20.14	19.93	20.00	20.35	20.32	0-3	2
		50	25	20.17	19.88	20.02	20.39	20.38	0-3	2
		50	49	20.12	19.72	19.96	20.33	20.24	0-3	2
		100	0	20.15	19.86	20.03	20.42	20.34	0-3	2
	256QAM	1	0	18.13	17.70	17.88	18.39	18.24	0-5	4
		1	49	18.14	17.74	18.02	18.37	18.31	0-5	4
		1	99	18.01	17.58	17.84	18.15	18.08	0-5	4
		50	0	18.09	17.88	18.00	18.39	18.30	0-5	4
		50	25	18.19	17.87	18.05	18.39	18.34	0-5	4
		50	49	18.12	17.74	17.98	18.32	18.25	0-5	4
		100	0	18.14	17.83	18.05	18.38	18.32	0-5	4

Note; LTE Band 41 has 5 required test channels per FCC KDB 447498 D01v06.

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE TDD Band 41 Conducted Power (Power Class 3) _ Measured DSI = 1 (RCV) _ MAIN2 Antenna

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	21.73	21.43	21.52	21.85	21.87	0	0
		1	49	21.78	21.38	21.48	21.94	21.75	0	0
		1	99	21.67	21.27	21.39	21.77	21.64	0	0
		50	0	21.70	21.46	21.53	21.83	21.81	0-1	0
		50	25	21.73	21.45	21.55	21.93	21.85	0-1	0
		50	49	21.62	21.30	21.51	21.85	21.83	0-1	0
		100	0	21.67	21.39	21.52	21.87	21.84	0-1	0
	16QAM	1	0	21.71	21.33	21.51	21.86	21.90	0-1	0
		1	49	21.68	21.32	21.49	21.86	21.92	0-1	0
		1	99	21.63	21.13	21.36	21.72	21.75	0-1	0
		50	0	21.05	20.83	20.94	21.27	21.23	0-2	0
		50	25	21.13	20.83	20.97	21.33	21.32	0-2	0
		50	49	21.09	20.69	20.90	21.22	21.21	0-2	0
		100	0	21.06	20.78	20.96	21.27	21.27	0-2	0
	64QAM	1	0	21.23	20.93	21.10	21.28	21.45	0-2	0
		1	49	21.13	20.86	21.06	21.39	21.29	0-2	0
		1	99	21.05	20.68	20.90	21.23	21.20	0-2	0
		50	0	20.12	19.83	19.94	20.25	20.26	0-3	1
		50	25	20.17	19.82	19.99	20.33	20.31	0-3	1
		50	49	20.08	19.68	19.89	20.26	20.22	0-3	1
		100	0	20.12	19.80	19.97	20.31	20.27	0-3	1
	256QAM	1	0	17.95	17.67	17.75	18.22	18.07	0-5	3
		1	49	18.08	17.69	17.83	18.30	18.17	0-5	3
		1	99	17.94	17.59	17.77	18.17	17.96	0-5	3
		50	0	18.09	17.82	17.94	18.24	18.23	0-5	3
		50	25	18.12	17.81	17.98	18.31	18.31	0-5	3
		50	49	18.08	17.66	17.87	18.22	18.14	0-5	3
		100	0	18.13	17.78	17.96	18.32	18.29	0-5	3

Note; LTE Band 41 has 5 required test channels per FCC KDB 447498 D01v06.

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LTE TDD Band 41 Conducted Power (Power Class 3) _ Measured *Pmax* _ SUB2 Antenna

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	23.83	23.73	23.42	23.17	23.70	0	0
		1	49	23.95	23.64	23.33	23.32	23.71	0	0
		1	99	23.94	23.53	23.14	23.30	23.59	0	0
		50	0	22.95	22.81	22.49	22.36	22.79	0-1	0
		50	25	22.98	22.81	22.39	22.42	22.88	0-1	0
		50	49	22.94	22.69	22.33	22.32	22.84	0-1	0
		100	0	22.98	22.79	22.36	22.38	22.83	0-1	0
	16QAM	1	0	22.93	22.96	22.38	22.44	22.90	0-1	0
		1	49	22.90	22.88	22.61	22.33	22.90	0-1	0
		1	99	22.94	22.64	22.15	22.24	22.92	0-1	0
		50	0	21.95	21.86	21.50	21.39	21.80	0-2	0
		50	25	21.91	21.82	21.38	21.43	21.88	0-2	0
		50	49	21.90	21.70	21.31	21.40	21.84	0-2	0
		100	0	21.99	21.82	21.40	21.44	21.90	0-2	0
	64QAM	1	0	21.97	21.86	21.52	21.41	21.86	0-2	0
		1	49	21.96	21.86	21.43	21.42	21.85	0-2	0
		1	99	21.98	21.67	21.33	21.22	21.71	0-2	0
		50	0	20.92	20.87	20.51	20.40	20.80	0-3	1
		50	25	20.99	20.85	20.39	20.46	20.89	0-3	1
		50	49	20.97	20.73	20.33	20.39	20.87	0-3	1
		100	0	20.96	20.80	20.41	20.45	20.87	0-3	1
	256QAM	1	0	18.89	18.73	18.52	18.30	18.72	0-5	3
		1	49	18.97	18.67	18.48	18.32	18.73	0-5	3
		1	99	18.86	18.58	18.10	18.25	18.82	0-5	3
		50	0	18.93	18.84	18.54	18.41	18.82	0-5	3
		50	25	18.90	18.85	18.41	18.49	18.85	0-5	3
		50	49	18.91	18.68	18.33	18.42	18.84	0-5	3
		100	0	18.98	18.79	18.40	18.49	18.87	0-5	3

Note; LTE Band 41 has 5 required test channels per FCC KDB 447498 D01v06.

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LTE TDD Band 41 Conducted Power (Power Class 3) _ Measured DSI = 0 (free) _ SUB2 Antenna

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	20.21	20.04	19.68	19.50	19.94	0	0
		1	49	20.30	19.98	19.58	19.63	20.00	0	0
		1	99	20.23	19.83	19.36	19.47	19.85	0	0
		50	0	20.33	20.08	19.73	19.58	19.99	0-1	0
		50	25	20.24	20.03	19.59	19.65	20.07	0-1	0
		50	49	20.23	19.90	19.54	19.59	20.05	0-1	0
		100	0	20.24	20.00	19.58	19.62	20.10	0-1	0
	16QAM	1	0	20.42	20.08	19.81	19.54	20.03	0-1	0
		1	49	20.33	19.96	19.62	19.52	20.11	0-1	0
		1	99	20.26	19.97	19.47	19.43	19.86	0-1	0
		50	0	20.34	20.10	19.74	19.58	20.01	0-2	0
		50	25	20.27	20.03	19.60	19.65	20.11	0-2	0
		50	49	20.26	19.91	19.51	19.62	20.04	0-2	0
		100	0	20.27	20.01	19.59	19.66	20.07	0-2	0
	64QAM	1	0	20.41	20.10	19.70	19.65	20.11	0-2	0
		1	49	20.49	19.95	19.66	19.62	20.03	0-2	0
		1	99	20.34	19.91	19.58	19.51	19.92	0-2	0
		50	0	20.36	20.08	19.70	19.64	20.01	0-3	0
		50	25	20.28	20.07	19.60	19.67	20.05	0-3	0
		50	49	20.25	19.89	19.49	19.64	20.04	0-3	0
		100	0	20.25	20.00	19.57	19.67	20.06	0-3	0
	256QAM	1	0	18.66	18.42	18.22	17.99	18.44	0-5	1.5
		1	49	18.83	18.45	18.05	18.08	18.71	0-5	1.5
		1	99	18.58	18.18	17.80	17.95	18.37	0-5	1.5
		50	0	18.86	18.55	18.23	18.13	18.54	0-5	1.5
		50	25	18.78	18.53	18.12	18.21	18.59	0-5	1.5
		50	49	18.78	18.40	18.01	18.13	18.55	0-5	1.5
		100	0	18.77	18.51	18.08	18.21	18.56	0-5	1.5

Note; LTE Band 41 has 5 required test channels per FCC KDB 447498 D01v06.

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE TDD Band 41 Conducted Power (Power Class 3) _ Measured DSI = 1 (RCV) _ SUB2 Antenna

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	17.67	17.39	17.00	16.93	17.27	0	0
		1	49	17.81	17.35	16.94	17.00	17.27	0	0
		1	99	17.65	17.21	16.74	16.84	17.22	0	0
		50	0	17.72	17.42	17.07	16.91	17.29	0-1	0
		50	25	17.65	17.41	16.93	16.99	17.37	0-1	0
		50	49	17.63	17.25	16.88	16.94	17.33	0-1	0
		100	0	17.63	17.35	16.90	16.99	17.34	0-1	0
	16QAM	1	0	17.74	17.35	17.02	17.00	17.23	0-1	0
		1	49	17.69	17.32	16.99	16.98	17.33	0-1	0
		1	99	17.57	17.18	16.85	16.77	17.14	0-1	0
		50	0	17.76	17.45	17.09	16.98	17.29	0-2	0
		50	25	17.68	17.43	16.95	17.01	17.36	0-2	0
		50	49	17.70	17.31	16.88	16.96	17.37	0-2	0
		100	0	17.65	17.40	16.95	16.97	17.37	0-2	0
	64QAM	1	0	17.81	17.60	17.09	17.06	17.46	0-2	0
		1	49	17.81	17.57	16.99	17.11	17.41	0-2	0
		1	99	17.72	17.39	16.81	16.88	17.35	0-2	0
		50	0	17.78	17.45	17.10	16.97	17.33	0-3	0
		50	25	17.70	17.43	16.99	17.02	17.37	0-3	0
		50	49	17.68	17.33	16.88	16.99	17.37	0-3	0
		100	0	17.65	17.37	16.98	17.07	17.36	0-3	0
	256QAM	1	0	17.59	17.46	17.08	16.90	17.20	0-5	0
		1	49	17.72	17.38	16.97	16.97	17.25	0-5	0
		1	99	17.44	17.16	16.71	16.88	17.23	0-5	0
		50	0	17.82	17.44	17.08	16.96	17.32	0-5	0
		50	25	17.71	17.49	16.96	17.05	17.38	0-5	0
		50	49	17.70	17.31	16.87	16.97	17.36	0-5	0
		100	0	17.68	17.39	16.96	17.03	17.36	0-5	0

Note; LTE Band 41 has 5 required test channels per FCC KDB 447498 D01v06.

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11.3.13 LTE TDD Band 48 Maximum Conducted Output Power

LTE TDD Band 48 Conducted Power_ Measured *Pmax,* DSI = 0 (free) _ SUB2 Antenna

LTE TDD Band 48 _ 20 ㎒ Bandwidth Conducted

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55340Ch. 3560.0 ㎒	55773 Ch. 3603.3 ㎒	56207 Ch. 3646.7 ㎒	56640 Ch. 3690.0 ㎒		
20 ㎒	QPSK	1	0	20.88	20.58	20.97	20.67	0	0
		1	49	21.03	21.11	20.98	20.92	0	0
		1	99	21.09	21.10	20.91	20.42	0	0
		50	0	19.87	20.26	20.06	19.88	0-1	0
		50	25	20.03	20.16	20.10	19.91	0-1	0
		50	49	20.01	20.23	20.02	19.79	0-1	0
		100	0	20.24	20.04	20.05	19.89	0-1	0
	16QAM	1	0	19.82	19.98	19.96	19.80	0-1	0
		1	49	19.82	20.18	20.00	19.79	0-1	0
		1	99	19.94	20.08	19.92	19.88	0-1	0
		50	0	18.92	19.12	19.10	18.91	0-2	0
		50	25	19.00	19.25	19.10	18.93	0-2	0
		50	49	18.98	19.25	18.99	18.84	0-2	0
		100	0	19.01	19.23	19.11	18.87	0-2	0
	64QAM	1	0	19.03	19.17	19.23	18.88	0-2	0
		1	49	19.04	19.33	19.25	19.04	0-2	0
		1	99	19.01	19.24	19.04	18.85	0-2	0
		50	0	17.90	18.14	18.07	17.84	0-3	0
		50	25	18.01	18.27	18.10	17.91	0-3	0
		50	49	18.05	18.26	18.01	17.80	0-3	0
		100	0	18.04	18.27	18.13	17.94	0-3	0
	256QAM	1	0	15.80	16.07	16.04	15.82	0-5	0
		1	49	15.89	15.98	16.09	15.88	0-5	0
		1	99	15.78	16.09	15.95	15.54	0-5	0
		50	0	15.88	16.10	16.13	15.89	0-5	0
		50	25	16.02	16.27	16.10	15.88	0-5	0
		50	49	15.97	16.26	16.01	15.79	0-5	0
		100	0	15.99	16.21	16.09	15.87	0-5	0

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE TDD Band 48 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

LTE TDD Band 48 _ 20 ㎒ Bandwidth Conducted

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55340Ch. 3560.0 ㎒	55773 Ch. 3603.3 ㎒	56207 Ch. 3646.7 ㎒	56640 Ch. 3690.0 ㎒		
20 ㎒	QPSK	1	0	16.42	16.57	16.37	16.17	0	0
		1	49	16.60	16.64	16.40	16.37	0	0
		1	99	16.65	16.59	16.34	16.22	0	0
		50	0	16.63	16.71	16.50	16.35	0-1	0
		50	25	16.61	16.65	16.50	16.40	0-1	0
		50	49	16.69	16.70	16.46	16.34	0-1	0
		100	0	16.60	16.61	16.51	16.38	0-1	0
	16QAM	1	0	16.47	16.58	16.41	16.12	0-1	0
		1	49	16.65	16.58	16.39	16.33	0-1	0
		1	99	16.65	16.74	16.32	16.35	0-1	0
		50	0	16.59	16.65	16.50	16.36	0-2	0
		50	25	16.68	16.64	16.53	16.42	0-2	0
		50	49	16.64	16.62	16.47	16.33	0-2	0
		100	0	16.61	16.62	16.53	16.40	0-2	0
	64QAM	1	0	16.53	16.58	16.52	16.40	0-2	0
		1	49	16.70	16.76	16.55	16.45	0-2	0
		1	99	16.75	16.64	16.39	16.42	0-2	0
		50	0	16.63	16.70	16.49	16.38	0-3	0
		50	25	16.62	16.67	16.55	16.43	0-3	0
		50	49	16.69	16.63	16.43	16.32	0-3	0
		100	0	16.60	16.61	16.52	16.41	0-3	0
	256QAM	1	0	16.46	16.57	16.37	16.28	0-5	0
		1	49	16.58	16.63	16.47	16.41	0-5	0
		1	99	16.57	16.54	16.41	16.25	0-5	0
		50	0	16.66	16.71	16.53	16.41	0-5	0
		50	25	16.67	16.67	16.57	16.43	0-5	0
		50	49	16.67	16.70	16.48	16.37	0-5	0
		100	0	16.65	16.65	16.53	16.44	0-5	0

The report shall not be (partly) reproduced except in full without approval of the laboratory.

11.3.14 LTE FDD Band 66 Maximum Conducted Output Power

LTE FDD Band 66 Conducted Power_ Measured *Pmax*, DSI = 1 (RCV) _ MAIN1 Antenna

LTE FDD Band 66 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 ㎒	132322 Ch. 1745 ㎒	132572 Ch. 1770 ㎒		
20 ㎒	QPSK	1	0	24.41	24.23	24.40	0	0
		1	49	24.33	24.39	24.34	0	0
		1	99	24.14	23.90	24.17	0	0
		50	0	23.27	23.22	23.01	0-1	1
		50	25	23.21	23.17	23.00	0-1	1
		50	49	23.22	23.17	22.96	0-1	1
		100	0	23.21	23.19	23.05	0-1	1
	16QAM	1	0	23.51	23.33	23.31	0-1	1
		1	49	23.52	23.64	23.07	0-1	1
		1	99	23.40	23.41	23.10	0-1	1
		50	0	22.28	22.24	22.05	0-2	2
		50	25	22.33	22.17	22.04	0-2	2
		50	49	22.25	22.15	22.02	0-2	2
		100	0	22.27	21.89	22.04	0-2	2
	64QAM	1	0	22.25	22.31	22.25	0-2	2
		1	49	22.48	22.53	22.24	0-2	2
		1	99	22.44	22.28	22.14	0-2	2
		50	0	21.23	21.20	21.06	0-3	3
		50	25	21.27	21.24	21.05	0-3	3
		50	49	21.22	21.17	21.02	0-3	3
		100	0	21.34	21.18	21.05	0-3	3
	256QAM	1	0	19.24	19.42	19.17	0-5	5
		1	49	19.33	19.65	19.05	0-5	5
		1	99	19.16	19.01	19.05	0-5	5
		50	0	19.25	19.01	19.61	0-5	5
		50	25	19.31	18.73	18.99	0-5	5
		50	49	19.24	19.50	18.95	0-5	5
		100	0	19.20	19.11	18.99	0-5	5

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LTE FDD Band 66 Conducted Power_ Measured DSI = 0 (free) _ MAIN1 Antenna

LTE FDD Band 66 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 ㎒	132322 Ch. 1745 ㎒	132572 Ch. 1770 ㎒		
20 ㎒	QPSK	1	0	19.79	19.63	19.56	0	0
		1	49	19.71	19.77	19.46	0	0
		1	99	19.54	19.45	19.49	0	0
		50	0	19.88	19.50	19.40	0-1	0
		50	25	19.57	19.49	19.31	0-1	0
		50	49	19.49	19.40	19.37	0-1	0
		100	0	19.60	19.47	19.31	0-1	0
	16QAM	1	0	19.97	19.82	19.47	0-1	0
		1	49	19.79	19.65	19.59	0-1	0
		1	99	19.71	19.46	19.57	0-1	0
		50	0	19.62	19.54	19.44	0-2	0
		50	25	19.61	19.56	19.40	0-2	0
		50	49	19.54	19.52	19.40	0-2	0
		100	0	19.59	19.52	19.37	0-2	0
	64QAM	1	0	19.69	19.73	19.62	0-2	0
		1	49	19.81	19.78	19.67	0-2	0
		1	99	19.64	19.49	19.48	0-2	0
		50	0	19.60	19.51	19.34	0-3	0
		50	25	19.66	19.50	19.35	0-3	0
		50	49	19.57	19.51	19.28	0-3	0
		100	0	19.57	19.51	19.35	0-3	0
	256QAM	1	0	19.41	19.19	18.84	0-5	0.3
		1	49	19.11	19.14	19.08	0-5	0.3
		1	99	19.19	19.11	18.91	0-5	0.3
		50	0	19.19	19.12	19.00	0-5	0.3
		50	25	19.22	19.11	18.87	0-5	0.3
		50	49	19.18	19.06	18.94	0-5	0.3
		100	0	19.21	19.07	18.93	0-5	0.3

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LTE FDD Band 66 Conducted Power_ Measured *Pmax* _ SUB2 Antenna

LTE FDD Band 66 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 ㎒	132322 Ch. 1745 ㎒	132572 Ch. 1770 ㎒		
20 ㎒	QPSK	1	0	23.98	23.88	24.26	0	0
		1	49	23.90	24.08	23.87	0	0
		1	99	23.64	23.75	24.00	0	0
		50	0	22.60	22.77	22.83	0-1	1
		50	25	22.73	22.83	22.88	0-1	1
		50	49	22.68	22.87	22.95	0-1	1
		100	0	22.67	22.80	22.92	0-1	1
	16QAM	1	0	23.41	23.41	23.45	0-1	1
		1	49	22.73	22.85	23.04	0-1	1
		1	99	22.66	22.73	23.06	0-1	1
		50	0	21.63	21.80	21.82	0-2	2
		50	25	21.79	21.87	21.93	0-2	2
		50	49	21.72	21.89	21.88	0-2	2
		100	0	21.67	21.81	21.91	0-2	2
	64QAM	1	0	21.68	21.53	21.95	0-2	2
		1	49	22.08	22.09	22.41	0-2	2
		1	99	21.71	22.42	22.03	0-2	2
		50	0	20.71	20.82	20.84	0-3	3
		50	25	20.78	20.84	20.96	0-3	3
		50	49	20.72	20.85	20.93	0-3	3
		100	0	20.76	20.81	20.92	0-3	3
	256QAM	1	0	18.67	18.89	18.95	0-5	5
		1	49	18.75	18.93	19.06	0-5	5
		1	99	18.90	18.95	18.83	0-5	5
		50	0	18.70	18.77	18.92	0-5	5
		50	25	18.76	18.77	18.92	0-5	5
		50	49	18.78	18.88	18.89	0-5	5
		100	0	18.77	18.85	18.94	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 66 Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

LTE FDD Band 66 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 ㎒	132322 Ch. 1745 ㎒	132572 Ch. 1770 ㎒		
20 ㎒	QPSK	1	0	19.87	19.75	19.89	0	0
		1	49	19.79	19.70	19.65	0	0
		1	99	19.83	19.67	19.67	0	0
		50	0	19.89	19.74	19.95	0-1	0
		50	25	19.92	19.80	19.75	0-1	0
		50	49	19.79	19.67	19.50	0-1	0
		100	0	19.51	19.80	19.81	0-1	0
	16QAM	1	0	20.26	19.75	19.80	0-1	0
		1	49	20.17	19.99	19.82	0-1	0
		1	99	19.85	19.80	19.84	0-1	0
		50	0	19.88	19.77	19.63	0-2	0
		50	25	19.86	19.75	19.62	0-2	0
		50	49	19.88	19.67	19.45	0-2	0
		100	0	19.89	19.71	19.63	0-2	0
	64QAM	1	0	19.96	19.78	19.67	0-2	0
		1	49	19.98	19.83	20.14	0-2	0
		1	99	19.90	19.91	19.61	0-2	0
		50	0	19.95	19.76	19.63	0-3	0
		50	25	19.90	19.79	19.67	0-3	0
		50	49	19.82	19.64	19.49	0-3	0
		100	0	19.78	19.81	19.60	0-3	0
	256QAM	1	0	20.01	19.48	19.66	0-5	0
		1	49	20.08	19.92	19.84	0-5	0
		1	99	19.83	19.77	19.54	0-5	0
		50	0	19.98	19.74	19.60	0-5	0
		50	25	19.75	19.82	19.60	0-5	0
		50	49	19.83	19.71	19.42	0-5	0
		100	0	19.64	19.77	19.64	0-5	0

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LTE FDD Band 66 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

LTE FDD Band 66 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 ㎒	132322 Ch. 1745 ㎒	132572 Ch. 1770 ㎒		
20 ㎒	QPSK	1	0	17.00	16.82	16.95	0	0
		1	49	17.02	16.79	16.80	0	0
		1	99	16.68	16.72	16.94	0	0
		50	0	17.03	16.79	16.92	0-1	0
		50	25	16.95	16.72	16.97	0-1	0
		50	49	16.86	16.75	17.01	0-1	0
		100	0	17.00	16.76	16.97	0-1	0
	16QAM	1	0	17.27	16.92	17.15	0-1	0
		1	49	17.14	16.91	17.13	0-1	0
		1	99	17.04	16.84	17.10	0-1	0
		50	0	17.01	16.79	16.91	0-2	0
		50	25	17.06	16.86	16.94	0-2	0
		50	49	16.81	16.85	16.99	0-2	0
		100	0	16.96	16.86	17.03	0-2	0
	64QAM	1	0	17.21	16.83	16.89	0-2	0
		1	49	16.98	16.81	17.08	0-2	0
		1	99	16.86	16.77	17.05	0-2	0
		50	0	17.00	16.79	16.97	0-3	0
		50	25	16.96	16.81	17.10	0-3	0
		50	49	16.89	16.74	16.90	0-3	0
		100	0	16.97	16.75	16.99	0-3	0
	256QAM	1	0	17.21	16.94	16.76	0-5	0
		1	49	16.94	16.79	17.01	0-5	0
		1	99	16.85	16.88	17.06	0-5	0
		50	0	17.08	16.77	16.96	0-5	0
		50	25	17.03	16.76	17.01	0-5	0
		50	49	17.00	16.88	17.05	0-5	0
		100	0	17.05	16.77	17.02	0-5	0

The report shall not be (partly) reproduced except in full without approval of the laboratory.

11.3.15 LTE FDD Band 71 Maximum Conducted Output Power

LTE FDD Band 71 Conducted Power _ Measured *Pmax,* DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

LTE FDD Band 71 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 133297 Ch. 680.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
20 ㎒	QPSK	1	0	24.47	0	0
		1	49	24.32	0	0
		1	99	24.35	0	0
		50	0	23.38	0-1	1
		50	25	23.33	0-1	1
		50	49	23.23	0-1	1
		100	0	23.29	0-1	1
	16QAM	1	0	23.59	0-1	1
		1	49	23.68	0-1	1
		1	99	23.25	0-1	1
		50	0	22.42	0-2	2
		50	25	22.34	0-2	2
		50	49	22.24	0-2	2
		100	0	22.28	0-2	2
	64QAM	1	0	22.54	0-2	2
		1	49	22.47	0-2	2
		1	99	22.52	0-2	2
		50	0	21.43	0-3	3
		50	25	21.27	0-3	3
		50	49	21.34	0-3	3
		100	0	21.29	0-3	3
	256QAM	1	0	19.49	0-5	5
		1	49	19.33	0-5	5
		1	99	19.14	0-5	5
		50	0	19.36	0-5	5
		50	25	19.28	0-5	5
		50	49	19.34	0-5	5
		100	0	19.24	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 71 Conducted Power _ Measured *Pmax,* DSI = 0 (free) _ SUB1 Antenna

LTE FDD Band 71 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 133297 Ch. 680.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
20 ㎒	QPSK	1	0	24.19	0	0
		1	49	24.04	0	0
		1	99	23.93	0	0
		50	0	23.01	0-1	1
		50	25	22.93	0-1	1
		50	49	22.87	0-1	1
		100	0	22.95	0-1	1
	16QAM	1	0	23.14	0-1	1
		1	49	23.21	0-1	1
		1	99	23.07	0-1	1
		50	0	22.03	0-2	2
		50	25	21.96	0-2	2
		50	49	21.84	0-2	2
		100	0	22.01	0-2	2
	64QAM	1	0	22.07	0-2	2
		1	49	22.34	0-2	2
		1	99	21.99	0-2	2
		50	0	20.93	0-3	3
		50	25	21.02	0-3	3
		50	49	20.82	0-3	3
		100	0	20.91	0-3	3
	256QAM	1	0	19.15	0-5	5
		1	49	19.16	0-5	5
		1	99	18.75	0-5	5
		50	0	18.95	0-5	5
		50	25	18.98	0-5	5
		50	49	18.77	0-5	5
		100	0	18.84	0-5	5

The report shall not be (partly) reproduced except in full without approval of the laboratory.

LTE FDD Band 71 Conducted Power _ Measured DSI = 1 (RCV) _ SUB1 Antenna

LTE FDD Band 71 _ 20 ㎒ Bandwidth Conducted Power

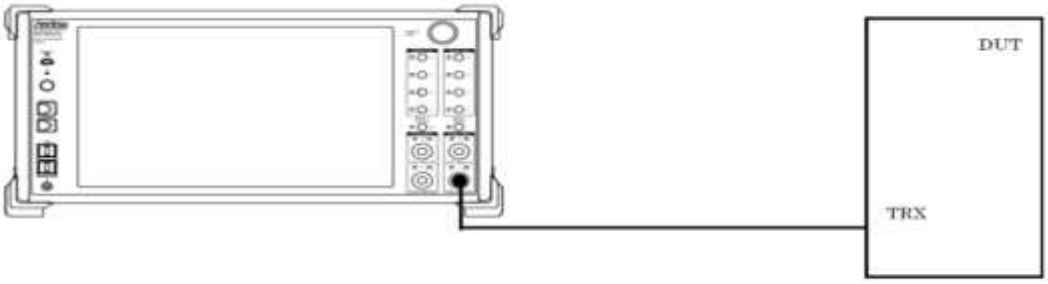
Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 133297 Ch. 680.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
20 ㎒	QPSK	1	0	20.89	0	0
		1	49	20.88	0	0
		1	99	20.63	0	0
		50	0	20.79	0-1	0
		50	25	20.86	0-1	0
		50	49	20.76	0-1	0
		100	0	20.73	0-1	0
	16QAM	1	0	21.33	0-1	0
		1	49	21.12	0-1	0
		1	99	20.77	0-1	0
		50	0	20.85	0-2	0
		50	25	20.81	0-2	0
		50	49	20.78	0-2	0
		100	0	20.72	0-2	0
	64QAM	1	0	20.93	0-2	0
		1	49	21.03	0-2	0
		1	99	20.75	0-2	0
		50	0	20.76	0-3	0
		50	25	20.85	0-3	0
		50	49	20.74	0-3	0
		100	0	20.89	0-3	0
	256QAM	1	0	19.16	0-5	1.7
		1	49	19.28	0-5	1.7
		1	99	18.89	0-5	1.7
		50	0	19.07	0-5	1.7
		50	25	19.00	0-5	1.7
		50	49	18.96	0-5	1.7
		100	0	19.02	0-5	1.7

The EUT enables maximum power reduction in accordance with 3GPP 36.101. The MPR settings are configured during the manufacture process and are not configurable by the network, carrier, or end user.

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11.3.16 LTE Up-link Carrier Aggregation Conducted Powers Setup

To measure the LTE UP CA power of this device, Anritsu's MT8821C was used to check the power as follows.



Power Measurement setup

TDD CA_41C Intra-Band Contiguous Call Connection

Set to MT8821C with following parameters:

-. Set up the call box for PCC Configuration for LTE Uplink CA

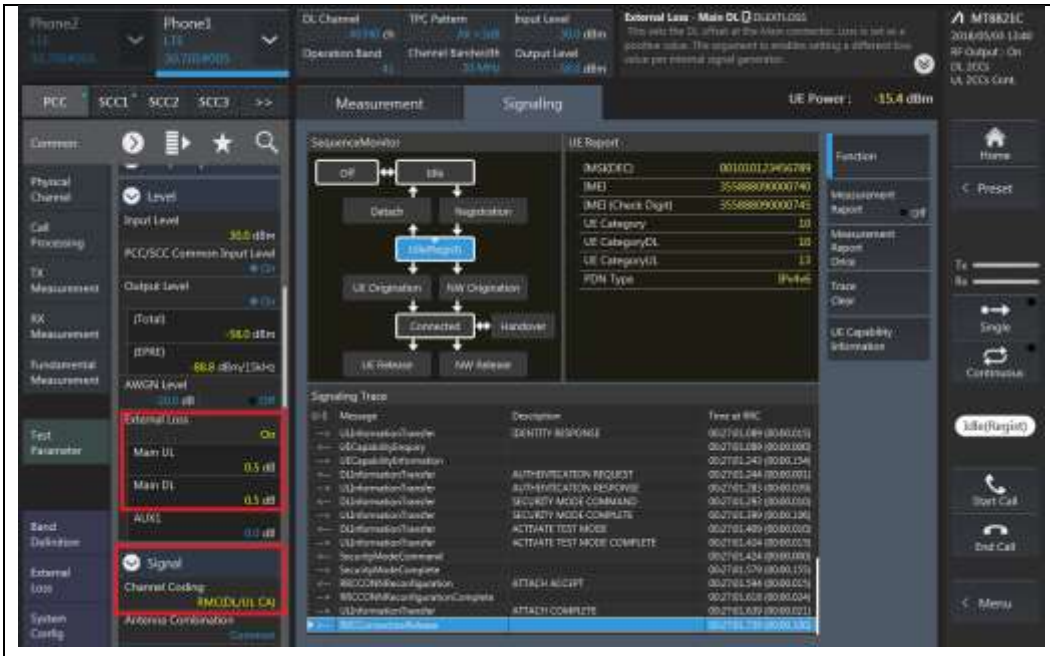
-. Set up the call box for SCC Configuration for LTE Uplink CA

-. Measure the maximum output power in Uplink LTE CA conditions.

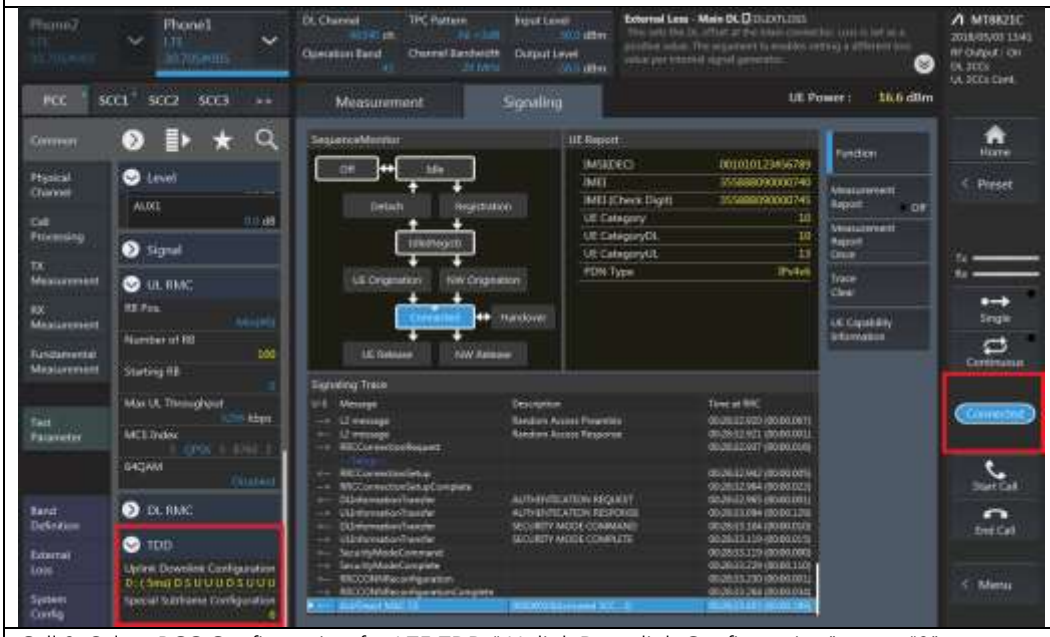


Call 1 :Select PCC Configuration for Authentication key to Register

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Call 2 :Select PCC Configuration for LTE UL CA and Cable loss



Call 3 :Select PCC Configuration for LTE TDD " Uplink Downlink Configuration" set to "0"
And then Select "connect"button.

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Call 4 :Set to RB, offset, BW, modulation of SCC channel.



Call 5: Set to RB, offset, BW, modulation and Max Power conditions of PCC required test channel.

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11.3.17 Uplink Carrier aggregation Conducted Powers

LTE TDD Band 48 Conducted Power _ SUB2 Antenna

	Combination	PCC						SCC						Tx Power	
		Band	BW	PCC UL Channel	PCC UL Frequency	RB	offset	Band	BW	SCC UL Channel	SCC UL Frequency	RB	offset	LTE Single Carrier Tx Power (dBm)	LTE Tx Power witU UL CA Enabled (dBm)
DSI = 1 (RCV)	48C	48	20	55340	3560	50	49	48	20	55538	3579.8	50	0	16.69	16.70
Pmax, DSI = 0 (free)	48C	48	20	56640	3690	1	0	48	20	56442	3670.2	1	99	20.67	20.41

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11.4 NR Maximum Output Power

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

11.4.1 NR FDD Band n2 Maximum Conducted Power

NR FDD Band n2 Conducted Power_ Measured *Pmax*, DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n2 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 376000 1 880 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.81	0
				1	108	23.94	0
				1	214	24.01	0
				108	0	23.44	0.5
				108	54	24.07	0
				108	108	23.65	0.5
				216	0	23.52	0.5
			QPSK	1	1	24.05	0
				1	108	24.19	0
				1	214	24.31	0
				108	0	22.99	1
				108	54	24.16	0
				108	108	23.14	1
				216	0	23.08	1
			16QAM	1	1	22.86	1
			64QAM	1	1	21.56	2.5
			256QAM	1	1	19.02	4.5
		CP	QPSK	1	1	22.64	1.5

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NR FDD Band n2 Conducted Power_ Measured DSI = 0 (free) _ MAIN1 Antenna

NR FDD Band n2 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 376000 1 880 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.68	0
				1	108	19.72	0
				1	214	19.92	0
				108	0	19.74	0
				108	54	19.96	0
				108	108	19.89	0
				216	0	19.85	0
			QPSK	1	1	19.79	0
				1	108	19.90	0
				1	214	19.93	0
				108	0	19.72	0
				108	54	19.87	0
				108	108	19.98	0
				216	0	19.93	0
			16QAM	1	1	19.75	0
			64QAM	1	1	19.95	0
			256QAM	1	1	19.23	0
		CP	QPSK	1	1	19.89	0

NR FDD Band n2 Conducted Power_ Measured *Pmax* _ SUB2 Antenna

NR FDD Band n2 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	376000 1 880 ㎒		MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1		23.64		0
				1	108		23.38		0
				1	214		23.11		0
				108	0		23.10		0.5
				108	54		23.57		0
				108	108		22.83		0.5
				216	0		22.96		0.5
			QPSK	1	1		23.75		0
				1	108		23.49		0
				1	214		23.28		0
				108	0		22.72		1
				108	54		23.66		0
				108	108		22.23		1
				216	0		22.57		1
			16QAM	1	1		22.65		1
			64QAM	1	1		21.38		2.5
			256QAM	1	1		18.50		4.5
		CP	QPSK	1	1		22.48		1.5

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NR FDD Band n2 Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR FDD Band n2 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 376000 1 880 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.39	0
				1	108	18.34	0
				1	214	18.33	0
				108	0	18.28	0
				108	54	18.43	0
				108	108	18.19	0
				216	0	18.46	0
			QPSK	1	1	18.43	0
				1	108	18.34	0
				1	214	18.26	0
				108	0	18.38	0
				108	54	18.50	0
				108	108	18.24	0
				216	0	18.45	0
			16QAM	1	1	18.40	0
			64QAM	1	1	18.48	0
			256QAM	1	1	17.79	0.5
		CP	QPSK	1	1	18.70	0

NR FDD Band n2 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR FDD Band n2 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 376000 1 880 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.93	0
				1	108	16.71	0
				1	214	16.96	0
				108	0	16.78	0
				108	54	16.81	0
				108	108	16.84	0
				216	0	16.78	0
			QPSK	1	1	16.84	0
				1	108	16.87	0
				1	214	16.81	0
				108	0	16.83	0
				108	54	16.90	0
				108	108	16.79	0
				216	0	16.92	0
			16QAM	1	1	16.90	0
			64QAM	1	1	16.93	0
			256QAM	1	1	16.18	0.5
		CP	QPSK	1	1	17.08	0

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11.4.2 NR FDD Band n5 Maximum Conducted Power

NR FDD Band n5 Conducted Power_ Measured *Pmax,* DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n5_ 20 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 167300 836.5 ㎒	MPR [dB]
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.88	0
				1	53	23.80	0
				1	104	23.80	0
				50	0	23.37	0.5
				50	28	23.78	0
				50	56	23.19	0.5
				100	0	23.39	0.5
			QPSK	1	1	23.74	0
				1	53	23.89	0
				1	104	23.59	0
				50	0	22.82	1
				50	28	23.89	0
				50	56	22.82	1
				100	0	22.81	1
			16QAM	1	1	22.70	1
			64QAM	1	1	21.52	2.5
			256QAM	1	1	18.75	4.5
		CP	QPSK	1	1	22.53	1.5

NR FDD Band n5 Conducted Power_ Measured *Pmax,* DSI = 0 (free)_ SUB1 Antenna

NR FDD Band n5_ 20 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 167300 836.5 ㎒	MPR [dB]
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.90	0
				1	53	23.82	0
				1	104	23.74	0
				50	0	23.30	0.5
				50	28	23.89	0
				50	56	23.24	0.5
				100	0	23.41	0.5
			QPSK	1	1	23.42	0
				1	53	23.04	0
				1	104	23.24	0
				50	0	22.33	1
				50	28	22.98	0
				50	56	21.99	1
				100	0	22.20	1
			16QAM	1	1	22.33	1
			64QAM	1	1	21.03	2.5
			256QAM	1	1	18.85	4.5
		CP	QPSK	1	1	22.02	1.5

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NR FDD Band n5 Conducted Power_ Measured DSI = 1 (RCV)_ SUB1 Antenna

NR FDD Band n5_ 20 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 167300 836.5 ㎒	MPR [dB]
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.51	0
				1	53	20.53	0
				1	104	20.54	0
				50	0	20.56	0
				50	28	20.45	0
				50	56	20.36	0
				100	0	20.62	0
			QPSK	1	1	20.39	0
				1	53	20.70	0
				1	104	20.60	0
				50	0	20.42	0
				50	28	20.72	0
				50	56	20.47	0
				100	0	20.69	0
			16QAM	1	1	20.55	0
			64QAM	1	1	20.45	0
			256QAM	1	1	17.69	2.5
		CP	QPSK	1	1	20.60	0

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11.4.3 NR FDD Band n7 Maximum Conducted Power

NR FDD Band n7 Conducted Power_ Measured *Pmax,* DSI = 1 (RCV) _ MAIN2 Antenna

NR FDD Band n7 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 507000 2 535 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.12	0
				1	108	22.15	0
				1	214	22.28	0
				108	0	21.78	0.5
				108	54	22.33	0
				108	108	21.76	0.5
				216	0	21.78	0.5
			QPSK	1	1	22.24	0
				1	108	22.32	0
				1	214	22.45	0
				108	0	21.35	1
				108	54	22.54	0
				108	108	21.35	1
				216	0	21.35	1
			16QAM	1	1	21.26	1
			64QAM	1	1	19.97	2.5
			256QAM	1	1	17.35	4.5
		CP	QPSK	1	1	20.84	1.5

NR FDD Band n7 Conducted Power_ Measured DSI = 0 (free) _ MAIN2 Antenna

NR FDD Band n7 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 507000 2 535 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.15	0
				1	108	20.23	0
				1	214	20.17	0
				108	0	20.24	0
				108	54	20.84	0
				108	108	20.23	0
				216	0	20.42	0
			QPSK	1	1	20.34	0
				1	108	20.42	0
				1	214	20.47	0
				108	0	20.35	0
				108	54	20.57	0
				108	108	20.59	0
				216	0	20.53	0
			16QAM	1	1	20.43	0
			64QAM	1	1	20.12	0.5
			256QAM	1	1	17.53	3
		CP	QPSK	1	1	20.45	0

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NR FDD Band n7 Conducted Power_ Measured *Pmax* _ SUB2 Antenna

NR FDD Band n7 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 507000 2 535 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.56	0
				1	108	22.37	0
				1	214	22.43	0
				108	0	21.84	0.5
				108	54	22.64	0
				108	108	22.02	0.5
				216	0	22.07	0.5
			QPSK	1	1	22.64	0
				1	108	22.56	0
				1	214	22.57	0
				108	0	21.51	1
				108	54	22.61	0
				108	108	21.59	1
				216	0	21.54	1
			16QAM	1	1	21.47	1
			64QAM	1	1	20.13	2.5
			256QAM	1	1	17.57	4.5
		CP	QPSK	1	1	21.27	1.5

NR FDD Band n7 Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR FDD Band n7 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 507000 2 535 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.06	0
				1	108	18.04	0
				1	214	18.03	0
				108	0	17.95	0
				108	54	17.97	0
				108	108	17.91	0
				216	0	18.08	0
			QPSK	1	1	18.10	0
				1	108	18.06	0
				1	214	17.98	0
				108	0	18.14	0
				108	54	18.26	0
				108	108	18.07	0
				216	0	18.25	0
			16QAM	1	1	18.11	0
			64QAM	1	1	18.16	0
			256QAM	1	1	17.81	0
		CP	QPSK	1	1	18.23	0

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NR FDD Band n7 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR FDD Band n7 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 507000 2 535 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.17	0
				1	108	16.05	0
				1	214	16.03	0
				108	0	16.04	0
				108	54	15.91	0
				108	108	15.98	0
				216	0	16.03	0
			QPSK	1	1	16.17	0
				1	108	16.06	0
				1	214	16.05	0
				108	0	16.07	0
				108	54	16.12	0
				108	108	16.10	0
				216	0	16.04	0
			16QAM	1	1	16.07	0
			64QAM	1	1	16.14	0
			256QAM	1	1	15.55	0.5
		CP	QPSK	1	1	16.32	0

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11.4.4 NR FDD Band n12 Maximum Conducted Power

NR FDD Band n12 Conducted Power_ Measured *Pmax*, DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n12_ 15 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 141500 707.5 ㎒	MPR [dB]
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.75	0
				1	40	23.69	0
				1	77	23.73	0
				36	0	23.11	0.5
				36	22	23.76	0
				36	43	23.21	0.5
				75	0	23.24	0.5
			QPSK	1	1	23.75	0
				1	40	23.78	0
				1	77	23.79	0
				36	0	22.71	1
				36	22	23.86	0
				36	43	22.66	1
				75	0	22.69	1
			16QAM	1	1	22.63	1
			64QAM	1	1	21.26	2.5
			256QAM	1	1	18.64	4.5
		CP	QPSK	1	1	22.15	1.5

NR FDD Band n12 Conducted Power_ Measured *Pmax*, DSI = 0 (free) _ SUB1 Antenna

NR FDD Band n12_ 15 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 141500 707.5 ㎒	MPR [dB]
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.78	0
				1	40	23.89	0
				1	77	23.79	0
				36	0	23.32	0.5
				36	22	23.78	0
				36	43	23.37	0.5
				75	0	23.35	0.5
			QPSK	1	1	23.83	0
				1	40	22.91	0
				1	77	23.67	0
				36	0	22.30	1
				36	22	22.81	0
				36	43	22.42	1
				75	0	22.25	1
			16QAM	1	1	22.61	1
			64QAM	1	1	21.43	2.5
			256QAM	1	1	18.73	4.5
		CP	QPSK	1	1	22.26	1.5

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NR FDD Band n12 Conducted Power_ Measured DSI = 1 (RCV) _ SUB1 Antenna

NR FDD Band n12_ 15 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 141500 707.5 ㎒	MPR [dB]
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.10	0
				1	40	20.13	0
				1	77	20.16	0
				36	0	20.10	0
				36	22	20.26	0
				36	43	20.04	0
				75	0	20.17	0
			QPSK	1	1	20.33	0
				1	40	20.24	0
				1	77	20.28	0
				36	0	20.15	0
				36	22	20.28	0
				36	43	20.12	0
				75	0	20.09	0
			16QAM	1	1	20.05	0
			64QAM	1	1	20.18	0
			256QAM	1	1	18.77	1.2
		CP	QPSK	1	1	20.28	0

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11.4.5 NR FDD Band n14 Maximum Conducted Power

NR FDD Band n14 Conducted Power_ Measured *Pmax,* DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n14_ 10 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 158600 793 ㎒	MPR [dB]
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	24.71	0
				1	26	24.59	0
				1	50	24.58	0
				25	0	24.16	0.5
				25	14	24.71	0
				25	27	24.13	0.5
				50	0	24.15	0.5
			QPSK	1	1	24.70	0
				1	26	24.44	0
				1	50	24.47	0
				25	0	23.62	1
				25	14	24.42	0
				25	27	23.41	1
				50	0	23.46	1
			16QAM	1	1	23.46	1
			64QAM	1	1	22.31	2.5
			256QAM	1	1	19.58	4.5
		CP	QPSK	1	1	23.17	1.5

NR FDD Band n14 Conducted Power_ Measured *Pmax,* DSI = 0 (free) _ SUB1 Antenna

NR FDD Band n14_ 10 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 158600 793 ㎒	MPR [dB]
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	24.77	0
				1	26	24.62	0
				1	50	24.70	0
				25	0	24.25	0.5
				25	14	24.85	0
				25	27	24.25	0.5
				50	0	24.34	0.5
			QPSK	1	1	24.96	0
				1	26	24.60	0
				1	50	24.58	0
				25	0	23.81	1
				25	14	24.68	0
				25	27	23.83	1
				50	0	23.83	1
			16QAM	1	1	23.71	1
			64QAM	1	1	22.43	2.5
			256QAM	1	1	19.78	4.5
		CP	QPSK	1	1	23.40	1.5

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NR FDD Band n14 Conducted Power_ Measured DSI = 1 (RCV) _ SUB1 Antenna

NR FDD Band n14_ 10 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 158600 793 ㎒	MPR [dB]
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	21.08	0
				1	26	20.90	0
				1	50	21.12	0
				25	0	21.01	0
				25	14	21.04	0
				25	27	21.00	0
				50	0	21.04	0
			QPSK	1	1	21.12	0
				1	26	21.15	0
				1	50	21.08	0
				25	0	21.08	0
				25	14	21.16	0
				25	27	21.03	0
				50	0	21.07	0
			16QAM	1	1	21.17	0
			64QAM	1	1	21.30	0
			256QAM	1	1	19.77	1
		CP	QPSK	1	1	21.29	0

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11.4.6 NR FDD Band n25 Maximum Conducted Power

NR FDD Band n25 Conducted Power_ Measured *Pmax*, DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n25 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 376500 1 882.5 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.89	0
				1	108	23.95	0
				1	214	24.07	0
				108	0	23.45	0.5
				108	54	24.17	0
				108	108	23.65	0.5
				216	0	23.49	0.5
			QPSK	1	1	23.90	0
				1	108	24.00	0
				1	214	24.38	0
				108	0	23.04	1
				108	54	24.12	0
				108	108	23.12	1
				216	0	23.15	1
			16QAM	1	1	22.95	1
			64QAM	1	1	21.69	2.5
			256QAM	1	1	18.94	4.5
		CP	QPSK	1	1	22.54	1.5

NR FDD Band n25 Conducted Power_ Measured DSI = 0 (free) _ MAIN1 Antenna

NR FDD Band n25 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 376500 1 882.5 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.58	0
				1	108	19.65	0
				1	214	19.73	0
				108	0	19.63	0
				108	54	19.84	0
				108	108	19.81	0
				216	0	19.73	0
			QPSK	1	1	19.58	0
				1	108	19.66	0
				1	214	19.87	0
				108	0	19.69	0
				108	54	19.82	0
				108	108	19.80	0
				216	0	19.73	0
			16QAM	1	1	19.60	0
			64QAM	1	1	19.87	0
			256QAM	1	1	19.08	0
		CP	QPSK	1	1	19.79	0

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NR FDD Band n25 Conducted Power_ Measured *Pmax*_ SUB2 Antenna

NR FDD Band n25 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 376500 1 882.5 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.68	0
				1	108	23.68	0
				1	214	23.42	0
				108	0	23.15	0.5
				108	54	23.76	0
				108	108	23.08	0.5
				216	0	23.25	0.5
			QPSK	1	1	23.92	0
				1	108	23.91	0
				1	214	23.87	0
				108	0	22.77	1
				108	54	23.80	0
				108	108	22.59	1
				216	0	22.72	1
			16QAM	1	1	22.60	1
			64QAM	1	1	21.39	2.5
			256QAM	1	1	18.63	4.5
		CP	QPSK	1	1	22.21	1.5

NR FDD Band n25 Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR FDD Band n25 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 376500 1 882.5 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.05	0
				1	108	18.23	0
				1	214	18.32	0
				108	0	18.25	0
				108	54	18.38	0
				108	108	18.18	0
				216	0	18.24	0
			QPSK	1	1	18.30	0
				1	108	18.21	0
				1	214	18.23	0
				108	0	18.23	0
				108	54	18.25	0
				108	108	18.15	0
				216	0	18.20	0
			16QAM	1	1	18.21	0
			64QAM	1	1	18.33	0
			256QAM	1	1	17.55	0.5
		CP	QPSK	1	1	18.41	0

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NR FDD Band n25 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR FDD Band n25 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 376500 1 882.5 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.82	0
				1	108	16.75	0
				1	214	16.99	0
				108	0	16.76	0
				108	54	16.79	0
				108	108	16.79	0
				216	0	16.73	0
			QPSK	1	1	16.95	0
				1	108	16.71	0
				1	214	16.77	0
				108	0	16.65	0
				108	54	16.70	0
				108	108	16.68	0
				216	0	16.81	0
			16QAM	1	1	16.87	0
			64QAM	1	1	16.89	0
			256QAM	1	1	16.11	0.5
		CP	QPSK	1	1	17.01	0

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11.4.7 NR FDD Band n26 Maximum Conducted Power

NR FDD Band n26 Conducted Power_ Measured *Pmax,* DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n26 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 166300 831.5 ㎒	MPR [dB]
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.85	0
				1	53	23.86	0
				1	104	23.75	0
				50	0	23.24	0.5
				50	28	23.89	0
				50	56	23.25	0.5
				100	0	23.33	0.5
			QPSK	1	1	24.15	0
				1	53	23.84	0
				1	104	23.77	0
				50	0	22.81	1
				50	28	23.97	0
				50	56	22.68	1
				100	0	22.84	1
			16QAM	1	1	22.60	1
			64QAM	1	1	21.38	2.5
			256QAM	1	1	18.86	4.5
		CP	QPSK	1	1	22.47	1.5

NR FDD Band n26 Conducted Power_ Measured *Pmax,* DSI = 0 (free) _ SUB1 Antenna

NR FDD Band n26 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 166300 831.5 ㎒	MPR [dB]
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.64	0
				1	53	23.83	0
				1	104	23.70	0
				50	0	23.31	0.5
				50	28	23.83	0
				50	56	23.23	0.5
				100	0	23.39	0.5
			QPSK	1	1	24.01	0
				1	53	24.10	0
				1	104	24.05	0
				50	0	22.83	1
				50	28	23.89	0
				50	56	22.82	1
				100	0	22.91	1
			16QAM	1	1	22.70	1
			64QAM	1	1	21.44	2.5
			256QAM	1	1	18.73	4.5
		CP	QPSK	1	1	22.26	1.5

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NR FDD Band n26 Conducted Power_ Measured DSI = 1 (RCV) _ SUB1 Antenna

NR FDD Band n26 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 166300 831.5 ㎒	MPR [dB]
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.06	0
				1	53	21.99	0
				1	104	21.97	0
				50	0	21.90	0
				50	28	22.08	0
				50	56	21.94	0
				100	0	22.00	0
			QPSK	1	1	22.02	0
				1	53	22.10	0
				1	104	21.92	0
				50	0	22.05	0
				50	28	21.98	0
				50	56	21.86	0
				100	0	22.08	0
			16QAM	1	1	21.95	0
			64QAM	1	1	21.91	0.5
			256QAM	1	1	19.08	2.5
		CP	QPSK	1	1	22.06	0

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11.4.8 NR FDD Band n30 Maximum Conducted Power

NR FDD Band n30 Conducted Power_ Measured *Pmax,* DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n30_ 10 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 462000 2 310 ㎒	MPR [dB]
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.18	0
				1	26	22.11	0
				1	50	21.40	0
				25	0	22.15	0.5
				25	14	22.03	0
				25	27	21.31	0.5
				50	0	21.34	0.5
			QPSK	1	1	22.06	0
				1	26	22.15	0
				1	50	21.09	0
				25	0	21.52	1
				25	14	22.43	0
				25	27	21.50	1
				50	0	21.48	1
			16QAM	1	1	20.42	1
			64QAM	1	1	19.27	2.5
			256QAM	1	1	16.63	4.5
		CP	QPSK	1	1	20.25	1.5

NR FDD Band n30 Conducted Power_ Measured DSI = 0 (free)_ MAIN1 Antenna

NR FDD Band n30_ 10 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 462000 2 310 ㎒	MPR [dB]
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.71	0
				1	26	19.62	0
				1	50	19.43	0
				25	0	19.68	0
				25	14	19.61	0
				25	27	19.69	0
				50	0	19.66	0
			QPSK	1	1	19.61	0
				1	26	19.60	0
				1	50	19.25	0
				25	0	19.68	0
				25	14	19.71	0
				25	27	19.59	0
				50	0	19.71	0
			16QAM	1	1	19.87	0
			64QAM	1	1	19.32	0
			256QAM	1	1	17.23	2.5
		CP	QPSK	1	1	20.04	0

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NR FDD Band n30 Conducted Power_ Measured *Pmax*_ SUB2 Antenna

NR FDD Band n30_ 10 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 462000 2 310 ㎒	MPR [dB]
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.77	0
				1	26	22.80	0
				1	50	22.38	0
				25	0	22.32	0.5
				25	14	22.66	0
				25	27	21.95	0.5
				50	0	22.25	0.5
			QPSK	1	1	22.97	0
				1	26	21.84	0
				1	50	21.31	0
				25	0	21.68	1
				25	14	21.73	0
				25	27	20.66	1
				50	0	21.23	1
			16QAM	1	1	21.75	1
			64QAM	1	1	20.49	2.5
			256QAM	1	1	17.89	4.5
		CP	QPSK	1	1	21.41	1.5

NR FDD Band n30 Conducted Power_ Measured DSI = 0 (free)_ SUB2 Antenna

NR FDD Band n30_ 10 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 462000 2 310 ㎒	MPR [dB]
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.78	0
				1	26	18.72	0
				1	50	18.68	0
				25	0	18.89	0
				25	14	18.89	0
				25	27	18.80	0
				50	0	18.91	0
			QPSK	1	1	19.19	0
				1	26	19.13	0
				1	50	18.85	0
				25	0	18.79	0
				25	14	18.87	0
				25	27	18.80	0
				50	0	18.83	0
			16QAM	1	1	18.67	0
			64QAM	1	1	19.00	0
			256QAM	1	1	17.44	1.5
		CP	QPSK	1	1	18.83	0

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NR FDD Band n30 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR FDD Band n30_ 10 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 462000 2 310 ㎒	MPR [dB]
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.31	0
				1	26	16.22	0
				1	50	16.17	0
				25	0	16.32	0
				25	14	16.37	0
				25	27	16.28	0
				50	0	16.36	0
			QPSK	1	1	16.66	0
				1	26	16.44	0
				1	50	16.44	0
				25	0	16.36	0
				25	14	16.41	0
				25	27	16.32	0
				50	0	16.38	0
			16QAM	1	1	16.29	0
			64QAM	1	1	16.54	0
			256QAM	1	1	15.80	0.5
		CP	QPSK	1	1	16.49	0

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11.4.9 NR TDD Band n38 Maximum Conducted Power

NR TDD Band n38 Conducted Power_ Measured *Pmax*, _ SUB2 Antenna

NR TDD Band n38 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							519000		
							2 595 ㎒		
40 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1		23.68		0
				1	80		23.78		0
				1	158		23.78		0
				80	0		23.27		0.5
				80	40		23.82		0
				80	80		23.29		0.5
				160	0		23.29		0.5
			QPSK	1	1		23.75		0
				1	80		23.65		0
				1	158		23.65		0
				80	0		22.72		1
				80	40		23.89		0
				80	80		22.77		1
				160	0		22.91		1
			16QAM	1	1		22.48		1
			64QAM	1	1		21.22		2.5
			256QAM	1	1		18.68		4.5
		CP	QPSK	1	80		22.50		1.5

NR TDD Band n38 Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR TDD Band n38 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							519000		
							2 595 ㎒		
40 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1		18.76		0
				1	80		18.73		0
				1	158		18.53		0
				80	0		18.86		0
				80	40		18.78		0
				80	80		18.59		0
				160	0		18.81		0
			QPSK	1	1		18.76		0
				1	80		18.79		0
				1	158		18.54		0
				80	0		18.78		0
				80	40		18.79		0
				80	80		18.57		0
				160	0		18.89		0
			16QAM	1	1		18.75		0
			64QAM	1	1		18.66		0
			256QAM	1	1		17.96		0
		CP	QPSK	1	80		18.72		0

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NR TDD Band n38 Conducted Power_ Measured DSI = 1 (RCV)_ SUB2 Antenna

NR TDD Band n38 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							519000		
							2 595 ㎒		
40 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1		15.41		0
				1	80		15.28		0
				1	158		15.40		0
				80	0		15.42		0
				80	40		15.47		0
				80	80		15.01		0
				160	0		15.38		0
			QPSK	1	1		15.33		0
				1	80		15.30		0
				1	158		15.46		0
				80	0		15.41		0
				80	40		15.42		0
				80	80		15.39		0
				160	0		15.56		0
			16QAM	1	1		15.05		0
			64QAM	1	1		15.31		0
			256QAM	1	1		14.94		0.5
		CP	QPSK	1	80		15.54		0

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11.4.10 NR TDD Band n41 Maximum Conducted Power

NR TDD Band n41 (PC2) _ Conducted Power_ Pmax _ MAIN2 Antenna

◆ SA Mode

NR TDD Band n41 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2 592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			25.68			0
				1	137			25.16			0
				1	271			26.61			0
				135	0			26.16			0.5
				135	69			26.09			0
				135	138			26.35			0.5
				270	0			25.08			0.5
			QPSK	1	1			25.62			0
				1	137			25.07			0
				1	271			25.07			0
				135	0			24.42			1
				135	69			25.34			0
				135	138			24.17			1
				270	0			24.32			1
			16QAM	1	1			24.46			1
			64QAM	1	1			23.29			2.5
			256QAM	1	1			20.73			4.5
		CP	QPSK	1	1			24.34			1.5

◆ NSA Mode

NR TDD Band n41 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2 592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			24.70			0
				1	137			24.26			0
				1	271			24.41			0
				135	0			24.18			0.5
				135	69			24.33			0
				135	138			23.98			0.5
				270	0			24.08			0.5
			QPSK	1	1			24.77			0
				1	137			24.30			0
				1	271			24.45			0
				135	0			23.61			1
				135	69			24.36			0
				135	138			23.49			1
				270	0			23.60			1
			16QAM	1	1			23.87			1
			64QAM	1	1			22.42			2.5
			256QAM	1	1			20.17			4.5
		CP	QPSK	1	1			23.46			1.5

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NR TDD Band n41 (PC2) Conducted Power_ Measured DSI = 0 (free)_ MAIN2 Antenna

NR TDD Band n41 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			21.01			0
				1	137			20.83			0
				1	271			21.06			0
				135	0			20.86			0
				135	69			20.91			0
				135	138			20.95			0
				270	0			20.92			0
			QPSK	1	1			20.98			0
				1	137			20.84			0
				1	271			21.07			0
				135	0			20.91			0
				135	69			20.90			0
				135	138			20.97			0
				270	0			20.19			0
			16QAM	1	1			20.89			0
			64QAM	1	1			21.14			0
			256QAM	1	1			20.67			0
		CP	QPSK	1	1			21.23			0

NR TDD Band n41 (PC2) Conducted Power_ Measured DSI = 1 (RCV)_ MAIN2 Antenna

NR TDD Band n41 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			19.65			0
				1	137			19.76			0
				1	271			19.71			0
				135	0			19.68			0
				135	69			19.22			0
				135	138			19.64			0
				270	0			19.76			0
			QPSK	1	1			19.54			0
				1	137			19.50			0
				1	271			19.65			0
				135	0			19.68			0
				135	69			19.15			0
				135	138			19.69			0
				270	0			19.74			0
			16QAM	1	1			19.34			0
			64QAM	1	1			19.38			0
			256QAM	1	1			19.03			0
		CP	QPSK	1	1			19.82			0

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NR TDD Band n41 (PC2) Conducted Power_ Measured *Pmax* _ SUB2 Antenna

◆ SA Mode

NR TDD Band n41 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			25.36			0
				1	137			25.28			0
				1	271			25.59			0
				135	0			24.87			0.5
				135	69			25.32			0
				135	138			24.90			0.5
				270	0			24.87			0.5
			QPSK	1	1			25.36			0
				1	137			25.28			0
				1	271			25.59			0
				135	0			24.33			1
				135	69			25.36			0
				135	138			24.41			1
				270	0			24.39			1
			16QAM	1	1			24.37			1
			64QAM	1	1			23.02			2.5
			256QAM	1	1			20.19			4.5
		CP	QPSK	1	1			23.88			1.5

◆ NSA Mode

NR TDD Band n41 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2 592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			24.23			0
				1	137			24.19			0
				1	271			24.19			0
				135	0			23.79			0.5
				135	69			24.16			0
				135	138			23.80			0.5
				270	0			23.79			0.5
			QPSK	1	1			24.29			0
				1	137			24.17			0
				1	271			24.24			0
				135	0			23.34			1
				135	69			24.19			0
				135	138			23.32			1
				270	0			23.30			1
			16QAM	1	1			23.25			1
			64QAM	1	1			22.03			2.5
			256QAM	1	1			19.75			4.5
		CP	QPSK	1	1			23.09			1.5

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NR TDD Band n41 (PC2) Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR TDD Band n41 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			19.11			0
				1	137			18.92			0
				1	271			19.35			0
				135	0			19.03			0
				135	69			18.98			0
				135	138			19.07			0
				270	0			19.06			0
			QPSK	1	1			19.11			0
				1	137			19.02			0
				1	271			19.33			0
				135	0			19.07			0
				135	69			19.05			0
				135	138			19.09			0
				270	0			19.06			0
			16QAM	1	1			19.21			0
			64QAM	1	1			19.13			0
			256QAM	1	1			18.47			0
		CP	QPSK	1	1			19.31			0

NR TDD Band n41 (PC2) Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n41 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			14.56			0
				1	137			14.36			0
				1	271			14.77			0
				135	0			14.47			0
				135	69			14.38			0
				135	138			14.49			0
				270	0			14.47			0
			QPSK	1	1			14.56			0
				1	137			14.37			0
				1	271			14.78			0
				135	0			14.50			0
				135	69			14.52			0
				135	138			14.55			0
				270	0			14.49			0
			16QAM	1	1			14.75			0
			64QAM	1	1			14.67			0
			256QAM	1	1			13.57			0
		CP	QPSK	1	1			14.67			0

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11.4.11 NR TDD Band n48 Maximum Conducted Power

NR TDD Band n48 Conducted Power_ Measured *Pmax* _ SUB2 Antenna

NR TDD Band n48 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						638000	641666		645332	
						3 570 ㎒	3 624.99 ㎒		3 679.98 ㎒	
40 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	20.89	20.85		20.48	0
				1	53	20.83	20.75		20.18	0
				1	104	20.97	20.77		20.52	0
				50	0	20.36	20.19		19.69	0.5
				50	28	20.93	20.78		20.50	0
				50	56	20.36	20.18		19.94	0.5
				100	0	20.33	20.17		19.80	0.5
			QPSK	1	1	20.92	20.97		20.29	0
				1	53	20.84	20.61		20.16	0
				1	104	21.01	20.67		20.29	0
				50	0	19.81	19.57		19.08	1
				50	28	20.97	20.57		20.37	0
				50	56	19.81	19.50		19.27	1
				100	0	19.63	19.45		19.42	1
			16QAM	1	1	19.76	19.74		19.19	1
			64QAM	1	1	18.48	18.27		17.82	2.5
			256QAM	1	1	16.05	15.88		15.06	4.5
		CP	QPSK	1	1	19.42	19.38		18.95	1.5

NR TDD Band n48 Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR TDD Band n48 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						638000	641666		645332	
						3 570 ㎒	3 624.99 ㎒		3 679.98 ㎒	
40 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	19.86	19.45		19.18	0
				1	53	19.53	19.31		19.00	0
				1	104	19.29	19.14		18.96	0
				50	0	19.69	19.48		19.27	0
				50	28	19.60	19.47		19.18	0
				50	56	19.46	19.30		19.08	0
				100	0	19.56	19.41		19.13	0
			QPSK	1	1	19.52	19.44		19.15	0
				1	53	19.33	19.32		18.95	0
				1	104	19.26	19.14		18.91	0
				50	0	19.62	19.48		19.22	0
				50	28	19.52	19.43		19.12	0
				50	56	19.40	19.25		19.04	0
				100	0	19.54	19.40		19.22	0
			16QAM	1	1	19.43	19.49		19.24	0
			64QAM	1	1	19.59	19.45		19.19	0
			256QAM	1	1	16.67	17.15		16.91	2
		CP	QPSK	1	1	19.65	19.39		19.23	0

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NR TDD Band n48 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n48 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						638000	641666		645332	
						3 570 ㎒	3 624.99 ㎒		3 679.98 ㎒	
40 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	14.61	14.71		14.11	0
				1	53	14.44	14.28		14.06	0
				1	104	14.24	14.11		13.90	0
				50	0	14.61	14.39		14.16	0
				50	28	14.56	14.47		14.16	0
				50	56	14.38	14.24		13.97	0
				100	0	14.54	14.35		14.13	0
			QPSK	1	1	14.55	14.34		14.10	0
				1	53	14.35	14.24		14.02	0
				1	104	14.16	14.08		13.87	0
				50	0	14.58	14.43		14.18	0
				50	28	14.52	14.39		14.15	0
				50	56	14.41	14.18		13.98	0
				100	0	14.46	14.38		14.13	0
			16QAM	1	1	14.33	14.13		14.23	0
			64QAM	1	1	14.40	14.28		14.04	0
			256QAM	1	1	14.24	13.98		13.82	0
		CP	QPSK	1	1	14.51	14.39		14.16	0

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11.4.12 NR FDD Band n66 Maximum Conducted Power

NR FDD Band n66 Conducted Power_ Measured *Pmax,* DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n66 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 349000 1745 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.71	0
				1	108	24.32	0
				1	214	24.02	0
				108	0	24.82	0.5
				108	54	25.43	0
				108	108	24.87	0.5
				216	0	24.79	0.5
			QPSK	1	1	24.48	0
				1	108	24.42	0
				1	214	24.41	0
				108	0	24.15	1
				108	54	25.32	0
				108	108	24.29	1
				216	0	24.21	1
			16QAM	1	1	23.25	1
			64QAM	1	1	21.94	2.5
			256QAM	1	1	19.78	4.5
		CP	QPSK	1	1	23.02	1.5

NR FDD Band n66 Conducted Power_ Measured DSI = 0 (free) _ MAIN1 Antenna

NR FDD Band n66 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 349000 1745 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.73	0
				1	108	19.75	0
				1	214	19.64	0
				108	0	19.62	0
				108	54	19.71	0
				108	108	19.68	0
				216	0	19.63	0
			QPSK	1	1	19.73	0
				1	108	19.65	0
				1	214	19.84	0
				108	0	19.64	0
				108	54	19.92	0
				108	108	19.71	0
				216	0	19.62	0
			16QAM	1	1	19.65	0
			64QAM	1	1	19.67	0
			256QAM	1	1	18.34	0.5
		CP	QPSK	1	1	19.68	0

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NR FDD Band n66 Conducted Power_ Measured *Pmax*_ SUB2 Antenna

NR FDD Band n66 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 349000 1745 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.42	0
				1	108	23.47	0
				1	214	23.43	0
				108	0	22.86	0.5
				108	54	23.62	0
				108	108	22.87	0.5
				216	0	22.92	0.5
			QPSK	1	1	23.52	0
				1	108	23.55	0
				1	214	23.57	0
				108	0	22.93	1
				108	54	23.75	0
				108	108	22.96	1
				216	0	22.78	1
			16QAM	1	1	22.21	1
			64QAM	1	1	21.01	2.5
			256QAM	1	1	18.86	4.5
		CP	QPSK	1	1	22.24	1.5

NR FDD Band n66 Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR FDD Band n66 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 349000 1745 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.40	0
				1	108	20.02	0
				1	214	20.23	0
				108	0	20.15	0
				108	54	20.03	0
				108	108	20.05	0
				216	0	20.12	0
			QPSK	1	1	20.43	0
				1	108	20.00	0
				1	214	20.26	0
				108	0	20.14	0
				108	54	19.99	0
				108	108	20.07	0
				216	0	20.17	0
			16QAM	1	1	20.24	0
			64QAM	1	1	20.36	0
			256QAM	1	1	19.88	0.5
		CP	QPSK	1	1	20.31	0

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NR FDD Band n66 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR FDD Band n66 _ 40 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 349000 1745 ㎒	MPR [dB]
40 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.78	0
				1	108	16.70	0
				1	214	17.09	0
				108	0	16.83	0
				108	54	16.79	0
				108	108	16.75	0
				216	0	16.70	0
			QPSK	1	1	16.90	0
				1	108	16.75	0
				1	214	16.72	0
				108	0	16.67	0
				108	54	16.69	0
				108	108	16.68	0
				216	0	16.83	0
			16QAM	1	1	16.79	0
			64QAM	1	1	16.85	0
			256QAM	1	1	16.04	0.5
		CP	QPSK	1	1	16.98	0

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11.4.13 NR FDD Band n70 Maximum Conducted Power

NR FDD Band n70 Conducted Power_ Measured *Pmax,* DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n70 _ 15 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 340500 1 702.5 ㎒	MPR [dB]
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.33	0
				1	40	23.24	0
				1	77	23.24	0
				36	0	22.79	0.5
				36	22	23.32	0
				36	43	22.80	0.5
				75	0	22.77	0.5
			QPSK	1	1	23.40	0
				1	40	23.38	0
				1	77	23.28	0
				36	0	22.38	1
				36	22	23.37	0
				36	43	22.24	1
				75	0	22.41	1
			16QAM	1	1	22.27	1
			64QAM	1	1	21.09	2.5
			256QAM	1	1	18.34	4.5
		CP	QPSK	1	1	21.89	1.5

NR FDD Band n70 Conducted Power_ Measured DSI = 0 (free) _ MAIN1 Antenna

NR FDD Band n70 _ 15 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 340500 1 702.5 ㎒	MPR [dB]
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.09	0
				1	40	19.92	0
				1	77	19.82	0
				36	0	20.03	0
				36	22	20.04	0
				36	43	19.85	0
				75	0	19.99	0
			QPSK	1	1	20.06	0
				1	40	19.98	0
				1	77	19.85	0
				36	0	20.02	0
				36	22	20.03	0
				36	43	19.95	0
				75	0	19.98	0
			16QAM	1	1	20.10	0
			64QAM	1	1	20.26	0
			256QAM	1	1	18.23	1.5
		CP	QPSK	1	1	20.17	0

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NR FDD Band n70 Conducted Power_ Measured *Pmax*_ SUB2 Antenna

NR FDD Band n70 _ 15 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 340500 1 702.5 ㎒	MPR [dB]
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.45	0
				1	40	22.77	0
				1	77	22.81	0
				36	0	22.00	0.5
				36	22	22.79	0
				36	43	22.18	0.5
				75	0	22.09	0.5
			QPSK	1	1	22.47	0
				1	40	22.79	0
				1	77	22.88	0
				36	0	21.51	1
				36	22	22.81	0
				36	43	21.72	1
				75	0	21.65	1
			16QAM	1	1	21.32	1
			64QAM	1	1	20.05	2.5
			256QAM	1	1	17.52	4.5
		CP	QPSK	1	1	20.96	1.5

NR FDD Band n70 Conducted Power_ Measured DSI = 0 (free)_ SUB2 Antenna

NR FDD Band n70 _ 15 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 340500 1 702.5 ㎒	MPR [dB]
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	21.08	0
				1	40	21.07	0
				1	77	21.11	0
				36	0	20.94	0
				36	22	21.23	0
				36	43	21.09	0
				75	0	21.29	0
			QPSK	1	1	21.12	0
				1	40	21.19	0
				1	77	21.11	0
				36	0	21.05	0
				36	22	21.29	0
				36	43	21.28	0
				75	0	21.19	0
			16QAM	1	1	21.15	0
			64QAM	1	1	20.92	0
			256QAM	1	1	18.32	1.5
		CP	QPSK	1	1	21.40	0

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NR FDD Band n70 Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR FDD Band n70 _ 15 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 340500 1 702.5 ㎒	MPR [dB]
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.29	0
				1	40	16.39	0
				1	77	16.55	0
				36	0	16.18	0
				36	22	16.44	0
				36	43	16.47	0
				75	0	16.33	0
			QPSK	1	1	16.27	0
				1	40	16.49	0
				1	77	16.60	0
				36	0	16.30	0
				36	22	16.51	0
				36	43	16.50	0
				75	0	16.33	0
			16QAM	1	1	16.21	0
			64QAM	1	1	16.41	0
			256QAM	1	1	15.75	0.5
		CP	QPSK	1	1	16.53	0

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11.4.14 NR FDD Band n71 Maximum Conducted Power

NR FDD Band n71 Conducted Power_ Measured *Pmax,* DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n71 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm) 136100 680.5 ㎒	MPR [dB]
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	24.01	0
				1	53	24.31	0
				1	104	24.28	0
				50	0	23.61	0.5
				50	28	24.26	0
				50	56	23.75	0.5
				100	0	23.67	0.5
			QPSK	1	1	23.75	0
				1	53	24.38	0
				1	104	23.63	0
				50	0	23.14	1
				50	28	24.35	0
				50	56	23.26	1
				100	0	23.24	1
			16QAM	1	1	22.70	1
			64QAM	1	1	21.55	2.5
			256QAM	1	1	19.04	4.5
		CP	QPSK	1	1	22.45	1.5

NR FDD Band n71 Conducted Power_ Measured *Pmax,* DSI = 0 (free) _ SUB1 Antenna

NR FDD Band n71 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm) 136100 680.5 ㎒	MPR [dB]
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	24.13	0
				1	53	24.11	0
				1	104	23.97	0
				50	0	23.29	0.5
				50	28	24.11	0
				50	56	23.18	0.5
				100	0	23.22	0.5
			QPSK	1	1	24.05	0
				1	53	24.12	0
				1	104	24.03	0
				50	0	23.24	1
				50	28	24.06	0
				50	56	23.15	1
				100	0	23.12	1
			16QAM	1	1	22.64	1
			64QAM	1	1	21.45	2.5
			256QAM	1	1	19.07	4.5
		CP	QPSK	1	1	22.41	1.5

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NR FDD Band n71 Conducted Power_ Measured DSI = 1 (RCV) _ SUB1 Antenna

NR FDD Band n71 _ 20 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm) 136100 680.5 ㎒	MPR [dB]
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.82	0
				1	53	20.87	0
				1	104	20.66	0
				50	0	20.79	0
				50	28	20.97	0
				50	56	20.91	0
				100	0	20.89	0
			QPSK	1	1	20.63	0
				1	53	21.01	0
				1	104	20.91	0
				50	0	20.91	0
				50	28	20.86	0
				50	56	20.78	0
				100	0	21.05	0
			16QAM	1	1	20.60	0
			64QAM	1	1	20.84	0
			256QAM	1	1	18.69	2
		CP	QPSK	1	1	20.86	0

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11.4.15 NR TDD Band n77 Maximum Conducted Power

NR TDD Band n77 (PC2) Conducted Power_ Measured *Pmax* _ SUB2 Antenna

NR TDD Band n77_ 100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm) 650000	Max. Average Power (dBm) 662000	MPR [dB]
						3 750 ㎒	3 930 ㎒	
100 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	25.85	26.20	0
				1	137	25.62	26.13	0
				1	271	26.07	26.50	0
				135	0	25.24	25.54	0.5
				135	69	25.73	25.79	0
				135	138	25.32	25.23	0.5
				270	0	25.30	25.37	0.5
			QPSK	1	1	25.63	26.15	0
				1	137	25.55	26.04	0
				1	271	26.01	26.46	0
				135	0	24.72	25.17	1
				135	69	25.64	25.94	0
				135	138	24.85	24.96	1
				270	0	24.83	25.22	1
			16QAM	1	1	24.52	24.94	1
			64QAM	1	1	23.42	23.70	2.5
			256QAM	1	1	20.86	21.12	4.5
		CP	QPSK	1	1	24.57	24.85	1.5

NR TDD Band n77 (PC2) Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR TDD Band n77_ 100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm) 650000	Max. Average Power (dBm) 662000	MPR [dB]
						3 750 ㎒	3 930 ㎒	
100 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	16.61	16.16	0
				1	137	16.61	16.34	0
				1	271	16.80	16.28	0
				135	0	16.76	16.38	0
				135	69	16.59	16.36	0
				135	138	16.79	16.43	0
				270	0	16.78	16.41	0
			QPSK	1	1	16.79	16.41	0
				1	137	16.54	16.24	0
				1	271	16.46	16.30	0
				135	0	16.66	16.41	0
				135	69	16.56	16.28	0
				135	138	16.63	16.21	0
				270	0	16.76	16.68	0
			16QAM	1	1	16.90	16.54	0
			64QAM	1	1	16.87	16.51	0
			256QAM	1	1	16.50	16.28	0
		CP	QPSK	1	1	16.59	16.47	0

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NR TDD Band n77 (PC2) Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n77_ 100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						650000				662000		
						3 750 ㎒				3 930 ㎒		
100 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	14.37				13.90		0
				1	137	13.97				13.44		0
				1	271	14.13				13.64		0
				135	0	14.18				13.64		0
				135	69	13.68				13.31		0
				135	138	13.99				13.45		0
				270	0	13.90				13.51		0
			QPSK	1	1	14.31				13.73		0
				1	137	13.93				13.25		0
				1	271	14.01				13.54		0
				135	0	14.16				13.59		0
				135	69	13.86				13.43		0
				135	138	13.95				13.44		0
				270	0	14.05				13.33		0
			16QAM	1	1	14.14				13.58		0
			64QAM	1	1	14.24				13.65		0
			256QAM	1	1	13.98				13.45		0
		CP	QPSK	1	1	14.47				13.93		0

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11.4.16 NR TDD Band n77 DoD Maximum Conducted Power

NR TDD Band n77 DoD (PC2) Conducted Power_ Measured *Pmax*_ SUB2 Antenna

NR TDD Band n77 DoD_100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3 500.01 ㎒		
100 ㎒	30	DFT-s	pi/2 BPSK	1	1		26.53		0
				1	137		26.28		0
				1	271		26.36		0
				135	0		25.94		0.5
				135	69		26.35		0
				135	138		25.88		0.5
				270	0		25.92		0.5
			QPSK	1	1		26.47		0
				1	137		26.15		0
				1	271		26.23		0
				135	0		25.44		1
				135	69		26.23		0
				135	138		25.40		1
				270	0		25.43		1
			16QAM	1	1		25.39		1
			64QAM	1	1		24.06		2.5
			256QAM	1	1		21.51		4.5
		CP	QPSK	1	1		25.19		1.5

NR TDD Band n77 DoD (PC2) Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR TDD Band n77 DoD_100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3 500.01 ㎒		
100 ㎒	30	DFT-s	pi/2 BPSK	1	1		16.40		0
				1	137		16.25		0
				1	271		16.60		0
				135	0		16.64		0
				135	69		16.22		0
				135	138		16.55		0
				270	0		16.46		0
			QPSK	1	1		16.55		0
				1	137		16.49		0
				1	271		16.35		0
				135	0		16.52		0
				135	69		16.38		0
				135	138		16.34		0
				270	0		16.28		0
			16QAM	1	1		16.47		0
			64QAM	1	1		16.33		0
			256QAM	1	1		16.44		0
		CP	QPSK	1	1		16.72		0

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NR TDD Band n77 DoD (PC2) Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n77 DoD_100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3 500.01 ㎒		
100 ㎒	30	DFT-s	pi/2 BPSK	1	1		14.23		0
				1	137		14.29		0
				1	271		14.33		0
				135	0		14.43		0
				135	69		14.34		0
				135	138		14.32		0
				270	0		14.37		0
			QPSK	1	1		14.53		0
				1	137		14.30		0
				1	271		14.40		0
				135	0		14.44		0
				135	69		14.30		0
				135	138		14.34		0
				270	0		14.37		0
			16QAM	1	1		14.48		0
			64QAM	1	1		14.54		0
			256QAM	1	1		14.11		0
		CP	QPSK	1	1		14.60		0

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11.4.17 NR TDD Band n78 Maximum Conducted Power

NR TDD Band n78 (PC2) Conducted Power_ Measured *Pmax*_ SUB2 Antenna

NR TDD Band n78 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3 750 ㎒		
100 ㎒	30	DFT-s	pi/2 BPSK	1	1		25.92		0
				1	137		25.73		0
				1	271		26.10		0
				135	0		25.29		0.5
				135	69		25.75		0
				135	138		25.34		0.5
				270	0		25.26		0.5
			QPSK	1	1		25.75		0
				1	137		25.50		0
				1	271		26.02		0
				135	0		24.77		1
				135	69		25.75		0
				135	138		24.87		1
				270	0		24.83		1
			16QAM	1	1		24.59		1
			64QAM	1	1		23.45		2.5
			256QAM	1	1		20.85		4.5
		CP	QPSK	1	1		24.45		1.5

NR TDD Band n78 (PC2) Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR TDD Band n78 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3 750 ㎒		
100 ㎒	30	DFT-s	pi/2 BPSK	1	1		16.69		0
				1	137		16.11		0
				1	271		16.47		0
				135	0		16.30		0
				135	69		16.13		0
				135	138		16.21		0
				270	0		16.34		0
			QPSK	1	1		16.80		0
				1	137		16.29		0
				1	271		16.29		0
				135	0		16.46		0
				135	69		16.02		0
				135	138		16.44		0
				270	0		16.49		0
			16QAM	1	1		16.24		0
			64QAM	1	1		16.71		0
			256QAM	1	1		16.28		0
		CP	QPSK	1	1		16.88		0

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NR TDD Band n78 (PC2) Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n78 _100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3 750 ㎒		
100 ㎒	30	DFT-s	pi/2 BPSK	1	1		14.16		0
				1	137		13.90		0
				1	271		14.05		0
				135	0		14.11		0
				135	69		14.20		0
				135	138		13.88		0
				270	0		14.00		0
			QPSK	1	1		14.15		0
				1	137		13.72		0
				1	271		13.90		0
				135	0		14.06		0
				135	69		13.90		0
				135	138		13.89		0
				270	0		13.63		0
			16QAM	1	1		14.06		0
			64QAM	1	1		14.04		0
			256QAM	1	1		13.84		0
		CP	QPSK	1	1		14.58		0

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11.4.18 NR TDD Band n78 DoD Maximum Conducted Power

NR TDD Band n78 DoD (PC2) Conducted Power_ Measured *Pmax*_ SUB2 Antenna

NR TDD Band n78 DoD_100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
100 ㎒	30	DFT-s	pi/2 BPSK	1	1		26.62		0
				1	137		26.39		0
				1	271		26.49		0
				135	0		26.05		0.5
				135	69		26.47		0
				135	138		25.96		0.5
				270	0		26.03		0.5
			QPSK	1	1		26.54		0
				1	137		26.24		0
				1	271		26.44		0
				135	0		25.56		1
				135	69		26.52		0
				135	138		25.49		1
				270	0		25.48		1
			16QAM	1	1		25.59		1
			64QAM	1	1		24.17		2.5
			256QAM	1	1		21.63		4.5
		CP	QPSK	1	1		25.31		1.5

NR TDD Band n78 DoD (PC2) Conducted Power_ Measured DSI = 0 (free) _ SUB2 Antenna

NR TDD Band n78 DoD_100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
100㎒	30	DFT-s	pi/2 BPSK	1	1		16.38		0
				1	137		16.46		0
				1	271		16.32		0
				135	0		16.35		0
				135	69		16.67		0
				135	138		16.37		0
				270	0		16.42		0
			QPSK	1	1		16.50		0
				1	137		16.28		0
				1	271		16.63		0
				135	0		16.35		0
				135	69		16.72		0
				135	138		16.50		0
				270	0		16.50		0
			16QAM	1	1		16.28		0
			64QAM	1	1		16.27		0
			256QAM	1	1		17.10		0
		CP	QPSK	1	1		16.80		0

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NR TDD Band n78 DoD (PC2) Conducted Power_ Measured DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n78 DoD_100 ㎒ Bandwidth Conducted Power

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
100㎒	30	DFT-s	pi/2 BPSK	1	1		13.78		0
				1	137		14.01		0
				1	271		14.18		0
				135	0		14.18		0
				135	69		13.94		0
				135	138		14.08		0
				270	0		13.55		0
			QPSK	1	1		14.23		0
				1	137		13.97		0
				1	271		14.04		0
				135	0		14.20		0
				135	69		13.73		0
				135	138		14.11		0
				270	0		14.15		0
			16QAM	1	1		14.08		0
			64QAM	1	1		14.10		0
			256QAM	1	1		13.97		0

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11.4.19 NR Band SRS Conducted Power

[NR TDD Band n41 (Power Class 2) SRS Conducted Power_ Low Antenna]

NR TDD Band n41_ 100 ㎒ Bandwidth Conducted Power_ SUB2 Antenna, SRS #2

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm] 518598 2 592.99 ㎒	MPR [dB]
Measured *Pmax*	100 ㎒	30	CW	20.66	0
Measured DSI = 0 (free)	100 ㎒	30	CW	20.66	0
Measured DSI = 1 (RCV)	100 ㎒	30	CW	19.23	0

NR TDD Band n41_ 100 ㎒ Bandwidth Conducted Power_ MAIN4 Antenna, SRS #3

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm] 518598 2 592.99 ㎒	MPR [dB]
Measured *Pmax*	100 ㎒	30	CW	22.76	0
Measured DSI = 0 (free)	100 ㎒	30	CW	19.19	0
Measured DSI = 1 (RCV)	100 ㎒	30	CW	18.21	0

NR TDD Band n41_ 100 ㎒ Bandwidth Conducted Power_ SUB1 Antenna, SRS #4

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm] 518598 2 592.99 ㎒	MPR [dB]
Measured *Pmax*	100 ㎒	30	CW	19.42	0
Measured DSI = 0 (free)	100 ㎒	30	CW	18.23	0
Measured DSI = 1 (RCV)	100 ㎒	30	CW	17.23	0

[NR TDD Band n41 (Power Class 2) SRS Conducted Power_ Up Antenna]

NR TDD Band n41_ 100 ㎒ Bandwidth Conducted Power_ MAIN2 Antenna, SRS #2

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm] 518598 2 592.99 ㎒	MPR [dB]
Measured *Pmax*	100 ㎒	30	CW	22.93	0
Measured DSI = 0 (free)	100 ㎒	30	CW	20.31	0
Measured DSI = 1 (RCV)	100 ㎒	30	CW	14.96	0

NR TDD Band n41_ 100 ㎒ Bandwidth Conducted Power_ SUB1 Antenna, SRS #3

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm] 518598 2 592.99 ㎒	MPR [dB]
Measured *Pmax*	100 ㎒	30	CW	23.99	0
Measured DSI = 0 (free)	100 ㎒	30	CW	19.26	0
Measured DSI = 1 (RCV)	100 ㎒	30	CW	13.74	0

NR TDD Band n41_ 100 ㎒ Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm] 518598 2 592.99 ㎒	MPR [dB]
Measured *Pmax*	100 ㎒	30	CW	20.02	0
Measured DSI = 0 (free)	100 ㎒	30	CW	19.24	0
Measured DSI = 1 (RCV)	100 ㎒	30	CW	13.82	0

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[NR TDD Band n48 SRS Conducted Power]

NR TDD Band n48_ 40 ㎒ Bandwidth Conducted Power_ MAIN3 Antenna, SRS #2

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
				638000	641666	645334	
				3 570 ㎒	3 624.99 ㎒	3 680.01 ㎒	
Measured *Pmax*	40 ㎒	30	CW	15.13	16.55	16.88	0
Measured DSI = 0 (free)	40 ㎒	30	CW	12.59	13.94	13.98	0
Measured DSI = 1 (RCV)	40 ㎒	30	CW	7.62	9.24	9.39	0

NR TDD Band n48_ 40 ㎒ Bandwidth Conducted Power_ SUB5 Antenna, SRS #3

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
				638000	641666	645334	
				3 570 ㎒	3 624.99 ㎒	3 680.01 ㎒	
Measured *Pmax*	40 ㎒	30	CW	19.40	20.40	19.76	0
Measured DSI = 0 (free)	40 ㎒	30	CW	16.92	17.96	17.26	0
Measured DSI = 1 (RCV)	40 ㎒	30	CW	11.91	12.93	12.23	0

NR TDD Band n48_ 40 ㎒ Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
				638000	641666	645334	
				3 570 ㎒	3 624.99 ㎒	3 680.01 ㎒	
Measured *Pmax*	40 ㎒	30	CW	14.32	15.72	15.57	0
Measured DSI = 0 (free)	40 ㎒	30	CW	11.83	13.36	13.41	0
Measured DSI = 1 (RCV)	40 ㎒	30	CW	6.81	8.31	8.29	0

[NR TDD Band n77 (Power Class 2) SRS Conducted Power]

NR TDD Band n77_ 100 ㎒ Bandwidth Conducted Power_ MAIN3 Antenna, SRS #2

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]							MPR [dB]
				650000				662000			
				3 750 ㎒				3 930 ㎒			
Measured *Pmax*	100 ㎒	30	CW	14.60				14.61			0
Measured DSI = 0 (free)	100 ㎒	30	CW	5.06				5.08			0
Measured DSI = 1 (RCV)	100 ㎒	30	CW	3.06				3.09			0

NR TDD Band n77_ 100 ㎒ Bandwidth Conducted Power_ SUB5 Antenna, SRS #3

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]							MPR [dB]
				650000				662000			
				3 750 ㎒				3 930 ㎒			
Measured *Pmax*	100 ㎒	30	CW	18.10				17.83			0
Measured DSI = 0 (free)	100 ㎒	30	CW	8.67				8.77			0
Measured DSI = 1 (RCV)	100 ㎒	30	CW	6.39				6.54			0

NR TDD Band n77_ 100 ㎒ Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]							MPR [dB]
				650000				662000			
				3 750 ㎒				3 930 ㎒			
Measured *Pmax*	100 ㎒	30	CW	13.88				14.13			0
Measured DSI = 0 (free)	100 ㎒	30	CW	4.14				4.47			0
Measured DSI = 1 (RCV)	100 ㎒	30	CW	2.35				2.68			0

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[NR TDD Band n77 DoD (Power Class 2) SRS Conducted Power]

NR TDD Band n77 DoD_ 100 ㎒ Bandwidth Conducted Power_ MAIN3 Antenna, SRS #2

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
					633334		
					3500.01 ㎒		
Measured *Pmax*	100 ㎒	30	CW		16.16		0
Measured DSI = 0 (free)	100 ㎒	30	CW		6.84		0
Measured DSI = 1 (RCV)	100 ㎒	30	CW		4.41		0

NR TDD Band n77 DoD_ 100 ㎒ Bandwidth Conducted Power_ SUB5 Antenna, SRS #3

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
					633334		
					3500.01 ㎒		
Measured *Pmax*	100 ㎒	30	CW		19.45		0
Measured DSI = 0 (free)	100 ㎒	30	CW		10.20		0
Measured DSI = 1 (RCV)	100 ㎒	30	CW		7.86		0

NR TDD Band n77 DoD_ 100 ㎒ Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
					633334		
					3500.01 ㎒		
Measured *Pmax*	100 ㎒	30	CW		15.20		0
Measured DSI = 0 (free)	100 ㎒	30	CW		5.47		0
Measured DSI = 1 (RCV)	100 ㎒	30	CW		3.52		0

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[NR TDD Band n78 (Power Class 2) SRS Conducted Power]

NR TDD Band n78_ 100 ㎒ Bandwidth Conducted Power_ MAIN3 Antenna, SRS #2

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
					650000		
					3750 ㎒		
Measured *Pmax*	100 ㎒	30	CW		14.26		0
Measured DSI = 0 (free)	100 ㎒	30	CW		4.80		0
Measured DSI = 1 (RCV)	100 ㎒	30	CW		2.89		0

NR TDD Band n78_ 100 ㎒ Bandwidth Conducted Power_ SUB5 Antenna, SRS #3

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
					650000		
					3750 ㎒		
Measured *Pmax*	100 ㎒	30	CW		17.82		0
Measured DSI = 0 (free)	100 ㎒	30	CW		8.46		0
Measured DSI = 1 (RCV)	100 ㎒	30	CW		6.06		0

NR TDD Band n78_ 100 ㎒ Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
					650000		
					3750 ㎒		
Measured *Pmax*	100 ㎒	30	CW		13.62		0
Measured DSI = 0 (free)	100 ㎒	30	CW		4.05		0
Measured DSI = 1 (RCV)	100 ㎒	30	CW		2.12		0

[NR TDD Band n78 DoD (Power Class 2) SRS Conducted Power]

NR TDD Band n78 DoD_ 100 ㎒ Bandwidth Conducted Power_ MAIN3 Antenna, SRS #2

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
					633334		
					3500.01 ㎒		
Measured *Pmax*	100 ㎒	30	CW		16.04		0
Measured DSI = 0 (free)	100 ㎒	30	CW		6.82		0
Measured DSI = 1 (RCV)	100 ㎒	30	CW		4.38		0

NR TDD Band n78 DoD _ 100 ㎒ Bandwidth Conducted Power_ SUB5 Antenna, SRS #3

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
					633334		
					3500.01 ㎒		
Measured *Pmax*	100 ㎒	30	CW		19.25		0
Measured DSI = 0 (free)	100 ㎒	30	CW		9.59		0
Measured DSI = 1 (RCV)	100 ㎒	30	CW		7.75		0

NR TDD Band n78 DoD _ 100 ㎒ Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(㎑)	Modulation	Max. Average Power [dBm]			MPR [dB]
					633334		
					3500.01 ㎒		
Measured *Pmax*	100 ㎒	30	CW		15.12		0
Measured DSI = 0 (free)	100 ㎒	30	CW		5.45		0
Measured DSI = 1 (RCV)	100 ㎒	30	CW		3.29		0

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11.4.20 NTN Conducted Power

NTN Band 255 Conducted Power_ SUB2 Antenna

Bandwidth	SCS(㎑)	Modulation	SC Size	Max. Average Power (dBm)		
				261505(Tx) 228738(Rx)	261674(Tx) 228906(Rx)	261843(Tx) 229075(Rx)
				1626.6 ㎒(Tx)	1643.5 ㎒(Tx)	1660.4 ㎒(Tx)
200 ㎑	3.75	BPSK	1SC0	21.34	21.32	21.11
			1SC47	21.60	22.04	21.55
	15		1SC0	21.50	22.01	21.51
			1SC11	22.38	22.39	22.19
	3.75	QPSK	1SC0	21.15	21.31	21.17
			1SC47	21.63	22.00	21.58
	15		1SC0	21.85	21.93	21.56
			1SC11	21.93	22.25	21.87
			3SC0	21.43	21.92	21.80
			3SC9	21.74	21.79	21.79
			6SC0	21.43	21.97	21.90
			6SC6	21.51	22.02	21.96
			12SC0	21.52	22.02	21.98

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11.5 WIFI Conducted Power measurement method

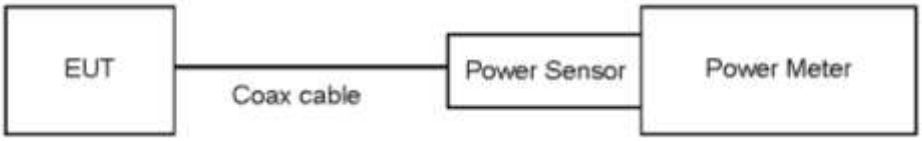
Un-Licensed Bands (DTS Band)

Test Description	Test Procedure Used
Conducted Output Power	- KDB 558074 v05 – Section 8.3.2.3 - ANSI 63.10-2013 – Section 11.9.2.3

Test Procedure

1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Test setup



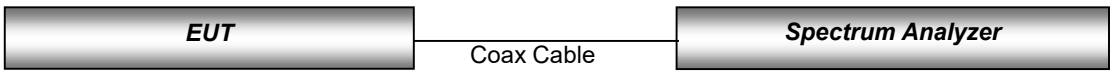
Un-Licensed Bands (NII Band)

Test Description	Test Procedure Used
Conducted Output Power	- KDB 789033 D02 v02r01 – Section E.3.a

Test Procedure

1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Test setup



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11.5.1 IEEE 802.11 (2.4 ㎓) Maximum and Reduced Conducted Power

Mode	Frequency [㎒]	Channel	Plimit (Head) (DSI = 1)		
			IEEE 802.11 (2.4 ㎓) Average RF Conducted Power [dBm]		
			WIFI 1	WIFI 2	MIMO
802.11b	2 412	1	14.59	14.64	17.62
	2 437	6	14.32	14.26	17.30
	2 462	11	14.37	14.32	17.35
802.11g	2 412	1	14.34	14.45	17.40
	2 437	6	14.10	14.05	17.08
	2 462	11	14.13	14.06	17.10
802.11n (HT20)	2 412	1	14.29	14.38	17.34
	2 437	6	14.14	14.10	17.13
	2 462	11	14.04	13.95	17.00
802.11ax (HT20)	2 412	1	14.08	14.08	17.09
	2 437	6	13.89	13.77	16.84
	2 462	11	13.74	13.69	16.72

Mode	Frequency [㎒]	Channel	Plimit (Body) (DSI = 0)		
			IEEE 802.11 (2.4 ㎓) Average RF Conducted Power [dBm]		
			WIFI 1	WIFI 2	MIMO
802.11b	2 412	1	18.92	18.54	21.74
	2 437	6	18.63	18.48	21.57
	2 462	11	19.03	18.25	21.67

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11.5.2 IEEE 802.11 (5 ㎓) Maximum and Reduced Conducted Power

Frequency [㎒]	Channel	Plimit (Head) (DSI = 1)		
		IEEE 802.11 ac (80 ㎒ BW) Conducted Power [dBm]		
		Ant.1	Ant.2	MIMO
5 530	106	13.45	13.65	16.56
5 610	122	13.17	13.50	16.35
5 690	138	13.53	13.80	16.68
5 775	155	13.28	13.37	16.34
5 855	171	13.36	13.04	16.22

Frequency [㎒]	Channel	Plimit (Head) (DSI = 1)		
		IEEE 802.11 ax (80 ㎒ BW) Conducted Power [dBm]		
		Ant.1	Ant.2	MIMO
5 210	42	14.01	13.91	16.97
5 290	58	14.25	14.11	17.19
5 530	106	12.43	13.23	15.86

Frequency [㎒]	Channel	Plimit (Body) (DSI = 0)		
		IEEE 802.11 a (20 ㎒ BW) Conducted Power [dBm]		
		Ant.1	Ant.2	MIMO
5 300	60	17.80	17.25	20.54
5 320	64	16.18	15.97	19.08
5 500	100	16.34	16.46	19.41

Frequency [㎒]	Channel	Plimit (Body) (DSI = 0)		
		IEEE 802.11 n (40 ㎒ BW) Conducted Power [dBm]		
		Ant.1	Ant.2	MIMO
5 270	54	17.97	17.56	20.78

Frequency [㎒]	Channel	Plimit (Body) (DSI = 0)		
		IEEE 802.11 ac (80 ㎒ BW) Conducted Power [dBm]		
		Ant.1	Ant.2	MIMO
5 610	122	16.75	17.36	20.08
5 690	138	17.03	17.69	20.39
5 775	155	17.11	17.03	20.08
5 855	171	17.17	16.82	20.01

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11.5.3 IEEE 802.11 (6-7 GHz) Maximum and Reduced Conducted Power

Frequency [MHz]	Channel	Plimit (DSI = 0, 1)		
		IEEE 802.11ax (160 MHz BW) Conducted Power [dBm]		
		Ant.1	Ant.2	MIMO
6 025	15	8.80	8.88	11.85
6 185	47	8.91	8.85	11.89
6 345	79	8.60	8.73	11.67
6 505	111	8.04	8.96	11.53
6 665	143	8.08	8.34	11.22
6 825	175	8.07	8.47	11.28
6 985	207	8.97	8.96	11.97

Note:

For testing the WIFI 6 GHz of this DUT, the selection of test channels was based on FCC guidance, with five channels selected across the entire WIFI 6 GHz Bands.

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

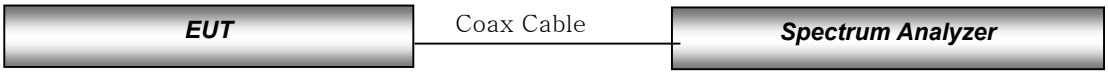
▪ Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.

▪ For transmission mode with the same maximum output power specification, powers were measured for the largest channel Bandwidth, lowest order modulation and lowest data rate.

▪ For transmission modes with identical maximum specified output power, channel Bandwidth, modulation and data rates, power measurements were required for all identical configurations.

▪ For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-Band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-Band channels, due to an even number of channels, both channels were measured.

Test Configuration



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11.6 Bluetooth Maximum Conducted Power

11.6.1 Bluetooth Maximum Conducted Power (Pmax=DSI 0)

The Burst Averaged-conducted power

Mode	Channel	Max. Average Conducted Power [dBm]	
		Ant.1 (PL11)	Ant.2 (PL11)
DH5	0	17.40	17.98
	39	18.26	18.52
	78	17.77	17.96
2-DH5	0	13.20	13.35
	39	13.93	14.37
	78	13.42	13.61
3-DH5	0	13.23	13.36
	39	13.90	14.38
	78	13.43	13.64

11.6.2 Bluetooth Reduced Conducted Power – Receiver Active (DSI 1)

The Burst Averaged-conducted power

Mode	Channel	Max. Average Conducted Power [dBm]	
		Ant.1	Ant.2
DH5	0	15.68	16.01
	39	16.24	16.42
	78	15.84	16.03

11.6.3 Bluetooth LE Maximum Conducted Power (Pmax=DSI 0)

The Burst Averaged-conducted power

Mode	Channel	Max. Average Conducted Power [dBm]	
		Ant.1 (PL11)	Ant.2 (PL11)
LE1M	0	17.45	17.86
	39	18.13	18.49
	78	17.69	17.71

11.6.4 Bluetooth LE Reduced Conducted Power – Receiver Active (DSI 1)

The Burst Averaged-conducted power – Bluetooth LE

Mode	Channel	Max. Average Conducted Power [dBm]	
		Ant.1	Ant.2
1M 255 Packet	37	15.67	15.57
	17	16.47	16.63
	39	15.83	15.86

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Per October 2016 TCB Workshop Notes:

When call box and Bluetooth protocol are used for Bluetooth SAR measurement, time-domain plot is required to identify duty factor for supporting the test setup and result.
Bluetooth duty cycle was measured using Bluetooth tester equipment (CBT / R&S) with Bluetooth.

Bluetooth Duty cycle Measurement results

	
Duty Cycle== (BT-On time /BT-Full time) =(2.887/3.751) = 0.77 (DH5)	Duty Cycle=(BT-On time /BT-Full time) (2.135/2.500) = 0.854 (BT LE 1M)

BT DH5 Maximum Duty Factor:

The maximum duty cycle defined by chipset manufacturer is 79.0 % The duty cycle of DH5 measured by DUT was 77.0 %, and the measured SAR results was compensated by applying the maximum duty cycle

BT LE (1M) Maximum Duty Factor:
The maximum duty cycle defined by chipset manufacturer is 86.0 % for BT LE 1MHz. The duty cycle of DH5 measured by DUT was 85.4 %, and the measured SAR results was compensated by applying the maximum duty cycle

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12. System Verification

12.1 Tissue Verification

The head simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity.

◆ GSM/ UMTS/ LTE/ WLAN/ NFC Band

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (㎒)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/20/2024	21.8	13H	12	0.730	54.359	0.750	55.000	-2.67	-1.17
			13	0.735	54.501	0.750	55.000	-2.00	-0.91
			14	0.740	54.504	0.750	55.000	-1.33	-0.90
09/02/2024	21.6	750H	705	0.914	41.896	0.889	42.174	2.81	-0.66
			710	0.917	41.838	0.890	42.148	3.03	-0.74
			750	0.926	41.204	0.893	41.940	3.70	-1.75
09/09/2024	21.5	750H	705	0.914	41.924	0.889	42.174	2.81	-0.59
			710	0.917	41.881	0.890	42.148	3.03	-0.63
			750	0.926	41.202	0.893	41.940	3.70	-1.76
08/27/2024	21.8	750H	705	0.855	43.859	0.889	42.174	-3.82	4.00
			710	0.860	43.785	0.890	42.148	-3.37	3.88
			750	0.903	43.202	0.893	41.940	1.12	3.01
09/03/2024	21.4	750H	705	0.865	42.194	0.889	42.174	-2.70	0.05
			710	0.871	42.102	0.890	42.148	-2.13	-0.11
			750	0.919	41.355	0.893	41.940	2.91	-1.39
08/28/2024	21.8	750H	750	0.878	43.797	0.893	41.940	-1.68	4.43
			785	0.914	43.291	0.896	41.758	2.01	3.67
09/04/2024	21.8	750H	750	0.871	41.900	0.893	41.940	-2.46	-0.10
			785	0.910	41.236	0.896	41.758	1.56	-1.25
08/29/2024	21.4	750H	750	0.877	43.803	0.893	41.940	-1.79	4.44
			785	0.915	43.297	0.896	41.758	2.12	3.69
09/05/2024	21.6	750H	750	0.867	42.165	0.893	41.940	-2.91	0.54
			785	0.906	41.498	0.896	41.758	1.12	-0.62
10/07/2024	22.2	835H	820	0.911	42.076	0.899	41.577	1.33	1.20
			835	0.917	42.021	0.900	41.500	1.89	1.26
			850	0.921	41.973	0.916	41.500	0.55	1.14
10/13/2024	22.7	835H	820	0.913	42.077	0.899	41.577	1.56	1.20
			835	0.919	42.023	0.900	41.500	2.11	1.26
			850	0.924	41.975	0.916	41.500	0.87	1.14
08/30/2024	20.3	835H	820	0.912	42.268	0.899	41.577	1.45	1.66
			835	0.918	42.200	0.900	41.500	2.00	1.69
			850	0.922	42.165	0.916	41.500	0.66	1.60
08/30/2024	21.1	835H	820	0.924	43.133	0.899	41.577	2.78	3.74
			835	0.939	42.929	0.900	41.500	4.33	3.44
			850	0.955	42.727	0.916	41.500	4.26	2.96
09/06/2024	22.0	835H	820	0.915	41.155	0.899	41.577	1.78	-1.01
			835	0.932	40.890	0.900	41.500	3.56	-1.47
			850	0.947	40.631	0.916	41.500	3.38	-2.09

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Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/02/2024	20.5	1800H	1 710	1.295	40.390	1.348	40.144	-3.93	0.61
			1 750	1.317	40.411	1.371	40.080	-3.94	0.83
			1 800	1.360	40.400	1.400	40.000	-2.86	1.00
09/10/2024	22.6	1800H	1 710	1.322	39.410	1.348	40.144	-1.93	-1.83
			1 750	1.366	39.259	1.371	40.080	-0.36	-2.05
			1 800	1.420	39.021	1.400	40.000	1.43	-2.45
10/19/2024	21.4	1800H	1 710	1.338	39.408	1.400	40.000	-4.43	-1.48
			1 750	1.383	39.259	1.400	40.000	-1.21	-1.85
			1 800	1.437	39.019	1.400	40.000	2.64	-2.45
10/13/2024	22.6	1900H	1 850	1.393	41.440	1.400	40.000	-0.50	3.60
			1 900	1.422	41.305	1.400	40.000	1.57	3.26
			1 910	1.426	41.284	1.400	40.000	1.86	3.21
09/03/2024	20.3	1900H	1 850	1.380	39.900	1.400	40.000	-1.43	-0.25
			1 900	1.410	39.700	1.400	40.000	0.71	-0.75
			1 910	1.420	39.700	1.400	40.000	1.43	-0.75
09/09/2024	22.6	1900H	1 850	1.376	40.209	1.400	40.000	-1.71	0.52
			1 900	1.425	40.006	1.400	40.000	1.79	0.02
			1 910	1.434	39.966	1.400	40.000	2.43	-0.08
10/21/2024	20.6	1900H	1 850	1.374	39.754	1.400	40.000	-1.86	-0.62
			1 900	1.423	39.551	1.400	40.000	1.64	-1.12
			1 910	1.433	39.511	1.400	40.000	2.36	-1.22
10/09/2024	21.3	2300H	2 300	1.718	39.308	1.667	39.470	3.06	-0.41
			2 310	1.727	39.290	1.676	39.452	3.04	-0.46
10/04/2024	20.4	2300H	2 300	1.720	39.300	1.667	39.470	3.18	-0.43
			2 310	1.724	39.267	1.676	39.452	2.86	-0.47
09/04/2024	20.7	2450H	2 400	1.719	39.244	1.756	39.290	-2.11	-0.12
			2 450	1.790	39.900	1.800	39.200	-0.56	1.79
			2 500	1.896	40.526	1.855	39.140	2.21	3.54
09/11/2024	21.0	2450H	2 400	1.692	39.348	1.756	39.290	-3.64	0.15
			2 450	1.760	40.000	1.800	39.200	-2.22	2.04
			2 500	1.868	40.625	1.855	39.140	0.70	3.79
10/02/2024	20.0	2450H	2 400	1.813	40.454	1.756	39.290	3.25	2.96
			2 450	1.880	40.300	1.800	39.200	4.44	2.81
			2 500	1.927	40.126	1.855	39.140	3.88	2.52
09/09/2024	20.3	2600H	2 500	1.850	38.430	1.855	39.140	-0.27	-1.81
			2 600	1.960	38.034	1.964	39.010	-0.20	-2.50
			2 690	2.055	37.635	2.062	38.894	-0.34	-3.24
09/05/2024	21.0	2600H	2 500	1.829	38.879	1.855	39.140	-1.40	-0.67
			2 600	1.938	38.486	1.964	39.010	-1.32	-1.34
			2 690	2.033	38.093	2.062	38.894	-1.41	-2.06

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Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/10/2024	20.8	2600H	2 500	1.852	38.436	1.855	39.140	-0.16	-1.80
			2 600	1.959	38.037	1.964	39.010	-0.25	-2.49
			2 690	2.058	37.644	2.062	38.894	-0.19	-3.21
10/22/2024	20.3	2600H	2 500	1.860	39.300	1.855	39.140	0.27	1.94
			2 600	1.980	39.100	1.964	39.010	0.81	0.23
			2 690	2.090	38.200	2.062	38.894	1.36	-1.78
09/06/2024	20.7	2600H	2 500	1.831	38.876	1.855	39.140	-1.29	-0.67
			2 600	1.938	38.484	1.964	39.010	-1.32	-1.35
			2 690	2.036	38.087	2.062	38.894	1.36	-1.78
10/18/2024	20.3	3500H-3700H	3 500	2.980	38.900	2.913	37.930	2.30	2.56
			3 550	3.030	38.800	2.964	37.870	2.23	2.46
			3 650	3.120	38.700	3.066	37.760	1.76	2.49
			3 700	3.170	38.600	3.118	37.770	1.67	2.20
09/05/2024	20.5	5180H-5320H	5 180	4.647	36.037	4.635	36.010	0.26	0.07
			5 250	4.740	35.800	4.706	35.930	0.72	-0.36
			5 280	4.782	35.742	4.737	35.894	0.95	-0.42
			5 320	4.840	35.701	4.778	35.846	1.30	-0.40
09/06/2024	20.3	5500H-5600H	5 500	5.001	35.546	4.963	35.640	0.77	-0.26
			5 600	5.110	35.400	5.065	35.530	0.89	-0.37
			5 750	5.319	35.228	5.219	35.360	1.92	-0.37
09/09/2024	20.8	5750H-5825H	5 750	5.330	35.300	5.219	35.360	2.13	-0.17
			5 800	5.253	35.329	5.270	35.300	-0.32	0.08
			5 825	5.223	35.282	5.296	35.270	-1.38	0.03
09/10/2024	21.0	5800H-5885H	5 800	5.260	35.400	5.270	35.300	-0.19	0.28
			5 835	5.213	35.353	5.306	35.258	-1.75	0.27
			5 845	5.207	35.317	5.316	35.246	-2.05	0.20
			5 855	5.204	35.276	5.326	35.235	-2.29	0.12
			5 865	5.204	35.230	5.337	35.225	-2.49	0.01
			5 875	5.208	35.178	5.347	35.215	-2.60	-0.11
			5 885	5.215	35.125	5.357	35.205	-2.65	-0.23

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Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (㎒)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
10/05/2024	20.2	6500H	5 935	5.170	34.800	5.409	35.148	-4.42	-0.99
			6 000	5.290	34.500	5.475	35.070	-3.38	-1.63
			6 425	5.900	34.400	5.982	34.550	-1.37	-0.43
			6 500	5.890	34.300	6.072	34.460	-3.00	-0.46
			6 525	5.990	34.000	6.101	34.430	-1.82	-1.25
			6 875	6.390	33.500	6.497	34.029	-1.65	-1.55
			7 000	6.550	33.300	6.650	33.880	-1.50	-1.71
			7 115	6.740	33.300	6.786	33.742	-0.68	-1.31
10/06/2024	20.5	6500H	5 935	5.170	34.800	5.409	35.148	-4.42	-0.99
			6 000	5.300	34.600	5.475	35.070	-3.20	-1.34
			6 425	5.940	34.400	5.982	34.550	-0.70	-0.43
			6 500	5.890	34.300	6.072	34.460	-3.00	-0.46
			6 525	5.970	34.100	6.101	34.430	-2.15	-0.96
			6 875	6.430	33.500	6.497	34.029	-1.03	-1.55
			7 000	6.560	33.100	6.650	33.880	-1.35	-2.30
			7 115	6.710	33.200	6.786	33.742	-1.12	-1.61
10/09/2024	21.0	6500H	5 935	5.160	34.800	5.409	35.148	-4.60	-0.99
			6 000	5.320	34.500	5.475	35.070	-2.83	-1.63
			6 425	5.930	34.300	5.982	34.550	-0.87	-0.72
			6 500	5.910	34.200	6.072	34.460	-2.67	-0.75
			6 525	5.960	34.100	6.101	34.430	-2.31	-0.96
			6 875	6.420	33.600	6.497	34.029	-1.19	-1.26
			7 000	6.520	33.200	6.650	33.880	-1.95	-2.01
			7 115	6.720	33.300	6.786	33.742	-0.97	-1.31
10/08/2024	21.1	6500H	5 935	5.260	34.800	5.409	35.148	-2.75	-0.99
			6 000	5.370	34.700	5.475	35.070	-1.92	-1.06
			6 425	6.010	34.300	5.982	34.550	0.47	-0.72
			6 500	6.030	34.100	6.072	34.460	-0.69	-1.04
			6 525	6.050	34.100	6.101	34.430	-0.84	-0.96
			6 875	6.480	33.500	6.497	34.029	-0.26	-1.55
			7 000	6.630	33.100	6.650	33.880	-0.30	-2.30
			7 115	6.770	33.200	6.786	33.742	-0.24	-1.61

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◆ 5G NR SUB 6 / NTN Band

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (㎒)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/10/2024	21.4	750H	705	0.870	43.416	0.889	42.174	-2.14	2.94
			710	0.872	43.401	0.890	42.148	-2.02	2.97
			750	0.888	43.266	0.893	41.940	-0.56	3.16
09/14/2024	21.6	750H	705	0.870	41.260	0.889	42.174	-2.14	-2.17
			710	0.872	41.244	0.890	42.148	-2.02	-2.14
			750	0.888	41.107	0.893	41.940	-0.56	-1.99
09/11/2024	21.3	750H	705	0.870	43.201	0.889	42.174	-2.14	2.44
			710	0.872	43.186	0.890	42.148	-2.02	2.46
			750	0.888	43.050	0.893	41.940	-0.56	2.65
09/15/2024	21.4	750H	705	0.870	42.303	0.889	42.174	-2.14	0.31
			710	0.872	42.288	0.890	42.148	-2.02	0.33
			750	0.888	42.153	0.893	41.940	-0.56	0.51
09/13/2024	21.8	750H	705	0.914	42.542	0.889	42.174	2.81	0.87
			710	0.917	42.484	0.890	42.148	3.03	0.80
			750	0.927	41.848	0.893	41.940	3.81	-0.22
09/17/2024	21.0	750H	705	0.916	42.898	0.889	42.174	3.04	1.72
			710	0.919	42.845	0.890	42.148	3.26	1.65
			750	0.928	42.198	0.893	41.940	3.92	0.62
09/12/2024	21.5	835H	820	0.912	42.459	0.899	41.577	1.45	2.12
			835	0.918	42.405	0.900	41.500	2.00	2.18
			850	0.922	42.356	0.916	41.500	0.66	2.06
09/16/2024	21.0	835H	820	0.912	40.897	0.899	41.577	1.45	-1.64
			835	0.918	40.843	0.900	41.500	2.00	-1.58
			850	0.922	40.794	0.916	41.500	0.66	-1.70
10/28/2024	20.4	1640H	1 630	1.249	39.588	1.301	40.270	-4.00	-1.69
			1 640	1.264	39.582	1.307	40.255	-3.29	-1.67
09/11/2024	22.7	1640H	1 640	1.262	39.564	1.307	40.255	-3.44	-1.72
			1 690	1.311	39.405	1.336	40.176	-1.87	-1.92
			1 700	1.330	39.497	1.342	40.160	-0.89	-1.65
09/12/2024	23.0	1640H	1 640	1.262	39.534	1.307	40.255	-3.44	-1.79
			1 690	1.314	39.414	1.336	40.176	-1.65	-1.90
			1 700	1.311	39.500	1.342	40.160	-2.31	-1.64
10/02/2024	22.4	1640H	1 640	1.291	40.282	1.307	40.255	-1.22	0.07
			1 690	1.340	40.248	1.336	40.176	0.30	0.18
			1 700	1.351	40.381	1.342	40.160	0.67	0.55
10/17/2024	22.0	1800H	1 710	1.341	39.421	1.348	40.144	-0.52	-1.80
			1 750	1.385	39.274	1.371	40.080	1.02	-2.01
			1 800	1.439	39.038	1.400	40.000	2.79	-2.41
10/14/2024	21.8	1800H	1 710	1.331	39.439	1.348	40.144	-1.26	-1.76
			1 750	1.375	39.286	1.371	40.080	0.29	-1.98
			1 800	1.429	39.042	1.400	40.000	2.07	-2.40

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Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
10/18/2024	21.5	1900H	1 850	1.373	41.432	1.400	40.000	-1.93	3.58
			1 900	1.400	41.297	1.400	40.000	0.00	3.24
			1 910	1.404	41.276	1.400	40.000	0.29	3.19
09/12/2024	23.0	1900H	1 850	1.350	38.802	1.400	40.000	-3.57	-3.00
			1 900	1.398	38.597	1.400	40.000	-0.14	-3.51
			1 910	1.407	38.556	1.400	40.000	0.50	-3.61
10/20/2024	21.6	1900H	1 850	1.334	41.476	1.400	40.000	-4.71	3.69
			1 900	1.378	41.256	1.400	40.000	-1.57	3.14
			1 910	1.386	41.185	1.400	40.000	-1.00	2.96
09/11/2024	22.7	1900H	1 850	1.350	40.799	1.400	40.000	-3.57	2.00
			1 900	1.398	40.596	1.400	40.000	-0.14	1.49
			1 910	1.407	40.555	1.400	40.000	0.50	1.39
09/23/2024	22.0	2300H	2 300	1.718	39.307	1.667	39.470	3.06	-0.41
			2 310	1.724	39.259	1.676	39.452	2.86	-0.49
09/20/2024	21.8	2300H	2 300	1.718	39.297	1.667	39.470	3.06	-0.44
			2 310	1.724	39.270	1.676	39.452	2.86	-0.46
10/01/2024	20.0	2 600H	2 500	1.800	40.300	1.855	39.140	-2.96	2.96
			2 600	2.030	40.300	1.964	39.010	3.36	3.31
			2 690	2.160	38.900	2.062	38.894	4.75	0.02
09/24/2024	22.0	2 600H	2 500	1.884	39.660	1.855	39.140	1.56	1.33
			2 600	2.026	39.723	1.964	39.010	3.16	1.83
			2 690	2.620	38.309	2.062	38.894	4.85	-1.50
10/14/2024	20.5	2 600H	2 500	1.866	39.273	1.855	39.140	0.59	0.34
			2 600	2.000	39.100	1.964	39.010	1.83	0.23
			2 690	2.097	38.325	2.062	38.894	1.70	-1.46
09/11/2024	20.5	2 600H	2 500	1.798	40.161	1.855	39.140	-3.07	2.61
			2 600	1.953	40.222	1.964	39.010	-0.56	3.11
			2 690	2.122	38.808	2.062	38.894	2.91	-0.22
10/22/2024	20.3	2 600H	2 500	1.881	40.161	1.855	39.140	1.40	2.61
			2 600	1.920	40.200	1.964	39.010	-2.24	3.05
			2 690	2.033	38.808	2.062	38.894	-1.41	-0.22
10/23/2024	20.4	2 600H	2 500	1.877	39.308	1.855	39.140	1.19	0.43
			2 600	2.010	39.100	1.964	39.010	2.34	0.23
			2 690	2.112	38.334	2.062	38.894	2.42	-1.44
10/15/2024	20.3	3500H-3700H	3 500	2.990	38.800	2.913	37.930	2.64	2.29
			3 550	3.045	39.075	2.964	37.870	2.73	3.18
			3 650	3.053	39.239	3.066	37.760	-0.42	3.92
			3 700	3.070	39.100	3.118	37.770	-1.54	3.52
10/14/2024	20.8	3500H-3700H	3 500	2.990	38.300	2.913	37.930	2.64	0.98
			3 550	3.044	38.534	2.964	37.870	2.70	1.75
			3 650	3.053	38.690	3.066	37.760	-0.42	2.46
			3 700	3.070	38.600	3.118	37.770	-1.54	2.20

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Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (㎒)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
10/15/2024	21.0	3500H-3700H	3 500	3.010	37.900	2.913	37.930	3.33	-0.08
			3 550	3.063	38.103	2.964	37.870	3.34	0.62
			3 650	3.074	38.257	3.066	37.760	0.26	1.32
			3 700	3.090	38.100	3.118	37.770	-0.90	0.87
10/07/2024	20.8	3500H	3 400	2.803	38.332	2.810	38.040	-0.25	0.77
			3 500	2.990	38.400	2.913	37.930	2.64	1.24
			3 550	3.046	38.715	2.964	37.870	2.77	2.23
10/10/2024	21.6	3500H	3 400	2.825	38.720	2.810	38.040	0.53	1.79
			3 500	3.010	38.800	2.913	37.930	3.33	2.29
			3 550	3.064	39.068	2.964	37.870	3.37	3.16
10/11/2024	21.3	3500H	3 400	2.805	38.520	2.810	38.040	-0.18	1.26
			3 500	2.990	38.600	2.913	37.930	2.64	1.77
			3 550	3.045	38.871	2.964	37.870	2.73	2.64
10/07/2024	20.8	3700H-3970	3 700	3.070	38.800	3.118	37.700	-1.54	2.92
			3 750	3.099	38.469	3.169	37.640	-2.21	2.20
			3 800	3.169	38.124	3.220	37.590	-1.58	1.42
			3 900	3.350	37.900	3.233	37.470	3.62	1.15
			3 970	3.465	38.056	3.394	37.390	2.09	1.78
10/10/2024	21.6	3700H-3970	3 700	3.090	39.100	3.118	37.700	-0.90	3.71
			3 750	3.125	38.809	3.169	37.640	-1.39	3.11
			3 800	3.194	38.480	3.220	37.590	-0.81	2.37
			3 900	3.380	38.200	3.233	37.470	4.55	1.95
			3 970	3.486	38.415	3.394	37.390	2.71	2.74
10/11/2024	21.3	3700H-3970	3 700	3.070	38.900	3.118	37.700	-1.54	3.18
			3 750	3.104	38.613	3.169	37.640	-2.05	2.59
			3 800	3.173	38.283	3.220	37.590	-1.46	1.84
			3 900	3.350	38.000	3.233	37.470	3.62	1.41
			3 970	3.294	38.033	3.394	37.390	-2.95	1.72

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12.2 System Verification

◆ GSM/ UMTS/ LTE/ WLAN Band

Input Power: 50 mW

Freq.	Date	Probe	Dipole	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR_{1g} (SPEAG)	50mW Measured SAR_{1g}	1 W Normalized SAR_{1g}	Deviation	Limit
[MHz]		(S/N)	(S/N)		[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
750	09/02/2024	7622	1014	Head	21.7	21.6	8.50	0.442	8.84	+ 4.00	± 10
750	09/09/2024	7622		Head	21.6	21.5	8.50	0.442	8.84	+ 4.00	± 10
750	08/27/2024	7622		Head	21.9	21.8	8.50	0.430	8.60	+ 1.18	± 10
750	09/03/2024	7622		Head	21.5	21.4	8.50	0.437	8.74	+ 2.82	± 10
750	08/28/2024	7622		Head	21.9	21.8	8.50	0.418	8.36	- 1.65	± 10
750	09/04/2024	7622		Head	21.9	21.8	8.50	0.415	8.30	- 2.35	± 10
750	08/29/2024	7622		Head	21.5	21.4	8.50	0.418	8.36	- 1.65	± 10
750	09/05/2024	7622		Head	21.7	21.6	8.50	0.414	8.28	- 2.59	± 10
835	10/07/2024	7702	441	Head	22.3	22.2	9.73	0.496	9.92	+ 1.95	± 10
835	10/13/2024	7702		Head	22.8	22.7	9.73	0.499	9.98	+ 2.57	± 10
835	08/30/2024	7732		Head	20.4	20.3	9.73	0.517	10.34	+ 6.27	± 10
835	08/30/2024	7622		Head	21.2	21.1	9.73	0.493	9.86	+ 1.34	± 10
835	09/06/2024	7622		Head	22.0	22.0	9.73	0.490	9.80	+ 0.72	± 10
1 800	09/02/2024	7732	2d007	Head	20.6	20.5	39.0	1.81	36.2	- 7.18	± 10
1 800	09/10/2024	7370		Head	22.7	22.6	39.0	1.93	38.6	- 1.03	± 10
1 800	10/19/2024	3076		Head	21.5	21.4	39.0	1.96	39.2	+ 0.51	± 10
1 900	10/13/2024	3076	5d032	Head	22.7	22.6	40.2	2.07	41.4	+ 2.99	± 10
1 900	09/03/2024	7732		Head	20.4	20.3	40.2	2.14	42.8	+ 6.47	± 10
1 900	09/09/2024	7370		Head	22.7	22.6	40.2	2.01	40.2	+ 0.00	± 10
1 900	10/21/2024	3797		Head	20.7	20.6	40.2	2.04	40.8	+ 1.49	± 10
2 300	10/09/2024	3076	1010	Head	21.4	21.3	48.3	2.45	49.0	+ 1.45	± 10
2 300	10/04/2024	3797		Head	20.5	20.4	48.3	2.37	47.4	- 1.86	± 10
2 450	09/04/2024	7732	743	Head	20.8	20.7	51.8	2.53	50.6	- 2.32	± 10
2 450	09/11/2024	7732		Head	21.1	21.0	51.8	2.52	50.4	- 2.70	± 10
2 450	10/02/2024	7370		Head	20.0	20.0	51.8	2.64	52.8	+ 1.93	± 10
2 600	09/09/2024	7679	1015	Head	20.4	20.3	56.4	2.84	56.8	+ 0.71	± 10
2 600	09/05/2024	7679		Head	21.1	21.0	56.4	2.80	56.0	- 0.71	± 10
2 600	09/10/2024	7679		Head	20.9	20.8	56.4	2.83	56.6	+ 0.35	± 10
2 600	10/22/2024	3797		Head	20.4	20.3	56.4	2.98	59.6	+ 5.67	± 10
2 600	09/06/2024	7679		Head	20.8	20.7	56.4	2.81	56.2	- 0.35	± 10
3 500	10/18/2024	3903	1132	Head	20.4	20.3	65.1	3.27	65.4	+ 0.46	± 10
3 700	10/18/2024	3903	1105	Head	20.4	20.3	67.1	3.32	66.4	- 1.04	± 10
5 250	09/05/2024	7309	1107	Head	20.6	20.5	80.2	4.07	81.4	+ 1.50	± 10
5 600	09/06/2024	7309		Head	20.4	20.3	82.1	4.34	86.8	+ 5.72	± 10
5 750	09/09/2024	7309		Head	20.9	20.8	79.9	3.99	79.8	- 0.13	± 10
5 800	09/10/2024	7309		Head	21.0	21.0	79.3	3.93	78.6	- 0.88	± 10

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Input Power: 10 mW

Freq.	Date	Probe	Dipole	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR_{1g} (SPEAG)	10 mW Measured SAR_{1g}	1 W Normalized SAR_{1g}	Deviation	Limit
[MHz]		(S/N)	(S/N)		[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
6 500	10/05/2024	7370	1012	Head	20.3	20.2	297	14.7	294	- 1.01	± 10
6 500	10/06/2024	7370		Head	20.6	20.5	297	15.6	312	+ 5.05	± 10
6 500	10/09/2024	7370		Head	21.1	21.0	297	14.0	280	- 5.72	± 10
6 500	10/08/2024	7681		Head	21.2	21.1	297	13.9	278	- 6.40	± 10

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◆ 5G NR SUB 6 Band

Input Power: 50 ㎽

Freq.	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR_{1g} (SPEAG)	50mW Measured SAR_{1g}	1 W Normalized SAR_{1g}	Deviation	Limit
[㎒]					[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
750	09/10/2024	7622	1014	Head	21.5	21.4	8.50	0.426	8.52	+ 0.24	± 10
750	09/14/2024	7622		Head	21.7	21.6	8.50	0.428	8.56	+ 0.71	± 10
750	09/11/2024	7622		Head	21.4	21.3	8.50	0.427	8.54	+ 0.47	± 10
750	09/15/2024	7622		Head	21.5	21.4	8.50	0.427	8.54	+ 0.47	± 10
750	09/13/2024	7622		Head	21.9	21.8	8.50	0.444	8.88	+ 4.47	± 10
750	09/17/2024	7622		Head	21.1	21.0	8.50	0.446	8.92	+ 4.94	± 10
835	09/12/2024	7622	441	Head	21.6	21.5	9.73	0.483	9.66	- 0.72	± 10
835	09/16/2024	7622	441	Head	21.0	21.0	9.73	0.484	9.68	- 0.51	± 10
1 640	10/28/2024	7702	345	Head	22.1	22.0	33.8	1.77	35.4	+ 4.73	± 10
1 640	09/11/2024	7370		Head	22.8	22.7	33.8	1.74	34.8	+ 2.96	± 10
1 640	09/12/2024	7370		Head	23.1	23.0	33.8	1.75	35.0	+ 3.55	± 10
1 640	10/02/2024	7702		Head	22.5	22.4	33.8	1.81	36.2	+ 7.10	± 10
1 800	10/17/2024	7370	2d007	Head	22.0	22.0	39.0	1.95	39.0	+ 0.00	± 10
1 800	10/14/2024	3076		Head	21.9	21.8	39.0	2.00	40.0	+ 2.56	± 10
1 900	10/18/2024	3076	5d032	Head	21.6	21.5	40.2	2.05	41.0	+ 1.99	± 10
1 900	09/12/2024	7370		Head	23.1	23.0	40.2	1.97	39.4	- 1.99	± 10
1 900	10/20/2024	3076		Head	21.7	21.6	40.2	2.03	40.6	+ 1.00	± 10
1 900	09/11/2024	7370		Head	22.8	22.7	40.2	1.96	39.2	- 2.49	± 10
2 300	09/23/2024	3076	1010	Head	22.0	22.0	48.3	2.31	46.2	- 4.35	± 10
2 300	09/20/2024	3076		Head	21.9	21.8	48.3	2.29	45.8	- 5.18	± 10
2 600	10/01/2024	3797	1015	Head	20.1	20.0	56.4	2.89	57.8	+ 2.48	± 10
2 600	09/24/2024	3076		Head	22.1	22.0	56.4	2.91	58.2	+ 3.19	± 10
2 600	10/14/2024	3797		Head	20.6	20.5	56.4	2.81	56.2	- 0.35	± 10
2 600	09/11/2024	3076		Head	20.6	20.5	56.4	2.82	56.4	+ 0.00	± 10
2 600	10/22/2024	3797		Head	20.4	20.3	56.4	2.78	55.6	- 1.42	± 10
2 600	10/23/2024	3797		Head	20.5	20.4	56.4	2.90	58.0	+ 2.84	± 10
3 500	10/15/2024	3903	1132	Head	20.4	20.3	65.1	3.38	67.6	+ 3.84	± 10
3 500	10/14/2024	7751		Head	20.9	20.8	65.1	3.53	70.6	+ 8.45	± 10
3 500	10/15/2024	7751		Head	21.1	21.0	65.1	3.18	63.6	- 2.30	± 10
3 500	10/07/2024	3903		Head	20.9	20.8	65.1	3.38	67.6	+ 3.84	± 10
3 500	10/10/2024	7751		Head	21.7	21.6	65.1	3.18	63.6	- 2.30	± 10
3 500	10/11/2024	7751		Head	21.4	21.3	65.1	3.54	70.8	+ 8.76	± 10
3 700	10/15/2024	3903	1105	Head	20.4	20.3	67.1	3.23	64.6	- 3.73	± 10
3 700	10/14/2024	7751		Head	20.9	20.8	67.1	3.45	69.0	+ 2.83	± 10
3 700	10/15/2024	7751		Head	21.1	21.0	67.1	3.48	69.6	+ 3.73	± 10
3 700	10/07/2024	3903		Head	20.9	20.8	67.1	3.21	64.2	- 4.32	± 10
3 700	10/10/2024	7751		Head	21.7	21.6	67.1	3.45	69.0	+ 2.83	± 10
3 700	10/11/2024	7751		Head	21.4	21.3	67.1	3.42	68.4	+ 1.94	± 10
3 900	10/07/2024	3903	1086	Head	20.9	20.8	67.6	3.48	69.6	+ 2.96	± 10
3 900	10/10/2024	7751		Head	21.7	21.6	67.6	3.29	65.8	- 2.66	± 10
3 900	10/11/2024	7751		Head	21.4	21.3	67.6	3.27	65.4	- 3.25	± 10

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◆ System Verification Results – Extremity SAR

Input Power: 50 mW

Freq.	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR_{10g} (SPEAG)	50mW Measured SAR_{10g}	1 W Normalized SAR_{10g}	Deviation	Limit
[MHz]					[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
13	09/20/2024	3076	1016	Head	21.9	21.8	0.343	0.018	0.36	+ 4.96	± 10
1 640	10/28/2024	7702	345	Head	22.1	22.0	18.3	0.983	19.66	+ 7.43	± 10
5 250	09/05/2024	7309	1107	Head	20.6	20.5	23.1	1.17	23.4	+ 1.30	± 10
5 600	09/06/2024	7309		Head	20.4	20.3	23.5	1.27	25.4	+ 8.09	± 10
5 800	09/10/2024	7309		Head	21.0	21.0	22.5	1.14	22.8	+ 1.33	± 10

Input Power: 10 mW

Freq.	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR_{10g} (SPEAG)	10mW Measured SAR_{10g}	1 W Normalized SAR_{10g}	Deviation	Limit
[MHz]					[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
6 500	10/05/2024	7370	1012	Head	20.3	20.2	54.6	2.71	54.2	- 0.73	± 10
6 500	10/06/2024	7370		Head	20.6	20.5	54.6	2.88	57.6	+ 5.49	± 10
6 500	10/09/2024	7370		Head	21.1	21.0	54.6	2.59	51.8	- 5.13	± 10
6 500	10/08/2024	7681		Head	21.2	21.1	54.6	2.51	50.2	- 8.06	± 10

12.3 SAR Test System Verification Procedure

SAR measurement was prior to assessment; the system is verified to the ± 10 % of the specifications at each frequency Band by using the system verification kit. (Graphic Plots Attached)
- Cabling the system, using the verification kit equipment.
- For all frequency band except 6 GHz, Generate about 50 mW Input level from the signal generator to the Dipole Antenna. And Generate about 10 mW Input level from the signal generator to the Dipole Antenna for 6.5 GHz.
- Dipole antenna was placed below the flat phantom.
- The measured one-gram SAR at the surface of the phantom above the dipole feed-point should be within 10 % of the target reference value.

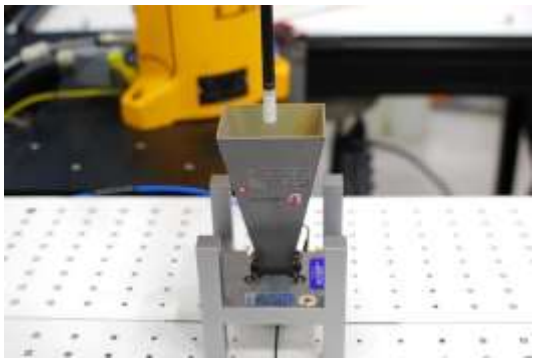
Note;
SAR Verification was performed according to the FCC KDB 865664 D01v01r04.

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12.4 Power density System Verification

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provide by the manufacturer, per November 2017 TCBC Workshop Notes.



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◆ 10 ㎓ Power Density System Verification Results

Input Power: 50 ㎽

Freq. [㎓]	Date	Probe (S/N)	Dipole (S/N)	Amb. Temp. [°C]	Normal psPD (W/m² over 4 cm²)			Deviation [dB]	Total psPD (W/m² over 4 cm²)			Deviation [dB]
					Measured	Normalized	Target		Measured	Normalized	Target	
10	09/23/2024	9528	1018	20.1	28.5	57.0	56.9	+ 0.01	28.6	57.2	57.0	+ 0.02
10	09/24/2024	9528	1018	20.5	29.2	58.4	56.9	+ 0.11	29.3	58.6	57.0	+ 0.12
10	09/25/2024	9528	1018	20.0	28.9	57.8	56.9	+ 0.07	29.3	58.6	57.0	+ 0.12

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13. SAR Test Data Summary

13.1 SAR Measurement Results

13.1.1 Head SAR Measurement Results

GSM 850 Head SAR													
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)				(W/kg)		(W/kg)	
848.8	251	GSM Voice	MAIN1	33.0	32.17	-0.17	Left Touch	1:8.3	1	0.072	1.211	0.087	-
848.8	251	GSM Voice	MAIN1	33.0	32.17	-0.14	Left Tilt	1:8.3	1	0.042	1.211	0.051	-
848.8	251	GSM Voice	MAIN1	33.0	32.17	0.02	Right Touch	1:8.3	1	0.090	1.211	0.109	-
848.8	251	GSM Voice	MAIN1	33.0	32.17	-0.11	Right Tilt	1:8.3	1	0.047	1.211	0.057	-
836.6	190	GPRS 2Tx	MAIN1	32.0	30.90	-0.00	Left Touch	1:4.15	1	0.094	1.288	0.121	-
836.6	190	GPRS 2Tx	MAIN1	32.0	30.90	-0.10	Left Tilt	1:4.15	1	0.050	1.288	0.064	-
836.6	190	GPRS 2Tx	MAIN1	32.0	30.90	-0.19	Right Touch	1:4.15	1	0.103	1.288	0.133	-
836.6	190	GPRS 2Tx	MAIN1	32.0	30.90	-0.15	Right Tilt	1:4.15	1	0.056	1.288	0.072	-
848.8	251	GSM Voice	SUB1	31.0	30.40	0.05	Left Touch	1:8.3	0	**0.542**	1.148	0.622	A1
848.8	251	GSM Voice	SUB1	31.0	30.40	-0.07	Left Tilt	1:8.3	0	0.479	1.148	0.550	-
848.8	251	GSM Voice	SUB1	31.0	30.40	0.02	Right Touch	1:8.3	0	0.449	1.148	0.515	-
848.8	251	GSM Voice	SUB1	31.0	30.40	0.02	Right Tilt	1:8.3	0	0.353	1.148	0.405	-
848.8	251	GPRS 2Tx	SUB1	28.0	27.16	-0.16	Left Touch	1:4.15	0	0.516	1.213	**0.626**	-
848.8	251	GPRS 2Tx	SUB1	28.0	27.16	-0.05	Left Tilt	1:4.15	0	0.357	1.213	0.433	-
848.8	251	GPRS 2Tx	SUB1	28.0	27.16	-0.05	Right Touch	1:4.15	0	0.371	1.213	0.450	-
848.8	251	GPRS 2Tx	SUB1	28.0	27.16	0.02	Right Tilt	1:4.15	0	0.302	1.213	0.366	-
ANSI/ IEEE C95.1 – 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

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GSM 1900 Head SAR													
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)				(W/kg)		(W/kg)	
1 880	661	GSM Voice	MAIN1	30.0	29.10	0.01	Left Touch	1:8.3	0	0.070	1.230	0.086	-
1 880	661	GSM Voice	MAIN1	30.0	29.10	0.15	Left Tilt	1:8.3	0	0.028	1.230	0.034	-
1 880	661	GSM Voice	MAIN1	30.0	29.10	0.19	Right Touch	1:8.3	0	0.036	1.230	0.044	-
1 880	661	GSM Voice	MAIN1	30.0	29.10	0.14	Right Tilt	1:8.3	0	0.022	1.230	0.027	-
1 880	661	GPRS 3Tx	MAIN1	26.5	26.26	0.15	Left Touch	1:2.77	0	0.096	1.057	0.101	A2
1 880	661	GPRS 3Tx	MAIN1	26.5	26.26	0.04	Left Tilt	1:2.77	0	0.037	1.057	0.039	-
1 880	661	GPRS 3Tx	MAIN1	26.5	26.26	0.18	Right Touch	1:2.77	0	0.054	1.057	0.057	-
1 880	661	GPRS 3Tx	MAIN1	26.5	26.26	-0.18	Right Tilt	1:2.77	0	0.034	1.057	0.036	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

UMTS Band 5 Head SAR													
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)				(W/kg)		(W/kg)	
836.6	4183	RMC	MAIN1	25.0	23.78	-0.16	Left Touch	1:1	0	0.134	1.324	0.177	-
836.6	4183	RMC	MAIN1	25.0	23.78	-0.00	Left Tilt	1:1	0	0.060	1.324	0.079	-
836.6	4183	RMC	MAIN1	25.0	23.78	0.05	Right Touch	1:1	0	0.147	1.324	0.195	-
836.6	4183	RMC	MAIN1	25.0	23.78	0.05	Right Tilt	1:1	0	0.076	1.324	0.101	-
836.6	4183	RMC	SUB1	22.0	20.77	0.02	Left Touch	1:1	0	0.625	1.327	0.829	-
826.4	4132	RMC	SUB1	22.0	20.57	-0.02	Left Touch	1:1	0	0.535	1.390	0.744	-
846.6	4233	RMC	SUB1	22.0	20.55	0.01	Left Touch	1:1	0	0.633	1.396	0.884	A3
836.6	4183	RMC	SUB1	22.0	20.77	0.02	Left Tilt	1:1	0	0.462	1.327	0.613	-
836.6	4183	RMC	SUB1	22.0	20.77	-0.10	Right Touch	1:1	0	0.542	1.327	0.719	-
836.6	4183	RMC	SUB1	22.0	20.77	-0.06	Right Tilt	1:1	0	0.428	1.327	0.568	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

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UMTS Band 4 Head SAR													
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)				(W/kg)		(W/kg)	
1 732.4	1412	RMC	MAIN1	24.0	22.56	-0.05	Left Touch	1:1	14	0.127	1.393	**0.177**	A4
1 732.4	1412	RMC	MAIN1	24.0	22.56	-0.05	Left Tilt	1:1	14	0.070	1.393	0.098	-
1 732.4	1412	RMC	MAIN1	24.0	22.56	-0.17	Right Touch	1:1	14	0.089	1.393	0.124	-
1 732.4	1412	RMC	MAIN1	24.0	22.56	-0.13	Right Tilt	1:1	14	0.072	1.393	0.100	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

UMTS Band 2 Head SAR													
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)				(W/kg)		(W/kg)	
1 880	9400	RMC	MAIN1	24.0	23.25	-0.16	Left Touch	1:1	1	0.142	1.189	**0.169**	A5
1 880	9400	RMC	MAIN1	24.0	23.25	-0.13	Left Tilt	1:1	1	0.044	1.189	0.052	-
1 880	9400	RMC	MAIN1	24.0	23.25	0.13	Right Touch	1:1	1	0.099	1.189	0.118	-
1 880	9400	RMC	MAIN1	24.0	23.25	-0.09	Right Tilt	1:1	1	0.056	1.189	0.067	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

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LTE FDD Band 7 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 535	21100	QPSK	MAIN2	20	24.0	22.76	0.00	Left Touch	0	1	0	1:1	-	0.044	1.330	0.059	-
2 510	20850	QPSK	MAIN2	20	23.0	21.62	0.00	Left Touch	1	50	49	1:1	-	0.037	1.374	0.051	-
2 535	21100	QPSK	MAIN2	20	24.0	22.76	0.00	Left Tilt	0	1	0	1:1	-	0.00196	1.330	0.003	-
2 510	20850	QPSK	MAIN2	20	23.0	21.62	0	Left Tilt	1	50	49	1:1	-	0	1.374	0.000	-
2 535	21100	QPSK	MAIN2	20	24.0	22.76	0	Right Touch	0	1	0	1:1	-	0.00924	1.330	0.012	-
2 510	20850	QPSK	MAIN2	20	23.0	21.62	0	Right Touch	1	50	49	1:1	-	0	1.374	0.000	-
2 535	21100	QPSK	MAIN2	20	24.0	22.76	0.00	Right Tilt	0	1	0	1:1	-	0.00000518	1.330	0.000	-
2 510	20850	QPSK	MAIN2	20	23.0	21.62	0.00	Right Tilt	1	50	49	1:1	-	0.00282	1.374	0.004	-
2 510	20850	QPSK	SUB2	20	17.5	15.90	-0.03	Left Touch	0	1	0	1:1	-	0.232	1.445	0.335	-
2 510	20850	QPSK	SUB2	20	17.5	15.87	0.03	Left Touch	0	50	0	1:1	-	0.224	1.455	0.326	-
2 510	20850	QPSK	SUB2	20	17.5	15.90	-0.07	Left tilt	0	1	0	1:1	-	0.410	1.445	0.592	-
2 510	20850	QPSK	SUB2	20	17.5	15.87	-0.06	Left tilt	0	50	0	1:1	-	0.436	1.455	0.634	A6
2 510	20850	QPSK	SUB2	20	17.5	15.90	-0.15	Right touch	0	1	0	1:1	-	0.390	1.445	0.564	-
2 510	20850	QPSK	SUB2	20	17.5	15.87	0.10	Right touch	0	50	0	1:1	-	0.380	1.455	0.553	-
2 510	20850	QPSK	SUB2	20	17.5	15.90	-0.12	Right Tilt	0	1	0	1:1	-	0.411	1.445	0.594	-
2 510	20850	QPSK	SUB2	20	17.5	15.87	-0.01	Right Tilt	0	50	0	1:1	-	0.400	1.455	0.582	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram									

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LTE FDD Band 12 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
707.5	23095	QPSK	MAIN1	10	25.0	24.83	0.15	Left Touch	0	1	49	1:1	45	0.084	1.040	0.087	-
707.5	23095	QPSK	MAIN1	10	24.0	23.51	0.00	Left Touch	1	25	12	1:1	45	0.066	1.119	0.074	-
707.5	23095	QPSK	MAIN1	10	25.0	24.83	0.14	Left Tilt	0	1	49	1:1	45	0.036	1.040	0.037	-
707.5	23095	QPSK	MAIN1	10	24.0	23.51	-0.05	Left Tilt	1	25	12	1:1	45	0.024	1.119	0.027	-
707.5	23095	QPSK	MAIN1	10	25.0	24.83	-0.13	Right Touch	0	1	49	1:1	45	0.076	1.040	0.079	-
707.5	23095	QPSK	MAIN1	10	24.0	23.51	0.10	Right Touch	1	25	12	1:1	45	0.062	1.119	0.069	-
707.5	23095	QPSK	MAIN1	10	25.0	24.83	0.18	Right Tilt	0	1	49	1:1	45	0.033	1.040	0.034	-
707.5	23095	QPSK	MAIN1	10	24.0	23.51	0.13	Right Tilt	1	25	12	1:1	45	0.022	1.119	0.025	-
707.5	23095	QPSK	SUB1	10	21.5	19.90	-0.05	Left Touch	0	1	0	1:1	23	0.667	1.445	0.964	A7
707.5	23095	QPSK	SUB1	10	21.5	19.94	-0.04	Left Touch	0	25	24	1:1	23	0.656	1.432	0.939	-
707.5	23095	QPSK	SUB1	10	21.5	19.90	-0.03	Left Touch	0	50	0	1:1	23	0.621	1.445	0.897	-
707.5	23095	QPSK	SUB1	10	21.5	19.90	-0.00	Left Tilt	0	1	0	1:1	23	0.569	1.445	0.822	-
707.5	23095	QPSK	SUB1	10	21.5	19.94	-0.02	Left Tilt	0	25	24	1:1	23	0.571	1.432	0.818	-
707.5	23095	QPSK	SUB1	10	21.5	19.90	-0.04	Left Tilt	0	50	0	1:1	23	0.567	1.445	0.819	-
707.5	23095	QPSK	SUB1	10	21.5	19.90	0.01	Right Touch	0	1	0	1:1	23	0.472	1.445	0.682	-
707.5	23095	QPSK	SUB1	10	21.5	19.94	-0.03	Right Touch	0	25	24	1:1	23	0.482	1.432	0.690	-
707.5	23095	QPSK	SUB1	10	21.5	19.90	0.15	Right Tilt	0	1	0	1:1	23	0.421	1.445	0.608	-
707.5	23095	QPSK	SUB1	10	21.5	19.94	-0.02	Right Tilt	0	25	24	1:1	23	0.429	1.432	0.614	-
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LTE FDD Band 13 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
782	23230	QPSK	MAIN1	10	25.0	24.38	0.18	Left Touch	0	1	49	1:1	12	0.063	1.153	0.073	-
782	23230	QPSK	MAIN1	10	24.0	23.32	-0.13	Left Touch	1	25	12	1:1	12	0.050	1.169	0.058	-
782	23230	QPSK	MAIN1	10	25.0	24.38	0.17	Left Tilt	0	1	49	1:1	12	0.034	1.153	0.039	-
782	23230	QPSK	MAIN1	10	24.0	23.32	0.10	Left Tilt	1	25	12	1:1	12	0.025	1.169	0.029	-
782	23230	QPSK	MAIN1	10	25.0	24.38	-0.16	Right Touch	0	1	49	1:1	12	0.045	1.153	0.052	-
782	23230	QPSK	MAIN1	10	24.0	23.32	0.00	Right Touch	1	25	12	1:1	12	0.040	1.169	0.047	-
782	23230	QPSK	MAIN1	10	25.0	24.38	0.17	Right Tilt	0	1	49	1:1	12	0.024	1.153	0.028	-
782	23230	QPSK	MAIN1	10	24.0	23.32	0.12	Right Tilt	1	25	12	1:1	12	0.021	1.169	0.025	-
782	23230	QPSK	SUB1	10	22.0	20.92	0.02	Left Touch	0	1	0	1:1	45	0.695	1.282	0.891	-
782	23230	QPSK	SUB1	10	22.0	20.91	0.01	Left Touch	0	25	0	1:1	45	0.698	1.285	0.897	A8
782	23230	QPSK	SUB1	10	22.0	20.88	-0.07	Left Touch	0	50	0	1:1	45	0.671	1.294	0.868	-
782	23230	QPSK	SUB1	10	22.0	20.92	-0.07	Left Tilt	0	1	0	1:1	45	0.533	1.282	0.683	-
782	23230	QPSK	SUB1	10	22.0	20.91	0.01	Left Tilt	0	25	0	1:1	45	0.544	1.285	0.699	-
782	23230	QPSK	SUB1	10	22.0	20.92	0.04	Right Touch	0	1	0	1:1	45	0.448	1.282	0.574	-
782	23230	QPSK	SUB1	10	22.0	20.91	0.01	Right Touch	0	25	0	1:1	45	0.454	1.285	0.583	-
782	23230	QPSK	SUB1	10	22.0	20.92	-0.16	Right Tilt	0	1	0	1:1	45	0.387	1.282	0.496	-
782	23230	QPSK	SUB1	10	22.0	20.91	-0.01	Right Tilt	0	25	0	1:1	45	0.394	1.285	0.506	-
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LTE FDD Band 14 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
793	23330	QPSK	MAIN1	10	25.0	24.85	0.15	Left Touch	0	1	49	1:1	45	0.061	1.035	0.063	-
793	23330	QPSK	MAIN1	10	24.0	23.67	0.00	Left Touch	1	25	12	1:1	45	0.052	1.079	0.056	-
793	23330	QPSK	MAIN1	10	25.0	24.85	-0.18	Left Tilt	0	1	49	1:1	45	0.025	1.035	0.026	-
793	23330	QPSK	MAIN1	10	24.0	23.67	0.15	Left Tilt	1	25	12	1:1	45	0.021	1.079	0.023	-
793	23330	QPSK	MAIN1	10	25.0	24.85	-0.07	Right Touch	0	1	49	1:1	45	0.039	1.035	0.040	-
793	23330	QPSK	MAIN1	10	24.0	23.67	0.11	Right Touch	1	25	12	1:1	45	0.035	1.079	0.038	-
793	23330	QPSK	MAIN1	10	25.0	24.85	0.12	Right Tilt	0	1	49	1:1	45	0.020	1.035	0.021	-
793	23330	QPSK	MAIN1	10	24.0	23.67	0.12	Right Tilt	1	25	12	1:1	45	0.00363	1.079	0.004	-
793	23330	QPSK	SUB1	10	22.0	21.06	-0.07	Left Touch	0	1	0	1:1	45	0.687	1.242	0.853	-
793	23330	QPSK	SUB1	10	22.0	20.89	-0.01	Left Touch	0	25	12	1:1	45	0.701	1.291	**0.905**	A9
793	23330	QPSK	SUB1	10	22.0	20.75	-0.07	Left Touch	0	50	0	1:1	45	0.659	1.334	0.879	-
793	23330	QPSK	SUB1	10	22.0	21.06	-0.12	Left Tilt	0	1	0	1:1	45	0.548	1.242	0.681	-
793	23330	QPSK	SUB1	10	22.0	20.89	0.07	Left Tilt	0	25	12	1:1	45	0.551	1.291	0.711	-
793	23330	QPSK	SUB1	10	22.0	21.06	0.02	Right Touch	0	1	0	1:1	45	0.454	1.242	0.564	-
793	23330	QPSK	SUB1	10	22.0	20.89	0.02	Right Touch	0	25	12	1:1	45	0.459	1.291	0.593	-
793	23330	QPSK	SUB1	10	22.0	21.06	-0.02	Right Tilt	0	1	0	1:1	45	0.396	1.242	0.492	-
793	23330	QPSK	SUB1	10	22.0	20.89	-0.03	Right Tilt	0	25	12	1:1	45	0.405	1.291	0.523	-
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LTE FDD Band 25 (PCS) Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 860	26140	QPSK	MAIN1	20	24.5	23.15	0.16	Left Touch	0	1	0	1:1	1	0.139	1.365	0.190	-
1 860	26140	QPSK	MAIN1	20	23.5	22.35	0.16	Left Touch	1	50	25	1:1	1	0.113	1.303	0.147	-
1 860	26140	QPSK	MAIN1	20	24.5	23.15	-0.17	Left Tilt	0	1	0	1:1	1	0.056	1.365	0.076	-
1 860	26140	QPSK	MAIN1	20	23.5	22.35	-0.10	Left Tilt	1	50	25	1:1	1	0.050	1.303	0.065	-
1 860	26140	QPSK	MAIN1	20	24.5	23.15	0.08	Right Touch	0	1	0	1:1	1	0.111	1.365	0.152	-
1 860	26140	QPSK	MAIN1	20	23.5	22.35	0.19	Right Touch	1	50	25	1:1	1	0.095	1.303	0.124	-
1 860	26140	QPSK	MAIN1	20	24.5	23.15	0.09	Right Tilt	0	1	0	1:1	1	0.070	1.365	0.096	-
1 860	26140	QPSK	MAIN1	20	23.5	22.35	0.07	Right Tilt	1	50	25	1:1	1	0.053	1.303	0.069	-
1 860	26140	QPSK	SUB2	20	18.5	17.55	-0.14	Left Touch	0	1	0	1:1	22	0.206	1.245	0.256	-
1 860	26140	QPSK	SUB2	20	18.5	17.56	-0.12	Left Touch	0	50	25	1:1	22	0.217	1.242	0.270	-
1 860	26140	QPSK	SUB2	20	18.5	17.55	-0.09	Left Tilt	0	1	0	1:1	22	0.249	1.245	0.310	-
1 860	26140	QPSK	SUB2	20	18.5	17.56	-0.14	Left Tilt	0	50	25	1:1	22	0.247	1.242	0.307	-
1 860	26140	QPSK	SUB2	20	18.5	17.55	-0.18	Right Touch	0	1	0	1:1	22	0.357	1.245	0.444	-
1 860	26140	QPSK	SUB2	20	18.5	17.56	-0.15	Right Touch	0	50	25	1:1	22	0.367	1.242	**0.456**	A10
1 860	26140	QPSK	SUB2	20	18.5	17.55	-0.17	Right Tilt	0	1	0	1:1	22	0.348	1.245	0.433	-
1 860	26140	QPSK	SUB2	20	18.5	17.56	-0.13	Right Tilt	0	50	25	1:1	22	0.357	1.242	0.443	-
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LTE FDD Band 26 (Cell) Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
831.5	26865	QPSK	MAIN1	15	25.0	24.50	-0.15	Left Touch	0	1	36	1:1	0	0.078	1.122	0.088	-
831.5	26865	QPSK	MAIN1	15	24.0	23.30	0.16	Left Touch	1	36	39	1:1	0	0.064	1.175	0.075	-
831.5	26865	QPSK	MAIN1	15	25.0	24.50	0.14	Left Tilt	0	1	36	1:1	0	0.031	1.122	0.035	-
831.5	26865	QPSK	MAIN1	15	24.0	23.30	0.03	Left Tilt	1	36	39	1:1	0	0.036	1.175	0.042	-
831.5	26865	QPSK	MAIN1	15	25.0	24.50	0.12	Right Touch	0	1	36	1:1	0	0.100	1.122	0.112	-
831.5	26865	QPSK	MAIN1	15	24.0	23.30	-0.10	Right Touch	1	36	39	1:1	0	0.074	1.175	0.087	-
831.5	26865	QPSK	MAIN1	15	25.0	24.50	-0.12	Right Tilt	0	1	36	1:1	0	0.043	1.122	0.048	-
831.5	26865	QPSK	MAIN1	15	24.0	23.30	0.12	Right Tilt	1	36	39	1:1	0	0.037	1.175	0.043	-
831.5	26865	QPSK	SUB1	15	22.5	20.93	0.00	Left Touch	0	1	0	1:1	0	0.700	1.435	1.005	-
831.5	26865	QPSK	SUB1	15	22.5	20.84	-0.06	Left Touch	0	36	0	1:1	0	**0.709**	1.466	1.039	A11
831.5	26865	QPSK	SUB1	15	22.5	20.53	-0.02	Left Touch	0	75	0	1:1	0	0.678	1.574	**1.067**	-
831.5	26865	QPSK	SUB1	15	22.5	20.93	-0.07	Left Tilt	0	1	0	1:1	0	0.535	1.435	0.768	-
831.5	26865	QPSK	SUB1	15	22.5	20.84	-0.02	Left Tilt	0	36	0	1:1	0	0.548	1.466	0.803	-
831.5	26865	QPSK	SUB1	15	22.5	20.93	-0.04	Right Touch	0	1	0	1:1	0	0.413	1.435	0.593	-
831.5	26865	QPSK	SUB1	15	22.5	20.84	-0.02	Right Touch	0	36	0	1:1	0	0.424	1.466	0.622	-
831.5	26865	QPSK	SUB1	15	22.5	20.93	-0.01	Right Tilt	0	1	0	1:1	0	0.368	1.435	0.528	-
831.5	26865	QPSK	SUB1	15	22.5	20.84	-0.07	Right Tilt	0	36	0	1:1	0	0.372	1.466	0.545	-
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LTE FDD Band 30 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 310	27710	QPSK	MAIN1	10	23.5	22.78	0.14	Left Touch	0	1	0	1:1	-	0.070	1.180	0.083	-
2 310	27710	QPSK	MAIN1	10	22.5	21.82	0.19	Left Touch	1	25	0	1:1	-	0.053	1.169	0.062	-
2 310	27710	QPSK	MAIN1	10	23.5	22.78	0.19	Left tilt	0	1	0	1:1	-	0.020	1.180	0.024	-
2 310	27710	QPSK	MAIN1	10	22.5	21.82	0.14	Left tilt	1	25	0	1:1	-	0.016	1.169	0.019	-
2 310	27710	QPSK	MAIN1	10	23.5	22.78	0.17	Right touch	0	1	0	1:1	-	0.025	1.180	0.030	-
2 310	27710	QPSK	MAIN1	10	22.5	21.82	0.00	Right touch	1	25	0	1:1	-	0.020	1.169	0.023	-
2 310	27710	QPSK	MAIN1	10	23.5	22.78	0.16	Right Tilt	0	1	0	1:1	-	0.025	1.180	0.030	-
2 310	27710	QPSK	MAIN1	10	22.5	21.82	0.14	Right Tilt	1	25	0	1:1	-	0.023	1.169	0.027	-
2 310	27710	QPSK	SUB2	10	17.5	16.47	-0.07	Left Touch	0	1	0	1:1	-	0.379	1.268	0.481	-
2 310	27710	QPSK	SUB2	10	17.5	16.49	-0.14	Left Touch	0	25	0	1:1	-	0.382	1.262	0.482	-
2 310	27710	QPSK	SUB2	10	17.5	16.47	-0.10	Left tilt	0	1	0	1:1	-	0.207	1.268	0.262	-
2 310	27710	QPSK	SUB2	10	17.5	16.49	-0.17	Left tilt	0	25	0	1:1	-	0.405	1.262	0.511	-
2 310	27710	QPSK	SUB2	10	17.5	16.47	0.00	Right touch	0	1	0	1:1	-	0.675	1.268	0.856	-
2 310	27710	QPSK	SUB2	10	17.5	16.49	-0.14	Right touch	0	25	0	1:1	-	0.691	1.262	0.872	A12
2 310	27710	QPSK	SUB2	10	17.5	16.47	-0.08	Right touch	0	50	0	1:1	-	0.497	1.268	0.630	-
2 310	27710	QPSK	SUB2	10	17.5	16.47	-0.07	Right Tilt	0	1	0	1:1	-	0.584	1.268	0.741	-
2 310	27710	QPSK	SUB2	10	17.5	16.49	-0.07	Right Tilt	0	25	0	1:1	-	0.594	1.262	0.750	-

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LTE TDD Band 41 (Power Class 3) Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 636.5	41055	QPSK	MAIN2	20	23.0	21.94	0.00	Left Touch	0	1	49	1:1.58	-	0.035	1.276	0.045	-
2 636.5	41055	QPSK	MAIN2	20	23.0	21.93	0.00	Left Touch	0	50	25	1:1.58	-	0.032	1.279	0.041	-
2 636.5	41055	QPSK	MAIN2	20	23.0	21.94	0.00	Left tilt	0	1	49	1:1.58	-	0.000701	1.276	0.001	-
2 636.5	41055	QPSK	MAIN2	20	23.0	21.93	0	Left tilt	0	50	25	1:1.58	-	0	1.279	0.000	-
2 636.5	41055	QPSK	MAIN2	20	23.0	21.94	0.00	Right touch	0	1	49	1:1.58	-	0.00537	1.276	0.007	-
2 636.5	41055	QPSK	MAIN2	20	23.0	21.93	0.00	Right touch	0	50	25	1:1.58	-	0.00931	1.279	0.012	-
2 636.5	41055	QPSK	MAIN2	20	23.0	21.94	0.00	Right Tilt	0	1	49	1:1.58	-	0.00168	1.276	0.002	-
2 636.5	41055	QPSK	MAIN2	20	23.0	21.93	-0.10	Right Tilt	0	50	25	1:1.58	-	0.0031	1.279	0.004	-
2 506	39750	QPSK	SUB2	20	18.5	17.81	-0.19	Left Touch	0	1	49	1:1.58	-	0.234	1.172	0.274	-
2 506	39750	QPSK	SUB2	20	18.5	17.72	-0.16	Left Touch	0	50	0	1:1.58	-	0.229	1.197	0.274	-
2 506	39750	QPSK	SUB2	20	18.5	17.81	-0.18	Left Tilt	0	1	49	1:1.58	-	0.277	1.172	0.325	-
2 506	39750	QPSK	SUB2	20	18.5	17.72	-0.08	Left Tilt	0	50	0	1:1.58	-	0.296	1.197	0.354	-
2 506	39750	QPSK	SUB2	20	18.5	17.81	-0.09	Right Touch	0	1	49	1:1.58	-	0.564	1.172	0.661	-
2 549.5	40185	QPSK	SUB2	20	18.5	17.39	-0.06	Right Touch	0	1	0	1:1.58	-	0.469	1.291	0.605	-
2 593	40620	QPSK	SUB2	20	18.5	17.00	-0.00	Right Touch	0	1	0	1:1.58	-	0.337	1.413	0.476	-
2 636.5	41055	QPSK	SUB2	20	18.5	17.00	-0.16	Right Touch	0	1	49	1:1.58	-	0.297	1.413	0.420	-
2 680	41490	QPSK	SUB2	20	18.5	17.27	-0.16	Right Touch	0	1	0	1:1.58	-	0.338	1.327	0.449	-
2 506	39750	QPSK	SUB2	20	18.5	17.72	-0.15	Right Touch	0	50	0	1:1.58	-	0.575	1.197	0.688	-
2 549.5	40185	QPSK	SUB2	20	18.5	17.42	-0.11	Right Touch	0	50	0	1:1.58	-	0.407	1.282	0.522	-
2 593	40620	QPSK	SUB2	20	18.5	17.07	-0.01	Right Touch	0	50	0	1:1.58	-	0.359	1.390	0.499	-
2 636.5	41055	QPSK	SUB2	20	18.5	16.99	0.07	Right Touch	0	50	25	1:1.58	-	0.295	1.416	0.418	-
2 680	41490	QPSK	SUB2	20	18.5	17.37	0.11	Right Touch	0	50	25	1:1.58	-	0.356	1.297	0.462	-
2 506	39750	QPSK	SUB2	20	18.5	17.63	0.04	Right Touch	0	100	0	1:1.58	-	0.597	1.222	0.730	-
2 506	39750	QPSK	SUB2	20	18.5	17.81	0.04	Right Tilt	0	1	49	1:1.58	-	0.660	1.172	**0.774**	A13
2 549.5	40185	QPSK	SUB2	20	18.5	17.39	0.06	Right Tilt	0	1	0	1:1.58	-	0.509	1.291	0.657	-
2 593	40620	QPSK	SUB2	20	18.5	17.00	0.06	Right Tilt	0	1	0	1:1.58	-	0.394	1.413	0.557	-
2 636.5	41055	QPSK	SUB2	20	18.5	17.00	0.01	Right Tilt	0	1	49	1:1.58	-	0.328	1.413	0.463	-
2 680	41490	QPSK	SUB2	20	18.5	17.27	0.03	Right Tilt	0	1	0	1:1.58	-	0.343	1.327	0.455	-
2 506	39750	QPSK	SUB2	20	18.5	17.72	0.06	Right Tilt	0	50	0	1:1.58	-	0.63	1.197	0.754	-
2 549.5	40185	QPSK	SUB2	20	18.5	17.42	0.05	Right Tilt	0	50	0	1:1.58	-	0.475	1.282	0.609	-
2 593	40620	QPSK	SUB2	20	18.5	17.07	0.03	Right Tilt	0	50	0	1:1.58	-	0.369	1.390	0.513	-
2 636.5	41055	QPSK	SUB2	20	18.5	16.99	0.06	Right Tilt	0	50	25	1:1.58	-	0.309	1.416	0.438	-
2 680	41490	QPSK	SUB2	20	18.5	17.37	0.08	Right Tilt	0	50	25	1:1.58	-	0.359	1.297	0.466	-
2 506	39750	QPSK	SUB2	20	18.5	17.63	0.03	Right Tilt	0	100	0	1:1.58	-	0.611	1.222	0.747	-
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LTE TDD Band 48 Head SAR

CC UL PC		Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
		Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1CC UL		3 560.0	55340	QPSK	SUB2	20	17.0	16.65	0.01	Left Touch	0	1	99	1:1.58	-	0.330	1.084	0.358	-
1CC UL		3 603.3	55773	QPSK	SUB2	20	17.0	16.71	0.05	Left Touch	0	50	0	1:1.58	-	0.330	1.069	0.353	-
1CC UL		3 560.0	55340	QPSK	SUB2	20	17.0	16.65	0.14	Left Tilt	0	1	99	1:1.58	-	0.373	1.084	0.404	-
1CC UL		3 603.3	55773	QPSK	SUB2	20	17.0	16.71	-0.04	Left Tilt	0	50	0	1:1.58	-	0.381	1.069	0.407	-
1CC UL		3 560.0	55340	QPSK	SUB2	20	17.0	16.65	0.18	Right Touch	0	1	99	1:1.58	-	0.674	1.084	0.731	-
1CC UL		3 603.3	55773	QPSK	SUB2	20	17.0	16.64	0.11	Right Touch	0	1	49	1:1.58	-	0.610	1.086	0.662	-
1CC UL		3 646.7	56207	QPSK	SUB2	20	17.0	16.40	0.08	Right Touch	0	1	49	1:1.58	-	0.607	1.148	0.697	-
1CC UL		3 690.0	56640	QPSK	SUB2	20	17.0	16.37	0.17	Right Touch	0	1	49	1:1.58	-	0.653	1.156	0.755	-
1CC UL		3 603.3	55773	QPSK	SUB2	20	17.0	16.71	0.03	Right Touch	0	50	0	1:1.58	-	0.633	1.069	0.677	-
1CC UL		3 560.0	55340	QPSK	SUB2	20	17.0	16.69	0.06	Right Touch	0	50	49	1:1.58	-	0.709	1.074	**0.761**	A14
1CC UL		3 646.7	56207	QPSK	SUB2	20	17.0	16.50	0.11	Right Touch	0	50	0	1:1.58	-	0.595	1.122	0.668	-
1CC UL		3 690.0	56640	QPSK	SUB2	20	17.0	16.40	0.11	Right Touch	0	50	25	1:1.58	-	0.650	1.148	0.746	-
1CC UL		3 603.3	55773	QPSK	SUB2	20	17.0	16.61	0.18	Right Touch	0	100	0	1:1.58	-	0.617	1.094	0.675	-
1CC UL		3 560.0	55340	QPSK	SUB2	20	17.0	16.65	0.14	Right Tilt	0	1	99	1:1.58	-	0.669	1.084	0.725	-
1CC UL		3 603.3	55773	QPSK	SUB2	20	17.0	16.64	0.15	Right Tilt	0	1	49	1:1.58	-	0.594	1.086	0.645	-
1CC UL		3 646.7	56207	QPSK	SUB2	20	17.0	16.40	0.02	Right Tilt	0	1	49	1:1.58	-	0.591	1.148	0.678	-
1CC UL		3 690.0	56640	QPSK	SUB2	20	17.0	16.37	-0.00	Right Tilt	0	1	49	1:1.58	-	0.564	1.156	0.652	-
1CC UL		3 603.3	55773	QPSK	SUB2	20	17.0	16.71	-0.01	Right Tilt	0	50	0	1:1.58	-	0.556	1.069	0.594	-
1CC UL		3 560.0	55340	QPSK	SUB2	20	17.0	16.69	0.03	Right Tilt	0	50	49	1:1.58	-	0.632	1.074	0.679	-
1CC UL		3 646.7	56207	QPSK	SUB2	20	17.0	16.50	0.11	Right Tilt	0	50	0	1:1.58	-	0.535	1.122	0.600	-
1CC UL		3 690.0	56640	QPSK	SUB2	20	17.0	16.40	0.06	Right Tilt	0	50	25	1:1.58	-	0.581	1.148	0.667	-
1CC UL		3 603.3	55773	QPSK	SUB2	20	17.0	16.61	0.14	Right Tilt	0	100	0	1:1.58	-	0.559	1.094	0.612	-
2CC UL CA(48C)	PCC	3 560	55340	QPSK	SUB2	20	17.0	16.70	0.01	Right Touch	0	50	49	1:1.58	-	0.706	1.072	0.757	-
	SCC	3 579.8	55538	QPSK		20						50	0						

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LTE FDD Band 66 (AWS) Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 720	132072	QPSK	MAIN1	20	25.0	24.41	-0.10	Left Touch	0	1	0	1:1	22	0.194	1.146	0.222	-
1 720	132072	QPSK	MAIN1	20	24.0	23.27	-0.16	Left Touch	1	50	0	1:1	22	0.159	1.183	0.188	-
1 720	132072	QPSK	MAIN1	20	25.0	24.41	-0.04	Left Tilt	0	1	0	1:1	22	0.090	1.146	0.103	-
1 720	132072	QPSK	MAIN1	20	24.0	23.27	0.10	Left Tilt	1	50	0	1:1	22	0.074	1.183	0.088	-
1 720	132072	QPSK	MAIN1	20	25.0	24.41	-0.13	Right Touch	0	1	0	1:1	22	0.107	1.146	0.123	-
1 720	132072	QPSK	MAIN1	20	24.0	23.27	0.11	Right Touch	1	50	0	1:1	22	0.090	1.183	0.106	-
1 720	132072	QPSK	MAIN1	20	25.0	24.41	0.02	Right Tilt	0	1	0	1:1	22	0.069	1.146	0.079	-
1 720	132072	QPSK	MAIN1	20	24.0	23.27	-0.16	Right Tilt	1	50	0	1:1	22	0.059	1.183	0.070	-
1 720	132072	QPSK	SUB2	20	18.0	17.02	0.03	Left Touch	0	1	49	1:1	22	0.588	1.253	0.737	-
1 720	132072	QPSK	SUB2	20	18.0	17.03	0.12	Left Touch	0	50	0	1:1	22	0.598	1.250	0.748	-
1 720	132072	QPSK	SUB2	20	18.0	17.02	0.15	Left Tilt	0	1	49	1:1	22	0.737	1.253	0.923	-
1 745	132322	QPSK	SUB2	20	18.0	16.82	-0.05	Left Tilt	0	1	0	1:1	22	0.669	1.312	0.878	-
1 770	132572	QPSK	SUB2	20	18.0	16.95	-0.03	Left Tilt	0	1	0	1:1	22	0.625	1.274	0.796	-
1 720	132072	QPSK	SUB2	20	18.0	17.03	0.05	Left Tilt	0	50	0	1:1	22	0.747	1.250	0.934	-
1 745	132322	QPSK	SUB2	20	18.0	16.79	0.04	Left Tilt	0	50	0	1:1	22	0.682	1.321	0.901	-
1 770	132572	QPSK	SUB2	20	18.0	17.01	0.01	Left Tilt	0	50	49	1:1	22	0.569	1.256	0.715	-
1 720	132072	QPSK	SUB2	20	18.0	17.03	-0.02	Left Tilt	0	100	0	1:1	22	0.725	1.250	0.906	-
1 720	132072	QPSK	SUB2	20	18.0	17.02	-0.01	Right Touch	0	1	49	1:1	22	0.886	1.253	1.110	-
1 745	132322	QPSK	SUB2	20	18.0	16.82	0.05	Right Touch	0	1	0	1:1	22	0.792	1.312	1.039	-
1 770	132572	QPSK	SUB2	20	18.0	16.95	0.09	Right Touch	0	1	0	1:1	22	0.737	1.274	0.939	-
1 720	132072	QPSK	SUB2	20	18.0	17.03	0.05	Right Touch	0	50	0	1:1	22	0.898	1.250	1.123	-
1 745	132322	QPSK	SUB2	20	18.0	16.79	0.12	Right Touch	0	50	0	1:1	22	0.815	1.321	1.077	-
1 770	132572	QPSK	SUB2	20	18.0	17.01	-0.11	Right Touch	0	50	49	1:1	22	0.645	1.256	0.810	-
1 720	132072	QPSK	SUB2	20	18.0	17.03	-0.13	Right Touch	0	100	0	1:1	22	0.882	1.250	1.103	-
1 720	132072	QPSK	SUB2	20	18.0	17.02	0.04	Right Tilt	0	1	49	1:1	22	0.827	1.253	1.036	-
1 745	132322	QPSK	SUB2	20	18.0	16.82	0.06	Right Tilt	0	1	0	1:1	22	0.769	1.312	1.009	-
1 770	132572	QPSK	SUB2	20	18.0	16.95	-0.01	Right Tilt	0	1	0	1:1	22	0.702	1.274	0.894	-
1 720	132072	QPSK	SUB2	20	18.0	17.03	0.02	Right Tilt	0	50	0	1:1	22	0.854	1.250	1.068	-
1 745	132322	QPSK	SUB2	20	18.0	16.79	-0.01	Right Tilt	0	50	0	1:1	22	0.772	1.321	1.020	-
1 770	132572	QPSK	SUB2	20	18.0	17.01	0.04	Right Tilt	0	50	49	1:1	22	0.650	1.256	0.816	-
1 720	132072	QPSK	SUB2	20	18.0	17.03	0.07	Right Tilt	0	100	0	1:1	22	0.840	1.250	1.050	-
1 720	132072	QPSK	SUB2	20	18.0	17.03	0.07	Right Touch	0	50	0	1:1	22	0.900	1.250	1.125	A15#
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Note: # Data entry indicate Variability measurement.

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LTE FDD Band 71 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
680.5	133297	QPSK	MAIN1	20	25.5	24.47	-0.02	Left Touch	0	1	0	1:1	12	0.078	1.268	0.099	-
680.5	133297	QPSK	MAIN1	20	24.5	23.38	0.15	Left Touch	1	50	0	1:1	12	0.056	1.294	0.072	-
680.5	133297	QPSK	MAIN1	20	25.5	24.47	0.16	Left Tilt	0	1	0	1:1	12	0.035	1.268	0.044	-
680.5	133297	QPSK	MAIN1	20	24.5	23.38	-0.11	Left Tilt	1	50	0	1:1	12	0.027	1.294	0.035	-
680.5	133297	QPSK	MAIN1	20	25.5	24.47	0.13	Right Touch	0	1	0	1:1	12	0.081	1.268	0.103	-
680.5	133297	QPSK	MAIN1	20	24.5	23.38	0.10	Right Touch	1	50	0	1:1	12	0.057	1.294	0.074	-
680.5	133297	QPSK	MAIN1	20	25.5	24.47	-0.14	Right Tilt	0	1	0	1:1	12	0.015	1.268	0.019	-
680.5	133297	QPSK	MAIN1	20	24.5	23.38	0.12	Right Tilt	1	50	0	1:1	12	0.011	1.294	0.014	-
680.5	133297	QPSK	SUB1	20	22.0	20.89	-0.16	Left Touch	0	1	0	1:1	0	0.732	1.291	**0.945**	**A16**
680.5	133297	QPSK	SUB1	20	22.0	20.86	0.04	Left Touch	0	50	25	1:1	0	0.627	1.300	0.815	-
680.5	133297	QPSK	SUB1	20	22.0	20.73	-0.06	Left Touch	0	100	0	1:1	0	0.632	1.340	0.847	-
680.5	133297	QPSK	SUB1	20	22.0	20.89	-0.02	Left Tilt	0	1	0	1:1	0	0.639	1.291	0.825	-
680.5	133297	QPSK	SUB1	20	22.0	20.86	-0.07	Left Tilt	0	50	25	1:1	0	0.565	1.300	0.735	-
680.5	133297	QPSK	SUB1	20	22.0	20.73	-0.01	Left Tilt	0	100	0	1:1	0	0.554	1.340	0.742	-
680.5	133297	QPSK	SUB1	20	22.0	20.89	0.15	Right Touch	0	1	0	1:1	0	0.515	1.291	0.665	-
680.5	133297	QPSK	SUB1	20	22.0	20.86	0.05	Right Touch	0	50	25	1:1	0	0.482	1.300	0.627	-
680.5	133297	QPSK	SUB1	20	22.0	20.89	-0.03	Right Tilt	0	1	0	1:1	0	0.434	1.291	0.560	-
680.5	133297	QPSK	SUB1	20	22.0	20.86	-0.09	Right Tilt	0	50	25	1:1	0	0.405	1.300	0.527	-
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NR FDD Band n7 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	24.0	22.45	0.13	Left Touch	0	1	214	1:1	-	0.041	1.429	0.059	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	24.0	22.54	0.01	Left Touch	0	108	54	1:1	-	0.036	1.400	0.050	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	24.0	22.45	0.12	Left tilt	0	1	214	1:1	-	0.035	1.429	0.050	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	24.0	22.54	0.16	Left tilt	0	108	54	1:1	-	0.036	1.400	0.050	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	24.0	22.45	0.11	Right touch	0	1	214	1:1	-	0.036	1.429	0.051	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	24.0	22.54	0.00	Right touch	0	108	54	1:1	-	0.033	1.400	0.046	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	24.0	22.45	0.12	Right Tilt	0	1	214	1:1	-	0.017	1.429	0.024	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	24.0	22.54	0.18	Right Tilt	0	108	54	1:1	-	0.014	1.400	0.020	-
2 535	507000	CP QPSK	MAIN2	40	22.5	20.84	-0.06	Left Touch	1.5	1	1	1:1	-	0.017	1.466	0.025	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	17.5	16.17	0.02	Left Touch	0	1	1	1:1	-	0.236	1.358	0.320	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	17.5	16.12	-0.03	Left Touch	0	108	54	1:1	-	0.205	1.374	0.282	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	17.5	16.17	0.17	Left Tilt	0	1	1	1:1	-	0.237	1.358	0.322	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	17.5	16.12	0.13	Left Tilt	0	108	54	1:1	-	0.224	1.374	0.308	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	17.5	16.17	0.11	Right Touch	0	1	1	1:1	-	0.394	1.358	0.535	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	17.5	16.12	0.17	Right Touch	0	108	54	1:1	-	0.364	1.374	0.500	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	17.5	16.17	0.10	Right Tilt	0	1	1	1:1	-	0.483	1.358	**0.656**	A17
2 535	507000	DFT-s OFDM QPSK	SUB2	40	17.5	16.12	0.15	Right Tilt	0	108	54	1:1	-	0.372	1.374	0.511	-
2 535	507000	CP QPSK	SUB2	40	17.5	16.32	0.19	Right Tilt	0	1	1	1:1	-	0.460	1.312	0.604	-

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NR FDD Band n12 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.79	0.19	Left Touch	0	1	77	1:1	11	0.043	1.321	0.057	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.86	0.00	Left Touch	0	36	22	1:1	11	0.052	1.300	0.068	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.79	-0.16	Left Tilt	0	1	77	1:1	11	0.019	1.321	0.025	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.86	-0.13	Left Tilt	0	36	22	1:1	11	0.014	1.300	0.018	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.79	-0.14	Right Touch	0	1	77	1:1	11	0.058	1.321	0.077	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.86	-0.13	Right Touch	0	36	22	1:1	11	0.066	1.300	0.086	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.79	-0.14	Right Tilt	0	1	77	1:1	11	0.014	1.321	0.018	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.86	0.17	Right Tilt	0	36	22	1:1	11	0.018	1.300	0.023	-
707.5	141500	CP QPSK	MAIN1	15	23.5	22.15	-0.12	Right Touch	1.5	1	1	1:1	11	0.053	1.365	0.072	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	21.5	20.33	0.11	Left Touch	0	1	1	1:1	45	**0.634**	1.309	0.830	A18
707.5	141500	DFT-s OFDM QPSK	SUB1	15	21.5	20.28	-0.00	Left Touch	0	36	22	1:1	45	0.629	1.324	0.833	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	21.5	20.09	-0.15	Left Touch	0	75	0	1:1	45	0.620	1.384	**0.858**	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	21.5	20.33	-0.18	Left Tilt	0	1	1	1:1	45	0.594	1.309	0.778	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	21.5	20.28	-0.01	Left Tilt	0	36	22	1:1	45	0.577	1.324	0.764	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	21.5	20.33	-0.10	Right Touch	0	1	1	1:1	45	0.477	1.309	0.624	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	21.5	20.28	0.07	Right Touch	0	36	22	1:1	45	0.477	1.324	0.632	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	21.5	20.33	-0.04	Right Tilt	0	1	1	1:1	45	0.436	1.309	0.571	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	21.5	20.28	-0.14	Right Tilt	0	36	22	1:1	45	0.441	1.324	0.584	-
707.5	141500	CP QPSK	SUB1	15	21.5	20.28	0.07	Left Touch	0	1	1	1:1	45	0.572	1.324	0.757	-

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NR FDD Band n14 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.70	0.00	Left Touch	0	1	1	1:1	11	0.035	1.072	0.038	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.42	0.00	Left Touch	0	25	14	1:1	11	0.021	1.143	0.024	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.70	-0.19	Left Tilt	0	1	1	1:1	11	0.017	1.072	0.018	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.42	-0.13	Left Tilt	0	25	14	1:1	11	0.010	1.143	0.011	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.70	0.00	Right Touch	0	1	1	1:1	11	0.043	1.072	0.046	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.42	0.00	Right Touch	0	25	14	1:1	11	0.033	1.143	0.038	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.70	-0.19	Right Tilt	0	1	1	1:1	11	0.014	1.072	0.015	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.42	0.19	Right Tilt	0	25	14	1:1	11	0.010	1.143	0.011	-
793	158600	CP QPSK	MAIN1	10	23.5	23.17	0.00	Right Touch	1.5	1	1	1:1	11	0.031	1.079	0.033	-
793	158600	DFT-s OFDM QPSK	SUB1	10	21.5	21.15	-0.03	Left Touch	0	1	26	1:1	0	0.708	1.084	**0.767**	A19
793	158600	DFT-s OFDM QPSK	SUB1	10	21.5	21.16	-0.12	Left Touch	0	25	14	1:1	0	0.570	1.081	0.616	-
793	158600	DFT-s OFDM QPSK	SUB1	10	21.5	21.15	-0.14	Left Tilt	0	1	26	1:1	0	0.499	1.084	0.541	-
793	158600	DFT-s OFDM QPSK	SUB1	10	21.5	21.16	-0.11	Left Tilt	0	25	14	1:1	0	0.505	1.081	0.546	-
793	158600	DFT-s OFDM QPSK	SUB1	10	21.5	21.15	-0.15	Right Touch	0	1	26	1:1	0	0.401	1.084	0.435	-
793	158600	DFT-s OFDM QPSK	SUB1	10	21.5	21.16	-0.11	Right Touch	0	25	14	1:1	0	0.403	1.081	0.436	-
793	158600	DFT-s OFDM QPSK	SUB1	10	21.5	21.15	-0.14	Right Tilt	0	1	26	1:1	0	0.331	1.084	0.359	-
793	158600	DFT-s OFDM QPSK	SUB1	10	21.5	21.16	-0.12	Right Tilt	0	25	14	1:1	0	0.331	1.081	0.358	-
793	158600	CP QPSK	SUB1	10	21.5	21.29	-0.06	Left Touch	0	1	1	1:1	0	0.566	1.050	0.594	-
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NR FDD Band n25 Head (PCS) SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	25.0	24.38	-0.16	Left Touch	0	1	214	1:1	1	0.144	1.153	0.166	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	25.0	24.12	-0.18	Left Touch	0	108	54	1:1	1	0.159	1.225	0.195	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	25.0	24.38	-0.02	Left Tilt	0	1	214	1:1	1	0.058	1.153	0.067	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	25.0	24.12	0.19	Left Tilt	0	108	54	1:1	1	0.081	1.225	0.099	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	25.0	24.38	0.15	Right Touch	0	1	214	1:1	1	0.099	1.153	0.114	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	25.0	24.12	0.14	Right Touch	0	108	54	1:1	1	0.087	1.225	0.107	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	25.0	24.38	0.18	Right Tilt	0	1	214	1:1	1	0.050	1.153	0.058	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	25.0	24.12	0.16	Right Tilt	0	108	54	1:1	1	0.061	1.225	0.075	-
1 882.5	376500	CP QPSK	MAIN1	40	23.5	22.54	-0.14	Left Touch	1.5	1	1	1:1	1	0.107	1.247	0.133	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	17.5	16.95	-0.08	Left Touch	0	1	1	1:1	22	0.288	1.134	0.327	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	17.5	16.70	-0.02	Left Touch	0	108	108	1:1	22	0.278	1.202	0.334	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	17.5	16.95	-0.07	Left Tilt	0	1	1	1:1	22	0.337	1.134	0.382	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	17.5	16.70	0.03	Left Tilt	0	108	108	1:1	22	0.332	1.202	0.399	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	17.5	16.95	0.18	Right Touch	0	1	1	1:1	22	**0.403**	1.134	0.457	A20
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	17.5	16.70	-0.02	Right Touch	0	108	108	1:1	22	0.389	1.202	**0.468**	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	17.5	16.95	-0.12	Right Tilt	0	1	1	1:1	22	0.398	1.134	0.451	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	17.5	16.70	0.09	Right Tilt	0	108	108	1:1	22	0.382	1.202	0.459	-
1 882.5	376500	CP QPSK	SUB2	40	17.5	17.01	0.08	Right Tilt	0	1	1	1:1	22	0.36	1.119	0.403	-
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NR FDD Band n26 (Cell) Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	24.15	-0.15	Left Touch	0	1	1	1:1	3	0.058	1.216	0.071	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.97	-0.17	Left Touch	0	50	28	1:1	3	0.058	1.268	0.074	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	24.15	-0.04	Left Tilt	0	1	1	1:1	3	0.029	1.216	0.035	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.97	-0.16	Left Tilt	0	50	28	1:1	3	0.026	1.268	0.033	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	24.15	-0.18	Right Touch	0	1	1	1:1	3	0.079	1.216	0.096	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.97	0.05	Right Touch	0	50	28	1:1	3	0.101	1.268	0.128	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	24.15	0.11	Right Tilt	0	1	1	1:1	3	0.048	1.216	0.058	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.97	-0.04	Right Tilt	0	50	28	1:1	3	0.054	1.268	0.068	-
831.5	166300	CP QPSK	MAIN1	20	23.5	22.47	0.08	Right Touch	1.5	1	1	1:1	3	0.067	1.268	0.085	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	23.0	22.10	0.07	Left Touch	0	1	53	1:1	0	0.792	1.230	**0.974**	A21
831.5	166300	DFT-s OFDM QPSK	SUB1	20	23.0	22.05	0.01	Left Touch	0	50	0	1:1	0	0.716	1.245	0.891	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	23.0	22.08	-0.08	Left Touch	0	100	0	1:1	0	0.758	1.236	0.937	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	23.0	22.10	-0.10	Left Tilt	0	1	53	1:1	0	0.566	1.230	0.696	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	23.0	22.05	-0.16	Left Tilt	0	50	0	1:1	0	0.637	1.245	0.793	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	23.0	22.10	-0.18	Right Touch	0	1	53	1:1	0	0.485	1.230	0.597	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	23.0	22.05	-0.01	Right Touch	0	50	0	1:1	0	0.480	1.245	0.598	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	23.0	22.10	-0.07	Right Tilt	0	1	53	1:1	0	0.450	1.230	0.554	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	23.0	22.05	-0.10	Right Tilt	0	50	0	1:1	0	0.438	1.245	0.545	-
831.5	166300	CP QPSK	SUB1	20	23.0	22.06	-0.06	Left Touch	0	1	1	1:1	0	0.689	1.242	0.856	-
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NR FDD Band n30 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	23.5	22.16	0.01	Left Touch	0	1	1	1:1	-	0.038	1.361	0.052	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	23.5	22.43	0.01	Left Touch	0	25	14	1:1	-	0.039	1.279	0.050	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	23.5	22.16	0.15	Left Tilt	0	1	1	1:1	-	0.011	1.361	0.015	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	23.5	22.43	0.14	Left Tilt	0	25	14	1:1	-	0.011	1.279	0.014	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	23.5	22.16	0.00	Right Touch	0	1	1	1:1	-	0.010	1.361	0.014	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	23.5	22.43	-0.12	Right Touch	0	25	14	1:1	-	0.015	1.279	0.019	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	23.5	22.16	-0.02	Right Tilt	0	1	1	1:1	-	0.018	1.361	0.024	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	23.5	22.43	0.04	Right Tilt	0	25	14	1:1	-	0.015	1.279	0.019	-
2 310	462000	CP QPSK	MIAIN1	10	22.0	20.25	0.13	Left Touch	1.5	1	1	1:1	-	0.032	1.496	0.048	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	17.5	16.66	0.13	Left Touch	0	1	1	1:1	-	0.355	1.213	0.431	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	17.5	16.41	0.05	Left Touch	0	25	14	1:1	-	0.340	1.285	0.437	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	17.5	16.66	0.12	Left tilt	0	1	1	1:1	-	0.476	1.213	0.577	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	17.5	16.41	0.03	Left tilt	0	25	14	1:1	-	0.498	1.285	0.640	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	17.5	16.66	-0.06	Right touch	0	1	1	1:1	-	0.609	1.213	0.739	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	17.5	16.41	0.11	Right touch	0	25	14	1:1	-	0.625	1.285	0.803	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	17.5	16.38	0.07	Right touch	0	50	0	1:1	-	0.639	1.294	0.827	A22
2 310	462000	DFT-s OFDM QPSK	SUB2	10	17.5	16.66	0.05	Right Tilt	0	1	1	1:1	-	0.593	1.213	0.719	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	17.5	16.41	0.04	Right Tilt	0	25	14	1:1	-	0.615	1.285	0.790	-
2 310	462000	CP QPSK	SUB2	10	17.5	16.49	0.16	Right touch	0	1	1	1:1	-	0.627	1.262	0.791	-
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NR TDD Band n41 (Power Class 2) Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	20.0	19.65	0.18	Left Touch	0	1	271	1:1	-	0.032	1.084	0.035	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	20.0	19.69	-0.13	Left Touch	0	135	138	1:1	-	0.027	1.074	0.029	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	20.0	19.65	0.18	Left tilt	0	1	271	1:1	-	0.016	1.084	0.017	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	20.0	19.69	0.18	Left tilt	0	135	138	1:1	-	0.012	1.074	0.013	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	20.0	19.65	0.11	Right touch	0	1	271	1:1	-	0.029	1.084	0.031	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	20.0	19.69	0.00	Right touch	0	135	138	1:1	-	0	1.074	0.000	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	20.0	19.65	0.14	Right Tilt	0	1	271	1:1	-	0.015	1.084	0.016	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	20.0	19.69	0.08	Right Tilt	0	135	138	1:1	-	0.013	1.074	0.014	-
2 592.99	518598	CP OFDM QPSK	MAIN2	100	20.0	19.82	0.19	Left Touch	0	1	1	1:1	-	0.027	1.042	0.028	-
2 592.99	518598	CW SRS #2	SUB2	100	20.0	19.23	-0.17	Left Touch	0	-	-	1:1	-	0.47	1.194	0.561	-
2 592.99	518598	CW SRS #2	SUB2	100	20.0	19.23	-0.13	Left Tilt	0	-	-	1:1	-	0.527	1.194	0.629	-
2 592.99	518598	CW SRS #2	SUB2	100	20.0	19.23	-0.13	Right Touch	0	-	-	1:1	-	0.901	1.194	1.076	-
2 592.99	518598	CW SRS #2	SUB2	100	20.0	19.23	-0.04	Right Tilt	0	-	-	1:1	-	0.925	1.194	**1.104**	A23
2 592.99	518598	CW SRS #3	MAIN4	100	19.0	18.21	0.02	Left Touch	0	-	-	1:1	-	0.01	1.199	0.012	-
2 592.99	518598	CW SRS #3	MAIN4	100	19.0	18.21	0.12	Left Tilt	0	-	-	1:1	-	0.003	1.199	0.004	-
2 592.99	518598	CW SRS #3	MAIN4	100	19.0	18.21	0	Right Touch	0	-	-	1:1	-	0	1.199	0.000	-
2 592.99	518598	CW SRS #3	MAIN4	100	19.0	18.21	0.11	Right Tilt	0	-	-	1:1	-	0.001	1.199	0.001	-
2 592.99	518598	CW SRS #4	SUB1	100	18.0	17.23	-0.05	Left Touch	0	-	-	1:1	-	0.894	1.194	1.067	-
2 592.99	518598	CW SRS #4	SUB1	100	18.0	17.23	-0.02	Left Tilt	0	-	-	1:1	-	0.776	1.194	0.927	-
2 592.99	518598	CW SRS #4	SUB1	100	18.0	17.23	-0.11	Right Touch	0	-	-	1:1	-	0.285	1.194	0.340	-
2 592.99	518598	CW SRS #4	SUB1	100	18.0	17.23	-0.08	Right Tilt	0	-	-	1:1	-	0.343	1.194	0.410	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.78	-0.12	Left Touch	0	1	271	1:1	-	0.171	1.324	0.226	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.55	0.03	Left Touch	0	135	138	1:1	-	0.168	1.396	0.235	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.78	-0.08	Left Tilt	0	1	271	1:1	-	0.378	1.324	0.500	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.55	-0.13	Left Tilt	0	135	138	1:1	-	0.266	1.396	0.371	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.78	0.07	Right Touch	0	1	271	1:1	-	0.456	1.324	0.604	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.55	-0.13	Right Touch	0	135	138	1:1	-	0.375	1.396	0.524	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.49	0.06	Right Touch	0	270	0	1:1	-	0.316	1.416	0.447	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.78	0.05	Right Tilt	0	1	271	1:1	-	0.486	1.324	0.643	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.55	0.03	Right Tilt	0	135	138	1:1	-	0.413	1.396	0.577	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	16.0	14.49	-0.05	Right Tilt	0	270	0	1:1	-	0.403	1.416	0.571	
2 592.99	518598	CP OFDM QPSK	SUB2	100	16.0	14.67	-0.19	Right Tilt	0	1	1	1:1	-	0.494	1.358	0.671	-
2 592.99	518598	CW SRS #2	MAIN2	100	16.0	14.96	0.09	Left Touch	0	-	-	1:1	-	0.025	1.271	0.032	-
2 592.99	518598	CW SRS #2	MAIN2	100	16.0	14.96	0.07	Left Tilt	0	-	-	1:1	-	0.011	1.271	0.014	-
2 592.99	518598	CW SRS #2	MAIN2	100	16.0	14.96	0.01	Right Touch	0	-	-	1:1	-	0.021	1.271	0.027	-
2 592.99	518598	CW SRS #2	MAIN2	100	16.0	14.96	0.03	Right Tilt	0	-	-	1:1	-	0.014	1.271	0.018	-
2 592.99	518598	CW SRS #3	SUB1	100	14.5	13.74	-0.04	Left Touch	0	-	-	1:1	-	0.365	1.191	0.435	-
2 592.99	518598	CW SRS #3	SUB1	100	14.5	13.74	0.01	Left Tilt	0	-	-	1:1	-	0.342	1.191	0.407	-
2 592.99	518598	CW SRS #3	SUB1	100	14.5	13.74	-0.06	Right Touch	0	-	-	1:1	-	0.266	1.191	0.317	-
2 592.99	518598	CW SRS #3	SUB1	100	14.5	13.74	0.13	Right Tilt	0	-	-	1:1	-	0.224	1.191	0.267	-
2 592.99	518598	CW SRS #4	MAIN4	100	14.5	13.82	-0.02	Left Touch	0	-	-	1:1	-	0.006	1.169	0.007	-
2 592.99	518598	CW SRS #4	MAIN4	100	14.5	13.82	0.03	Left Tilt	0	-	-	1:1	-	0.001	1.169	0.001	-
2 592.99	518598	CW SRS #4	MAIN4	100	14.5	13.82	-0.06	Right Touch	0	-	-	1:1	-	0.003	1.169	0.004	-
2 592.99	518598	CW SRS #4	MAIN4	100	14.5	13.82	-0.01	Right Tilt	0	-	-	1:1	-	0	1.169	0.000	-
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NR TDD Band n48 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	14.55	-0.06	Left Touch	0	1	1	1:1	-	0.299	1.245	0.372	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	14.58	-0.10	Left Touch	0	50	0	1:1	-	0.297	1.236	0.367	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	14.55	-0.13	Left Tilt	0	1	1	1:1	-	0.376	1.245	0.468	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	14.58	-0.13	Left Tilt	0	50	0	1:1	-	0.346	1.236	0.428	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	14.55	0.03	Right Touch	0	1	1	1:1	-	0.577	1.245	0.718	-
3 624.99	641666	DFT-s OFDM QPSK	SUB2	40	15.5	14.34	0.18	Right Touch	0	1	1	1:1	-	0.497	1.306	0.649	-
3 680.01	645334	DFT-s OFDM QPSK	SUB2	40	15.5	14.10	0.07	Right Touch	0	1	1	1:1	-	0.485	1.380	0.669	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	15.58	0.17	Right Touch	0	50	0	1:1	-	0.544	0.982	0.534	-
3 624.99	641666	DFT-s OFDM QPSK	SUB2	40	15.5	14.43	-0.02	Right Touch	0	50	0	1:1	-	0.481	1.279	0.615	-
3 680.01	645334	DFT-s OFDM QPSK	SUB2	40	15.5	14.18	0.06	Right Touch	0	50	0	1:1	-	0.475	1.355	0.644	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	14.46	0.11	Right Touch	0	100	0	1:1	-	0.476	1.271	0.605	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	14.55	0.06	Right Tilt	0	1	1	1:1	-	0.687	1.245	**0.855**	A24
3 624.99	641666	DFT-s OFDM QPSK	SUB2	40	15.5	14.34	0.11	Right Tilt	0	1	1	1:1	-	0.513	1.306	0.670	-
3 680.01	645334	DFT-s OFDM QPSK	SUB2	40	15.5	14.10	0.14	Right Tilt	0	1	1	1:1	-	0.413	1.380	0.570	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	14.58	0.10	Right Tilt	0	50	0	1:1	-	0.665	1.236	0.822	-
3 624.99	641666	DFT-s OFDM QPSK	SUB2	40	15.5	14.43	0.05	Right Tilt	0	50	0	1:1	-	0.591	1.279	0.756	-
3 680.01	645334	DFT-s OFDM QPSK	SUB2	40	15.5	14.18	0.10	Right Tilt	0	50	0	1:1	-	0.589	1.355	0.798	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	15.5	14.46	0.16	Right Tilt	0	100	0	1:1	-	0.640	1.271	0.813	-
3 570	638000	CP QPSK	SUB2	40	15.5	14.51	0.19	Right Tilt	0	1	1	1:1	-	0.670	1.256	0.842	-
3 680.01	645334	CW SRS #2	MAIN3	40	9.5	9.39	-0.13	Left Touch	0	-	-	1:1	-	0.002	1.026	0.002	-
3 680.01	645334	CW SRS #2	MAIN3	40	9.5	9.39	-0.10	Left Tilt	0	-	-	1:1	-	0.002	1.026	0.002	-
3 680.01	645334	CW SRS #2	MAIN3	40	9.5	9.39	-0.12	Right Touch	0	-	-	1:1	-	0	1.026	0.000	-
3 680.01	645334	CW SRS #2	MAIN3	40	9.5	9.39	-0.14	Right Tilt	0	-	-	1:1	-	0.002	1.026	0.002	-
3 624.99	641666	CW SRS #3	SUB5	40	13.0	12.93	-0.17	Left Touch	0	-	-	1:1	-	0.063	1.016	0.064	-
3 624.99	641666	CW SRS #3	SUB5	40	13.0	12.93	-0.18	Left Tilt	0	-	-	1:1	-	0.002	1.016	0.002	-
3 624.99	641666	CW SRS #3	SUB5	40	13.0	12.93	-0.10	Right Touch	0	-	-	1:1	-	0.175	1.016	0.178	-
3 624.99	641666	CW SRS #3	SUB5	40	13.0	12.93	-0.10	Right Tilt	0	-	-	1:1	-	0.002	1.016	0.002	-
3 624.99	641666	CW SRS #4	MAIN4	40	8.5	8.31	-0.16	Left Touch	0	-	-	1:1	-	0	1.045	0.000	-
3 624.99	641666	CW SRS #4	MAIN4	40	8.5	8.31	-0.18	Left Tilt	0	-	-	1:1	-	0	1.045	0.000	-
3 624.99	641666	CW SRS #4	MAIN4	40	8.5	8.31	-0.13	Right Touch	0	-	-	1:1	-	0	1.045	0.000	-
3 624.99	641666	CW SRS #4	MAIN4	40	8.5	8.31	-0.16	Right Tilt	0	-	-	1:1	-	0	1.045	0.000	-
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NR FDD Band n66 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	25.5	24.48	0.09	Left Touch	0	1	1	1:1	18	0.237	1.265	0.300	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	25.5	25.32	-0.10	Left Touch	0	108	54	1:1	18	0.220	1.042	0.229	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	25.5	24.48	0.18	Left Tilt	0	1	1	1:1	18	0.095	1.265	0.120	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	25.5	25.32	-0.11	Left Tilt	0	108	54	1:1	18	0.021	1.042	0.022	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	25.5	24.48	-0.13	Right Touch	0	1	1	1:1	18	0.159	1.265	0.201	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	25.5	25.32	-0.18	Right Touch	0	108	54	1:1	18	0.111	1.042	0.116	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	25.5	24.48	0.15	Right Tilt	0	1	1	1:1	18	0.101	1.265	0.128	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	25.5	25.32	-0.13	Right Tilt	0	108	54	1:1	18	0.093	1.042	0.097	-
1 745	349000	CP QPSK	MAIN1	40	24.0	23.02	0.06	Left Touch	1.5	1	1	1:1	18	0.168	1.253	0.211	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.90	-0.13	Left Touch	0	1	1	1:1	22	0.444	1.148	0.510	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.69	0.11	Left Touch	0	108	54	1:1	22	0.397	1.205	0.478	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.90	0.01	Left Tilt	0	1	1	1:1	22	0.61	1.148	0.700	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.69	-0.02	Left Tilt	0	108	54	1:1	22	0.538	1.205	0.648	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.90	0.09	Right Touch	0	1	1	1:1	22	0.697	1.148	0.800	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.69	-0.05	Right Touch	0	108	54	1:1	22	0.635	1.205	0.765	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.83	-0.09	Right Touch	0	216	0	1:1	22	0.611	1.167	0.713	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.90	-0.11	Right Tilt	0	1	1	1:1	22	0.700	1.148	0.804	A25
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.69	0.03	Right Tilt	0	108	54	1:1	22	0.608	1.205	0.733	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	17.5	16.83	0.05	Right Tilt	0	216	0	1:1	22	0.625	1.167	0.729	-
1 745	349000	CP QPSK	SUB2	40	17.5	16.98	-0.10	Right Tilt	0	1	1	1:1	22	0.698	1.127	0.787	-
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NR FDD Band n70 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	24.5	23.40	-0.17	Left Touch	0	1	1	1:1	19	0.172	1.288	0.222	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	24.5	23.37	0.11	Left Touch	0	36	22	1:1	19	0.181	1.297	0.235	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	24.5	23.40	0.05	Left Tilt	0	1	1	1:1	19	0.083	1.288	0.107	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	24.5	23.37	0.13	Left Tilt	0	36	22	1:1	19	0.071	1.297	0.091	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	24.5	23.40	0.05	Right Touch	0	1	1	1:1	19	0.100	1.288	0.129	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	24.5	23.37	0.18	Right Touch	0	36	22	1:1	19	0.101	1.297	0.131	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	24.5	23.40	-0.04	Right Tilt	0	1	1	1:1	19	0.070	1.288	0.090	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	24.5	23.37	0.15	Right Tilt	0	36	22	1:1	19	0.064	1.297	0.083	-
1 702.5	340500	CP QPSK	MAIN1	15	23.0	21.89	-0.16	Left Touch	1.5	1	1	1:1	19	0.137	1.291	0.177	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.60	-0.13	Left Touch	0	1	77	1:1	22	0.459	1.380	0.633	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.51	0.07	Left Touch	0	36	22	1:1	22	0.451	1.409	0.635	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.60	-0.03	Left Tilt	0	1	77	1:1	22	0.675	1.380	0.932	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.51	0.00	Left Tilt	0	36	22	1:1	22	0.669	1.409	0.943	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.33	-0.05	Left Tilt	0	75	0	1:1	22	0.639	1.469	0.939	
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.60	0.01	Right Touch	0	1	77	1:1	22	0.65	1.380	0.897	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.51	-0.03	Right Touch	0	36	22	1:1	22	0.637	1.409	0.898	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.33	-0.12	Right Touch	0	75	0	1:1	22	0.582	1.469	0.855	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.60	-0.17	Right Tilt	0	1	77	1:1	22	0.730	1.380	1.007	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.51	0.08	Right Tilt	0	36	22	1:1	22	**0.739**	1.409	1.041	A26
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	18.0	16.33	0.06	Right Tilt	0	75	0	1:1	22	0.695	1.469	1.021	-
1 702.5	340500	CP QPSK	SUB2	15	18.0	16.33	-0.02	Right Tilt	0	1	1	1:1	22	0.718	1.469	**1.055**	-
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NR FDD Band n71 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.38	0.00	Left Touch	0	1	53	1:1	12	0.050	1.294	0.065	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.35	0.00	Left Touch	0	50	28	1:1	12	0.057	1.303	0.074	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.38	-0.19	Left Tilt	0	1	53	1:1	12	0.025	1.294	0.032	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.35	-0.03	Left Tilt	0	50	28	1:1	12	0.024	1.303	0.031	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.38	0.00	Right Touch	0	1	53	1:1	12	0.069	1.294	0.089	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.35	-0.10	Right Touch	0	50	28	1:1	12	0.085	1.303	0.111	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.38	-0.13	Right Tilt	0	1	53	1:1	12	0.013	1.294	0.017	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.35	-0.05	Right Tilt	0	50	28	1:1	12	0.016	1.303	0.021	-
680.5	136100	CP QPSK	MAIN1	20	24.0	22.45	0.17	Right Touch	1.5	1	1	1:1	12	0.046	1.429	0.066	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	22.0	21.01	-0.12	Left Touch	0	1	53	1:1	0	0.594	1.256	0.746	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	22.0	20.91	0.02	Left Touch	0	50	0	1:1	0	0.648	1.285	0.833	A27
680.5	136100	DFT-s OFDM QPSK	SUB1	20	22.0	21.05	-0.02	Left Touch	0	100	0	1:1	0	0.606	1.245	0.754	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	22.0	20.91	-0.11	Left Tilt	0	1	53	1:1	0	0.551	1.285	0.708	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	22.0	20.91	-0.14	Left Tilt	0	50	0	1:1	0	0.603	1.285	0.775	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	22.0	21.01	-0.12	Right Touch	0	1	53	1:1	0	0.520	1.256	0.653	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	22.0	20.91	-0.02	Right Touch	0	50	0	1:1	0	0.544	1.285	0.699	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	22.0	21.01	-0.03	Right Tilt	0	1	53	1:1	0	0.414	1.256	0.520	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	22.0	20.91	-0.19	Right Tilt	0	50	0	1:1	0	0.433	1.285	0.556	-
680.5	136100	CP QPSK	SUB1	20	22.0	20.78	0.06	Left Touch	0	1	1	1:1	0	0.627	1.324	0.830	-
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NR TDD Band n77 (Power Class 2) Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.31	-0.13	Left Touch	0	1	1	1:1	-	0.304	1.315	0.400	-
3 930	662000	DFT-s OFDM QPSK	SUB2	100	15.5	13.73	0.01	Left Touch	0	1	1	1:1	-	0.128	1.503	0.192	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.16	-0.11	Left Touch	0	135	0	1:1	-	0.22	1.361	0.299	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.05	0.13	Left Touch	0	270	0	1:1	-	0.23	1.396	0.321	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.31	0.04	Left Tilt	0	1	1	1:1	-	0.317	1.315	0.417	-
3 930	662000	DFT-s OFDM QPSK	SUB2	100	15.5	13.73	0.17	Left Tilt	0	1	1	1:1	-	0.181	1.503	0.272	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.16	-0.15	Left Tilt	0	135	0	1:1	-	0.306	1.361	0.416	-
3 930	662000	DFT-s OFDM QPSK	SUB2	100	15.5	13.59	0.19	Left Tilt	0	135	0	1:1	-	0.173	1.552	0.268	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.05	0.06	Left Tilt	0	270	0	1:1	-	0.247	1.396	0.345	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.31	0.02	Right Touch	0	1	1	1:1	-	0.470	1.315	0.618	-
3 930	662000	DFT-s OFDM QPSK	SUB2	100	15.5	13.73	0.03	Right Touch	0	1	1	1:1	-	0.339	1.503	0.510	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.16	-0.05	Right Touch	0	135	0	1:1	-	0.460	1.361	0.626	-
3 930	662000	DFT-s OFDM QPSK	SUB2	100	15.5	13.59	0.10	Right Touch	0	135	0	1:1	-	0.305	1.552	0.473	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.05	-0.03	Right Touch	0	270	0	1:1	-	0.538	1.396	0.751	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.31	0.14	Right Tilt	0	1	1	1:1	-	0.665	1.315	**0.874**	A28
3 930	662000	DFT-s OFDM QPSK	SUB2	100	15.5	13.73	0.16	Right Tilt	0	1	1	1:1	-	0.368	1.503	0.553	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.16	0.14	Right Tilt	0	135	0	1:1	-	0.625	1.361	0.851	-
3 930	662000	DFT-s OFDM QPSK	SUB2	100	15.5	13.59	0.17	Right Tilt	0	135	0	1:1	-	0.289	1.552	0.449	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	15.5	14.05	0.09	Right Tilt	0	270	0	1:1	-	0.469	1.396	0.655	-
3 750	650000	CP QPSK	SUB2	100	15.5	14.47	0.01	Right Tilt	0	1	1	1:1	-	0.523	1.268	0.663	-
3 500.01	633334	DFT-s OFDM QPSK	SUB2	100	15.5	14.53	0.19	Right Tilt	0	1	1	1:1	-	0.548	1.250	0.685	-
3 500.01	633334	DFT-s OFDM QPSK	SUB2	100	15.5	14.44	-0.10	Right Tilt	0	135	0	1:1	-	0.542	1.276	0.692	-
3 500.01	633334	DFT-s OFDM QPSK	SUB2	100	15.5	14.37	-0.10	Right Tilt	0	270	0	1:1	-	0.473	1.297	0.613	-
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NR TDD Band n77 SRS (Power Class 2) Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
3 930	662000	CW SRS #2	MAIN3	100	4.5	3.09	-0.13	Left Touch	0	-	-	1:1	-	0.003	1.384	0.004	-
3 930	662000	CW SRS #2	MAIN3	100	4.5	3.09	-0.17	Left Tilt	0	-	-	1:1	-	0.005	1.384	0.007	-
3 930	662000	CW SRS #2	MAIN3	100	4.5	3.09	0.00	Right Touch	0	-	-	1:1	-	0.000	1.384	0.000	-
3 930	662000	CW SRS #2	MAIN3	100	4.5	3.09	0.00	Right Tilt	0	-	-	1:1	-	0.000	1.384	0.000	-
3 500.01	633334	CW SRS #2	MAIN3	100	4.5	4.41	-0.15	Left Tilt	0	-	-	1:1	-	0.000	1.021	0.000	-
3 930	662000	CW SRS #3	SUB5	100	8.0	6.54	-0.13	Left Touch	0	-	-	1:1	-	0.051	1.114	0.071	-
3 930	662000	CW SRS #3	SUB5	100	8.0	6.54	-0.16	Left Tilt	0	-	-	1:1	-	0.006	1.114	0.008	-
3 930	662000	CW SRS #3	SUB5	100	8.0	6.54	0.11	Right Touch	0	-	-	1:1	-	0.161	1.114	0.225	-
3 930	662000	CW SRS #3	SUB5	100	8.0	6.54	-0.14	Right Tilt	0	-	-	1:1	-	0.005	1.114	0.007	-
3 500.01	633334	CW SRS #3	SUB5	100	8.0	7.86	-0.17	Right Touch	0	-	-	1:1	-	0.207	1.096	**0.214**	A29
3 930	662000	CW SRS #4	MAIN4	100	4	2.68	0.09	Left Touch	0	-	-	1:1	-	0.002	1.291	0.003	-
3 930	662000	CW SRS #4	MAIN4	100	4	2.68	0.00	Left Tilt	0	-	-	1:1	-	0.000	1.291	0.000	-
3 930	662000	CW SRS #4	MAIN4	100	4	2.68	-0.10	Right Touch	0	-	-	1:1	-	0.003	1.291	0.004	-
3 930	662000	CW SRS #4	MAIN4	100	4	2.68	-0.02	Right Tilt	0	-	-	1:1	-	0.000	1.291	0.000	-
3 500.01	633334	CW SRS #4	MAIN4	100	4	3.52	-0.19	Right Touch	0	-	-	1:1	-	0.001	1.380	0.001	-

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DTS Head SAR – RCV ON																
Frequency		Mode	Ant.	Band width (㎒)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
㎒	Ch.															
2 412	1	802.11b	Ant.1	20	1	15.0	14.59	-0.18	Left Touch	98.9	0.095	0.078	1.099	1.000	0.086	-
2 412	1	802.11b	Ant.1	20	1	15.0	14.59	-0.15	Left Tilt	98.9	0.125	0.094	1.099	1.000	0.103	-
2 412	1	802.11b	Ant.1	20	1	15.0	14.59	0.13	Right Touch	98.9	1.12	0.441	1.099	1.000	0.485	-
2 412	1	802.11b	Ant.1	20	1	15.0	14.59	0.03	Right Tilt	98.9	0.463	0.320	1.099	1.000	0.352	-
2 412	1	802.11b	Ant.2	20	1	15.0	14.64	-0.16	Left Touch	98.9	0.490	0.345	1.086	1.000	0.375	-
2 412	1	802.11b	Ant.2	20	1	15.0	14.64	0.15	Left Tilt	98.9	0.085	0.064	1.086	1.000	0.070	-
2 412	1	802.11b	Ant.2	20	1	15.0	14.64	-0.13	Right Touch	98.9	0.174	0.117	1.086	1.000	0.127	-
2 412	1	802.11b	Ant.2	20	1	15.0	14.64	0.18	Right Tilt	98.9	0.023	0.015	1.086	1.000	0.016	-
2 412	1	802.11b	MIMO	20	1	18.0	17.62	0.17	Left Touch	98.9	0.543	0.403	1.099	1.000	0.443	-
2 412	1	802.11b	MIMO	20	1	18.0	17.62	-0.06	Left Tilt	98.9	0.160	0.126	1.099	1.000	0.138	-
2 412	1	802.11b	MIMO	20	1	18.0	17.62	-0.12	Right Touch	98.9	0.592	0.496	1.099	1.000	**0.545**	**A30**
2 412	1	802.11b	MIMO	20	1	18.0	17.62	-0.02	Right Tilt	98.9	0.317	0.287	1.099	1.000	0.315	-
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NII Head SAR – RCV-ON																
Frequency		Mode	Ant.	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
㎒	Ch.			(㎒)	(Mbps)	(dBm)	(dBm)	(dB)			(W/kg)	(W/kg)		(Duty)	(W/kg)	
5 290	58	802.11ax	Ant.1	80	MCS0	15.0	14.25	0.15	Left Touch	100	0.187	0.149	1.189	1.000	0.177	-
5 290	58	802.11ax	Ant.1	80	MCS0	15.0	14.25	-0.03	Left Tilt	100	0.215	0.164	1.189	1.000	0.195	-
5 290	58	802.11ax	Ant.1	80	MCS0	15.0	14.25	0.03	Right Touch	100	0.691	0.590	1.189	1.000	0.702	-
5 290	58	802.11ax	Ant.1	80	MCS0	15.0	14.25	0.08	Right Tilt	100	0.481	0.331	1.189	1.000	0.394	-
5 690	138	802.11ac	Ant.1	80	MCS0	15.0	13.53	0.11	Left Touch	92.4	0.127	0.091	1.403	1.082	0.138	-
5 690	138	802.11ac	Ant.1	80	MCS0	15.0	13.53	0.13	Left Tilt	92.4	0.077	0.05	1.403	1.082	0.076	-
5 690	138	802.11ac	Ant.1	80	MCS0	15.0	13.53	0.16	Right Touch	92.4	0.591	0.473	1.403	1.082	**0.718**	-
5 690	138	802.11ac	Ant.1	80	MCS0	15.0	13.53	-0.12	Right Tilt	92.4	0.232	0.178	1.403	1.082	0.270	-
5 775	155	802.11ac	Ant.1	80	MCS0	15.0	13.28	-0.15	Left Touch	92.4	0.060	0.034	1.486	1.082	0.055	-
5 775	155	802.11ac	Ant.1	80	MCS0	15.0	13.28	0.15	Left Tilt	92.4	0.176	0.037	1.486	1.082	0.060	-
5 775	155	802.11ac	Ant.1	80	MCS0	15.0	13.28	-0.02	Right Touch	92.4	0.514	0.569	1.486	1.082	**0.915**	-
5 775	155	802.11ac	Ant.1	80	MCS0	15.0	13.28	0.16	Right Tilt	92.4	0.271	0.160	1.486	1.082	0.257	-
5 855	171	802.11ac	Ant.1	80	MCS0	15.0	13.36	0.06	Left Touch	92.4	0.119	0.09	1.459	1.082	0.142	-
5 855	171	802.11ac	Ant.1	80	MCS0	15.0	13.36	-0.13	Left Tilt	92.4	0.107	0.069	1.459	1.082	0.109	-
5 855	171	802.11ac	Ant.1	80	MCS0	15.0	13.36	0.11	Right Touch	92.4	0.455	0.497	1.459	1.082	0.785	-
5 855	171	802.11ac	Ant.1	80	MCS0	15.0	13.36	-0.16	Right Tilt	92.4	0.221	0.149	1.459	1.082	0.235	-
5 290	58	802.11ax	Ant.2	80	MCS0	15.0	14.11	0.17	Left Touch	100	0.197	0.137	1.227	1.000	0.168	-
5 290	58	802.11ax	Ant.2	80	MCS0	15.0	14.11	0.05	Left Tilt	100	0.177	0.122	1.227	1.000	0.150	-
5 290	58	802.11ax	Ant.2	80	MCS0	15.0	14.11	0.02	Right Touch	100	0.08	0.054	1.227	1.000	0.066	-
5 290	58	802.11ax	Ant.2	80	MCS0	15.0	14.11	0.03	Right Tilt	100	0.085	0.062	1.227	1.000	0.076	-
5 690	138	802.11ac	Ant.2	80	MCS0	15.0	13.80	-0.11	Left Touch	92.4	0.202	0.155	1.318	1.082	0.221	-
5 690	138	802.11ac	Ant.2	80	MCS0	15.0	13.80	-0.19	Left Tilt	92.4	0.199	0.145	1.318	1.082	0.207	-
5 690	138	802.11ac	Ant.2	80	MCS0	15.0	13.80	-0.12	Right Touch	92.4	0.246	0.055	1.318	1.082	0.078	-
5 690	138	802.11ac	Ant.2	80	MCS0	15.0	13.80	0.12	Right Tilt	92.4	0.109	0.069	1.318	1.082	0.098	-
5 775	155	802.11ac	Ant.2	80	MCS0	15.0	13.37	-0.08	Left Touch	92.4	0.423	0.286	1.455	1.082	0.450	
5 775	155	802.11ac	Ant.2	80	MCS0	15.0	13.37	-0.17	Left Tilt	92.4	0.344	0.203	1.455	1.082	0.320	-
5 775	155	802.11ac	Ant.2	80	MCS0	15.0	13.37	0.11	Right Touch	92.4	0.086	0.058	1.455	1.082	0.091	-
5 775	155	802.11ac	Ant.2	80	MCS0	15.0	13.37	0.14	Right Tilt	92.4	0.085	0.053	1.455	1.082	0.083	-
5 855	171	802.11ac	Ant.2	80	MCS0	15.0	13.04	-0.19	Left Touch	92.4	0.24	0.203	1.570	1.082	0.345	-
5 855	171	802.11ac	Ant.2	80	MCS0	15.0	13.04	-0.19	Left Tilt	92.4	0.196	0.159	1.570	1.082	0.270	-
5 855	171	802.11ac	Ant.2	80	MCS0	15.0	13.04	0.15	Right Touch	92.4	0.068	0.052	1.570	1.082	0.088	-
5 855	171	802.11ac	Ant.2	80	MCS0	15.0	13.04	-0.14	Right Tilt	92.4	0.074	0.046	1.570	1.082	0.078	-
5 290	58	802.11ax	MIMO	80	MCS0	18.0	17.19	0.02	Left Touch	100	0.230	0.173	1.227	1.000	0.212	-
5 290	58	802.11ax	MIMO	80	MCS0	18.0	17.19	0.08	Left Tilt	100	0.209	0.141	1.227	1.000	0.173	-
5 290	58	802.11ax	MIMO	80	MCS0	18.0	17.19	0.08	Right Touch	100	0.866	0.649	1.227	1.000	**0.796**	A31
5 290	58	802.11ax	MIMO	80	MCS0	18.0	17.19	0.01	Right Tilt	100	0.522	0.338	1.227	1.000	0.415	-
5 690	138	802.11ac	MIMO	80	MCS0	18.0	16.68	-0.11	Left Touch	92.4	0.314	0.19	1.403	1.082	0.288	-
5 690	138	802.11ac	MIMO	80	MCS0	18.0	16.68	-0.15	Left Tilt	92.4	0.169	0.153	1.403	1.082	0.232	-
5 690	138	802.11ac	MIMO	80	MCS0	18.0	16.68	-0.13	Right Touch	92.4	0.499	0.449	1.403	1.082	0.682	-
5 690	138	802.11ac	MIMO	80	MCS0	18.0	16.68	-0.16	Right Tilt	92.4	0.197	0.177	1.403	1.082	0.269	-
5 775	155	802.11ac	MIMO	80	MCS0	18.0	16.34	-0.18	Left Touch	92.4	0.22	0.192	1.486	1.082	0.309	-
5 775	155	802.11ac	MIMO	80	MCS0	18.0	16.34	-0.10	Left Tilt	92.4	0.174	0.172	1.486	1.082	0.277	-
5 775	155	802.11ac	MIMO	80	MCS0	18.0	16.34	-0.15	Right Touch	92.4	0.452	0.423	1.486	1.082	0.680	-
5 775	155	802.11ac	MIMO	80	MCS0	18.0	16.34	0.15	Right Tilt	92.4	0.259	0.155	1.486	1.082	0.249	-
5 855	171	802.11ac	MIMO	80	MCS0	18.0	16.22	-0.07	Left Touch	92.4	0.282	0.177	1.570	1.082	0.301	-
5 855	171	802.11ac	MIMO	80	MCS0	18.0	16.22	0.12	Left Tilt	92.4	0.19	0.127	1.570	1.082	0.216	-
5 855	171	802.11ac	MIMO	80	MCS0	18.0	16.22	-0.13	Right Touch	92.4	0.387	0.489	1.570	1.082	**0.831**	-
5 855	171	802.11ac	MIMO	80	MCS0	18.0	16.22	-0.11	Right Tilt	92.4	0.223	0.141	1.570	1.082	0.240	-
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6 GHz WLAN Head SAR															
Frequency		Mode	Ant.	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(Mbps)	(dBm)	(dBm)	(dB)			(W/kg)		(Duty)	(W/kg)	
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	-0.04	Left Touch	99.6	0.035	1.268	1.004	0.045	-
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	0.00	Left Tilt	99.6	0.033	1.268	1.004	0.042	-
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	0.00	Right Touch	99.6	0.080	1.268	1.004	0.102	-
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	0.00	Right Tilt	99.6	0.050	1.268	1.004	0.064	-
6 025	15	802.11ax	Ant.1	160	MCS0	10.0	8.80	0.00	Right Touch	99.6	0.112	1.318	1.004	0.148	-
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.00	Right Touch	99.6	0.14	1.285	1.004	0.181	-
6 505	111	802.11ax	Ant.1	160	MCS0	10.0	8.04	0.00	Right Touch	99.6	0.095	1.570	1.004	0.150	-
6 665	143	802.11ax	Ant.1	160	MCS0	10.0	8.08	0.00	Right Touch	99.6	0.073	1.556	1.004	0.114	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	-0.04	Left Touch	99.6	0.027	1.271	1.004	0.034	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	0.01	Left Tilt	99.6	0.022	1.271	1.004	0.028	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	-0.05	Right Touch	99.6	0.004	1.271	1.004	0.005	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	-0.01	Right Tilt	99.6	0.006	1.271	1.004	0.008	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	0.09	Left Touch	99.6	0.042	1.294	1.004	0.055	-
6 185	47	802.11ax	Ant.2	160	MCS0	10.0	8.85	0.01	Left Touch	99.6	0.019	1.303	1.004	0.025	-
6 505	111	802.11ax	Ant.2	160	MCS0	10.0	8.96	0.03	Left Touch	99.6	0.028	1.271	1.004	0.036	-
6 665	143	802.11ax	Ant.2	160	MCS0	10.0	8.34	0.00	Left Touch	99.6	0.018	1.466	1.004	0.026	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.00	Left Touch	99.6	0.032	1.271	1.004	0.041	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.00	Left Tilt	99.6	0.033	1.271	1.004	0.042	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.00	Right Touch	99.6	0.074	1.271	1.004	0.094	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.00	Right Tilt	99.6	0.059	1.271	1.004	0.075	-
6 025	15	802.11ax	MIMO	160	MCS0	13.0	11.85	0.05	Right Touch	99.6	0.115	1.318	1.004	0.152	-
6 185	47	802.11ax	MIMO	160	MCS0	13.0	11.89	0.07	Right Touch	99.6	0.145	1.303	1.004	0.190	A32
6 505	111	802.11ax	MIMO	160	MCS0	13.0	11.53	0.07	Right Touch	99.6	0.093	1.570	1.004	0.147	-
6 665	143	802.11ax	MIMO	160	MCS0	13.0	11.22	0.00	Right Touch	99.6	0.086	1.556	1.004	0.134	-
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DSS Head SAR – RCV ON												
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(dBm)	(dBm)	(dB)		(W/kg)		(Duty)	(W/kg)	
2 441	39	Bluetooth DH5	Ant.1	17.0	16.24	-0.16	Left Touch	0.128	1.191	1.026	0.156	-
2 441	39	Bluetooth DH5	Ant.1	17.0	16.24	-0.07	Left Tilt	0.176	1.191	1.026	0.215	-
2 441	39	Bluetooth DH5	Ant.1	17.0	16.24	-0.13	Right Touch	0.508	1.191	1.026	0.621	-
2 441	39	Bluetooth DH5	Ant.1	17.0	16.24	0.10	Right Tilt	0.403	1.191	1.026	0.492	-
2 440	17	Bluetooth LE 1M	Ant.1	17.0	16.47	0.18	Left Touch	0.136	1.130	1.007	0.155	-
2 440	17	Bluetooth LE 1M	Ant.1	17.0	16.47	0.05	Left Tilt	0.154	1.130	1.007	0.175	-
2 440	17	Bluetooth LE 1M	Ant.1	17.0	16.47	-0.19	Right Touch	0.505	1.130	1.007	0.575	-
2 440	17	Bluetooth LE 1M	Ant.1	17.0	16.47	-0.15	Right Tilt	0.383	1.130	1.007	0.436	-
2 441	39	Bluetooth DH5	Ant.2	17.0	16.42	0.06	Left Touch	0.792	1.143	1.026	**0.929**	A33
2 402	0	Bluetooth DH5	Ant.2	17.0	16.01	-0.16	Left Touch	0.615	1.256	1.026	0.793	-
2 480	78	Bluetooth DH5	Ant.2	17.0	16.03	0.13	Left Touch	0.713	1.250	1.026	0.975	-
2 441	39	Bluetooth DH5	Ant.2	17.0	16.42	0.01	Left Tilt	0.114	1.143	1.026	0.134	-
2 441	39	Bluetooth DH5	Ant.2	17.0	16.42	0.13	Right Touch	0.399	1.143	1.026	0.477	-
2 441	39	Bluetooth DH5	Ant.2	17.0	16.42	0.18	Right Tilt	0.054	1.143	1.026	0.063	-
2 440	17	Bluetooth LE 1M	Ant.2	17.0	16.63	0.18	Left Touch	0.590	1.089	1.007	0.647	-
2 440	17	Bluetooth LE 1M	Ant.2	17.0	16.63	0.07	Left Tilt	0.071	1.089	1.007	0.078	-
2 440	17	Bluetooth LE 1M	Ant.2	17.0	16.63	0.13	Right Touch	0.229	1.089	1.007	0.251	-
2 440	17	Bluetooth LE 1M	Ant.2	17.0	16.63	0.14	Right Tilt	0.037	1.089	1.007	0.041	-
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13.1.2 Body/Hotspot SAR Measurement Results

GSM 850 Body/Hotspot SAR														
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)			(mm)		(W/kg)		(W/kg)	
836.6	190	GPRS 2Tx	MAIN1	32.0	30.90	-0.12	Rear	1:4.15	10	1	0.169	1.288	0.218	-
836.6	190	GPRS 2Tx	MAIN1	32.0	30.90	-0.10	Front	1:4.15	10	1	0.198	1.288	0.255	-
836.6	190	GPRS 2Tx	MAIN1	32.0	30.90	0.11	Left	1:4.15	10	1	0.209	1.288	0.269	-
836.6	190	GPRS 2Tx	MAIN1	32.0	30.90	0.01	Right	1:4.15	10	1	0.253	1.288	0.326	-
836.6	190	GPRS 2Tx	MAIN1	32.0	30.90	0.11	Bottom	1:4.15	10	1	0.045	1.288	0.058	-
848.8	251	Voice	MAIN1	33.0	32.17	0.10	Rear	1:8.3	10	1	0.146	1.211	0.177	-
848.8	251	Voice	MAIN1	33.0	32.17	0.09	Front	1:8.3	10	1	0.135	1.211	0.163	-
848.8	251	GPRS 2Tx	SUB1	32.0	30.90	0.05	Rear	1:4.15	10	0	0.615	1.288	**0.792**	**B1**
848.8	251	GPRS 2Tx	SUB1	32.0	30.90	-0.18	Front	1:4.15	10	0	0.388	1.288	0.500	-
848.8	251	GPRS 2Tx	SUB1	32.0	30.90	-0.10	Right	1:4.15	10	0	0.374	1.288	0.482	-
848.8	251	GPRS 2Tx	SUB1	32.0	30.90	0.04	Top	1:4.15	10	0	0.420	1.288	0.541	-
848.8	251	Voice	SUB1	33.0	32.07	-0.02	Rear	1:8.3	10	0	0.492	1.239	0.610	-
848.8	251	Voice	SUB1	33.0	32.07	-0.13	Front	1:8.3	10	0	0.286	1.239	0.354	-
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GSM 1900 Body/Hotspot SAR														
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)			(mm)		(W/kg)		(W/kg)	
1 880	661	GPRS 2Tx	MAIN1	26.5	25.28	0.16	Rear	1:4.15	10	0	0.361	1.324	0.478	-
1 880	661	GPRS 2Tx	MAIN1	26.5	25.28	0.12	Front	1:4.15	10	0	0.513	1.324	0.679	-
1 880	661	GPRS 2Tx	MAIN1	26.5	25.28	0.01	Left	1:4.15	10	0	0.186	1.324	0.246	-
1 880	661	GPRS 2Tx	MAIN1	26.5	25.28	-0.00	Right	1:4.15	10	0	0.071	1.324	0.094	-
1 880	661	GPRS 2Tx	MAIN1	26.5	25.28	0.09	Bottom	1:4.15	10	0	0.571	1.324	**0.756**	**B2**
1 880	661	Voice	MAIN1	29.0	28.45	0.02	Rear	1:8.3	10	0	0.407	1.135	0.462	-
1 880	661	Voice	MAIN1	29.0	28.45	0.19	Front	1:8.3	10	0	0.310	1.135	0.352	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram							

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UMTS Band 5 Body/Hotspot SAR														
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)			(mm)		(W/kg)		(W/kg)	
836.6	4183	RMC	MAIN1	25.0	23.78	-0.02	Rear	1:1	10	0	0.206	1.324	0.273	-
836.6	4183	RMC	MAIN1	25.0	23.78	0.01	Front	1:1	10	0	0.229	1.324	0.303	-
836.6	4183	RMC	MAIN1	25.0	23.78	-0.12	Left	1:1	10	0	0.222	1.324	0.294	-
836.6	4183	RMC	MAIN1	25.0	23.78	-0.06	Right	1:1	10	0	0.195	1.324	0.258	-
836.6	4183	RMC	MAIN1	25.0	23.78	0.14	Bottom	1:1	10	0	0.047	1.324	0.062	-
836.6	4183	RMC	SUB1	25.0	23.60	-0.03	Rear	1:1	10	0	0.429	1.380	**0.592**	**B3**
836.6	4183	RMC	SUB1	25.0	23.60	-0.02	Front	1:1	10	0	0.392	1.380	0.541	-
836.6	4183	RMC	SUB1	25.0	23.60	-0.04	Right	1:1	10	0	0.369	1.380	0.509	-
836.6	4183	RMC	SUB1	25.0	23.60	-0.01	Top	1:1	10	0	0.294	1.380	0.406	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram						

UMTS Band 4 Body/Hotspot SAR														
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)			(mm)		(W/kg)		(W/kg)	
1 732.4	1412	RMC	MAIN1	20.0	18.97	-0.06	Rear	1:1	10	14	0.448	1.268	0.568	-
1 732.4	1412	RMC	MAIN1	20.0	18.97	-0.11	Front	1:1	10	14	0.257	1.268	0.326	-
1 732.4	1412	RMC	MAIN1	20.0	18.97	0.03	Left	1:1	10	14	0.123	1.268	0.156	-
1 732.4	1412	RMC	MAIN1	20.0	18.97	-0.10	Right	1:1	10	14	0.053	1.268	0.067	-
1 732.4	1412	RMC	MAIN1	20.0	18.97	-0.01	Bottom	1:1	10	14	0.672	1.268	0.852	-
1 712.4	1312	RMC	MAIN1	20.0	19.28	-0.12	Bottom	1:1	10	14	**0.709**	1.180	0.837	**B4**
1 752.6	1513	RMC	MAIN1	20.0	19.02	-0.02	Bottom	1:1	10	14	0.689	1.253	**0.863**	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram						

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UMTS Band 2 Body/Hotspot SAR														
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)			(mm)		(W/kg)		(W/kg)	
1 880	9400	RMC	MAIN1	20.0	19.72	-0.11	Rear	1:1	10	1	0.509	1.067	0.543	-
1 880	9400	RMC	MAIN1	20.0	19.72	0.01	Front	1:1	10	1	0.497	1.067	0.530	-
1 880	9400	RMC	MAIN1	20.0	19.72	0.12	Left	1:1	10	1	0.097	1.067	0.103	-
1 880	9400	RMC	MAIN1	20.0	19.72	0.19	Right	1:1	10	1	0.056	1.067	0.060	-
1 880	9400	RMC	MAIN1	20.0	19.72	-0.01	Bottom	1:1	10	1	0.912	1.067	0.973	-
1 852.4	9262	RMC	MAIN1	20.0	19.60	-0.00	Bottom	1:1	10	1	0.901	1.096	0.987	-
1 907.6	9538	RMC	MAIN1	20.0	19.95	-0.10	Bottom	1:1	10	1	0.980	1.012	**0.992**	**B5**
1 907.6	9538	RMC	MAIN1	20.0	19.95	-0.09	Bottom	1:1	10	1	0.957	1.012	0.968	#
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Note: # Data entry indicate Variability measurement.

LTE FDD Band 7 Body/Hotspot SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 535	21100	QPSK	MAIN2	20	21.5	20.08	-0.12	Rear	0	1	0	1:1	-	10	0.195	1.387	0.270	-
2 510	20850	QPSK	MAIN2	20	21.5	20.02	-0.19	Rear	0	50	25	1:1	-	10	0.209	1.406	0.294	-
2 535	21100	QPSK	MAIN2	20	21.5	20.08	-0.10	Front	0	1	0	1:1	-	10	0.189	1.387	0.262	-
2 510	20850	QPSK	MAIN2	20	21.5	20.02	0.02	Front	0	50	25	1:1	-	10	0.192	1.406	0.270	-
2 535	21100	QPSK	MAIN2	20	21.5	20.08	0.09	Left	0	1	0	1:1	-	10	0.100	1.387	0.139	-
2 510	20850	QPSK	MAIN2	20	21.5	20.02	0.17	Left	0	50	25	1:1	-	10	0.109	1.406	0.153	-
2 535	21100	QPSK	MAIN2	20	21.5	20.08	-0.19	Bottom	0	1	0	1:1	-	10	0.121	1.387	0.168	-
2 510	20850	QPSK	MAIN2	20	21.5	20.02	-0.13	Bottom	0	50	25	1:1	-	10	0.114	1.406	0.160	-
2 535	21100	QPSK	SUB2	20	20.5	19.19	-0.16	Rear	0	1	49	1:1	-	10	0.147	1.352	0.199	-
2 535	21100	QPSK	SUB2	20	20.5	19.06	-0.11	Rear	0	50	0	1:1	-	10	0.146	1.393	0.203	-
2 535	21100	QPSK	SUB2	20	20.5	19.19	0.00	Front	0	1	49	1:1	-	10	0.102	1.352	0.138	-
2 535	21100	QPSK	SUB2	20	20.5	19.06	0.00	Front	0	50	0	1:1	-	10	0.103	1.393	0.143	-
2 535	21100	QPSK	SUB2	20	20.5	19.19	-0.12	Left	0	1	49	1:1	-	10	0.021	1.352	0.028	-
2 535	21100	QPSK	SUB2	20	20.5	19.06	-0.15	Left	0	50	0	1:1	-	10	0.018	1.393	0.025	-
2 535	21100	QPSK	SUB2	20	20.5	19.19	-0.10	Top	0	1	49	1:1	-	10	0.221	1.352	0.299	-
2 535	21100	QPSK	SUB2	20	20.5	19.06	0.04	Top	0	50	0	1:1	-	10	0.221	1.393	**0.308**	**B6**
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LTE FDD Band 12 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
707.5	23095	QPSK	MAIN1	10	25.0	24.83	0.03	Rear	0	1	49	1:1	45	10	0.284	1.040	0.295	-
707.5	23095	QPSK	MAIN1	10	24.0	23.51	-0.19	Rear	1	25	12	1:1	45	10	0.216	1.119	0.242	-
707.5	23095	QPSK	MAIN1	10	25.0	24.83	-0.09	Front	0	1	49	1:1	45	10	0.145	1.040	0.151	-
707.5	23095	QPSK	MAIN1	10	24.0	23.51	-0.02	Front	1	25	12	1:1	45	10	0.124	1.119	0.139	-
707.5	23095	QPSK	MAIN1	10	25.0	24.83	0.03	Left	0	1	49	1:1	45	10	0.107	1.040	0.111	-
707.5	23095	QPSK	MAIN1	10	24.0	23.51	-0.02	Left	1	25	12	1:1	45	10	0.088	1.119	0.098	-
707.5	23095	QPSK	MAIN1	10	25.0	24.83	0.01	Right	0	1	49	1:1	45	10	0.094	1.040	0.098	-
707.5	23095	QPSK	MAIN1	10	24.0	23.51	0.01	Right	1	25	12	1:1	45	10	0.124	1.119	0.139	-
707.5	23095	QPSK	MAIN1	10	25.0	24.83	-0.15	Bottom	0	1	49	1:1	45	10	0.059	1.040	0.061	-
707.5	23095	QPSK	MAIN1	10	24.0	23.51	0.11	Bottom	1	25	12	1:1	45	10	0.042	1.119	0.047	-
707.5	23095	QPSK	SUB1	10	25.0	24.02	0.07	Rear	0	1	0	1:1	23	10	0.597	1.253	**0.748**	**B7**
707.5	23095	QPSK	SUB1	10	24.0	22.94	-0.06	Rear	1	25	24	1:1	23	10	0.495	1.276	0.632	-
707.5	23095	QPSK	SUB1	10	25.0	24.02	-0.11	Front	0	1	0	1:1	23	10	0.419	1.253	0.525	-
707.5	23095	QPSK	SUB1	10	24.0	22.94	-0.01	Front	1	25	24	1:1	23	10	0.359	1.276	0.458	-
707.5	23095	QPSK	SUB1	10	25.0	24.02	0.14	Right	0	1	0	1:1	23	10	0.105	1.253	0.132	-
707.5	23095	QPSK	SUB1	10	24.0	22.94	0.14	Right	1	25	24	1:1	23	10	0.089	1.276	0.114	-
707.5	23095	QPSK	SUB1	10	25.0	24.02	0.14	Top	0	1	0	1:1	23	10	0.446	1.253	0.559	-
707.5	23095	QPSK	SUB1	10	24.0	22.94	0.15	Top	1	25	24	1:1	23	10	0.361	1.276	0.461	-
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LTE FDD Band 13 Body/Hotspot SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
782	23230	QPSK	MAIN1	10	25.0	24.38	-0.12	Rear	0	1	49	1:1	12	10	0.158	1.153	0.182	-
782	23230	QPSK	MAIN1	10	24.0	23.32	0.09	Rear	1	25	12	1:1	12	10	0.143	1.169	0.167	-
782	23230	QPSK	MAIN1	10	25.0	24.38	-0.09	Front	0	1	49	1:1	12	10	0.145	1.153	0.167	-
782	23230	QPSK	MAIN1	10	24.0	23.32	0.17	Front	1	25	12	1:1	12	10	0.126	1.169	0.147	-
782	23230	QPSK	MAIN1	10	25.0	24.38	0.02	Left	0	1	49	1:1	12	10	0.200	1.153	0.231	-
782	23230	QPSK	MAIN1	10	24.0	23.32	0.01	Left	1	25	12	1:1	12	10	0.149	1.169	0.174	-
782	23230	QPSK	MAIN1	10	25.0	24.38	-0.00	Right	0	1	49	1:1	12	10	0.147	1.153	0.169	-
782	23230	QPSK	MAIN1	10	24.0	23.32	0.03	Right	1	25	12	1:1	12	10	0.105	1.169	0.123	-
782	23230	QPSK	MAIN1	10	25.0	24.38	0.16	Bottom	0	1	49	1:1	12	10	0.047	1.153	0.054	-
782	23230	QPSK	MAIN1	10	24.0	23.32	0.15	Bottom	1	25	12	1:1	12	10	0.037	1.169	0.043	-
782	23230	QPSK	SUB1	10	24.0	23.84	-0.12	Rear	0	1	0	1:1	45	10	0.295	1.038	0.306	-
782	23230	QPSK	SUB1	10	23.0	22.86	-0.06	Rear	1	25	0	1:1	45	10	0.320	1.033	**0.331**	B8
782	23230	QPSK	SUB1	10	24.0	23.84	-0.05	Front	0	1	0	1:1	45	10	0.210	1.038	0.218	-
782	23230	QPSK	SUB1	10	23.0	22.86	-0.12	Front	1	25	0	1:1	45	10	0.234	1.033	0.242	-
782	23230	QPSK	SUB1	10	24.0	23.84	0.06	Right	0	1	0	1:1	45	10	0.086	1.038	0.089	-
782	23230	QPSK	SUB1	10	23.0	22.86	0.01	Right	1	25	0	1:1	45	10	0.108	1.033	0.112	-
782	23230	QPSK	SUB1	10	24.0	23.84	0.12	Top	0	1	0	1:1	45	10	0.242	1.038	0.251	-
782	23230	QPSK	SUB1	10	23.0	22.86	0.12	Top	1	25	0	1:1	45	10	0.264	1.033	0.273	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

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LTE FDD Band 14 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
793	23330	QPSK	MAIN1	10	24.0	23.13	-0.00	Rear	0	1	49	1:1	45	10	0.184	1.222	0.225	-
793	23330	QPSK	MAIN1	10	24.0	23.15	0.11	Rear	1	25	12	1:1	45	10	0.155	1.216	0.188	-
793	23330	QPSK	MAIN1	10	24.0	23.13	-0.02	Front	0	1	49	1:1	45	10	0.170	1.222	0.208	-
793	23330	QPSK	MAIN1	10	24.0	23.15	0.03	Front	1	25	12	1:1	45	10	0.081	1.216	0.098	-
793	23330	QPSK	MAIN1	10	24.0	23.13	-0.08	Left	0	1	49	1:1	45	10	0.261	1.222	0.319	-
793	23330	QPSK	MAIN1	10	24.0	23.15	0.06	Left	1	25	12	1:1	45	10	0.196	1.216	0.238	-
793	23330	QPSK	MAIN1	10	24.0	23.13	-0.02	Right	0	1	49	1:1	45	10	0.186	1.222	0.227	-
793	23330	QPSK	MAIN1	10	24.0	23.15	0.04	Right	1	25	12	1:1	45	10	0.133	1.216	0.162	-
793	23330	QPSK	MAIN1	10	24.0	23.13	-0.13	Bottom	0	1	49	1:1	45	10	0.053	1.222	0.065	-
793	23330	QPSK	MAIN1	10	24.0	23.15	-0.10	Bottom	1	25	12	1:1	45	10	0.012	1.216	0.015	-
793	23330	QPSK	SUB1	10	23.0	22.69	0.02	Rear	0	1	0	1:1	45	10	0.469	1.074	**0.504**	**B9**
793	23330	QPSK	SUB1	10	23.0	22.70	0.09	Rear	1	25	12	1:1	45	10	0.378	1.072	0.405	-
793	23330	QPSK	SUB1	10	23.0	22.69	-0.16	Front	0	1	0	1:1	45	10	0.356	1.074	0.382	-
793	23330	QPSK	SUB1	10	23.0	22.70	-0.05	Front	1	25	12	1:1	45	10	0.290	1.072	0.311	-
793	23330	QPSK	SUB1	10	23.0	22.69	0.16	Right	0	1	0	1:1	45	10	0.184	1.074	0.198	-
793	23330	QPSK	SUB1	10	23.0	22.70	0.04	Right	1	25	12	1:1	45	10	0.156	1.072	0.167	-
793	23330	QPSK	SUB1	10	23.0	22.69	0.17	Top	0	1	0	1:1	45	10	0.374	1.074	0.402	-
793	23330	QPSK	SUB1	10	23.0	22.70	0.15	Top	1	25	12	1:1	45	10	0.299	1.072	0.321	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

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LTE FDD Band 25 (PCS) Body/Hotspot SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 905	26590	QPSK	MAIN1	20	20.0	19.88	-0.14	Rear	0	1	99	1:1	1	10	0.256	1.028	0.263	-
1 905	26590	QPSK	MAIN1	20	20.0	19.82	0.12	Rear	0	50	49	1:1	1	10	0.292	1.042	0.304	-
1 905	26590	QPSK	MAIN1	20	20.0	19.88	0.11	Front	0	1	99	1:1	1	10	0.311	1.028	0.320	-
1 905	26590	QPSK	MAIN1	20	20.0	19.82	0.02	Front	0	50	49	1:1	1	10	0.319	1.042	0.332	-
1 905	26590	QPSK	MAIN1	20	20.0	19.88	-0.06	Left	0	1	99	1:1	1	10	0.092	1.028	0.095	-
1 905	26590	QPSK	MAIN1	20	20.0	19.82	-0.18	Left	0	50	49	1:1	1	10	0.105	1.042	0.109	-
1 905	26590	QPSK	MAIN1	20	20.0	19.88	-0.13	Right	0	1	99	1:1	1	10	0.065	1.028	0.067	-
1 905	26590	QPSK	MAIN1	20	20.0	19.82	-0.14	Right	0	50	49	1:1	1	10	0.062	1.042	0.065	-
1 905	26590	QPSK	MAIN1	20	20.0	19.88	0.01	Bottom	0	1	99	1:1	1	10	0.594	1.028	0.611	-
1 905	26590	QPSK	MAIN1	20	20.0	19.82	-0.08	Bottom	0	50	49	1:1	1	10	0.640	1.042	**0.667**	**B10**
1 882.5	26365	QPSK	SUB2	20	19.5	19.33	0.03	Rear	0	1	49	1:1	22	10	0.141	1.040	0.147	-
1 882.5	26365	QPSK	SUB2	20	19.5	19.37	-0.11	Rear	0	50	0	1:1	22	10	0.141	1.030	0.145	-
1 882.5	26365	QPSK	SUB2	20	19.5	19.33	-0.01	Front	0	1	49	1:1	22	10	0.097	1.040	0.101	-
1 882.5	26365	QPSK	SUB2	20	19.5	19.37	0.11	Front	0	50	0	1:1	22	10	0.097	1.030	0.100	-
1 882.5	26365	QPSK	SUB2	20	19.5	19.33	-0.18	Left	0	1	49	1:1	22	10	0.024	1.040	0.025	-
1 882.5	26365	QPSK	SUB2	20	19.5	19.37	0.10	Left	0	50	0	1:1	22	10	0.021	1.030	0.022	-
1 882.5	26365	QPSK	SUB2	20	19.5	19.33	-0.03	Top	0	1	49	1:1	22	10	0.178	1.040	0.185	-
1 882.5	26365	QPSK	SUB2	20	19.5	19.37	-0.11	Top	0	50	0	1:1	22	10	0.182	1.030	0.187	-
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LTE FDD Band 26 (Cell) Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
831.5	26865	QPSK	MAIN1	15	25.0	24.50	-0.12	Rear	0	1	36	1:1	0	10	0.272	1.122	0.305	-
831.5	26865	QPSK	MAIN1	15	24.0	23.30	-0.04	Rear	1	36	39	1:1	0	10	0.207	1.175	0.243	-
831.5	26865	QPSK	MAIN1	15	25.0	24.50	0.11	Front	0	1	36	1:1	0	10	0.340	1.122	0.381	-
831.5	26865	QPSK	MAIN1	15	24.0	23.30	-0.06	Front	1	36	39	1:1	0	10	0.115	1.175	0.135	-
831.5	26865	QPSK	MAIN1	15	25.0	24.50	0.05	Left	0	1	36	1:1	0	10	0.208	1.122	0.233	-
831.5	26865	QPSK	MAIN1	15	24.0	23.30	0.06	Left	1	36	39	1:1	0	10	0.165	1.175	0.194	-
831.5	26865	QPSK	MAIN1	15	25.0	24.50	0.05	Right	0	1	36	1:1	0	10	0.225	1.122	0.252	-
831.5	26865	QPSK	MAIN1	15	24.0	23.30	0.05	Right	1	36	39	1:1	0	10	0.176	1.175	0.207	-
831.5	26865	QPSK	MAIN1	15	25.0	24.50	0.18	Bottom	0	1	36	1:1	0	10	0.046	1.122	0.052	-
831.5	26865	QPSK	MAIN1	15	24.0	23.30	-0.07	Bottom	1	36	39	1:1	0	10	0.035	1.175	0.041	-
831.5	26865	QPSK	SUB1	15	25.0	24.51	0.01	Rear	0	1	36	1:1	0	10	0.390	1.119	**0.436**	**B11**
831.5	26865	QPSK	SUB1	15	24.0	22.86	0.06	Rear	1	36	0	1:1	0	10	0.290	1.300	0.377	-
831.5	26865	QPSK	SUB1	15	25.0	24.51	-0.18	Front	0	1	36	1:1	0	10	0.304	1.119	0.340	-
831.5	26865	QPSK	SUB1	15	24.0	22.86	-0.05	Front	1	36	0	1:1	0	10	0.224	1.300	0.291	-
831.5	26865	QPSK	SUB1	15	25.0	24.51	0.03	Right	0	1	36	1:1	0	10	0.155	1.119	0.173	-
831.5	26865	QPSK	SUB1	15	24.0	22.86	0.02	Right	1	36	0	1:1	0	10	0.118	1.300	0.153	-
831.5	26865	QPSK	SUB1	15	25.0	24.51	0.13	Top	0	1	36	1:1	0	10	0.304	1.119	0.340	-
831.5	26865	QPSK	SUB1	15	24.0	22.86	0.16	Top	1	36	0	1:1	0	10	0.225	1.300	0.293	-

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LTE FDD Band 30 Body/Hotspot SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 310	27710	QPSK	MAIN1	10	21.5	20.07	0.10	Rear	0	1	0	1:1	-	10	0.432	1.390	0.600	-
2 310	27710	QPSK	MAIN1	10	21.5	20.18	0.17	Rear	0	25	0	1:1	-	10	0.34	1.355	0.461	-
2 310	27710	QPSK	MAIN1	10	21.5	20.07	0.06	Front	0	1	0	1:1	-	10	0.273	1.390	0.379	-
2 310	27710	QPSK	MAIN1	10	21.5	20.18	0.12	Front	0	25	0	1:1	-	10	0.263	1.355	0.356	-
2 310	27710	QPSK	MAIN1	10	21.5	20.07	0.13	Left	0	1	0	1:1	-	10	0.035	1.390	0.049	-
2 310	27710	QPSK	MAIN1	10	21.5	20.18	0.10	Left	0	25	0	1:1	-	10	0.029	1.355	0.039	-
2 310	27710	QPSK	MAIN1	10	21.5	20.07	0.11	Right	0	1	0	1:1	-	10	0.00715	1.390	0.010	-
2 310	27710	QPSK	MAIN1	10	21.5	20.18	0.05	Right	0	25	0	1:1	-	10	0.00896	1.355	0.012	-
2 310	27710	QPSK	MAIN1	10	21.5	20.07	-0.15	Bottom	0	1	0	1:1	-	10	0.762	1.390	**1.059**	-
2 310	27710	QPSK	MAIN1	10	21.5	20.18	-0.12	Bottom	0	25	0	1:1	-	10	**0.765**	1.355	1.037	**B12**
2 310	27710	QPSK	MAIN1	10	21.5	20.07	-0.18	Bottom	0	50	0	1:1	-	10	0.754	1.390	1.048	-
2 310	27710	QPSK	SUB2	10	20.5	19.19	0.05	Rear	0	1	24	1:1	-	10	0.388	1.352	0.525	-
2 310	27710	QPSK	SUB2	10	20.5	19.18	-0.10	Rear	0	25	0	1:1	-	10	0.385	1.355	0.522	-
2 310	27710	QPSK	SUB2	10	20.5	19.19	-0.02	Front	0	1	24	1:1	-	10	0.236	1.352	0.319	-
2 310	27710	QPSK	SUB2	10	20.5	19.18	-0.03	Front	0	25	0	1:1	-	10	0.200	1.355	0.271	-
2 310	27710	QPSK	SUB2	10	20.5	19.19	-0.19	Left	0	1	24	1:1	-	10	0.099	1.352	0.134	-
2 310	27710	QPSK	SUB2	10	20.5	19.18	0.07	Left	0	25	0	1:1	-	10	0.090	1.355	0.122	-
2 310	27710	QPSK	SUB2	10	20.5	19.19	-0.01	Top	0	1	24	1:1	-	10	0.395	1.352	0.534	-
2 310	27710	QPSK	SUB2	10	20.5	19.18	0.00	Top	0	25	0	1:1	-	10	0.368	1.355	0.499	-
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LTE TDD Band 41 (Power Class 3) Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 680	41490	QPSK	MAIN2	20	23.5	22.49	-0.18	Rear	0	1	49	1:1.58	-	10	0.198	1.262	0.250	-
2 636.5	41055	QPSK	MAIN2	20	23.5	22.38	-0.11	Rear	0	50	25	1:1.58	-	10	0.233	1.294	0.302	-
2 680	41490	QPSK	MAIN2	20	23.5	22.49	-0.15	Front	0	1	49	1:1.58	-	10	0.198	1.262	0.250	-
2 636.5	41055	QPSK	MAIN2	20	23.5	22.38	-0.02	Front	0	50	25	1:1.58	-	10	0.218	1.294	0.282	-
2 680	41490	QPSK	MAIN2	20	23.5	22.49	-0.09	Left	0	1	49	1:1.58	-	10	0.116	1.262	0.146	-
2 636.5	41055	QPSK	MAIN2	20	23.5	22.38	0.10	Left	0	50	25	1:1.58	-	10	0.125	1.294	0.162	-
2 680	41490	QPSK	MAIN2	20	23.5	22.49	0.02	Bottom	0	1	49	1:1.58	-	10	0.145	1.262	0.183	-
2 636.5	41055	QPSK	MAIN2	20	23.5	22.38	-0.13	Bottom	0	50	25	1:1.58	-	10	0.151	1.294	0.195	-
2 506	39750	QPSK	SUB2	20	21.5	20.30	-0.19	Rear	0	1	49	1:1.58	-	10	0.137	1.318	0.181	-
2 506	39750	QPSK	SUB2	20	21.5	20.33	-0.19	Rear	0	50	0	1:1.58	-	10	0.143	1.309	0.187	-
2 506	39750	QPSK	SUB2	20	21.5	20.30	0.16	Front	0	1	49	1:1.58	-	10	0.094	1.318	0.124	-
2 506	39750	QPSK	SUB2	20	21.5	20.33	0.19	Front	0	50	0	1:1.58	-	10	0.097	1.309	0.127	-
2 506	39750	QPSK	SUB2	20	21.5	20.30	0.10	Left	0	1	49	1:1.58	-	10	0.016	1.318	0.021	-
2 506	39750	QPSK	SUB2	20	21.5	20.33	0.13	Left	0	50	0	1:1.58	-	10	0.014	1.309	0.018	-
2 506	39750	QPSK	SUB2	20	21.5	20.30	0.04	Top	0	1	49	1:1.58	-	10	0.222	1.318	0.293	-
2 506	39750	QPSK	SUB2	20	21.5	20.33	-0.02	Top	0	50	0	1:1.58	-	10	0.235	1.309	**0.308**	B13
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LTE TDD Band 48 Body/Hotspot SAR																			
CC UL PC	Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
	Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1CC UL	3 560	55340	QPSK	SUB2	20	21.5	21.09	-0.12	Rear	0	1	99	1:1.58	-	10	0.434	1.099	0.477	-
1CC UL	3 603.3	55773	QPSK	SUB2	20	20.5	20.26	-0.03	Rear	0	50	0	1:1.58	-	10	0.443	1.057	0.468	-
1CC UL	3 560	55340	QPSK	SUB2	20	21.5	21.09	-0.14	Front	0	1	99	1:1.58	-	10	0.158	1.099	0.174	-
1CC UL	3 603.3	55773	QPSK	SUB2	20	20.5	20.26	0.10	Front	0	50	0	1:1.58	-	10	0.149	1.057	0.157	-
1CC UL	3 560	55340	QPSK	SUB2	20	21.5	21.09	-0.14	Left	0	1	99	1:1.58	-	10	0.132	1.099	0.145	-
1CC UL	3 603.3	55773	QPSK	SUB2	20	20.5	20.26	-0.13	Left	0	50	0	1:1.58	-	10	0.128	1.057	0.135	-
1CC UL	3 560	55340	QPSK	SUB2	20	21.5	21.09	0.02	Top	0	1	99	1:1.58	-	10	**0.580**	1.099	0.637	**B14**
1CC UL	3 603.3	55773	QPSK	SUB2	20	21.5	21.11	-0.08	Top	0	1	49	1:1.58	-	10	0.536	1.094	0.586	-
1CC UL	3 646.7	56207	QPSK	SUB2	20	21.5	20.98	0.05	Top	0	1	49	1:1.58	-	10	0.544	1.127	0.613	-
1CC UL	3 690	56640	QPSK	SUB2	20	21.5	20.92	0.01	Top	0	1	49	1:1.58	-	10	0.557	1.143	0.637	-
1CC UL	3 603.3	55773	QPSK	SUB2	20	20.5	20.26	0.00	Top	0	50	0	1:1.58	-	10	0.551	1.057	0.582	-
1CC UL	3 560	55340	QPSK	SUB2	20	20.5	20.24	-0.04	Top	0	100	0	1:1.58	-	10	0.535	1.052	0.580	-
1CC UL	3 690	56640	QPSK	SUB2	20	21.5	20.67	0.03	Top	0	1	0	1:1.58	-	10	0.555	1.211	**0.672**	**-**
2CC UL CA(48C)	3 670.2	56442	QPSK	SUB2	20	21.5	20.41	-0.13	Top	0	1	99	1:1.58	-	10	0.510	1.285	0.655	-
	3 690	56640	QPSK		20					0	1	0							
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LTE FDD Band 66 (AWS) Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 720	132072	QPSK	MAIN1	20	20.5	19.79	0.00	Rear	0	1	0	1:1	22	10	0.366	1.178	0.431	-
1 720	132072	QPSK	MAIN1	20	20.5	19.88	-0.14	Rear	0	50	0	1:1	22	10	0.399	1.153	0.460	-
1 720	132072	QPSK	MAIN1	20	20.5	19.79	0.13	Front	0	1	0	1:1	22	10	0.343	1.178	0.404	-
1 720	132072	QPSK	MAIN1	20	20.5	19.88	0.14	Front	0	50	0	1:1	22	10	0.358	1.153	0.413	-
1 720	132072	QPSK	MAIN1	20	20.5	19.79	-0.09	Left	0	1	0	1:1	22	10	0.106	1.178	0.125	-
1 720	132072	QPSK	MAIN1	20	20.5	19.88	-0.13	Left	0	50	0	1:1	22	10	0.111	1.153	0.128	-
1 720	132072	QPSK	MAIN1	20	20.5	19.79	3.10	Right	0	1	0	1:1	22	10	0.049	1.178	0.058	-
1 720	132072	QPSK	MAIN1	20	20.5	19.88	-0.08	Right	0	50	0	1:1	22	10	0.053	1.153	0.061	-
1 720	132072	QPSK	MAIN1	20	20.5	19.79	-0.12	Bottom	0	1	0	1:1	22	10	0.652	1.178	0.768	-
1 720	132072	QPSK	MAIN1	20	20.5	19.88	0.14	Bottom	0	50	0	1:1	22	10	0.690	1.153	**0.796**	**B15**
1 770	132572	QPSK	SUB2	20	20.5	19.89	0.12	Rear	0	1	0	1:1	22	10	0.402	1.151	0.463	-
1 770	132572	QPSK	SUB2	20	20.5	19.95	-0.08	Rear	0	50	0	1:1	22	10	0.429	1.135	0.487	-
1 770	132572	QPSK	SUB2	20	20.5	19.89	-0.14	Front	0	1	0	1:1	22	10	0.162	1.151	0.186	-
1 770	132572	QPSK	SUB2	20	20.5	19.95	0.05	Front	0	50	0	1:1	22	10	0.163	1.135	0.185	-
1 770	132572	QPSK	SUB2	20	20.5	19.89	-0.16	Left	0	1	0	1:1	22	10	0.152	1.151	0.175	-
1 770	132572	QPSK	SUB2	20	20.5	19.95	-0.18	Left	0	50	0	1:1	22	10	0.166	1.135	0.188	-
1 770	132572	QPSK	SUB2	20	20.5	19.89	-0.14	Top	0	1	0	1:1	22	10	0.512	1.151	0.589	-
1 770	132572	QPSK	SUB2	20	20.5	19.95	-0.14	Top	0	50	0	1:1	22	10	0.539	1.135	0.612	-
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LTE FDD Band 71 Body/Hotspot SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
680.5	133297	QPSK	MAIN1	20	25.5	24.47	0.01	Rear	0	1	0	1:1	12	10	0.359	1.268	0.455	-
680.5	133297	QPSK	MAIN1	20	24.5	23.38	-0.04	Rear	1	50	0	1:1	12	10	0.257	1.294	0.333	-
680.5	133297	QPSK	MAIN1	20	25.5	24.47	-0.14	Front	0	1	0	1:1	12	10	0.143	1.268	0.181	-
680.5	133297	QPSK	MAIN1	20	24.5	23.38	0.01	Front	1	50	0	1:1	12	10	0.102	1.294	0.132	-
680.5	133297	QPSK	MAIN1	20	25.5	24.47	-0.02	Left	0	1	0	1:1	12	10	0.147	1.268	0.186	-
680.5	133297	QPSK	MAIN1	20	24.5	23.38	-0.01	Left	1	50	0	1:1	12	10	0.117	1.294	0.151	-
680.5	133297	QPSK	MAIN1	20	25.5	24.47	0.14	Right	0	1	0	1:1	12	10	0.114	1.268	0.145	-
680.5	133297	QPSK	MAIN1	20	24.5	23.38	0.02	Right	1	50	0	1:1	12	10	0.109	1.294	0.141	-
680.5	133297	QPSK	MAIN1	20	25.5	24.47	0.18	Bottom	0	1	0	1:1	12	10	0.063	1.268	0.080	-
680.5	133297	QPSK	MAIN1	20	24.5	23.38	0.17	Bottom	1	50	0	1:1	12	10	0.052	1.294	0.067	-
680.5	133297	QPSK	SUB1	20	25.5	24.19	0.03	Rear	0	1	0	1:1	0	10	0.535	1.352	**0.723**	**B16**
680.5	133297	QPSK	SUB1	20	24.5	23.01	0.00	Rear	1	50	0	1:1	0	10	0.425	1.409	0.599	-
680.5	133297	QPSK	SUB1	20	25.5	24.19	-0.09	Front	0	1	0	1:1	0	10	0.402	1.352	0.544	-
680.5	133297	QPSK	SUB1	20	24.5	23.01	0.04	Front	1	50	0	1:1	0	10	0.318	1.409	0.448	-
680.5	133297	QPSK	SUB1	20	25.5	24.19	0.03	Right	0	1	0	1:1	0	10	0.118	1.352	0.160	-
680.5	133297	QPSK	SUB1	20	24.5	23.01	0.10	Right	1	50	0	1:1	0	10	0.090	1.409	0.127	-
680.5	133297	QPSK	SUB1	20	25.5	24.19	0.16	Top	0	1	0	1:1	0	10	0.408	1.352	0.552	-
680.5	133297	QPSK	SUB1	20	24.5	23.01	0.16	Top	1	50	0	1:1	0	10	0.304	1.409	0.428	-
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NR FDD Band n7 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	22.0	20.47	-0.04	Rear	0	1	214	1:1	-	10	0.200	1.422	0.284	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	22.0	20.59	-0.02	Rear	0	108	108	1:1	-	10	0.176	1.384	0.244	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	22.0	20.47	0.00	Front	0	1	214	1:1	-	10	0.175	1.422	0.249	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	22.0	20.59	-0.02	Front	0	108	108	1:1	-	10	0.151	1.384	0.209	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	22.0	20.47	-0.10	Left	0	1	214	1:1	-	10	0.111	1.422	0.158	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	22.0	20.59	0.07	Left	0	108	108	1:1	-	10	0.100	1.384	0.138	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	22.0	20.47	-0.09	Bottom	0	1	214	1:1	-	10	0.229	1.422	0.024	-
2 535	507000	DFT-s OFDM QPSK	MAIN2	40	22.0	20.59	0.00	Bottom	0	108	108	1:1	-	10	0.217	1.384	0.017	-
2 535	507000	CP QPSK	MAIN2	40	22.0	20.45	0.02	Bottom	0	1	1	1:1	-	10	0.242	1.422	**0.326**	**B17**
2 535	507000	DFT-s OFDM QPSK	SUB2	40	19.5	18.10	0.00	Rear	0	1	1	1:1	-	10	0.170	1.380	0.235	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	19.5	18.26	0.00	Rear	0	108	54	1:1	-	10	0.158	1.330	0.210	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	19.5	18.10	0.13	Front	0	1	1	1:1	-	10	0.123	1.380	0.170	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	19.5	18.26	0.15	Front	0	108	54	1:1	-	10	0.114	1.330	0.152	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	19.5	18.10	0.19	Left	0	1	1	1:1	-	10	0.020	1.380	0.028	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	19.5	18.26	0.18	Left	0	108	54	1:1	-	10	0.015	1.330	0.020	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	19.5	18.10	0.15	Top	0	1	1	1:1	-	10	0.222	1.380	0.306	-
2 535	507000	DFT-s OFDM QPSK	SUB2	40	19.5	18.26	0.18	Top	0	108	54	1:1	-	10	0.193	1.330	0.257	-
2 535	507000	CP QPSK	SUB2	40	19.5	18.23	0.15	Top	0	1	1	1:1	-	10	0.225	1.340	0.302	-
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NR FDD Band n12 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.79	-0.16	Rear	0	1	77	1:1	11	10	0.184	1.321	0.243	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.86	-0.17	Rear	0	36	22	1:1	11	10	0.206	1.300	0.268	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.79	-0.19	Front	0	1	77	1:1	11	10	0.158	1.321	0.209	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.86	-0.13	Front	0	36	22	1:1	11	10	0.165	1.300	0.215	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.79	0.00	Left	0	1	77	1:1	11	10	0.105	1.321	0.139	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.86	-0.09	Left	0	36	22	1:1	11	10	0.112	1.300	0.146	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.79	0.12	Right	0	1	77	1:1	11	10	0.073	1.321	0.096	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.86	-0.03	Right	0	36	22	1:1	11	10	0.067	1.300	0.087	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.79	0.14	Bottom	0	1	77	1:1	11	10	0.064	1.321	0.085	-
707.5	141500	DFT-s OFDM QPSK	MAIN1	15	25.0	23.86	0.11	Bottom	0	36	22	1:1	11	10	0.070	1.300	0.091	-
707.5	141500	CP QPSK	MAIN1	15	23.5	22.15	-0.17	Rear	1.5	1	1	1:1	11	10	0.200	1.365	0.273	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	25.0	23.83	0.03	Rear	0	1	1	1:1	45	10	0.493	1.309	0.645	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	25.0	23.81	-0.16	Rear	0	36	22	1:1	45	10	0.505	1.315	0.664	B18
707.5	141500	DFT-s OFDM QPSK	SUB1	15	25.0	23.83	-0.14	Front	0	1	1	1:1	45	10	0.371	1.309	0.486	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	25.0	23.81	-0.15	Front	0	36	22	1:1	45	10	0.356	1.315	0.468	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	25.0	23.83	0.05	Right	0	1	1	1:1	45	10	0.285	1.309	0.373	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	25.0	23.81	-0.10	Right	0	36	22	1:1	45	10	0.320	1.315	0.421	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	25.0	23.83	0.18	Top	0	1	1	1:1	45	10	0.417	1.309	0.546	-
707.5	141500	DFT-s OFDM QPSK	SUB1	15	25.0	23.81	0.17	Top	0	36	22	1:1	45	10	0.423	1.315	0.556	-
707.5	141500	CP QPSK	SUB1	15	23.5	22.26	-0.03	Rear	0	1	1	1:1	45	10	0.390	1.330	0.519	-
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NR FDD Band n14 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.70	-0.13	Rear	0	1	1	1:1	11	10	0.119	1.072	0.128	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.42	-0.06	Rear	0	25	14	1:1	11	10	0.113	1.143	0.129	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.70	-0.07	Front	0	1	1	1:1	11	10	0.145	1.072	0.155	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.42	-0.19	Front	0	25	14	1:1	11	10	0.155	1.143	0.177	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.70	-0.06	Left	0	1	1	1:1	11	10	0.207	1.072	0.222	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.42	-0.10	Left	0	25	14	1:1	11	10	0.213	1.143	0.243	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.70	0.02	Right	0	1	1	1:1	11	10	0.115	1.072	0.123	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.42	-0.08	Right	0	25	14	1:1	11	10	0.142	1.143	0.162	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.70	-0.17	Bottom	0	1	1	1:1	11	10	0.054	1.072	0.058	-
793	158600	DFT-s OFDM QPSK	MAIN1	10	25.0	24.42	-0.10	Bottom	0	25	14	1:1	11	10	0.052	1.143	0.059	-
793	158600	CP QPSK	MAIN1	10	23.5	23.17	0.13	Left	1.5	1	1	1:1	11	10	0.162	1.079	0.175	-
793	158600	DFT-s OFDM QPSK	SUB1	10	25.0	24.96	-0.10	Rear	0	1	1	1:1	0	10	0.496	1.009	0.500	-
793	158600	DFT-s OFDM QPSK	SUB1	10	25.0	24.68	-0.19	Rear	0	25	14	1:1	0	10	0.506	1.076	**0.544**	**B19**
793	158600	DFT-s OFDM QPSK	SUB1	10	25.0	24.96	-0.18	Front	0	1	1	1:1	0	10	0.375	1.009	0.378	-
793	158600	DFT-s OFDM QPSK	SUB1	10	25.0	24.68	-0.16	Front	0	25	14	1:1	0	10	0.371	1.076	0.399	-
793	158600	DFT-s OFDM QPSK	SUB1	10	25.0	24.96	0.16	Right	0	1	1	1:1	0	10	0.485	1.009	0.489	-
793	158600	DFT-s OFDM QPSK	SUB1	10	25.0	24.68	-0.04	Right	0	25	14	1:1	0	10	0.499	1.076	0.537	-
793	158600	DFT-s OFDM QPSK	SUB1	10	25.0	24.96	0.15	Top	0	1	1	1:1	0	10	0.356	1.009	0.359	-
793	158600	DFT-s OFDM QPSK	SUB1	10	25.0	24.68	0.17	Top	0	25	14	1:1	0	10	0.354	1.076	0.381	-
793	158600	CP QPSK	SUB1	10	23.5	23.40	-0.09	Rear	1.5	1	1	1:1	0	10	0.352	1.023	0.360	-
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NR FDD Band n25 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.07	0.14	Rear	0	1	214	1:1	1	10	0.675	1.104	0.745	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.12	-0.10	Rear	0	108	54	1:1	1	10	0.675	1.091	0.736	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.07	-0.10	Front	0	1	214	1:1	1	10	0.401	1.104	0.443	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.12	0.12	Front	0	108	54	1:1	1	10	0.395	1.091	0.431	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.07	-0.10	Left	0	1	214	1:1	1	10	0.125	1.104	0.138	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.12	0.04	Left	0	108	54	1:1	1	10	0.144	1.091	0.157	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.07	-0.16	Right	0	1	214	1:1	1	10	0.034	1.104	0.038	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.12	0.05	Right	0	108	54	1:1	1	10	0.034	1.091	0.037	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.07	-0.06	Bottom	0	1	214	1:1	1	10	0.714	1.104	0.788	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	40	20.5	20.12	0.06	Bottom	0	108	54	1:1	1	10	**0.732**	1.091	0.799	B20
1 882.5	376500	CP QPSK	MAIN1	40	20.5	19.99	-0.14	Bottom	0	1	1	1:1	1	10	0.722	1.125	0.812	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	19.5	18.30	0.04	Rear	0	1	1	1:1	22	10	0.420	1.318	0.554	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	19.5	18.25	0.09	Rear	0	108	54	1:1	22	10	0.341	1.334	0.455	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	19.5	18.30	0.17	Front	0	1	1	1:1	22	10	0.249	1.318	0.328	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	19.5	18.25	-0.01	Front	0	108	54	1:1	22	10	0.195	1.334	0.260	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	19.5	18.30	0.17	Left	0	1	1	1:1	22	10	0.121	1.318	0.159	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	19.5	18.25	-0.11	Left	0	108	54	1:1	22	10	0.116	1.334	0.155	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	19.5	18.30	-0.05	Top	0	1	1	1:1	22	10	0.685	1.318	0.903	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	19.5	18.25	-0.04	Top	0	108	54	1:1	22	10	0.574	1.334	0.766	-
1 882.5	376500	DFT-s OFDM QPSK	SUB2	40	19.5	18.20	-0.04	Top	0	216	0	1:1	22	10	0.574	1.349	0.774	-
1 882.5	376500	CP QPSK	SUB2	40	19.5	18.41	-0.03	Top	0	1	1	1:1	22	10	0.731	1.285	**0.939**	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

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NR FDD Band n26 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	24.15	0.19	Rear	0	1	1	1:1	3	10	0.198	1.216	0.241	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.97	0.12	Rear	0	50	28	1:1	3	10	0.160	1.268	0.203	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	24.15	-0.10	Front	0	1	1	1:1	3	10	0.158	1.216	0.192	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.97	-0.07	Front	0	50	28	1:1	3	10	0.169	1.268	0.214	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	24.15	-0.02	Left	0	1	1	1:1	3	10	0.186	1.216	0.226	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.97	-0.05	Left	0	50	28	1:1	3	10	0.174	1.268	0.221	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	24.15	-0.07	Right	0	1	1	1:1	3	10	0.174	1.216	0.212	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.97	-0.11	Right	0	50	28	1:1	3	10	0.162	1.268	0.205	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	24.15	0.18	Bottom	0	1	1	1:1	3	10	0.045	1.216	0.055	-
831.5	166300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.97	0.16	Bottom	0	50	28	1:1	3	10	0.050	1.268	0.063	-
831.5	166300	CP QPSK	MAIN1	20	23.5	22.47	-0.02	Rear	1.5	1	1	1:1	3	10	0.138	1.268	0.175	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	25.0	24.10	0.01	Rear	0	1	53	1:1	0	10	0.343	1.230	0.422	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	25.0	23.89	-0.04	Rear	0	50	28	1:1	0	10	0.341	1.291	0.440	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	25.0	24.10	-0.07	Front	0	1	53	1:1	0	10	0.262	1.230	0.322	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	25.0	23.89	-0.10	Front	0	50	28	1:1	0	10	0.263	1.291	0.340	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	25.0	24.10	-0.13	Right	0	1	53	1:1	0	10	0.405	1.230	0.498	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	25.0	23.89	-0.04	Right	0	50	28	1:1	0	10	0.413	1.291	**0.533**	B21
831.5	166300	DFT-s OFDM QPSK	SUB1	20	25.0	24.10	0.14	Top	0	1	53	1:1	0	10	0.301	1.230	0.370	-
831.5	166300	DFT-s OFDM QPSK	SUB1	20	25.0	23.89	0.18	Top	0	50	28	1:1	0	10	0.302	1.291	0.390	-
831.5	166300	CP QPSK	SUB1	20	23.5	22.26	0.08	Right	0	1	1	1:1	0	10	0.314	1.330	0.418	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

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NR FDD Band n30 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.61	0.00	Rear	0	1	1	1:1	-	10	0.260	1.377	0.358	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.71	0.00	Rear	0	25	14	1:1	-	10	0.257	1.346	0.346	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.61	0.15	Front	0	1	1	1:1	-	10	0.148	1.377	0.204	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.71	0.11	Front	0	25	14	1:1	-	10	0.128	1.346	0.172	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.61	0.11	Left	0	1	1	1:1	-	10	0.038	1.377	0.052	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.71	0.19	Left	0	25	14	1:1	-	10	0.042	1.346	0.057	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.61	-0.00	Right	0	1	1	1:1	-	10	0.010	1.377	0.014	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.71	0.19	Right	0	25	14	1:1	-	10	0.00669	1.346	0.009	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.61	0.17	Bottom	0	1	1	1:1	-	10	0.606	1.377	**0.834**	**B22**
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.71	0.18	Bottom	0	25	14	1:1	-	10	0.596	1.346	0.802	-
2 310	462000	DFT-s OFDM QPSK	MIAIN1	10	21.0	19.71	0.01	Bottom	0	50	0	1:1	-	10	0.509	1.346	0.685	-
2 310	462000	CP QPSK	MIAIN1	10	21.0	20.04	0.12	Bottom	1.5	1	1	1:1	-	10	0.475	1.247	0.592	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	20.0	19.19	0.15	Rear	0	1	1	1:1	-	10	0.315	1.205	0.380	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	20.0	18.87	0.18	Rear	0	25	14	1:1	-	10	0.383	1.297	0.497	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	20.0	19.19	0.06	Front	0	1	1	1:1	-	10	0.224	1.205	0.270	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	20.0	18.87	-0.03	Front	0	25	14	1:1	-	10	0.236	1.297	0.306	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	20.0	19.19	-0.06	Left	0	1	1	1:1	-	10	0.097	1.205	0.117	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	20.0	18.87	-0.15	Left	0	25	14	1:1	-	10	0.097	1.297	0.126	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	20.0	19.19	0.11	Top	0	1	1	1:1	-	10	0.453	1.205	0.546	-
2 310	462000	DFT-s OFDM QPSK	SUB2	10	20.0	18.87	-0.06	Top	0	25	14	1:1	-	10	0.483	1.297	0.626	-
2 310	462000	CP QPSK	SUB2	10	20.0	18.83	0.01	Top	0	1	1	1:1	-	10	0.474	1.309	0.620	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

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NR TDD Band n41 (Power Class 2) Body/Hotspot SAR

Frequency		Mode	Ant	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	22.0	21.07	-0.05	Rear	0	1	271	1:1	-	10	0.076	1.239	0.094	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	22.0	20.97	-0.17	Rear	0	135	138	1:1	-	10	0.076	1.268	0.096	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	22.0	21.07	-0.12	Front	0	1	271	1:1	-	10	0.085	1.239	0.105	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	22.0	20.97	-0.10	Front	0	135	138	1:1	-	10	0.074	1.268	0.094	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	22.0	21.07	-0.04	Left	0	1	271	1:1	-	10	0.127	1.239	0.157	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	22.0	20.97	-0.02	Left	0	135	138	1:1	-	10	0.107	1.268	0.136	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	22.0	21.07	0.02	Bottom	0	1	271	1:1	-	10	0.332	1.239	0.411	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	22.0	20.97	0.01	Bottom	0	135	138	1:1	-	10	0.271	1.268	0.344	-
2 592.99	518598	CP QPSK	MAIN2	100	22.0	21.23	-0.02	Bottom	0	1	1	1:1	-	10	0.357	1.194	0.426	-
2 592.99	518598	CW SRS #2	SUB2	100	21.0	20.66	0.11	Rear	0	-	-	1:1	-	10	0.032	1.081	0.035	-
2 592.99	518598	CW SRS #2	SUB2	100	21.0	20.66	-0.17	Front	0	-	-	1:1	-	10	0.025	1.081	0.027	-
2 592.99	518598	CW SRS #2	SUB2	100	21.0	20.66	0.19	Left	0	-	-	1:1	-	10	0.009	1.081	0.010	-
2 592.99	518598	CW SRS #2	SUB2	100	21.0	20.66	-0.07	Top	0	-	-	1:1	-	10	0.081	1.081	0.088	-
2 592.99	518598	CW SRS #3	MAIN4	100	20.0	19.19	-0.12	Rear	0	-	-	1:1	-	10	0.131	1.205	0.158	-
2 592.99	518598	CW SRS #3	MAIN4	100	20.0	19.19	-0.12	Front	0	-	-	1:1	-	10	0.038	1.205	0.046	-
2 592.99	518598	CW SRS #3	MAIN4	100	20.0	19.19	-0.18	Right	0	-	-	1:1	-	10	0.008	1.205	0.010	-
2 592.99	518598	CW SRS #3	MAIN4	100	20.0	19.19	0.04	Bottom	0	-	-	1:1	-	10	0.051	1.205	0.061	-
2 592.99	518598	CW SRS #4	SUB1	100	19.0	18.23	0.16	Rear	0	-	-	1:1	-	10	0.097	1.194	0.116	-
2 592.99	518598	CW SRS #4	SUB1	100	19.0	18.23	-0.10	Front	0	-	-	1:1	-	10	0.085	1.194	0.101	-
2 592.99	518598	CW SRS #4	SUB1	100	19.0	18.23	-0.04	Right	0	-	-	1:1	-	10	0.088	1.194	0.105	-
2 592.99	518598	CW SRS #4	SUB1	100	19.0	18.23	-0.02	Top	0	-	-	1:1	-	10	0.094	1.194	0.112	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	20.5	19.33	0.05	Rear	0	1	271	1:1	-	10	0.386	1.309	0.505	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	20.5	19.09	0.06	Rear	0	135	138	1:1	-	10	0.373	1.384	0.516	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	20.5	19.33	0.03	Front	0	1	271	1:1	-	10	0.385	1.309	0.504	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	20.5	19.09	0.06	Front	0	135	138	1:1	-	10	0.289	1.384	0.400	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	20.5	19.33	-0.15	Left	0	1	271	1:1	-	10	0.043	1.309	0.056	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	20.5	19.09	0.12	Left	0	135	138	1:1	-	10	0.046	1.384	0.064	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	20.5	19.33	-0.02	Top	0	1	271	1:1	-	10	0.499	1.309	0.653	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	20.5	19.09	0.19	Top	0	135	138	1:1	-	10	0.544	1.384	0.753	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	20.5	19.06	0.18	Top	0	270	0	1:1	-	10	0.564	1.393	0.786	-
2 592.99	518598	CP QPSK	SUB2	100	20.5	19.31	0.03	Top	0	1	1	1:1	-	10	0.745	1.315	**0.980**	**B23**
2 592.99	518598	CW SRS #2	MAIN2	100	21.0	20.31	-0.16	Rear	0	-	-	1:1	-	10	0.229	1.172	0.268	-
2 592.99	518598	CW SRS #2	MAIN2	100	21.0	20.31	-0.16	Front	0	-	-	1:1	-	10	0.146	1.172	0.171	-
2 592.99	518598	CW SRS #2	MAIN2	100	21.0	20.31	-0.03	Left	0	-	-	1:1	-	10	0.125	1.172	0.147	-
2 592.99	518598	CW SRS #2	MAIN2	100	21.0	20.31	0.13	Bottom	0	-	-	1:1	-	10	0.215	1.172	0.252	-
2 592.99	518598	CW SRS #3	SUB1	100	20.0	19.26	-0.13	Rear	0	-	-	1:1	-	10	0.295	1.186	0.350	-
2 592.99	518598	CW SRS #3	SUB1	100	20.0	19.26	-0.11	Front	0	-	-	1:1	-	10	0.377	1.186	0.447	-
2 592.99	518598	CW SRS #3	SUB1	100	20.0	19.26	0.18	Right	0	-	-	1:1	-	10	0.017	1.186	0.020	-
2 592.99	518598	CW SRS #3	SUB1	100	20.0	19.26	0.13	Top	0	-	-	1:1	-	10	0.287	1.186	0.340	-
2 592.99	518598	CW SRS #4	MAIN4	100	20.0	19.24	-0.09	Rear	0	-	-	1:1	-	10	0.175	1.191	0.208	-
2 592.99	518598	CW SRS #4	MAIN4	100	20.0	19.24	-0.13	Front	0	-	-	1:1	-	10	0.105	1.191	0.125	-
2 592.99	518598	CW SRS #4	MAIN4	100	20.0	19.24	0.18	Right	0	-	-	1:1	-	10	0.100	1.191	0.119	-
2 592.99	518598	CW SRS #4	MAIN4	100	20.0	19.24	0.05	Bottom	0	-	-	1:1	-	10	0.062	1.191	0.074	-

ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population	Body 1.6 W/kg Averaged over 1 gram

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NR TDD Band n48 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.52	-0.08	Rear	0	1	1	1:1	-	10	0.473	1.253	0.593	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.62	0.04	Rear	0	50	0	1:1	-	10	0.519	1.225	0.636	-
3 624.99	641666	DFT-s OFDM QPSK	SUB2	40	20.5	19.48	-0.19	Rear	0	50	0	1:1	-	10	0.401	1.265	0.507	-
3 680.01	645334	DFT-s OFDM QPSK	SUB2	40	20.5	19.22	0.00	Rear	0	50	0	1:1	-	10	0.479	1.343	0.643	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.54	0.18	Rear	0	100	0	1:1	-	10	0.417	1.247	0.520	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.52	-0.02	Front	0	1	1	1:1	-	10	0.290	1.253	0.363	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.62	0.13	Front	0	50	0	1:1	-	10	0.262	1.225	0.321	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.52	0.06	Left	0	1	1	1:1	-	10	0.112	1.253	0.140	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.62	0.12	Left	0	50	0	1:1	-	10	0.098	1.225	0.120	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.52	-0.08	Top	0	1	1	1:1	-	10	0.622	1.253	0.779	B24
3 624.99	641666	DFT-s OFDM QPSK	SUB2	40	20.5	19.44	0.10	Top	0	1	1	1:1	-	10	0.432	1.276	0.551	-
3 680.01	645334	DFT-s OFDM QPSK	SUB2	40	20.5	19.15	-0.02	Top	0	1	1	1:1	-	10	0.452	1.365	0.617	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.62	0.01	Top	0	50	0	1:1	-	10	0.450	1.225	0.551	-
3 570	638000	DFT-s OFDM QPSK	SUB2	40	20.5	19.54	0.01	Top	0	100	0	1:1	-	10	0.438	1.247	0.546	-
3 570	638000	CP QPSK	SUB2	40	20.5	19.65	-0.06	Top	0	1	1	1:1	-	10	0.506	1.216	0.615	-
3 680.01	645334	CW SRS #2	MAIN3	40	14.0	13.98	0.17	Rear	0	-	-	1:1	-	10	0.086	1.005	0.086	-
3 680.01	645334	CW SRS #2	MAIN3	40	14.0	13.98	0.14	Front	0	-	-	1:1	-	10	0.059	1.005	0.059	-
3 680.01	645334	CW SRS #2	MAIN3	40	14.0	13.98	0.14	Left	0	-	-	1:1	-	10	0.089	1.005	0.089	-
3 680.01	645334	CW SRS #2	MAIN3	40	14.0	13.98	0.17	Bottom	0	-	-	1:1	-	10	0.042	1.005	0.042	-
3 624.99	641666	CW SRS #3	SUB5	40	18.0	17.96	-0.16	Rear	0	-	-	1:1	-	10	0.099	1.009	0.100	-
3 624.99	641666	CW SRS #3	SUB5	40	18.0	17.96	0.00	Front	0	-	-	1:1	-	10	0.073	1.009	0.074	-
3 624.99	641666	CW SRS #3	SUB5	40	18.0	17.96	0.05	Left	0			1:1	-	10	0.052	1.009	0.052	-
3 680.01	645334	CW SRS #4	MAIN4	40	13.5	13.41	-0.11	Rear	0	-	-	1:1	-	10	0.045	1.021	0.046	-
3 680.01	645334	CW SRS #4	MAIN4	40	13.5	13.41	-0.16	Front	0	-	-	1:1	-	10	0	1.021	0.000	-
3 680.01	645334	CW SRS #4	MAIN4	40	13.5	13.41	-0.03	Right	0	-	-	1:1	-	10	0.003	1.021	0.003	-
3 680.01	645334	CW SRS #4	MAIN4	40	13.5	13.41	-0.01	Bottom	0	-	-	1:1	-	10	0.006	1.021	0.006	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population														Body 1.6 W/kg Averaged over 1 gram				

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NR FDD Band n66 Body / Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.84	0.04	Rear	0	1	214	1:1	18	10	0.645	1.038	0.670	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.92	0.07	Rear	0	108	54	1:1	18	10	0.647	1.019	0.659	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.84	-0.08	Front	0	1	214	1:1	18	10	0.413	1.038	0.429	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.92	-0.06	Front	0	108	54	1:1	18	10	0.413	1.019	0.421	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.84	-0.10	Left	0	1	214	1:1	18	10	0.108	1.038	0.112	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.92	-0.11	Left	0	108	54	1:1	18	10	0.104	1.019	0.106	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.84	0.08	Right	0	1	214	1:1	18	10	0.048	1.038	0.050	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.92	-0.09	Right	0	108	54	1:1	18	10	0.046	1.019	0.047	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.84	-0.12	Bottom	0	1	214	1:1	18	10	0.687	1.038	0.713	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.0	19.92	-0.04	Bottom	0	108	54	1:1	18	10	0.674	1.019	0.687	-
1 745	349000	CP OFDM QPSK	MAIN1	40	20.0	19.68	-0.03	Bottom	0	1	1	1:1	18	10	0.725	1.076	**0.780**	**B25**
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	20.43	-0.01	Rear	0	1	1	1:1	22	10	0.416	1.140	0.474	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	20.14	0.09	Rear	0	108	0	1:1	22	10	0.39	1.219	0.475	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	20.43	0.07	Front	0	1	1	1:1	22	10	0.189	1.140	0.215	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	20.14	0.05	Front	0	108	0	1:1	22	10	0.199	1.219	0.243	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	20.43	-0.05	Left	0	1	1	1:1	22	10	0.109	1.140	0.124	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	20.14	0.08	Left	0	108	0	1:1	22	10	0.146	1.219	0.178	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	20.43	0.06	Top	0	1	1	1:1	22	10	0.665	1.140	0.758	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	20.14	-0.04	Top	0	108	0	1:1	22	10	0.633	1.219	0.772	-
1 745	349000	CP OFDM QPSK	SUB2	40	21.0	20.31	-0.14	Top	0	1	1	1:1	22	10	0.586	1.172	0.687	-
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NR FDD Band n70 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.06	-0.04	Rear	0	1	1	1:1	19	10	0.655	1.242	0.814	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.03	-0.01	Rear	0	36	22	1:1	19	10	0.634	1.250	0.793	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	19.98	-0.07	Rear	0	75	0	1:1	19	10	0.636	1.265	0.805	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.06	-0.15	Front	0	1	1	1:1	19	10	0.470	1.242	0.584	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.03	-0.07	Front	0	36	22	1:1	19	10	0.460	1.250	0.575	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.06	-0.09	Left	0	1	1	1:1	19	10	0.090	1.242	0.112	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.03	0.10	Left	0	36	22	1:1	19	10	0.092	1.250	0.115	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.06	0.15	Right	0	1	1	1:1	19	10	0.047	1.242	0.058	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.03	0.17	Right	0	36	22	1:1	19	10	0.047	1.250	0.059	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.06	0.13	Bottom	0	1	1	1:1	19	10	0.861	1.242	1.069	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	20.03	0.06	Bottom	0	36	22	1:1	19	10	0.818	1.250	1.023	-
1 702.5	340500	DFT-s OFDM QPSK	MAIN1	15	21.0	19.98	0.11	Bottom	1	75	0	1:1	19	10	0.842	1.265	1.065	-
1 702.5	340500	CP OFDM QPSK	MAIN1	15	21.0	20.17	0.09	Bottom	0	1	1	1:1	19	10	0.892	1.211	**1.080**	**B26**
1 702.5	340500	CP OFDM QPSK	MAIN1	15	21.0	20.17	0.04	Bottom	0	1	1	1:1	19	10	0.808	1.211	0.978	#
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	22.0	21.19	-0.14	Rear	0	1	40	1:1	22	10	0.573	1.205	0.690	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	22.0	21.29	0.10	Rear	0	36	22	1:1	22	10	0.547	1.178	0.644	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	22.0	21.19	0.15	Front	0	1	40	1:1	22	10	0.428	1.205	0.516	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	22.0	21.29	-0.14	Front	0	36	22	1:1	22	10	0.412	1.178	0.485	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	22.0	21.19	-0.10	Left	0	1	40	1:1	22	10	0.16	1.205	0.193	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	22.0	21.29	0.11	Left	0	36	22	1:1	22	10	0.156	1.178	0.184	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	22.0	21.19	-0.11	Top	0	1	40	1:1	22	10	0.698	1.205	0.841	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	22.0	21.29	-0.19	Top	0	36	22	1:1	22	10	0.716	1.178	0.843	-
1 702.5	340500	DFT-s OFDM QPSK	SUB2	15	22.0	21.19	-0.05	Top	0	75	0	1:1	22	10	0.700	1.205	0.844	-
1 702.5	340500	CP OFDM QPSK	SUB2	15	22.0	21.40	-0.12	Top	0	1	1	1:1	22	10	0.717	1.148	0.823	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

Note: # Data entry indicate Variability measurement.

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NR FDD Band n71 Body/Hotspot SAR																		
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.38	0.05	Rear	0	1	53	1:1	12	10	0.258	1.294	0.334	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.35	-0.10	Rear	0	50	28	1:1	12	10	0.285	1.303	0.371	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.38	-0.02	Front	0	1	53	1:1	12	10	0.163	1.294	0.211	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.35	-0.02	Front	0	50	28	1:1	12	10	0.177	1.303	0.231	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.38	0.06	Left	0	1	53	1:1	12	10	0.112	1.294	0.145	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.35	-0.15	Left	0	50	28	1:1	12	10	0.136	1.303	0.177	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.38	-0.07	Right	0	1	53	1:1	12	10	0.086	1.294	0.111	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.35	-0.06	Right	0	50	28	1:1	12	10	0.098	1.303	0.128	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.38	-0.02	Bottom	0	1	53	1:1	12	10	0.061	1.294	0.079	-
680.5	136100	DFT-s OFDM QPSK	MAIN1	20	25.5	24.35	0.15	Bottom	0	50	28	1:1	12	10	0.074	1.303	0.096	-
680.5	136100	CP QPSK	MAIN1	20	24.0	22.45	-0.19	Rear	1.5	1	1	1:1	12	10	0.189	1.429	0.270	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	24.5	24.12	-0.05	Rear	0	1	53	1:1	0	10	0.431	1.091	0.470	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	24.5	24.06	0.07	Rear	0	50	28	1:1	0	10	0.499	1.107	0.552	B27
680.5	136100	DFT-s OFDM QPSK	SUB1	20	24.5	24.12	-0.15	Front	0	1	53	1:1	0	10	0.323	1.091	0.352	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	24.5	24.06	-0.06	Front	0	50	28	1:1	0	10	0.375	1.107	0.415	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	24.5	24.12	-0.01	Right	0	1	53	1:1	0	10	0.244	1.091	0.266	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	24.5	24.06	0.00	Right	0	50	28	1:1	0	10	0.297	1.107	0.329	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	24.5	24.12	0.10	Top	0	1	53	1:1	0	10	0.363	1.091	0.396	-
680.5	136100	DFT-s OFDM QPSK	SUB1	20	24.5	24.06	0.15	Top	0	50	28	1:1	0	10	0.433	1.107	0.479	-
680.5	136100	CP QPSK	SUB1	20	23.0	22.41	0.04	Rear	1.5	1	1	1:1	0	10	0.317	1.146	0.363	-
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NR TDD Band n77 (Power Class 2) Body/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.79	0.19	Rear	0	1	1	1:1	-	10	0.502	1.178	0.591	-
3 930	662000	DFT-s OFDM QPSK	SUB2	100	17.5	16.41	-0.07	Rear	0	1	1	1:1	-	10	0.693	1.285	0.891	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.66	-0.18	Rear	0	135	0	1:1	-	10	0.476	1.213	0.577	-
3 930	662000	DFT-s OFDM QPSK	SUB2	100	17.5	16.41	-0.06	Rear	0	135	0	1:1	-	10	0.715	1.285	0.919	B28
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.76	-0.01	Rear	0	270	0	1:1	-	10	0.432	1.186	0.512	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.79	-0.18	Front	0	1	1	1:1	-	10	0.166	1.178	0.196	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.41	-0.06	Front	0	135	0	1:1	-	10	0.134	1.285	0.172	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.79	0.03	Left	0	1	1	1:1	-	10	0.111	1.178	0.131	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.41	0.14	Left	0	135	0	1:1	-	10	0.096	1.285	0.123	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.79	-0.03	Top	0	1	1	1:1	-	10	0.379	1.178	0.446	-
3 930	662000	DFT-s OFDM QPSK	SUB2	100	17.5	16.41	-0.11	Top	0	1	1	1:1	-	10	0.192	1.285	0.247	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.66	-0.06	Top	0	135	0	1:1	-	10	0.146	1.213	0.177	-
3 750	650000	DFT-s OFDM QPSK	SUB2	100	17.5	16.76	-0.08	Top	0	270	0	1:1	-	10	0.367	1.186	0.435	-
3 750	650000	CP QPSK	SUB2	100	17.5	16.59	0.19	Rear	0	1	1	1:1	-	10	0.425	1.233	0.524	-
3 500.01	633334	DFT-s OFDM QPSK	SUB2	100	17.5	16.55	-0.07	Rear	0	1	1	1:1	-	10	0.277	1.245	0.345	-
3 500.01	633334	DFT-s OFDM QPSK	SUB2	100	17.5	16.52	0.04	Rear	0	135	0	1:1	-	10	0.3	1.253	0.376	-
3 930	662000	CW SRS #2	MAIN3	100	7.0	5.08	0.15	Rear	0	-	-	1:1	-	10	0.011	1.503	0.017	-
3 930	662000	CW SRS #2	MAIN3	100	7.0	5.08	-0.11	Front	0	-	-	1:1	-	10	0.004	1.503	0.006	-
3 930	662000	CW SRS #2	MAIN3	100	7.0	5.08	0.11	Left	0	-	-	1:1	-	10	0.020	1.503	0.031	-
3 930	662000	CW SRS #2	MAIN3	100	7.0	5.08	0.14	Bottom	0	-	-	1:1	-	10	0.006	1.503	0.009	-
3 500.01	633334	CW SRS #2	MAIN3	100	7.0	6.84	0.17	Left	0	-	-	1:1	-	10	0.072	1.282	0.075	-
3 930	662000	CW SRS #3	SUB5	100	10.5	8.77	0.11	Rear	0	-	-	1:1	-	10	0.020	1.156	0.030	-
3 930	662000	CW SRS #3	SUB5	100	10.5	8.77	0.12	Front	0	-	-	1:1	-	10	0.017	1.156	0.025	-
3 930	662000	CW SRS #3	SUB5	100	10.5	8.77	0.16	Left	0	-	-	1:1	-	10	0.005	1.156	0.007	-
3 500.01	633334	CW SRS #3	SUB5	100	10.5	10.20	0.11	Rear	0	-	-	1:1	-	10	0.063	1.040	0.068	-
3 930	662000	CW SRS #4	MAIN4	100	5.5	4.47	0.15	Rear	0	-	-	1:1	-	10	0.026	1.211	0.033	-
3 930	662000	CW SRS #4	MAIN4	100	5.5	4.47	0.05	Front	0	-	-	1:1	-	10	0.000	1.211	0.000	-
3 930	662000	CW SRS #4	MAIN4	100	5.5	4.47	0.13	Right	0	-	-	1:1	-	10	0.000	1.211	0.000	-
3 930	662000	CW SRS #4	MAIN4	100	5.5	4.47	0.06	Bottom	0	-	-	1:1	-	10	0.000	1.211	0.000	-
3 500.01	633334	CW SRS #4	MAIN4	100	5.5	5.47	0.09	Rear	0	-	-	1:1	-	10	0.045	1.570	0.045	-

ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population	Body 1.6 W/kg Averaged over 1 gram

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DTS Body/Hotspot SAR																	
Frequency		Mode	Ant.	Band width (㎒)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (㎜)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
㎒	Ch.																
2 462	11	802.11b	Ant.1	20	1	20.0	19.03	0.06	Rear	98.9	10	0.481	0.365	1.250	1.000	0.456	-
2 462	11	802.11b	Ant.1	20	1	20.0	19.03	-0.15	Front	98.9	10	0.397	0.304	1.250	1.000	0.380	-
2 462	11	802.11b	Ant.1	20	1	20.0	19.03	-0.01	Left	98.9	10	0.838	0.648	1.250	1.000	**0.810**	**B29**
2 412	1	802.11b	Ant.1	20	1	20.0	18.92	-0.04	Left	98.9	10	0.669	0.539	1.282	1.000	0.691	-
2 462	11	802.11b	Ant.1	20	1	20.0	19.03	-0.12	Top	98.9	10	0.645	0.496	1.250	1.000	0.620	-
2 412	1	802.11b	Ant.2	20	1	20.0	18.54	0.05	Rear	98.9	10	0.361	0.273	1.400	1.000	0.382	-
2 412	1	802.11b	Ant.2	20	1	20.0	18.54	0.12	Front	98.9	10	0.285	0.225	1.400	1.000	0.315	-
2 412	1	802.11b	Ant.2	20	1	20.0	18.54	-0.11	Right	98.9	10	0.103	0.078	1.400	1.000	0.109	-
2 412	1	802.11b	Ant.2	20	1	20.0	18.54	0.18	Top	98.9	10	0.02	0.009	1.400	1.000	0.013	-
2 412	1	802.11b	MIMO	20	6	23.0	21.74	0.03	Rear	98.9	10	0.671	0.525	1.400	1.000	0.735	-
2 412	1	802.11b	MIMO	20	6	23.0	21.74	0.00	Front	98.9	10	0.463	0.371	1.400	1.000	0.519	-
2 412	1	802.11b	MIMO	20	6	23.0	21.74	-0.04	Left	98.9	10	0.699	0.557	1.400	1.000	0.780	-
2 412	1	802.11b	MIMO	20	6	23.0	21.74	-0.19	Right	98.9	10	0.118	0.090	1.400	1.000	0.126	-
2 412	1	802.11b	MIMO	20	6	23.0	21.74	0.00	Top	98.9	10	0.685	0.539	1.400	1.000	0.755	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Body 1.6 W/kg Averaged over 1 gram					

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5 GHz WLAN Body/Hotspot SAR																	
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.																
5 775	155	802.11ac	Ant.1	80	MCS0	18.0	17.11	0.02	Rear	92.4	10	1.77	0.430	1.227	1.082	0.571	-
5 775	155	802.11ac	Ant.1	80	MCS0	18.0	17.11	-0.09	Front	92.4	10	0.413	0.096	1.227	1.082	0.127	-
5 775	155	802.11ac	Ant.1	80	MCS0	18.0	17.11	0.13	Left	92.4	10	2.73	0.628	1.227	1.082	**0.834**	**B30**
5 775	155	802.11ac	Ant.1	80	MCS0	18.0	17.11	0.16	Top	92.4	10	0.550	0.135	1.227	1.082	0.179	-
5 775	155	802.11ac	Ant.2	80	MCS0	18.0	17.03	0.14	Rear	92.4	10	0.730	0.172	1.250	1.082	0.233	-
5 775	155	802.11ac	Ant.2	80	MCS0	18.0	17.03	0.11	Front	92.4	10	0.244	0.053	1.250	1.082	0.072	-
5 775	155	802.11ac	Ant.2	80	MCS0	18.0	17.03	-0.14	Right	92.4	10	0.219	0.046	1.250	1.082	0.062	-
5 775	155	802.11ac	Ant.2	80	MCS0	18.0	17.03	0.03	Top	92.4	10	0.523	0.118	1.250	1.082	0.160	-
5 775	155	802.11ac	MIMO	80	MCS0	21.0	20.08	0.14	Rear	92.4	10	1.79	0.455	1.250	1.082	0.616	-
5 775	155	802.11ac	MIMO	80	MCS0	21.0	20.08	-0.11	Front	92.4	10	0.543	0.125	1.250	1.082	0.169	-
5 775	155	802.11ac	MIMO	80	MCS0	21.0	20.08	-0.03	Left	92.4	10	1.94	0.461	1.250	1.082	0.624	-
5 775	155	802.11ac	MIMO	80	MCS0	21.0	20.08	0.19	Right	92.4	10	0.328	0.072	1.250	1.082	0.097	-
5 775	155	802.11ac	MIMO	80	MCS0	21.0	20.08	0.15	Top	92.4	10	0.503	0.121	1.250	1.082	0.164	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Body 1.6 W/kg Averaged over 1 gram							

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5 GHz WLAN Body-worn SAR																	
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.																
5 270	54	802.11n	Ant.1	40	MCS0	18.0	17.97	0.07	Rear	92.0	10	1.85	**0.510**	1.007	1.087	0.558	**B31**
5 270	54	802.11n	Ant.1	40	MCS0	18.0	17.97	0.02	Front	92.0	10	0.705	0.176	1.007	1.087	0.193	-
5 690	138	802.11ac	Ant.1	80	MCS0	18.0	17.03	0.05	Rear	92.4	10	1.56	0.388	1.250	1.082	0.525	-
5 690	138	802.11ac	Ant.1	80	MCS0	18.0	17.03	0.03	Front	92.4	10	0.724	0.148	1.250	1.082	0.200	-
5 855	171	802.11ac	Ant.1	80	MCS0	18.0	17.17	0.07	Rear	92.4	10	1.36	0.330	1.211	1.082	0.433	-
5 855	171	802.11ac	Ant.1	80	MCS0	18.0	17.17	-0.01	Front	92.4	10	0.731	0.163	1.211	1.082	0.214	-
5 270	54	802.11n	Ant.2	40	MCS0	18.0	17.56	0.04	Rear	92.0	10	1.54	0.406	1.107	1.087	0.489	-
5 270	54	802.11n	Ant.2	40	MCS0	18.0	17.56	-0.09	Front	92.0	10	0.266	0.072	1.107	1.087	0.087	-
5 690	138	802.11ac	Ant.2	80	MCS0	18.0	17.69	-0.05	Rear	92.4	10	1.35	0.330	1.074	1.082	0.384	-
5 690	138	802.11ac	Ant.2	80	MCS0	18.0	17.69	-0.05	Front	92.4	10	0.374	0.083	1.074	1.082	0.096	-
5 855	171	802.11ac	Ant.2	80	MCS0	18.0	16.82	-0.03	Rear	92.4	10	1.11	0.252	1.312	1.082	0.358	-
5 855	171	802.11ac	Ant.2	80	MCS0	18.0	16.82	0.08	Front	92.4	10	0.311	0.066	1.312	1.082	0.094	-
5 270	54	802.11n	MIMO	40	MCS8	21.0	20.78	0.03	Rear	92.0	10	1.75	0.508	1.107	1.087	0.611	-
5 270	54	802.11n	MIMO	40	MCS8	21.0	20.78	-0.08	Front	92.0	10	0.657	0.165	1.107	1.087	0.199	-
5 690	138	802.11ac	MIMO	80	MCS0	21.0	20.39	0.03	Rear	92.4	10	1.87	0.499	1.250	1.082	**0.675**	-
5 690	138	802.11ac	MIMO	80	MCS0	21.0	20.39	0.02	Front	92.4	10	1.01	0.235	1.250	1.082	0.318	-
5 855	171	802.11ac	MIMO	80	MCS0	21.0	20.01	-0.08	Rear	92.4	10	1.66	0.425	1.312	1.082	0.603	-
5 855	171	802.11ac	MIMO	80	MCS0	21.0	20.01	0.02	Front	92.4	10	0.637	0.160	1.312	1.082	0.227	-

ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population	Body 1.6 W/kg Averaged over 1 gram

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6 GHz WLAN Body SAR(VLP)																	
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.																
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.11	Rear	99.6	10	0.054	0.042	1.285	1.004	0.054	-
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.02	Front	99.6	10	0.026	0.023	1.285	1.004	0.030	-
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.17	Left	99.6	10	0.059	0.049	1.285	1.004	0.063	-
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.15	Top	99.6	10	0.013	0.019	1.285	1.004	0.025	-
6 665	143	802.11ax	Ant.1	160	MCS0	10.0	8.08	-0.12	Left	99.6	10	0.055	0.052	1.556	1.004	0.081	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	-0.08	Rear	99.6	10	0.035	0.029	1.294	1.004	0.038	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	-0.14	Front	99.6	10	0.009	0.002	1.294	1.004	0.003	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	-0.13	Right	99.6	10	0.005	0.006	1.294	1.004	0.008	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	0.11	Top	99.6	10	0.020	0.018	1.294	1.004	0.023	-
6 665	143	802.11ax	Ant.2	160	MCS0	10.0	8.34	0.07	Rear	99.6	10	0.017	0.015	1.466	1.004	0.022	-
6 185	47	802.11ax	MIMO	160	MCS0	10.0	8.88	0.02	Rear	99.6	10	0.187	0.042	1.294	1.004	0.055	-
6 185	47	802.11ax	MIMO	160	MCS0	10.0	8.88	0.00	Front	99.6	10	0.087	0.021	1.294	1.004	0.027	-
6 185	47	802.11ax	MIMO	160	MCS0	10.0	8.88	-0.10	Left	99.6	10	0.277	0.064	1.294	1.004	0.083	-
6 185	47	802.11ax	MIMO	160	MCS0	10.0	8.88	0.00	Right	99.6	10	0.024	0.006	1.294	1.004	0.008	-
6 185	47	802.11ax	MIMO	160	MCS0	10.0	8.88	0.00	Top	99.6	10	0.075	0.018	1.294	1.004	0.023	-
6 665	143	802.11ax	MIMO	160	MCS0	10.0	8.08	0.00	Left	99.6	10	0.353	0.073	1.556	1.004	**0.114**	**B32**
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Body 1.6 W/kg Averaged over 1 gram							

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6 GHz WLAN Body-worn SAR																
Frequency		Mode	Ant.	Band width (Mhz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.															
6 985	207	802.11ax	Ant.1	160	MCS0	9.0	8.97	-0.12	Rear	99.6	10	0.040	1.007	1.004	**0.040**	**B33**
6 985	207	802.11ax	Ant.1	160	MCS0	9.0	8.97	-0.19	Front	99.6	10	0.014	1.007	1.004	0.014	-
6 985	207	802.11ax	Ant.2	160	MCS0	9.0	8.96	-0.16	Rear	99.6	10	0.034	1.009	1.004	0.034	-
6 985	207	802.11ax	Ant.2	160	MCS0	9.0	8.96	0.00	Front	99.6	10	0.002	1.009	1.004	0.002	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.06	Rear	99.6	10	0.019	1.009	1.004	0.019	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.00	Front	99.6	10	0.017	1.009	1.004	0.017	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Body 1.6 W/kg Averaged over 1 gram						

DSS Tethering SAR													
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Distance	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(dBm)	(dBm)	(dB)		(mm)	(W/kg)		(Duty)	(W/kg)	
2 441	39	Bluetooth DH5	Ant.1	19.0	18.26	-0.15	Rear	10	0.226	1.186	1.026	0.271	-
2 441	39	Bluetooth DH5	Ant.1	19.0	18.26	-0.14	Front	10	0.152	1.186	1.026	0.182	-
2 441	39	Bluetooth DH5	Ant.1	19.0	18.26	-0.03	Left	10	0.217	1.186	1.026	0.260	-
2 441	39	Bluetooth DH5	Ant.1	19.0	18.26	0.06	Top	10	0.207	1.186	1.026	0.248	-
2 440	17	Bluetooth LE 1M	Ant.1	19.0	18.13	0.00	Rear	10	0.216	1.222	1.007	0.266	-
2 440	17	Bluetooth LE 1M	Ant.1	19.0	18.13	-0.02	Front	10	0.276	1.222	1.007	**0.340**	**B34**
2 440	17	Bluetooth LE 1M	Ant.1	19.0	18.13	-0.19	Left	10	0.019	1.222	1.007	0.023	-
2 440	17	Bluetooth LE 1M	Ant.1	19.0	18.13	-0.16	Top	10	0.024	1.222	1.007	0.030	-
2 441	39	Bluetooth DH5	Ant.2	19.0	18.52	-0.03	Rear	10	0.148	1.117	1.026	0.167	-
2 441	39	Bluetooth DH5	Ant.2	19.0	18.52	0.12	Front	10	0.131	1.117	1.026	0.148	-
2 441	39	Bluetooth DH5	Ant.2	19.0	18.52	0.06	Right	10	0.043	1.117	1.026	0.049	-
2 441	39	Bluetooth DH5	Ant.2	19.0	18.52	0.12	Top	10	0.005	1.117	1.026	0.006	-
2 440	17	Bluetooth LE 1M	Ant.2	19.0	18.49	-0.16	Rear	10	0.083	1.125	1.007	0.094	-
2 440	17	Bluetooth LE 1M	Ant.2	19.0	18.49	-0.07	Front	10	0.082	1.125	1.007	0.093	-
2 440	17	Bluetooth LE 1M	Ant.2	19.0	18.49	0.01	Right	10	0.048	1.125	1.007	0.054	-
2 440	17	Bluetooth LE 1M	Ant.2	19.0	18.49	0.07	Top	10	0.006	1.125	1.007	0.007	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram					

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NTN B255 Body-worn SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	SC Size	SC offset	Duty cycle	Distance	Meas. SAR	Scaling Factor	The worst-case duty cycle [%]	Scaled SAR	Plot No.
MHz	Ch.			(kHz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)			(W/kg)	
1643.5	261674	BPSK	SUB2	200	23	22.39	0.11	Rear	0	1	11	1:1	10	**0.937**	1.151	70.8	**0.763**	**B35**
1626.6	261505	BPSK	SUB2	200	23	22.38	-0.12	Rear	0	1	11	1:1	10	0.804	1.153	70.8	0.656	-
1660.4	261843	BPSK	SUB2	200	23	22.19	-0.14	Rear	0	1	11	1:1	10	0.795	1.205	70.8	0.678	-
1643.5	261674	BPSK	SUB2	200	23	22.39	0.03	Front	0	1	11	1:1	10	0.678	1.151	70.8	0.552	-
1643.5	261674	BPSK	SUB2	200	23	22.39	-0.08	Rear	0	1	11	1:1	10	0.86	1.151	70.8	0.700	#
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

Note: # Data entry indicate Variability measurement.

The scaled SAR results are calculated to reflect the worst case duty cycle of the device that can be operated in the real satellite network environment.

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13.1.3 Phablet SAR Measurement Considerations

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.

13.1.4 Phablet SAR Measurement Results

NTN B255 Phablet SAR _10g																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	SC Size	SC offset	Duty cycle	Distance	Meas. SAR	Scaling Factor	The worst-case duty cycle	Scaled SAR	Plot No.
Mhz	Ch.			(khz)	(dBm)	(dBm)	(dB)		(dB)				(mm)	(W/kg)		[%]	(W/kg)	
1643.5	261674	BPSK	Sub 2	200	23	22.39	-0.13	Rear	0	1	11	1:1	0	2.11	1.151	70.8	1.718	-
1626.6	261505	BPSK	Sub 2	200	23	22.38	-0.16	Rear	0	1	11	1:1	0	1.95	1.153	70.8	1.591	-
1660.4	261843	BPSK	Sub 2	200	23	22.19	-0.12	Rear	0	1	11	1:1	0	1.72	1.205	70.8	1.467	-
1643.5	261674	BPSK	Sub 2	200	23	22.39	-0.13	Front	0	1	11	1:1	0	2.37	1.151	70.8	1.930	-
1626.6	261505	BPSK	Sub 2	200	23	22.38	-0.15	Front	0	1	11	1:1	0	1.99	1.153	70.8	1.624	-
1660.4	261843	BPSK	Sub 2	200	23	22.19	-0.1	Front	0	1	11	1:1	0	2.18	1.205	70.8	1.859	-
1643.5	261674	BPSK	Sub 2	200	23	22.39	-0.16	Left	0	1	11	1:1	0	1.04	1.151	70.8	0.847	-
1643.5	261674	BPSK	Sub 2	200	23	22.39	-0.13	Top	0	1	11	1:1	0	3.11	1.151	70.8	2.533	-
1626.6	261505	BPSK	Sub 2	200	23	22.38	-0.01	Top	0	1	11	1:1	0	**3.19**	1.153	70.8	**2.603**	C1
1660.4	261843	BPSK	Sub 2	200	23	22.19	-0.11	Top	0	1	11	1:1	0	2.97	1.205	70.8	2.532	-
1626.6	261505	BPSK	Sub 2	200	23	22.38	-0.11	Top	0	1	11	1:1	0	3.18	1.153	70.8	2.594	#
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Hand 4.0 W/kg Averaged over 10 gram									

Note: # Data entry indicate Variability measurement.

The scaled SAR results are calculated to reflect the worst case duty cycle of the device that can be operated in the real satellite network environment.

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5 GHz WLAN Phablet SAR _10g																	
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																
5 270	54	802.11n	Ant.1	40	MCS0	18.0	17.97	0.02	Rear	92.0	0	14.5	0.765	1.007	1.087	0.837	-
5 270	54	802.11n	Ant.1	40	MCS0	18.0	17.97	0.05	Front	92.0	0	12.3	0.507	1.007	1.087	0.555	-
5 270	54	802.11n	Ant.1	40	MCS0	18.0	17.97	0.15	Left	92.0	0	58.0	1.87	1.007	1.087	2.047	-
5 300	60	802.11a	Ant.1	20	6Mbps	18.0	17.80	-0.19	Left	93.6	0	59.5	1.93	1.047	1.068	2.159	-
5 270	54	802.11n	Ant.1	40	MCS0	18.0	17.97	-0.09	Top	92.0	0	10.1	0.363	1.007	1.087	0.397	-
5 690	138	802.11ac	Ant.1	80	MCS0	18.0	17.03	-0.11	Rear	92.4	0	12.1	0.613	1.250	1.082	0.829	-
5 690	138	802.11ac	Ant.1	80	MCS0	18.0	17.03	-0.03	Front	92.4	0	24.5	0.682	1.250	1.082	0.923	-
5 690	138	802.11ac	Ant.1	80	MCS0	18.0	17.03	-0.1	Left	92.4	0	67.3	2.05	1.250	1.082	2.773	-
5 660	122	802.11ac	Ant.1	80	MCS0	18.0	16.75	-0.16	Left	92.4	0	66.5	2.06	1.334	1.082	2.974	-
5 690	138	802.11ac	Ant.1	80	MCS0	18.0	17.03	0.03	Top	92.4	0	6.1	0.252	1.250	1.082	0.341	-
5 660	122	802.11ac	Ant.1	80	MCS0	18.0	16.75	-0.02	Left	92.4	0	67.9	2.07	1.334	1.082	**2.989**	#
5 855	171	802.11ac	Ant.1	80	MCS0	18.0	17.17	0.04	Rear	92.4	0	13.5	0.697	1.211	1.082	0.913	-
5 855	171	802.11ac	Ant.1	80	MCS0	18.0	17.17	-0.02	Front	92.4	0	17.8	0.522	1.211	1.082	0.684	-
5 855	171	802.11ac	Ant.1	80	MCS0	18.0	17.17	-0.06	Left	92.4	0	65.8	1.93	1.211	1.082	2.529	-
5 855	171	802.11ac	Ant.1	80	MCS0	18.0	17.17	0.20	Top	92.4	0	4.72	0.264	1.211	1.082	0.346	-
5 270	54	802.11n	Ant.2	40	MCS0	18.0	17.56	0.03	Rear	92.0	0	11.8	0.671	1.107	1.087	0.807	-
5 270	54	802.11n	Ant.2	40	MCS0	18.0	17.56	-0.04	Front	92.0	0	1.92	0.447	1.107	1.087	0.538	-
5 270	54	802.11n	Ant.2	40	MCS0	18.0	17.56	-0.06	Right	92.0	0	0.728	0.039	1.107	1.087	0.047	-
5 270	54	802.11n	Ant.2	40	MCS0	18.0	17.56	0.03	Top	92.0	0	0.775	0.189	1.107	1.087	0.227	-
5 690	138	802.11ac	Ant.2	80	MCS0	18.0	17.69	-0.04	Rear	92.4	0	12.5	0.599	1.074	1.082	0.696	-
5 690	138	802.11ac	Ant.2	80	MCS0	18.0	17.69	-0.07	Front	92.4	0	4.54	0.259	1.074	1.082	0.301	-
5 690	138	802.11ac	Ant.2	80	MCS0	18.0	17.69	-0.18	Right	92.4	0	1.48	0.265	1.074	1.082	0.308	-
5 690	138	802.11ac	Ant.2	80	MCS0	18.0	17.69	0.02	Top	92.4	0	1.30	0.231	1.074	1.082	0.269	-
5 855	171	802.11ac	Ant.2	80	MCS0	18.0	16.82	-0.19	Rear	92.4	0	12.0	0.713	1.312	1.082	1.012	-
5 855	171	802.11ac	Ant.2	80	MCS0	18.0	16.82	-0.06	Front	92.4	0	2.67	0.190	1.312	1.082	0.270	-
5 855	171	802.11ac	Ant.2	80	MCS0	18.0	16.82	-0.04	Right	92.4	0	5.99	0.220	1.312	1.082	0.312	-
5 855	171	802.11ac	Ant.2	80	MCS0	18.0	16.82	-0.03	Top	92.4	0	2.27	0.194	1.312	1.082	0.275	-
5 270	54	802.11n	MIMO	40	MCS8	21.0	20.78	-0.02	Rear	92.0	0	11.5	0.715	1.107	1.087	0.860	-
5 270	54	802.11n	MIMO	40	MCS8	21.0	20.78	0.16	Front	92.0	0	12.9	0.507	1.107	1.087	0.610	-
5 270	54	802.11n	MIMO	40	MCS8	21.0	20.78	-0.15	Left	92.0	0	12.0	1.81	1.107	1.087	2.178	-
5 300	60	802.11a	MIMO	20	6Mbps	21.0	20.54	-0.06	Left	93.6	0	70.1	**2.27**	1.189	1.068	**2.883**	C2
5 270	54	802.11n	MIMO	40	MCS8	21.0	20.78	-0.02	Right	92.0	0	1.23	0.052	1.107	1.087	0.063	-
5 270	54	802.11n	MIMO	40	MCS8	21.0	20.78	-0.06	Top	92.0	0	9.18	0.352	1.107	1.087	0.424	-
5 300	60	802.11a	MIMO	20	6Mbps	21.0	20.54	-0.08	Left	93.6	0	67.6	2.24	1.189	1.068	2.844	#
5 690	138	802.11ac	MIMO	80	MCS0	21.0	20.39	-0.05	Rear	92.4	0	12.2	0.642	1.250	1.082	0.869	-
5 690	138	802.11ac	MIMO	80	MCS0	21.0	20.39	-0.06	Front	92.4	0	13.1	0.474	1.250	1.082	0.641	-
5 690	138	802.11ac	MIMO	80	MCS0	21.0	20.39	-0.09	Left	92.4	0	64.3	1.85	1.250	1.082	2.503	-
5 660	122	802.11ac	MIMO	80	MCS0	21.0	20.08	-0.06	Left	92.4	0	59.4	1.84	1.334	1.082	2.656	-
5 690	138	802.11ac	MIMO	80	MCS0	21.0	20.39	0.11	Right	92.4	0	4.17	0.138	1.250	1.082	0.187	-
5 690	138	802.11ac	MIMO	80	MCS0	21.0	20.39	-0.06	Top	92.4	0	5.05	0.225	1.250	1.082	0.304	-
5 855	171	802.11ac	MIMO	80	MCS0	21.0	20.01	-0.19	Rear	92.4	0	3.10	0.614	1.312	1.082	0.872	-
5 855	171	802.11ac	MIMO	80	MCS0	21.0	20.01	0.11	Front	92.4	0	1.59	0.506	1.312	1.082	0.718	-
5 855	171	802.11ac	MIMO	80	MCS0	21.0	20.01	0.17	Left	92.4	0	12.0	1.79	1.312	1.082	**2.542**	-
5 855	171	802.11ac	MIMO	80	MCS0	21.0	20.01	0.12	Right	92.4	0	0.924	0.185	1.312	1.082	0.263	-
5 855	171	802.11ac	MIMO	80	MCS0	21.0	20.01	-0.05	Top	92.4	0	0.967	0.199	1.312	1.082	0.283	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Hand 4.0 W/kg Averaged over 10 gram							

Note: # Data entry indicate Variability measurement.

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6 GHz WLAN Phablet SAR _10g																
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
6 985	207	802.11ax	Ant.1	160	MCS0	9.0	8.97	0.01	Rear	99.6	0	0.084	1.268	1.004	0.107	-
6 985	207	802.11ax	Ant.1	160	MCS0	9.0	8.97	0.04	Front	99.6	0	0.112	1.268	1.004	0.143	-
6 985	207	802.11ax	Ant.1	160	MCS0	9.0	8.97	-0.15	Left	99.6	0	0.242	1.268	1.004	0.308	-
6 985	207	802.11ax	Ant.1	160	MCS0	9.0	8.97	-0.12	Top	99.6	0	0.024	1.268	1.004	0.031	-
6 025	15	802.11ax	Ant.1	160	MCS0	9.0	8.80	-0.10	Left	99.6	0	0.242	1.318	1.004	0.320	-
6 185	47	802.11ax	Ant.1	160	MCS0	9.0	8.91	-0.17	Left	99.6	0	0.288	1.285	1.004	**0.372**	C3
6 505	111	802.11ax	Ant.1	160	MCS0	9.0	8.04	-0.10	Left	99.6	0	0.184	1.570	1.004	0.290	-
6 665	143	802.11ax	Ant.1	160	MCS0	9.0	8.08	-0.12	Left	99.6	0	0.173	1.556	1.004	0.270	-
6 985	207	802.11ax	Ant.2	160	MCS0	9.0	8.96	-0.03	Rear	99.6	0	0.085	1.271	1.004	0.108	-
6 985	207	802.11ax	Ant.2	160	MCS0	9.0	8.96	-0.03	Front	99.6	0	0.011	1.271	1.004	0.014	-
6 985	207	802.11ax	Ant.2	160	MCS0	9.0	8.96	0.02	Right	99.6	0	0.004	1.271	1.004	0.005	-
6 985	207	802.11ax	Ant.2	160	MCS0	9.0	8.96	0.00	Top	99.6	0	0.006	1.271	1.004	0.008	-
6 025	15	802.11ax	Ant.2	160	MCS0	9.0	8.88	0.08	Rear	99.6	0	0.067	1.294	1.004	0.087	-
6 185	47	802.11ax	Ant.2	160	MCS0	9.0	8.85	-0.01	Rear	99.6	0	0.068	1.303	1.004	0.089	-
6 505	111	802.11ax	Ant.2	160	MCS0	9.0	8.96	0.03	Rear	99.6	0	0.071	1.271	1.004	0.091	-
6 665	143	802.11ax	Ant.2	160	MCS0	9.0	8.34	0.05	Rear	99.6	0	0.051	1.466	1.004	0.075	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.08	Rear	99.6	0	0.043	1.271	1.004	0.055	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.06	Front	99.6	0	0.070	1.271	1.004	0.089	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.10	Left	99.6	0	0.119	1.271	1.004	0.152	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.14	Right	99.6	0	0.009	1.271	1.004	0.011	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.01	Top	99.6	0	0.032	1.271	1.004	0.041	-
6 025	15	802.11ax	MIMO	160	MCS0	13.0	11.85	-0.04	Left	99.6	0	0.235	1.294	1.004	0.305	-
6 185	47	802.11ax	MIMO	160	MCS0	13.0	11.89	-0.03	Left	99.6	0	0.241	1.303	1.004	0.315	-
6 505	111	802.11ax	MIMO	160	MCS0	13.0	11.53	-0.07	Left	99.6	0	0.168	1.570	1.004	0.265	-
6 665	143	802.11ax	MIMO	160	MCS0	13.0	11.22	-0.06	Left	99.6	0	0.032	1.556	1.004	0.050	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Hand 4.0 W/kg Averaged over 10 gram						

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NFC Phablet SAR _10g							
Frequency	Mode	Data Rate	Power Drift	Test Position	Distance	Meas. SAR	Plot No.
Mhz		(Kbps)	(dB)		(mm)	(W/kg)	
13.56	NFC (Type A)	106	0.12	Rear	0	**0.017**	**C4**
13.56	NFC (Type B)	106	-0.15	Rear	0	0.017	-
13.56	NFC (Type F)	106	0.00	Rear	0	0	-
13.56	NFC (Type A)	106	0.13	Front	0	0	-
13.56	NFC (Type A)	106	0.18	Left	0	0	-
13.56	NFC (Type A)	106	0.11	Right	0	0	-
13.56	NFC (Type A)	106	0.19	Top	0	0	-
13.56	NFC (Type A)	106	0.15	Bottom	0	0	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population			Hand 4.0 W/kg Averaged over 10 gram				

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13.2 Absorbed Power Density Results

13.2.1 Head Absorbed Power Density Results

6 GHz WLAN Absorbed Power Density											
Frequency		Mode	Ant. No.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Meas. APD 4 ㎠ (mW/cm²)	Plot No.
MHz	Ch.										
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	-0.04	Left Touch	0.0273	-
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	0.00	Left Tilt	0.0208	-
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	0.00	Right Touch	0.0524	-
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	0.00	Right Tilt	0.0328	-
6 025	15	802.11ax	Ant.1	160	MCS0	10.0	8.80	0.00	Right Touch	0.0648	-
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.00	Right Touch	0.0802	-
6 505	111	802.11ax	Ant.1	160	MCS0	10.0	8.04	0.00	Right Touch	0.0584	-
6 665	143	802.11ax	Ant.1	160	MCS0	10.0	8.08	0.00	Right Touch	0.0481	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	-0.04	Left Touch	0.0156	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	0.01	Left Tilt	0.012	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	-0.05	Right Touch	0.0031	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	-0.01	Right Tilt	0.0032	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	0.09	Left Touch	0.0254	-
6 185	47	802.11ax	Ant.2	160	MCS0	10.0	8.85	0.01	Left Touch	0.0149	-
6 505	111	802.11ax	Ant.2	160	MCS0	10.0	8.96	0.03	Left Touch	0.0163	-
6 665	143	802.11ax	Ant.2	160	MCS0	10.0	8.34	0.00	Left Touch	0.0095	-
6 985	207	802.11ax	MIMO	160	MCS0	12.0	11.97	0.00	Left Touch	0.0175	-
6 985	207	802.11ax	MIMO	160	MCS0	12.0	11.97	0.00	Left Tilt	0.0204	-
6 985	207	802.11ax	MIMO	160	MCS0	12.0	11.97	0.00	Right Touch	0.0461	-
6 985	207	802.11ax	MIMO	160	MCS0	12.0	11.97	0.00	Right Tilt	0.032	-
6 025	15	802.11ax	MIMO	160	MCS0	12.0	11.85	0.05	Right Touch	0.0661	-
6 185	47	802.11ax	MIMO	160	MCS0	12.0	11.89	0.07	Right Touch	**0.0806**	D1
6 505	111	802.11ax	MIMO	160	MCS0	12.0	11.53	0.07	Right Touch	0.0541	-
6 665	143	802.11ax	MIMO	160	MCS0	12.0	11.22	0.00	Right Touch	0.0519	-

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13.2.1 Body/ Hotspot Absorbed Power Density Results

6 GHz WLAN Absorbed Power Density												
Frequency		Mode	Ant. No.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Distance (mm)	Meas. APD 4 ㎠ (mW/cm²)	Plot No.
MHz	Ch.											
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.11	Rear	10	0.0315	-
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.02	Front	10	0.0187	-
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.17	Left	10	0.0415	-
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.91	0.15	Top	10	0.0156	-
6 665	143	802.11ax	Ant.1	160	MCS0	10.0	8.08	-0.12	Left	10	0.0406	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	-0.08	Rear	10	0.023	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	-0.14	Front	10	0.001	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	-0.13	Right	10	0.0046	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	0.11	Top	10	0.0161	-
6 665	143	802.11ax	Ant.2	160	MCS0	10.0	8.34	0.07	Rear	10	0.0119	-
6 185	47	802.11ax	MIMO	160	MCS0	13.0	8.88	0.02	Rear	10	0.0348	-
6 185	47	802.11ax	MIMO	160	MCS0	13.0	8.88	0.00	Front	10	0.0166	-
6 185	47	802.11ax	MIMO	160	MCS0	13.0	8.88	-0.10	Left	10	0.0508	-
6 185	47	802.11ax	MIMO	160	MCS0	13.0	8.88	0.00	Right	10	0.0059	-
6 185	47	802.11ax	MIMO	160	MCS0	13.0	8.88	0.00	Top	10	0.0137	-
6 665	143	802.11ax	MIMO	160	MCS0	13.0	8.08	0.00	Left	10	**0.056**	D2

13.2.2 Body-worn Absorbed Power Density Results

6 GHz WLAN Absorbed Power Density Body-worn												
Frequency		Mode	Ant. No.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Distance (mm)	Meas. APD 4 ㎠ (mW/cm²)	Plot No.
MHz	Ch.											
6 985	207	802.11ax	1	160	MCS0	10.0	8.97	-0.12	Rear	10	**0.0321**	D3
6 985	207	802.11ax	1	160	MCS0	10.0	8.97	-0.19	Front	10	0.0068	-
6 985	207	802.11ax	2	160	MCS0	10.0	8.96	-0.16	Rear	10	0.0207	-
6 985	207	802.11ax	2	160	MCS0	10.0	8.96	0.02	Front	10	0.0013	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.06	Rear	10	0.0116	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.03	Front	10	0.0146	-

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13.2.3 Phablet Absorbed Power Density Results

6 GHz WLAN Absorbed Power Density Phablet												
Frequency		Mode	Ant. No.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Distance (mm)	Meas. APD 4 ㎠ (mW/cm²)	Plot No.
MHz	Ch.											
6 985	207	802.11ax	1	160	MCS0	10.0	8.97	0.01	Rear	0	0.201	-
6 985	207	802.11ax	1	160	MCS0	10.0	8.97	0.04	Front	0	0.264	-
6 985	207	802.11ax	1	160	MCS0	10.0	8.97	-0.15	Left	0	0.583	-
6 985	207	802.11ax	1	160	MCS0	10.0	8.97	-0.12	Top	0	0.0571	-
6 025	15	802.11ax	1	160	MCS0	10.0	8.80	-0.10	Left	0	0.589	-
6 185	47	802.11ax	1	160	MCS0	10.0	8.91	-0.17	Left	0	**0.697**	**D4**
6 505	111	802.11ax	1	160	MCS0	10.0	8.04	-0.10	Left	0	0.449	-
6 665	143	802.11ax	1	160	MCS0	10.0	8.08	-0.12	Left	0	0.426	-
6 985	207	802.11ax	2	160	MCS0	10.0	8.96	-0.03	Rear	0	0.201	-
6 985	207	802.11ax	2	160	MCS0	10.0	8.96	-0.03	Front	0	0.0259	-
6 985	207	802.11ax	2	160	MCS0	10.0	8.96	0.02	Right	0	0.0084	-
6 985	207	802.11ax	2	160	MCS0	10.0	8.96	0.00	Top	0	0.0151	-
6 025	15	802.11ax	2	160	MCS0	10.0	8.88	0.08	Rear	0	0.158	-
6 185	47	802.11ax	2	160	MCS0	10.0	8.85	-0.01	Rear	0	0.160	-
6 505	111	802.11ax	2	160	MCS0	10.0	8.96	0.03	Rear	0	0.166	-
6 665	143	802.11ax	2	160	MCS0	10.0	8.34	0.05	Rear	0	0.120	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.08	Rear	0	0.105	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.06	Front	0	0.170	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.10	Left	0	0.281	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.14	Right	0	0.0208	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.01	Top	0	0.0733	-
6 025	15	802.11ax	MIMO	160	MCS0	13.0	11.85	-0.04	Left	0	0.577	-
6 185	47	802.11ax	MIMO	160	MCS0	13.0	11.89	-0.03	Left	0	0.589	-
6 505	111	802.11ax	MIMO	160	MCS0	13.0	11.53	-0.07	Left	0	0.403	-
6 665	143	802.11ax	MIMO	160	MCS0	13.0	11.22	-0.06	Left	0	0.106	-

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13.3 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, FCC KDB Procedure.
2. Batteries are fully charged at the beginning of the SAR measurements. A standard battery was used for all SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB 447498 D01v06.
6. Device was tested using a fixed spacing for body-worn accessory testing. A separation distance of 10 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.
7. Per FCC KDB 648474 D04v01r03, SAR was evaluated without a headset connected to the device. Since the standalone reported SAR was 1.2 W/kg, no additional SAR evaluation using a headset cable were required.
8. Per KDB 648474 D04v01r03, this device is considered a "Phablet" since the diagonal dimension is > 160 mm and < 200 mm. When hotspot mode applies, extremity SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (with tolerance) is 1 g SAR > 1.2 W/kg.
9. Per FCC KDB 865664 D01v01r04, variability SAR measurement were performed when the measured SAR results for a frequency Band were greater than or equal to 0.8 W/kg for 1g SAR and >2 for 10g SAR Please see Section 15 for variability analysis.
10. This device utilizes power reduction for some wireless mode and technologies, as outlined in sec. 4 The maximum output power allowed for each transmitter and exposure condition was evaluated for SAR compliance based on expected use conditions and simultaneous scenarios.
11. During SAR testing for the Hotspot conditions per KDB 941225 D06v02r01, the actual portable hotspot operation (with actual simultaneous transmission of a transmitter with WiFi) was not activated.
12. Per FCC guidance SAR was performed using 6.5 ㎓ SAR probe calibration factors. Per October 2020 TCBC Workshop notes, 5 channels were tested. Absorbed power density(APD) using a 4 ㎠ averaging area is reported based on SAR measurements.

GSM/GPRS Test Notes:

1. This EUT'S GSM and GPRS device class is B.
2. This device supports GPRS VOIP in the head and the body-worn configurations therefore GPRS was additionally evaluated for head and body-worn compliance.
3. Justification for reduced test configurations per KDB 941225 D01v03r01: The source-based time-averaged output power was evaluated for all multi-slot operations. The multi-slot configuration with the highest frame averaged output power including tolerance was evaluated for SAR.
4. Per FCC KDB 447498 D04v01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is 0.8 W/kg then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is 1/2 dB, instead of the middle channel, the highest output power channel must be used.

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UMTS Notes:

1. The 12.2 kbps RMC mode is the primary mode per KDB 941225 D01v03r01.
2. UMTS SAR was tested under RMC 12.2 kbps with HSPA inactive per KDB publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
3. Per FCC KDB 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is 0.8 W/kg then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the channel highest output power channel was used.

LTE Notes:

1. LTE Considerations: LTE test configurations are determined according to SAR Evaluation Consideration for LTE Devices in FCC KDB 941225 D05v02r05.
2. According to FCC KDB 941225 D05v02r05:
   When the reported SAR is 0.8 W/kg, testing of the 100% RB allocation and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the 1RB, 50%RB and 100%RB allocation with highest output power for that channel.
   Only one channel, and as reported SAR values for 1RB allocation and 50%RB allocation were less than 1.45W/Kg only the highest power RB offset for each allocation was required.
3. 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 target MPR is indicated alongside the SAR results.
4. When Power reduction is applied, MPR is 0 for some modes.
5. A-MPR was disabled for all SAR tests by setting NS=01 on the base station simulator.
6. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) LTE TDD Band 41 SAR measured at the highest output power channel for each test configuration is 0.6 W/kg then testing at the other channels is not required for such test configurations.
7. TDD LTE (Power Class 3) was tested using UL-DL configuration 0 with 6 UL sub frames and 2S sub frames using extended cyclic prefix only and special sub frame configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Sec. 4, the duty factor using extended cyclic prefix is 0.633(cf=1.58).
8. Per KDB 941225 D05Av01r02, SAR for LTE Carrier Aggregation operations was not needed because the maximum average output power in LTE CA mode was not > 0.25 dB higher than the maximum output power when downlink CA was not activated.
9. This device supports LTE Carrier Aggregation (CA) in Uplink for LTE Band 48C with two component carriers in the uplink. SAR measurements and conducted powers were evaluated per Fall 2017 TCBC Workshop notes (LTE Carrier aggregation).
   For LTE Band per 2018 TCBC Workshop notes, SAR was first measured with only a single carrier active in the uplink (carrier aggregation not active). For each exposure condition, the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when carrier aggregation was not active.
   Because the maximum output for UL CA of LTE Band 48C is ≤ standalone LTE mode (without CA), SAR for LTE Band 48C Up link CA was performed at the highest standalone SAR configuration without CA and also UL CA SAR is not required for all required test channels, Because the reported SAR for UL CA configuration is < 1.4 W/kg.
   The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power.
10. SAR test reduction is applied using the following criteria:
    Start with the largest channel Bandwidth and measure SAR for QPSK with 1 RB, and 50 % RB allocation, using the RB offset and required test channel combination with the highest maximum

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output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is >0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50 % RB configuration for that channel. Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are >0.8 W/kg, testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation <1.45 W/kg. Testing for 16-QAM modulation is not required because the reported SAR for QPSK is <1.45 W/kg and its output power is not more than 0.5 dB higher than that a QPSK. Testing for the other channel Bandwidths is not required because the reported SAR for the highest channel Bandwidth is <1.45 W/kg and its output power is not more than 0.5 dB higher than that of the highest channel Bandwidth.

NR Notes:

1. NTN This device supports SA and NSA mode for NR implementation. In EN-DC Mode, NR operate with the LTE Bands shown in the NR FR1 checklist acting as anchor Bands.
2. Due to Limitations of the SAR measurement equipment, SAR testing for NR Bands was performed separately using test mode (FTM) software.
3. More detailed specifications of the NR Bands are contained in the technical description document.
4. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
5. For NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power was evaluated for SAR tests.

NTN(Non-terrestrial Network) Notes:

1. The NTN B255 SAR test was performed in FTM mode at 100% duty cycle.
2. The scaled SAR results are calculated to reflect the worst case duty cycle of the device that can be operated in the real satellite network environment.
3. The NTN B255 only support message transmission, therefore, the RF Exposure only consider body-worn and extremity condition.

WLAN Notes:

1. For held-to-ear and hotspot operations, the initial test position procedures were applied. For initial test position, the highest extrapolated peak SAR will be used. 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 positions was required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR results is ≤ 0.8 W/kg for 1g SAR and ≤ 2.0 W/kg for 10 g SAR or all test position are measured.
2. Per KDB 2482227 D01v02r02 justification for test configurations of 2.4 GHz WiFi Single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement.

3. Per KDB 2482227 D01v02r02 justification for test configurations of 5 GHz WiFi Single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission mode was not investigated since the highest reported SAR for initial test configuration adjusted by the ration of maximum output powers is less than 1.2 W/kg for 1 g SAR and less than 3.0 W/kg for 10 g SAR.

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4. When the maximum reported 1g averaged SAR is ≤ 0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg or all test channels were measured.
5. The device was configured to transmit continuously at the required data rated, channel Bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated WLAN test reports.
6. WIFI 6 GHz operations are supported by SISO and MIMO both. WLAN Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D01v06 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is <1.6 W/kg, no additional SAR measurements for MIMO are required.
7. For testing the WIFI 6 GHz of this DUT, the selection of test channels was based on FCC guidance, with five channels selected across the entire WIFI 6 GHz Bands.
8. The device was configured to transmit continuously at the required data rated, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated WLAN test reports.
9. For testing the WIFI 6 GHz of this DUT, the selection of test channels was based on FCC guidance, with five channels selected across the entire WIFI 6 GHz Bands.

Bluetooth Notes:

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests mode type. In the technical documentation, the maximum duty factor of the declared BT was applied to the SAR results. Please see sec.11 for the time-domain plot and calculation for duty factor of the device.
2. Head and Bluetooth tethering SAR were evaluated for BT BDR tethering applications.

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13.4 6 GHz WLAN Power Density Results

6 GHz z WLAN Power Density																		
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Distance (mm)	Test Position	Duty Cycle	Grid Step (λ)	Scaling Factor for Measurement Uncertainty per IEC 62479	Normal psPD (mW/㎠)	Scaled Normal psPD (mW/㎠)	Total psPD (mW/㎠)	Reported 4 ㎠ psPD (mW/㎠)	Plot No.
MHz	Ch.																	
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	0.01	2	Rear	99.6	0.044	1.116	0.0876	0.098	0.15	0.167	-
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	0.04	2	Front	99.6	0.044	1.116	0.0772	0.086	0.121	0.135	-
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	-0.15	2	Left	99.6	0.044	1.116	0.305	0.340	0.637	0.711	-
6 985	207	802.11ax	Ant.1	160	MCS0	10.0	8.97	-0.12	2	Top	99.6	0.044	1.116	0.0379	0.042	0.0728	0.081	-
6 025	15	802.11ax	Ant.1	160	MCS0	10.0	8.80	-0.10	2	Left	99.6	0.044	1.116	0.276	0.308	0.574	0.641	-
6 505	111	802.11ax	Ant.1	160	MCS0	10.0	8.91	-0.17	2	Left	99.6	0.044	1.116	0.255	0.285	0.526	0.587	-
6 665	143	802.11ax	Ant.1	160	MCS0	10.0	8.04	-0.10	2	Left	99.6	0.044	1.116	0.265	0.296	0.501	0.559	-
6 185	47	802.11ax	Ant.1	160	MCS0	10.0	8.08	-0.12	2	Left	99.6	0.044	1.116	0.349	0.389	0.708	**0.790**	D5
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	-0.03	2	Rear	99.6	0.044	1.116	0.0647	0.072	0.135	0.151	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	-0.03	2	Front	99.6	0.044	1.116	0.0441	0.049	0.0839	0.094	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	0.02	2	Right	99.6	0.044	1.116	0.0135	0.015	0.0206	0.023	-
6 985	207	802.11ax	Ant.2	160	MCS0	10.0	8.96	0.00	2	Top	99.6	0.044	1.116	0.0224	0.025	0.0395	0.044	-
6 025	15	802.11ax	Ant.2	160	MCS0	10.0	8.88	0.08	2	Rear	99.6	0.044	1.116	0.112	0.125	0.181	0.202	-
6 505	111	802.11ax	Ant.2	160	MCS0	10.0	8.85	-0.01	2	Rear	99.6	0.044	1.116	0.107	0.119	0.222	0.248	-
6 665	143	802.11ax	Ant.2	160	MCS0	10.0	8.96	0.03	2	Rear	99.6	0.044	1.116	0.0878	0.098	0.169	0.189	-
6 185	47	802.11ax	Ant.2	160	MCS0	10.0	8.34	0.05	2	Rear	99.6	0.044	1.116	0.0878	0.098	0.172	0.192	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.08	2	Rear	99.6	0.044	1.116	0.0692	0.077	0.139	0.155	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.06	2	Front	99.6	0.044	1.116	0.0443	0.049	0.114	0.127	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.10	2	Left	99.6	0.044	1.116	0.227	0.253	0.437	0.488	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	0.14	2	Right	99.6	0.044	1.116	0.0233	0.026	0.0439	0.049	-
6 985	207	802.11ax	MIMO	160	MCS0	13.0	11.97	-0.01	2	Top	99.6	0.044	1.116	0.0871	0.097	0.145	0.162	-
6 025	15	802.11ax	MIMO	160	MCS0	13.0	11.85	-0.04	2	Left	99.6	0.044	1.116	0.315	0.352	0.623	0.695	-
6 505	111	802.11ax	MIMO	160	MCS0	13.0	11.89	-0.03	2	Left	99.6	0.044	1.116	0.2	0.223	0.22	0.246	-
6 665	143	802.11ax	MIMO	160	MCS0	13.0	11.53	-0.07	2	Left	99.6	0.044	1.116	0.273	0.305	0.596	0.665	-
6 185	47	802.11ax	MIMO	160	MCS0	13.0	11.22	-0.06	2	Left	99.6	0.044	1.116	0.359	0.401	0.676	**0.754**	
47 CFR §1.1310 – Safety Limit Spatial Average Uncontrolled Exposure/ General Population															Power Density 1mW/㎠ Averaged over 4 ㎠			

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Power Density General Notes:

1. manufacturer has confirmed that the device tested have the same The physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results
3. DASY6 Module mmWave is optimized for incident Power Density (PD) evaluations EUT at distances as close as 2mm for frequencies in the 6–110 GHz range.
4. The software Module mmWave V3.0+ features the novel Equivalent Source Reconstruction (ESR)method:
   This new method will greatly simplify compliance testing for distances as close as λ/25 (2mm at 6 GHz) from any surface and improve the overall flexibility and precision. With this method, the reconstruction uncertainty (REC) is below 0.6 dB For d ≥ λ/25, corresponding to a test distance of 2mm at 6 GHz. The above-mentioned REC value is valid if the following conditions on the grid resolution (ℓ_{grid}) and grid extent (ν_{grid}) are met:

$$\ell_{grid} = \begin{cases} 1.25d & \text{for } d < \lambda/10 \\ \lambda/8 & \text{for } d > \lambda/10 \end{cases}$$

$$\nu_{grid} \geq 2\lambda$$

   Power density was calculated by repeated E-field measurements on two measurement planes separated by λ/4.
5. 5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
6. 6. Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty >30%. Total expanded uncertainty of 1.51 dB(41.6%) was used to determine the psPD measurement scaling factor.

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14. Simultaneous Transmission Analysis

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per FCC KDB Publication 447498 D01v06 and IEEE 1528-2013 Section 6.3.4.1.2, simultaneous transmission SAR test exclusion may be applied when the sum of the 1g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤1.6 W/kg. The different test positions in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1g or 10g SAR.

Per FCC KDB Publication 941225 D06v02r01, the devices edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR.
This device is enabled with Qualcomm® Smart Transmit Gen2 with pre-defined antenna groups (AG0 and AG1). Simultaneous transmission analysis is performed per antenna groups. Below analysis demonstrates the mutually exclusive operation of AG0 and AG1, and the compliance between each antenna group with non-Smart Transmit Radios. For this model, WWAN/WLAN/BT/mmWave Radios are managed under Smart Transmit. The validation of the time-averaging algorithm and compliance under the Tx varying transmission scenario for 5G mmWave/WWAN/WLAN/BT technologies are reported in Part 2 Report. Non-Smart Transmit Radios include NFC and NTN.
The model operates in two modes: “cellular mode”, a normal usage mode controlled by WWAN including 5G FR2 and WLAN/BT Smart transmit algorithm, and “satellite mode”, which supports only satellite communication in Special circumstances when cellular mode is not available

This device supports two AGs: AG0 and AG1, with AG0 having 4 antennas (Main1, Main 2, Main 3, Main 4) and AG1 having 5 antennas (sub 1, sub 2, sub 4, sub 5, sub 6) for DSI=1 and 0 conditions, The M patch antenna was not considered in the TER analysis because it is considered to be collocated with antenna groups AG0 and AG1, The M patch modules is assumed to be collocated with each sub6 AG.

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AG0, AG1 are described in the table below.

Antenna Groups for Cellular mode

AG0	
Main 1	GSM850, GSM1900, WCDMA 2/4/5, LTE 2/4/5/12/13/14/25/26/30/66/71 NR n2/n5/n12/n14/n25/n26/n30/n66/n70/n71
Main 2	LTE 7/38/41, NR n7/n41, NR n41 SRS 2
Main 3	NR 48 SRS 2, NR 77 SRS 2, NR 78 SRS 2
Main 4	NR n41 SRS 3, NR n48 SRS 4, NR n77 SRS 4, NR n78 SRS 4

AG1	
Sub 1	GSM 850, WCDMA 5, LTE 12/13/14/26//71, NR n12/n14/n26/n71 NR 41 SRS 4, WLAN 5GHz/6GHz ANT 2
Sub 2	LTE 2/4/7/25//30/38/41/66, NR n2/n7/n25/n30/n41/n48/n77/n78, NR n41 SRS 2
Sub 4	WLAN 2.4GHz/ ANT 1, Bluetooth ANT 1, WLAN 5GHz/6GHz ANT 1
Sub 5	NR n48 SRS 3, NR n77 SRS 3, NR 78 SRS 3
Sub 6	WLAN 2.4GHz ANT 2, Bluetooth ANT 2

ER(External Radio)	
ANT L	NFC

Antenna Groups for satellite mode

Satellite mode Radio	
ANT L	NFC
Sub 2	NTN B255

The TER evaluation between antenna groups for this model of the Smart Transmit GEN 2 sub 6 was performed in accordance with Qualcomm Guidance 80-W2112-4 Appendix K in compliance with D01v06 and IEEE 1528- 2013 Section 6.3.4.1 and TER evaluation is included in Appendices N and L.

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15. SAR Measurement Variability and Uncertainty

In accordance with KDB procedure 865664 D01v01r04 SAR measurement 100 ㎒ to 6 ㎓, SAR additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency Band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement variability was assessed using the following procedures for each frequency Band:

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg for 1g SAR or < 2.0 W/kg for 10g SAR; steps 2) through 4) do not apply.

2) When the original highest measured 1g SAR is ≥ 0.80 W/kg or 10g SAR ≥ 2.0W/kg, repeat that measurement once.

3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg for 1g SAR or ≥ 3.625 W/kg for 10g SAR (~ 10% from the 1-g SAR limit).

4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg for 1g SAR or ≥3.75 W/kg for 10g SAR and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20. 1.08

Head SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
㎒	Channel					
1 720	132072	LTE FDD Band 66 (SUB2 Ant.)	Right Touch	0.840	0.900	1.07

Body/ Hotspot SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
㎒	Channel					
1 907.6	9538	UMTS Band 2 (MAIN1 ANT)	Bottom	0.980	0.957	1.02
1 702.5	340500	NR Band n70 (MAIN1 ANT)	Bottom	0.892	0.808	1.10
1643.5	261674	NTN B255	Rear	0.937	0.860	1.09

Phablet SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
㎒	Channel					
1 626.6	261505	NTN B255	Top	3.19	3.18	1.00
5 300	60	5 ㎓ WLAN (MIMO)	Left	2.27	2.24	1.01
5 660	122	5 ㎓ WLAN (Ant.1)	Left	2.06	2.07	1.00

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16. Antenna Impedance tuner testing

Per April 2019 TCB Workshop Notes, the following test procedures were followed to demonstrate that the SAR results in Section 11 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Per FCC Guidance, during NR testing the device was configured with the tuner state selected by the device in LTE mode with auto-tune active at the same frequency. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other than impedance matching.
To evaluate all the tuner states, the 96 tuner states were divided among the aggregate band, mode and exposure combinations. Single point time-sweep measurements were performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was > 1.2 W/kg for a
particular band/mode/exposure condition, point SAR measurements were made for all 96 states.
The operational description contains more information about the design and implementation of the dynamic antenna tuning.

1) Head SAR Configuration for AG0

GSM850		GSM1900		UMTS B5		UMTS B4	
GMSK GPRS 2Tx		GMSK GPRS 3Tx		RMC		RMC	
Test Position	Right Touch	Test Position	Left Touch	Test Position	Right Touch	Test Position	Left Touch
Frequency (MHz)	836.6	Frequency (MHz)	1880	Frequency (MHz)	836.6	Frequency (MHz)	1 732.4
Channel	190	Channel	661	Channel	4183	Channel	1412
Measured 1g SAR (W/kg)	0.103	Measured 1g SAR (W/kg)	0.096	Measured 1g SAR (W/kg)	0.147	Measured 1g SAR (W/kg)	0.127
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.222	Auto-tune (State 0)	0.119	Auto-tune (State 0)	0.147	Auto-tune (State 14)	0.075
Default (State 0)	0.191	Default (State 0)	0.108	Default (State 0)	0.141	Default (State 0)	0.071
State 1	0.218	State 2	0.051	State 3	0.137	State 4	0.072
State 20	0.132	State 21	0.104	State 22	0.076	State 23	0.111
State 39	0.125	State 40	0.095	State 41	0.076	State 42	0.063
State 58	0	State 59	0.044	State 60	0	State 61	0.073
State 77	0	State 78	0	State 79	0.106	State 80	0

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UMTS B2		LTE B12		LTE B13		LTE B71	
RMC		QPSK, 10 MHz , 1 RB, 49 RB		QPSK, 10 MHz, 1 RB, 49 RB Offset		QPSK, 20 MHz, 1 RB, 0 RB Offset	
Test Position	Left Touch	Test Position	Left Touch	Test Position	Left Touch	Test Position	Right Touch
Frequency (MHz)	1880	Frequency (MHz)	707.5	Frequency (MHz)	782	Frequency (MHz)	680.5
Channel	9400	Channel	23095	Channel	23230	Channel	133297
Measured 1g SAR(W/kg)	0.142	Measured 1g SAR(W/kg)	0.084	Measured 1g SAR (W/kg)	0.063	Measured 1g SAR (W/kg)	0.081
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.111	Auto-tune (State 45)	0.051	Auto-tune (State 12)	0.045	Auto-tune (State 12)	0.076
Default (State 0)	0.096	Default (State 0)	0.048	Default (State 0)	0.041	Default (State 0)	0.071
State 5	0.082	State 6	0	State 7	0.043	State 8	0.066
State 24	0.088	State 25	0.041	State 26	0.039	State 27	0.064
State 43	0.042	State 44	0.031	State 45	0.037	State 46	0.070
State 62	0.077	State 63	0.039	State 64	0.028	State 65	0.068
State 81	0.026	State 82	0	State 83	0.039	State 84	0.061

LTE B14		LTE B25		LTE B26		LTE B66	
QPSK, 10 MHz, 1 RB, 49 RB Offset		QPSK, 20 MHz, 1 RB, 0 RB Offset		QPSK, 15 MHz , 1 RB, 36 RB		QPSK, 20 MHz, 1 RB, 0 RB Offset	
Test Position	Left Touch	Test Position	Left Touch	Test Position	Left Touch	Test Position	Left Touch
Frequency (MHz)	793	Frequency (MHz)	1860	Frequency (MHz)	832	Frequency (MHz)	1720
Channel	23330	Channel	26140	Channel	26865	Channel	132072
Measured 1g SAR(W/kg)	0.061	Measured 1g SAR(W/kg)	0.139	Measured 1g SAR(W/kg)	0.078	Measured 1g SAR(W/kg)	0.194
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 45)	0.044	Auto-tune (State 1)	0.085	Auto-tune (State 0)	0.062	Auto-tune (State 22)	0.064
Default (State 0)	0.041	Default (State 0)	0.082	Default (State 0)	0.054	Default (State 0)	0.061
State 9	0.038	State 10	0.083	State 11	0.060	State 12	0.062
State 28	0.039	State 29	0.077	State 30	0.053	State 31	0.063
State 47	0.031	State 48	0.072	State 49	0.055	State 50	0.058
State 66	0.035	Sate 67	0.075	State 68	0.047	State 69	0.052
State 85	0.029	State 86	0.069	State 87	0.055	State 88	0.056

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NR Band n12		NR Band n14		NR Band n25	
QPSK, 15 MHz, 36 RB, 22 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 1 RB		QPSK, 40 MHz, 108 RB, 54 RB Offset	
Test Position	Right Touch	Test Position	Right Touch	Test Position	Left Touch
Frequency (MHz)	707.5	Frequency (MHz)	793	Frequency (MHz)	1882.5
Channel	141500	Channel	158600	Channel	376500
Measured 1g SAR(W/kg)	0.066	Measured 1g SAR(W/kg)	0.069	Measured 1g SAR(W/kg)	0.286
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 11)	0.054	Auto-tune (State 0)	0.043	Auto-tune (State 1)	0.043
Default (State 0)	0	Default (State 0)	0.071	Default (State 0)	0.040
State 13	0	State 14	0	State 15	0.040
State 32	0	State 33	0	State 34	0
State 51	0	State 52	0	State 53	0
Sate 70	0	State 71	0.061	State 72	0.041
State 89	0	State 90	0	State 91	0

NR Band n26		NR Band n66		NR Band n70		NR Band n71	
QPSK, 20 MHz, 50 RB, 28 RB Offset		QPSK, 45 MHz, 1 RB, 1 RB Offset		QPSK, 15 MHz 36 RB, 22 RB		QPSK, 35 MHz, 90 RB, 45 RB Offset	
Test Position	Right Touch	Test Position	Left Touch	Test Position	Left Touch	Test Position	Right Touch
Frequency (MHz)	831.5	Frequency (MHz)	1745	Frequency (MHz)	1702.5	Frequency (MHz)	680.5
Channel	166300	Channel	349000	Channel	340500	Channel	136100
Measured 1g SAR(W/kg)	0.101	Measured 1g SAR(W/kg)	0.237	Measured 1g SAR(W/kg)	0.181	Measured 1g SAR(W/kg)	0.085
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 3)	0.129	Auto-tune (State 18)	0.051	Auto-tune (State 19)	0.111	Auto-tune (State 12)	0.090
Default (State 0)	0.115	Default (State 0)	0.044	Default (State 0)	0.094	Default (State 0)	0.089
State 16	0.120	State 17	0.049	State 18	0.081	State 19	0.087
State 35	0.071	State 36	0.042	State 37	0.088	State 38	0
State 54	0.062	State 55	0	State 56	0	State 57	0
State 73	0	Sate 74	0	State 75	0	State 76	0.051
State 92	0.067	State 93	0	State 94	0	State 95	0

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2) Body SAR Configuration for AG0

GSM850		GSM1900		UMTS B5		UMTS B4	
GMSK GPRS 2Tx		GMSK GPRS 3Tx		RMC		RMC	
Test Position	Right	Test Position	Bottom	Test Position	Front	Test Position	Bottom
Spacing	10mm	Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	836.6	Frequency (MHz)	1880	Frequency (MHz)	836.6	Frequency (MHz)	1712.4
Channel	190	Channel	661	Channel	4183	Channel	1312
Measured 1g SAR(W/kg)	0.253	Measured 1g SAR(W/kg)	0.571	Measured 1g SAR(W/kg)	0.229	Measured 1g SAR(W/kg)	0.709
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg))	
Auto-tune (State 1)	0.258	Auto-tune (State 0)	0.479	Auto-tune (State 0)	0.155	Auto-tune (State 14)	0.783
Default (State 0)	0.239	Default (State 0)	0.472	Default (State 0)	0.146	Default (State 0)	0.67
State 1	0.251	State 2	0.421	State 3	0.103	State 4	0.604
State 20	0.116	State 21	0.412	State 22	0.061	State 23	0.728
State 39	0.122	State 40	0.308	State 41	0.08	State 42	0.512
State 58	0	State 59	0.182	State 60	0	State 61	0.71
State 77	0	State 78	0.088	State 79	0.069	State 80	0.077

UMTS B2		LTE B12		LTE B13		LTE B71	
RMC		QPSK, 10 MHz Bandwidth, 1 RB, 49 RB		QPSK, 10 MHz, 1 RB, 49 RB Offset		QPSK, 20 MHz, 1 RB, 0 RB Offset	
Test Position	Bottom	Test Position	Rear	Test Position	Left	Test Position	Rear
Spacing	10mm	Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	1907.6	Frequency (MHz)	707.5	Frequency (MHz)	782	Frequency (MHz)	680.5
Channel	9538	Channel	23095	Channel	23230	Channel	133297
Measured 1g SAR(W/kg)	0.992	Measured 1g SAR(W/kg)	0.284	Measured 1g SAR(W/kg)	0.200	Measured 1g SAR(W/kg)	0.359
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.950	Auto-tune (State 45)	0.238	Auto-tune (State 12)	0.103	Auto-tune (State 12)	0.298
Default (State 0)	0.897	Default (State 0)	0.198	Default (State 12)	0.101	Default (State 0)	0.284
State 5	0.805	State 6	0.146	State 7	0.085	State 8	0.159
State 24	0.774	State 25	0.071	State 26	0.083	State 27	0.118
State 43	0.711	State 44	0.219	State 45	0	State 46	0
State 62	0.229	State 63	0	State 64	0	State 65	0
State 81	0.134	State 82	0.101	State 83	0.050	State 84	0.198

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LTE B14		LTE B25		LTE B26		LTE B66	
QPSK, 10 MHz, 1 RB, 49 RB Offset		QPSK, 20 MHz, 50 RB, 49 RB Offset		QPSK, 15 MHz , 1 RB, 36 RB		QPSK, 20 MHz, 50 RB, 0 RB Offset	
Test Position	Bottom	Test Position	Bottom	Test Position	Front	Test Position	Bottom
Spacing	10mm	Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	793	Frequency (MHz)	1905	Frequency (MHz)	832	Frequency (MHz)	1720
Channel	23330	Channel	26590	Channel	26865	Channel	132072
Measured 1g SAR(W/kg)	0.261	Measured 1g SAR(W/kg)	0.640	Measured 1g SAR(W/kg)	0.340	Measured 1g SAR(W/kg)	0.690
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 45)	0.171	Auto-tune (State 1)	0.901	Auto-tune (State 0)	0.157	Auto-tune (State 22)	0.424
Default (State 0)	0.167	Default (State 0)	0.866	Default (State 0)	0.156	Default (State 0)	0.376
State 9	0.133	State 10	0.295	State 11	0.096	State 12	0.415
State 28	0.117	State 29	0.890	State 30	0.062	State 31	0.234
State 47	0.125	State 48	0.115	State 49	0.082	State 50	0
State 66	0.123	Sate 67	0.796	State 68	0.082	State 69	0.371
State 85	0	State 86	0.082	State 87	0	State 88	0

NR Band n12		NR Band n14		NR Band n25	
CP, 15 MHz, 1 RB, 1 RB Offset		QPSK, 10 MHz Bandwidth, 25 RB, 14 RB		QPSK, 40 MHz, 108 RB, 54 RB Offset	
Test Position	Rear	Test Position	Left	Test Position	Bottom
Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	707.5	Frequency (MHz)	793	Frequency (MHz)	1882.5
Channel	141500	Channel	158600	Channel	376500
Measured 1g SAR(W/kg)	0.2	Measured 1g SAR(W/kg)	0.213	Measured 1g S AR(W/kg)	0.732
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 11)	0.173	Auto-tune (State 0)	0.169	Auto-tune (State 1)	0.842
Default (State 0)	0.139	Default (State 0)	0.166	Default (State 0)	0.783
State 13	0	State 14	0	State 15	0.824
State 32	0.101	State 33	0	State 34	0.241
State 51	0.050	State 52	0.050	State 53	0.083
Sate 70	0.057	State 71	0.164	State 72	0.817
State 89	0	State 90	0	State 91	0

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NR Band n26		NR Band n66		NR Band n70		NR Band n71	
QPSK, 20 MHz, 1 RB, 1 RB Offset		CP, 45 MHz, 1 RB, 1 RB Offset		CP, 15 MHz, 1 RB, 1 RB Offset		QPSK, 35 MHz, 90 RB, 45 RB Offset	
Test Position	Rear	Test Position	Bottom	Test Position	Bottom	Test Position	Rear
Spacing	10mm	Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	831.5	Frequency (MHz)	1745	Frequency (MHz)	1702.5	Frequency (MHz)	680.5
Channel	166300	Channel	349000	Channel	340500	Channel	136100
Measured 1g SAR(W/kg)	0.198	Measured 1g SAR(W/kg)	0.725	Measured 1g SAR(W/kg)	0.892	Measured 1g SAR(W/kg)	0.285
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 3)	0.179	Auto-tune (State 18)	0.515	Auto-tune (State 19)	0.828	Auto-tune (State 12)	0.242
Default (State 0)	0.142	Default (State 0)	0.514	Default (State 0)	0.790	Default (State 0)	0.235
State 16	0.175	State 17	0.421	State 18	0.787	State 19	0
State 35	0.083	State 36	0.484	State 37	0.715	State 38	0.046
State 54	0	State 55	0.053	State 56	0	State 57	0.070
State 73	0.069	Sate 74	0.507	State 75	0.716	State 76	0.148
State 92	0.107	State 93	0.067	State 94	0	State 95	0

3) Head SAR Configuration For Upper Antenna AG1

GSM 850	
GMSK GPRS 2Tx	
Test Position	Left Touch
Frequency (MHz)	848.8
Channel	251
Measured 1g SAR(W/kg)	0.516
Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.479
Default (State 0)	0.468
State 1	0.459
State 17	0.468
State 33	0.471
State 49	0.473
State 65	0.466
State 81	0.473

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UMTS B5		LTE B12		LTE B13		LTE B71	
RMC		QPSK, 10 MHz , 1 RB, 0 RB		QPSK, 10 MHz, 25 RB, 0 RB Offset		QPSK, 20 MHz, 1 RB, 0 RB Offset	
Test Position	Left Touch	Test Position	Left Touch	Test Position	Left Touch	Test Position	Left Touch
Frequency (MHz)	846.6	Frequency (MHz)	707.5	Frequency (MHz)	782	Frequency (MHz)	680.5
Channel	4233	Channel	23095	Channel	23230	Channel	133297
Measured 1g SAR(W/kg)	0.633	Measured 1g S AR(W/kg)	0.667	Measured 1g SAR(W/kg)	0.698	Measured 1g SAR(W/kg)	0.732
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.592	Auto-tune (State 23)	0.583	Auto-tune (State 45)	0.564	Auto-tune (State 0)	0.758
Default (State 0)	0.589	Default (State 0)	0.579	Default (State 0)	0.557	Default (State 0)	0.744
State 2	0.581	State 3	0.580	State 4	0.556	State 5	0.755
State 18	0.588	State 19	0.577	State 20	0.563	State 21	0.745
State 34	0.581	State 35	0.581	State 36	0.554	State 37	0.757
State 50	0.579	Sate 51	0.578	State 52	0.556	State 53	0.744
State 66	0.588	State 67	0.574	State 68	0.558	State 69	0.743
State 82	0.581	State 83	0.567	State 84	0.551	State 85	0.749

LTE B14		LTE B25		LTE B26		LTE B66	
QPSK, 10 MHz, 25 RB, 12 RB Offset		QPSK, 20 MHz, 1 RB, 0 RB Offset		QPSK, 15 MHz , 75 RB, 0 RB		QPSK, 20 MHz, 50 RB, 0 RB Offset	
Test Position	Left Touch	Test Position	Right Touch	Test Position	Left Touch	Test Position	Right Touch
Frequency (MHz)	793	Frequency (MHz)	1860	Frequency (MHz)	831.5	Frequency (MHz)	1720
Channel	23330	Channel	26140	Channel	26865	Channel	132072
Measured 1g SAR(W/kg)	0.701	Measured 1g SAR(W/kg)	0.367	Measured 1g SAR(W/kg)	0.678	Measured 1g SAR(W/kg)	0.898
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 45)	0.576	Auto-tune (State 22)	0.617	Auto-tune (State 0)	0.472	Auto-tune (State 22)	0.683
Default (State 0)	0.573	Default (State 0)	0.614	Default (State 0)	0.471	Default (State 0)	0.676
State 6	0.575	State 7	0.606	State 8	0.465	State 9	0.673
State 22	0.571	State 23	0.599	State 24	0.463	State 25	0.642
State 38	0.573	State 39	0.608	State 40	0.464	State 41	0.671
State 54	0.567	Sate 55	0.607	State 56	0.471	State 57	0.679
State 70	0.565	State 71	0.615	State 72	0.468	State 73	0.667
State 86	0.575	State 87	0.612	State 88	0.465	State 89	0.664

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NR Band n12		NR Band n14		NR Band n25	
QPSK, 15 MHz, 75 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 26 RB		QPSK, 40 MHz, 108 RB, 54 RB Offset	
Test Position	Left Touch	Test Position	Left Touch	Test Position	Right Touch
Frequency (MHz)	707.5	Frequency (MHz)	793	Frequency (MHz)	1882.5
Channel	141500	Channel	158600	Channel	376500
Measured 1g SAR(W/kg)	0.620	Measured 1g SAR(W/kg)	0.708	Measured 1g SAR(W/kg)	0.389
Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg))		Average Value of Time Sweep(W/kg)	
Auto-tune (State 45)	0.493	Auto-tune (State 0)	0.456	Auto-tune (State 22)	0.731
Default (State 0)	0.490	Default (State 0)	0.455	Default (State 0)	0.725
State 10	0.485	State 11	0.454	State 12	0.724
State 26	0.491	State 27	0.452	State 28	0.726
State 42	0.485	State 43	0.454	State 44	0.730
Sate 58	0.481	State 59	0.455	State 60	0.728
State 74	0.483	State 75	0.455	State 76	0.729
State 90	0.484	State 91	0.454	State 92	0.727

NR Band n26		NR Band n66		NR Band n70		NR Band n71	
QPSK, 20 MHz, 1 RB, 53 RB Offset		QPSK, 45 MHz, 1 RB, 1 RB Offset		QPSK, 15 MHz 1 RB, 1 RB		QPSK, 35 MHz, 90 RB, 0 RB Offset	
Test Position	Left Touch	Test Position	Right Tilt	Test Position	Right Tilt	Test Position	Left Touch
Frequency (MHz)	831.5	Frequency (MHz)	1745	Frequency (MHz)	1702.5	Frequency (MHz)	680.5
Channel	166300	Channel	349000	Channel	340500	Channel	136100
Measured 1g SAR(W/kg)	0.792	Measured 1g SAR(W/kg)	0.7	Measured 1g SAR(W/kg)	0.718	Measured 1g SAR(W/kg)	0.648
Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)	
Auto-tune (State 0)	0.670	Auto-tune (State 22)	0.859	Auto-tune (State 22)	0.583	Auto-tune (State 0)	0.709
Default (State 0)	0.668	Default (State 0)	0.851	Default (State 0)	0.577	Default (State 0)	0.704
State 13	0.658	State 14	0.853	State 15	0.576	State 16	0.702
State 29	0.654	State 30	0.850	State 31	0.569	State 32	0.700
State 45	0.653	State 46	0.856	State 47	0.571	State 48	0.698
State 61	0.653	Sate 62	0.825	State 63	0.575	State 64	0.697
State 77	0.652	State 78	0.841	State 79	0.576	State 80	0.698
State 93	0.648	State 94	0.838	State 95	0.580		

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4) Body SAR Configuration for AG1

GSM 850	
GMSK GPRS 2Tx	
Test Position	Rear
Spacing	10mm
Frequency (MHz)	848.8
Channel	251
Measured 1g SAR(W/kg)	0.615
Average Value of Time Sweep(W/kg)	
Auto-tune (State 0)	0.598
Default (State 0)	0.590
State 1	0.581
State 17	0.583
State 33	0.582
State 49	0.579
State 65	0.593
State 81	0.586

UMTS B5		LTE B12		LTE B13		LTE B71	
RMC		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB		QPSK, 10 MHz, 25 RB, 0 RB Offset		QPSK, 20 MHz, 1 RB, 0 RB Offset	
Test Position	Rear	Test Position	Rear	Test Position	Rear	Test Position	Rear
Spacing	10mm	Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	836.6	Frequency (MHz)	707.5	Frequency (MHz)	782	Frequency (MHz)	680.5
Channel	4183	Channel	23095	Channel	23230	Channel	133297
Measured 1g SAR(W/kg)	0.429	Measured 1g SAR(W/kg)	0.597	Measured 1g SAR(W/kg)	0.320	Measured 1g SAR(W/kg)	0.535
Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)	
Auto-tune (State 0)	0.196	Auto-tune (State 23)	0.617	Auto-tune (State 45)	0.242	Auto-tune (State 0)	0.594
Default (State 0)	0.194	Default (State 0)	0.596	Default (State 0)	0.241	Default (State 0)	0.591
State 2	0.191	State 3	0.595	State 4	0.241	State 5	0.585
State 18	0.191	State 19	0.597	State 20	0.239	State 21	0.584
State 34	0.193	State 35	0.606	State 36	0.240	State 37	0.591
State 50	0.195	Sate 51	0.607	State 52	0.238	State 53	0.590
State 66	0.193	State 67	0.602	State 68	0.233	State 69	0.590
State 82	0.192	State 83	0.610	State 84	0.235	State 85	0.590

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LTE B14		LTE B25		LTE B26		LTE B66	
QPSK, 10 MHz, 1 RB, 0 RB Offset		QPSK, 20 MHz, 1 RB, 49 RB Offset		QPSK, 15 MHz , 1 RB, 36 RB		QPSK, 20 MHz, 50 RB, 0 RB Offset	
Test Position	Rear	Test Position	Top	Test Position	Rear	Test Position	Top
Spacing	10mm	Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	793	Frequency (MHz)	1882.5	Frequency (MHz)	831.5	Frequency (MHz)	1770
Channel	23330	Channel	26365	Channel	26865	Channel	132572
Measured 1g SAR(W/kg)	0.469	Measured 1g SAR(W/kg)	0.182	Measured 1g SAR(W/kg)	0.390	Measured 1g SAR(W/kg)	0.539
Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)	
Auto-tune (State 45)	0.508	Auto-tune (State 22)	0.604	Auto-tune (State 0)	0.358	Auto-tune (State 22)	0.497
Default (State 0)	0.498	Default (State 0)	0.602	Default (State 0)	0.349	Default (State 0)	0.491
State 6	0.504	State 7	0.597	State 8	0.353	State 9	0.496
State 22	0.493	State 23	0.597	State 24	0.353	State 25	0.496
State 38	0.500	State 39	0.594	State 40	0.349	State 41	0.492
State 54	0.494	Sate 55	0.598	State 56	0.354	State 57	0.496
State 70	0.496	State 71	0.599	State 72	0.353	State 73	0.490
State 86	0.505	State 87	0.594	State 88	0.349	State 89	0.492

NR Band n12		NR Band n14		NR Band n25	
QPSK, 15 MHz, 36 RB, 22 RB Offset		QPSK, 10 MHz Bandwidth, 25 RB, 14 RB		CP QPSK, 40 MHz, 1 RB, 1 RB Offset	
Test Position	Rear	Test Position	Rear	Test Position	Top
Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	707.5	Frequency (MHz)	793	Frequency (MHz)	1882.5
Channel	141500	Channel	158600	Channel	376500
Measured 1g SAR(W/kg)	0.505	Measured 1g SAR(W/kg)	0.506	Measured 1g SAR(W/kg)	0.731
Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)	
Auto-tune (State 45)	0.420	Auto-tune (State 0)	0.465	Auto-tune (State 22)	0.713
Default (State 0)	0.413	Default (State 0)	0.464	Default (State 0)	0.710
State 10	0.419	State 11	0.462	State 12	0.694
State 26	0.402	State 27	0.457	State 28	0.704
State 42	0.418	State 43	0.459	State 44	0.688
Sate 58	0.413	State 59	0.463	State 60	0.699
State 74	0.415	State 75	0.460	State 76	0.704
State 90	0.419	State 91	0.456	State 92	0.704

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NR Band n26		NR Band n66		NR Band n70		NR Band n71	
QPSK, 20 MHz, 50 RB, 28 RB Offset		QPSK 45 MHz, 120 RB, 0 RB Offset		QPSK, 15 MHz, 36 RB, 22 RB Offse		QPSK, 35 MHz, 90 RB, 45 RB Offset	
Test Position	Right	Test Position	Top	Test Position	Top	Test Position	Rear
Spacing	10mm	Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	831.5	Frequency (MHz)	1745	Frequency (MHz)	1702.5	Frequency (MHz)	680.5
Channel	166300	Channel	349000	Channel	340500	Channel	136100
Measured 1g SAR(W/kg)	0.413	Measured 1g SAR(W/kg)	0.633	Measured 1g SAR(W/kg)	0.498	Measured 1g SAR(W/kg)	0.499
Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)		Average Value of Time Sweep(W/kg)	
Auto-tune (State 0)	0.295	Auto-tune (State 22)	0.648	Auto-tune (State 22)	0.500	Auto-tune (State 0)	0.486
Default (State 0)	0.289	Default (State 0)	0.638	Default (State 0)	0.491	Default (State 0)	0.481
State 13	0.289	State 14	0.644	State 15	0.498	State 16	0.485
State 29	0.284	State 30	0.646	State 31	0.496	State 32	0.483
State 45	0.288	State 46	0.638	State 47	0.497	State 48	0.480
State 61	0.287	Sate 62	0.639	State 63	0.489	State 64	0.482
State 77	0.290	State 78	0.642	State 79	0.492	State 80	0.472
State 93	0.296	State 94	0.647	State 95	0.488		

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17. Measurement Uncertainty

The measured SAR was <1.5 W/Kg for 1g SAR and <3.75 W/Kg, for 10g SAR for all frequency Bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE1528-2013 was not required.

For SAR Measurement Uncertainty for Frequencies Above 6 GHz

Measurement Uncertainty for handset SAR test According to IEEE 1528 and IEC 62209-1528 (6 - 10 GHz range)									
a	*b*	*c*	*d*	*e*	*f*	*g*	*h = c x f / e*	*i = c x g / e*	*k*
Source of uncertainty	**Simbol**	**Uncertainty ± %**	**Probability distribution**	**Div.**	**ci**	**ci**	**Standard Uncertainty**	**Standard Uncertainty**	**vi or veff**
Description					**(1 g)**	**(10 g)**	**± % (1 g)**	**± % (10 g)**	
Measurement system									
Probe calibration	CF	18.60	N	2	1	1	9.30	9.30	∞
Probe Calibration Drift	CFdrift	1.70	N	1	1	1	1.00	1.00	∞
Probe Linearity	LIN	4.70	R	1.73	1.00	1.00	2.71	2.71	∞
Broadband Signal	BBS	3.00	R	1.73	1.00	1.00	1.73	1.73	∞
Probe Isotropy	ISO	7.60	R	1.73	1	1	4.39	4.39	∞
Data Acquisition	DAE	2.40	N	1	1	1	2.40	2.40	∞
RF Ambient	AMB	1.80	N	1	1	1	1.80	1.80	∞
Probe Positioning	Δsys	0.20	N	1	0.33	0.33	0.07	0.07	∞
Data Processing	DAT	3.50	N	1	1	1	3.50	3.50	∞
Phantom and Device Errors									
Conductivity (meas.)DAK	LIQ(σ)	2.50	N	1	0.78	0.71	1.95	1.78	∞
Conductivity (temp.)BB	LIQ(Tσ)	3.40	R	1.73	0.78	0.71	1.53	1.39	∞
Phantom Permittivity	EPS	14.00	R	1.73	0.25	0.25	2.02	2.02	∞
Distance DUT - TSL	DAS	2.00	N	1	2	2	4.00	4.00	∞
Device Holder	H	3.60	N	1	1	1	3.60	3.60	∞
DUT Modulation	MOD	2.40	R	1.73	1	1	1.39	1.39	∞
DUT drift	RFdrift	2.50	N	1	1	1	2.50	2.50	∞
Deviation to Target	C(ε, σ)	1.90	N	1	1	0.84	1.90	1.60	∞
SAR scaling	C(R)	0.00	R	1.73	1	1	0.00	0.00	∞
Combined standard uncertainty	u(ΔSAR)		RSS				13.72	13.65	
Expanded uncertainty (95% confidence interval)	U		*k = 2*				**27.44**	**27.30**	

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For Power Density Measurements Uncertainty for Frequencies Above 6GHz

DASY6 Uncertainty Budget for PD (avg ≥1cm2) Evaluation Distances to the Antennas ≥ λ/25 in Compliance with IEC/IEEE 63195						
Source of uncertainty Description	Uncertainty (±dB)	Probability distribution	Div.	ci	Standard Uncertainty (±dB)	(vi) veff
Uncertainty terms dependent on the measurement system						
Calibration	0.49	N	1	1	0.49	∝
Probe correction	0.00	R	1.73	1	0.00	∝
Frequency response (BW ≤ 1 GHz)	0.20	R	1.73	1	0.12	∝
Sensor cross coupling	0.00	R	1.73	1	0.00	∝
Isotropy	0.50	R	1.73	1	0.29	∝
Linearity	0.20	R	1.73	1	0.12	∝
Probe scattering	0.00	R	1.73	1	0.00	∝
Probe positioning offset	0.30	R	1.73	1	0.17	∝
Probe positioning repeatability	0.04	N	1	1	0.04	∝
Sensor mechanical offset	0.00	N	1	1	0.00	∝
Probe spatial resolution	0.00	N	1	1	0.00	∝
Field impedance dependence	0.00	N	1	1	0.00	∝
Measurement drift	0.05	N	1	1	0.05	∝
Amplitude and phase noise	0.04	N	1	1	0.04	∝
Measurement area truncation	0.00	N	1	1	0.00	∝
Data acquisition	0.03	N	1	1	0.03	∝
Sampling	0.00	N	1	1	0.00	∝
Field reconstruction	0.60	N	1	1	0.60	∝
Signal-to-Noise Ratio	0.00	N	1	1	0.00	∝
Spatial averaging	0.10	N	1	1	0.10	∝
Uncertainty terms dependent on the DUT and environmental factors						
Probe coupling with DUT	0.00	R	1.73	1	0.00	∝
Modulation response	0.40	R	1.73	1	0.23	∝
Integration time	0.00	R	1.73	1	0.00	∝
Response time	0.00	N	1.73	1	0.00	∝
Device holder influence	0.10	R	1.73	1	0.06	∝
DUT alignment	0.00	R	1.73	1	0.00	∝
RF ambient conditions	0.04	R	1.73	1	0.02	∝
Laboratory Temperature	0.05	R	1.73	1	0.03	∝
Laboratory Reflections	0.04	R	1.73	1	0.02	∝
Immunity / secondary reception	0.00	R	1.73	1	0.00	∝
Drift of the DUT	-	R	1.73	1	-	∝
Combined uncertainty (k = 1)					0.75	∝
Expanded uncertainty(k = 2)					**1.51**	

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18. SAR Test Equipment

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	SAM Phantom	-	N/A	N/A	N/A
SPEAG	ELI Phantom	-	N/A	N/A	N/A
SPEAG	cDASY6 5G Module Phantom		N/A	N/A	N/A
HP	SAR System Control PC	-	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F13/ 5R4XF1/ C/ 01	N/A	N/A	N/A
Staubli	CS9spe-TX2-90	F/24/0058554/C/001	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F17/ 59RAA1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F08/5AJ0A1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F13/ 5SD0A1/ C/ 01	N/A	N/A	N/A
Staubli	CS9spe-TX2-60	F/21/0029002/C/001	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F07/55B8A1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F07/56W9A1/C/01	N/A	N/A	N/A
N/A	TX90 XLspeag	F13/ 5R4XF1/ A/ 01	N/A	N/A	N/A
N/A	TX2-90XL spe	F/24/0058554/A/001	N/A	N/A	N/A
N/A	TX90 XLspeag	F17/ 59RAA1/ A/ 01	N/A	N/A	N/A
N/A	TX90 XLspeag	F08/5AJ0A1/A/01	N/A	N/A	N/A
N/A	TX90 Xlspeag	F13/ 5SD0A1/ A/ 01	N/A	N/A	N/A
N/A	TX2-60 Lspe	F/21/0029002/A/001	N/A	N/A	N/A
N/A	TX90 XLspeag	F07/55B8A1/A/01	N/A	N/A	N/A
N/A	TX90 XLspeag	F07/56W9A1/A/01	N/A	N/A	N/A
N/A	Teach Pendant (Joystick)	D21142605	N/A	N/A	N/A
N/A	Teach Pendant (Joystick)	D21144508	N/A	N/A	N/A
N/A	Teach Pendant (Joystick)	D21142606B	N/A	N/A	N/A
N/A	Teach Pendant (Joystick)	D21143300	N/A	N/A	N/A
N/A	Teach Pendant (Joystick)	D21142605	N/A	N/A	N/A
N/A	Teach Pendant (Joystick)	D21144507C	N/A	N/A	N/A
N/A	Teach Pendant (Joystick)	D21139902	N/A	N/A	N/A
N/A	Teach Pendant (Joystick)	D21142102	N/A	N/A	N/A
TESTO	175-H1/Thermometer	40331953309	01/18/2024	Annual	01/18/2025
TESTO	175-H1/Thermometer	40331939309	12/26/2023	Annual	12/26/2024
TESTO	175-H1/Thermometer	40331922309	12/26/2023	Annual	12/26/2024
TESTO	175-H1/Thermometer	40331949309	12/26/2023	Annual	12/26/2024
TESTO	608-H1/Thermometer	83348029	03/20/2024	Annual	03/20/2025
TESTO	608-H1/Thermometer	83348028	03/20/2024	Annual	03/20/2025
TESTO	608-H1/Thermometer	83348021	03/20/2024	Annual	03/20/2025
TESTO	608-H1/Thermometer	83406789	06/26/2024	Annual	06/26/2025
SPEAG	DAE4	466	09/03/2024	Annual	09/03/2025
SPEAG	DAE4	446	11/16/2023	Annual	11/16/2024
SPEAG	DAE4	504	01/30/2024	Annual	01/30/2025
SPEAG	DAE4	648	04/19/2024	Annual	04/19/2025
SPEAG	DAE4	780	06/19/2024	Annual	06/19/2025
SPEAG	DAE4	869	03/15/2024	Annual	03/15/2025
SPEAG	DAE4	1254	05/16/2024	Annual	05/16/2025
SPEAG	DAE4	1629	08/16/2024	Annual	08/16/2025
SPEAG	DAE4	1687	07/12/2024	Annual	07/12/2025
SPEAG	DAE4	1866	05/02/2024	Annual	05/02/2025
SPEAG	E-Field Probe ES3DV3	3076	07/17/2024	Annual	07/17/2025
SPEAG	E-Field Probe EX3DV4	3797	01/23/2024	Annual	01/23/2025
SPEAG	E-Field Probe EX3DV4	3903	07/31/2024	Annual	07/31/2025
SPEAG	E-Field Probe EX3DV4	7309	06/19/2024	Annual	06/19/2025
SPEAG	E-Field Probe EX3DV4	7370	08/22/2024	Annual	08/22/2025
SPEAG	E-Field Probe EX3DV4	7622	11/24/2023	Annual	11/24/2024
SPEAG	E-Field Probe EX3DV4	7679	08/22/2024	Annual	08/22/2025
SPEAG	E-Field Probe EX3DV4	7681	11/27/2023	Annual	11/27/2024
SPEAG	E-Field Probe EX3DV4	7702	01/22/2024	Annual	01/22/2025

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Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	E-Field Probe EX3DV4	7732	06/19/2024	Annual	06/19/2025
SPEAG	E-Field Probe EX3DV4	7751	09/19/2024	Annual	09/19/2025
SPEAG	E-Field Probe EUmmWV4	9528	05/17/2024	Annual	05/17/2025
SPEAG	CLA13	1016	09/21/2023	Annual	09/21/2024
SPEAG	Dipole D750V3	1014	05/20/2024	Annual	05/20/2025
SPEAG	Dipole D835V2	441	04/18/2024	Annual	04/18/2025
SPEAG	Dipole D1640V2	345	07/12/2023	Annual	07/12/2025
SPEAG	Dipole D1800V2	2d007	04/15/2024	Annual	04/15/2026
SPEAG	Dipole D1900V2	5d032	01/18/2024	Annual	01/18/2025
SPEAG	Dipole D2300V2	1010	07/19/2023	Annual	07/19/2025
SPEAG	Dipole D2450V2	743	03/14/2024	Annual	03/14/2025
SPEAG	Dipole D2600V2	1015	04/22/2024	Annual	04/22/2025
SPEAG	Dipole D3500V2	1132	01/23/2024	Annual	01/23/2025
SPEAG	Dipole D3700V2	1105	09/18/2024	Annual	09/18/2025
SPEAG	Dipole D3900V2	1086	05/21/2024	Annual	05/21/2025
SPEAG	Dipole D5 GHz V2	1107	04/19/2024	Annual	04/19/2025
SPEAG	Dipole D6.5 GHz V2	1012	09/17/2024	Annual	09/17/2025
SPEAG	5G Verification source 10 GHz	1018	04/17/2024	Annual	04/17/2025
Agilent	Power Meter E4419B	MY41291386	09/21/2023	Annual	09/21/2024
Agilent	Power Meter E4419B	MY41291386	09/11/2024	Annual	09/11/2025
Agilent	Power Meter N1911A	MY45101406	05/21/2024	Annual	05/21/2025
Agilent	Power Sensor 8481A	SG1091286	09/21/2023	Annual	09/21/2024
Agilent	Power Sensor 8481A	SG1091286	09/12/2024	Annual	09/12/2025
H.P	Power Sensor 8481A	MY41090675	09/21/2023	Annual	09/21/2024
H.P	Power Sensor 8481A	MY41090675	09/12/2024	Annual	09/12/2025
Agilent	Wideband Power Sensor N1921A	MY55220026	07/30/2024	Annual	07/30/2025
Agilent	11636B/Power Divider	58698	01/15/2024	Annual	01/15/2025
SPEAG	DAKS 3.5	1038	01/22/2024	Annual	01/22/2025
SPEAG	Vector Reflectometer	141013	01/11/2024	Annual	01/11/2025
SPEAG	DAKS 12	1048	03/20/2024	Annual	03/20/2025
SPEAG	MXA Signal Analyzer	MY49100108	01/09/2024	Annual	01/09/2025
H.P	Network Analyzer /8753ES	JP39240221	12/26/2023	Annual	12/26/2024
Agilent	WIRELESS COMMUNICATION E5515C	MY48360252	07/29/2024	Annual	07/29/2025
Agilent	WIRELESS COMMUNICATION E5515C	MY50260992	05/22/2024	Annual	05/22/2025
R&S	Wireless Communication Test Set CMW500	115733	03/19/2024	Annual	03/19/2025
Agilent	SIGNAL GENERATOR N5182A	MY47070230	03/19/2024	Annual	03/19/2025
EMPOWER	RF Power Amplifier	1084	05/21/2024	Annual	05/21/2025
EMPOWER	RF Power Amplifier	1041D/C0508	05/21/2024	Annual	05/21/2025
EMPOWER	RF Power Amplifier	1011	09/21/2023	Annual	09/21/2024
EMPOWER	RF Power Amplifier	1011	09/11/2024	Annual	09/11/2025
MICRO LAB	LP Filter / LA-15N	10453	09/21/2023	Annual	09/21/2024
MICRO LAB	LP Filter / LA-30N	-	09/21/2023	Annual	09/21/2024
MICRO LAB	LP Filter / LA-60N	32011	09/21/2023	Annual	09/21/2024
MICRO LAB	LP Filter / LA-15N	10453	09/11/2024	Annual	09/11/2025
MICRO LAB	LP Filter / LA-30N	-	09/11/2024	Annual	09/11/2025
MICRO LAB	LP Filter / LA-60N	32011	09/11/2024	Annual	09/11/2025
Agilent	Attenuator (3dB) 8693B	MY39260298	08/20/2024	Annual	08/20/2025
HP	Attenuator (20dB) 8493C	09271	08/20/2024	Annual	08/20/2025
Agilent	Directional Bridge 86205A	3140A04581	04/22/2024	Annual	04/22/2025

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Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
Agilent	MXA Signal Analyzer N9020A	MY50510407	06/04/2024	Annual	06/04/2025
KEYSIGHT	EXG Vector Signal Generator	MY50350097	03/05/2024	Annual	03/05/2025
HP	Dual Directional Coupler	16072	09/11/2024	Annual	09/11/2025
Anritsu	Radio Communication Test Station MT8000A	6262036812	11/28/2023	Annual	11/28/2024
Anritsu	Radio Communication Tester MT8820C	6201074225	01/17/2024	Annual	01/17/2025
Anritsu	Radio Communication Tester MT8820C	6200695605	03/19/2024	Annual	03/19/2025
Anritsu	Radio Communication Tester MT8821C	6201502997	05/21/2024	Annual	05/21/2025
Anritsu	Radio Communication Tester MT8821C	6262044720	11/28/2023	Annual	11/28/2024
Anritsu	Radio Communication Tester MT8821C	6201664725	01/17/2024	Annual	01/17/2025
ROHDE&SCHWARZ	BLUETOOTH TESTER CBT	100272	01/16/2024	Annual	01/16/2025

* The E-field probe was calibrated by SPEAG, by the waveguide technique procedure. Dipole Verification measurement is performed by HCT Lab. before each test. The brain/body simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity (dielectric constant) of the brain/body-equivalent material.

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19. Conclusion

The SAR and RF Exposure measurement indicates that the EUT complies with the RF radiation exposure limits of the ANSI/ IEEE C95.1 - 2005.

These measurements were taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the abortion and distribution of electromagnetic energy in the body are very complex phenomena the depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

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[22] Industry Canada RSS-102 Radio Frequency Exposure Compliance of Radio Communication Apparatus (All Frequency Band) Issue 5, March 2015.

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[24] FCC SAR Test procedures for 2G-3G Devices, Mobile Hotspot and UMPC Device KDB 941225 D01.

[25] SAR Measurement Guidance for IEEE 802.11 transmitters, KDB 248227 D01v02r02

[26] SAR Evaluation of Handsets with Multiple Transmitters and Antennas KDB 648474 D03, D04.

[27] SAR Evaluation for Laptop, Notebook, Netbook and Tablet computers KDB 616217 D04.

[28] SAR Measurement and Reporting Requirements for 100 ㎒ – 6 ㎓, KDB 865664 D01, D02.

[29] FCC 447498 D01 General RF Exposure Guidance v06

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Appendix A. DUT Ant. Information & SETUP PHOTO

Please refer to test DUT Ant. Information &setup photo file no. as follows:

Report No.
HCT-SR-2410-FC008-P

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