



HCT Co., Ltd.

74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA
Tel. +82 31 645 6300 Fax. +82 31 645 6401

Part 1 SAR TEST REPORT

Applicant Name:

SAMSUNG Electronics Co., Ltd.

129, Samsung-ro, Yeongtong-gu, Suwon-Si, Gyeonggi-do, 16677

Rep. of Korea

Date of Issue: Jun. 09, 2022

Test Report No.: HCT-SR-2205-FC007-R3

Test Site: HCT CO., LTD.

FCC ID:

A3LSMG990U2

Equipment Type:

Mobile Phone

Application Type

Certification

FCC Rule Part(s):

CFR §2.1093

Model Name:

SM-G990U2

Additional Model Name:

SM-G990U3/DS

Date of Test:

Apr. 12, 2022 ~ May 13, 2022

This device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in FCC KDB procedures and had been tested in accordance with the measurement procedures specified in FCC KDB procedures.

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

Tested By

Jung-hun park
Test Engineer
SAR Team
Certification Division

Reviewed By

Yun-jeang, Heo
Technical Manager
SAR Team
Certification Division

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REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	May 13, 2022	Initial Release
1	May 20, 2022	Revised Sec.4.4, Sec.8.9, Sec.11, Sec.13
2	Jun. 02, 2022	Revised Sec.3.2
3	Jun. 09, 2022	Revised Sec.3.2

This test results were applied only to the test methods required by the standard.

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Appendix A. DUT Ant. Information & Test SETUP PHOTO

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Appendix I. DLCA Power Measurement

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 SAR Guidance v06
- FCC KDB Publication 648474 D04 Handset SAR v01r03
- FCC KDB Publication 616217 D04 v01r02 (Proximity Sensor)
- 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 (Simultaneous transmission summation clarified)
- October 2016 TCB Workshop Notes (Bluetooth Duty Factor)
- November 2017 TCBC Workshop Notes (LTE Carrier Aggregation)
- May 2017 TCBC Workshop Notes (LTE 4x4 Downlink MIMO, LTE Band 41 Power Class 2)
- April 2018 TCBC Workshop Notes (LTE DL CA SAR Test Exclusion)
- April 2019 TCBC Workshop Notes (IEEE 802.11 ax)
- April 2019 and Oct 2020 TCBC Workshop Notes (Dynamic Antenna tuning)

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-G990U2
Additional Model Name	SM-G990U3/DS
Equipment Type	Mobile Phone
FCC ID	A3LSMG990U2
Application Type	Certification
Applicant	SAMSUNG Electronics Co., Ltd.

3.2 Attestation of test result of device under test

The Highest Reported SAR						
Band	Tx. Frequency	Equipment Class	Reported SAR (W/kg)			
			1g Head	1g Body-Worn	1g Hotspot	10g Extremity
CDMA/EVDO BC0	824.70 MHz ~ 848.31 MHz	PCE	0.23	0.50	0.82	N/A
PCS CDMA/EVDO	1 851.25 MHz ~ 1 908.75 MHz	PCE	0.22	1.05	1.10	2.34
CDMA/EVDO BC10	817.90 MHz ~ 823.10 MHz	PCE	0.21	0.39	0.74	N/A
GSM/GPRS/EDGE 850	824.2 MHz ~ 848.8 MHz	PCE	0.33	0.48	0.76	N/A
GSM/GPRS/EDGE 1900	1 850.2 MHz ~ 1 909.8 MHz	PCE	0.10	0.57	0.52	N/A
UMTS Band 5	826.4 MHz ~ 846.6 MHz	PCE	0.13	0.42	0.79	N/A
UMTS Band 4	1 712.4 MHz ~ 1 752.6 MHz	PCE	0.22	1.00	0.68	1.89
UMTS Band 2	1 852.4 MHz ~ 1 907.6 MHz	PCE	0.25	0.97	1.10	1.81
LTE Band 2 (PCS)	1 850.7 MHz ~ 1 909.3 MHz	PCE	N/A	N/A	N/A	N/A
LTE Band 4 (AWS)	1 710.7 MHz ~ 1 754.3 MHz	PCE	N/A	N/A	N/A	N/A
LTE Band 5 (Cell)	824.7 MHz ~ 848.3 MHz	PCE	N/A	N/A	N/A	N/A
LTE Band 7	2 502.5 MHz ~ 2 567.5 MHz	PCE	0.15	0.58	0.71	2.20
LTE Band 12	699.7 MHz ~ 715.3 MHz	PCE	0.18	0.23	0.37	N/A
LTE Band 13	779.5 MHz ~ 784.5 MHz	PCE	0.25	0.48	0.73	N/A
LTE Band 14	790.5 MHz ~ 795.5 MHz	PCE	0.30	0.51	0.61	N/A
LTE Band 25(PCS)	1 850.7 MHz ~ 1 914.3 MHz	PCE	0.33	0.61	0.80	1.90
LTE Band 26(Cell)	814.7 MHz ~ 848.3 MHz	PCE	0.27	0.46	0.75	N/A
LTE Band 30	2 307.5 MHz ~ 2 312.5 MHz	PCE	<0.10	0.50	1.01	1.40
LTE TDD Band 38	2 572.5 MHz ~ 2 617.5 MHz	PCE	N/A	N/A	N/A	N/A
LTE TDD Band 40	2 302.5 MHz ~ 2 397.5 MHz	PCE	<0.10	<0.10	0.17	N/A
LTE TDD Band 41	2 498.5 MHz ~ 2 687.5 MHz	PCE	0.19	0.52	0.57	1.23
LTE TDD Band 48	3 552.5 MHz ~ 3 697.5 MHz	CBE	0.56	0.36	0.30	N/A
LTE Band 66 (AWS)	1 710.7 MHz ~ 1 779.3 MHz	PCE	0.33	0.58	0.78	2.31
LTE Band 71	665.5 MHz ~ 695.5 MHz	PCE	0.15	0.22	0.39	N/A
NR Band n2	1 852.5 MHz ~ 1 907.5 MHz	PCE	N/A	N/A	N/A	N/A
NR Band n5	826.5 MHz ~ 846.5 MHz	PCE	0.11	0.17	0.44	N/A
NR Band n12	701.5 MHz ~ 713.5 MHz	PCE	0.10	0.13	0.28	N/A
NR Band n25	1 852.5 MHz ~ 1 912.5 MHz	PCE	0.19	0.93	1.03	1.75
NR Band n30	2 307.5 MHz ~ 2 312.5 MHz	PCE	0.15	0.92	1.02	1.55
NR Band n41	2 506.02 MHz ~ 2 679.99 MHz	PCE	<0.10	0.14	0.48	1.81
NR Band n66	1 712.5 MHz ~ 1 777.5 MHz	PCE	0.22	0.74	1.04	2.44
NR Band n71	665.5 MHz ~ 695.5 MHz	PCE	0.12	0.16	0.33	N/A
NR Band n77	3 710 MHz ~ 3 969.99 MHz	PCE	0.75	0.15	0.33	1.54
NR Band n77 (DoD)	3 460.02 MHz ~ 3 540 MHz	PCE	0.79	0.13	0.45	0.74
802.11b	2 412 MHz ~ 2 462 MHz	DTS	0.54	0.37	1.10	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	0.24	0.25	N/A	1.35
U-NII-2C	5 500 MHz ~ 5 720 MHz	NII	0.17	0.15	N/A	1.22
U-NII-3	5 745 MHz ~ 5 825 MHz	NII	0.31	0.47	0.59	N/A
Bluetooth	2 402 MHz ~ 2 480 MHz	DSS	0.41	<0.10	0.17	N/A
Simultaneous SAR per KDB 690783 D01v01r03			1.563	1.586	1.541	3.318
Date(s) of Tests:		Apr. 12, 2022 ~ May 13, 2022				

4. Device Under Test Description

4.1 DUT specification

Device Wireless specification overview		
Band & Mode	Operating Mode	Tx Frequency
CDMA/EVDO BC10	Voice / Data	817.90 MHz ~ 823.10 MHz
CDMA/EVDO BC0	Voice / Data	824.70 MHz ~ 848.31 MHz
PCS CDMA/EVDO	Voice / Data	1 851.25 MHz ~ 1 908.75 MHz
GSM850	Voice / Data	824.2 MHz ~ 848.8 MHz
GSM1900	Voice / Data	1 850.2 MHz ~ 1 909.8 MHz
UMTS Band 5	Voice / Data	826.4 MHz ~ 846.6 MHz
UMTS Band 4	Voice / Data	1 712.4 MHz ~ 1 752.6 MHz
UMTS Band 2	Voice / Data	1 852.4 MHz ~ 1 907.6 MHz
LTE Band 2 (PCS)	Voice / Data	1 850.7 MHz ~ 1 909.3 MHz
LTE Band 4 (AWS)	Voice / Data	1 710.7 MHz ~ 1 754.3 MHz
LTE Band 5 (Cell)	Voice / Data	824.7 MHz ~ 848.3 MHz
LTE Band 7	Voice / Data	2 502.5 MHz ~ 2 567.5 MHz
LTE Band 12	Voice / Data	699.7 MHz ~ 715.3 MHz
LTE Band 13	Voice / Data	779.5 MHz ~ 784.5 MHz
LTE Band 14	Voice / Data	790.5 MHz ~ 795.5 MHz
LTE Band 25	Voice / Data	1 850.7 MHz ~ 1 914.3 MHz
LTE Band 26	Voice / Data	814.7 MHz ~ 848.3 MHz
LTE 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 40	Voice / Data	2 302.5 MHz ~ 2 397.5 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 Band 66 (AWS)	Voice / Data	1 710.7 MHz ~ 1 779.3 MHz
LTE Band 71	Voice / Data	665.5 MHz ~ 695.5 MHz
NR Band n2	Voice / Data	1 852.5 MHz ~ 1 907.5 MHz
NR Band n5	Voice / Data	826.5 MHz ~ 846.5 MHz
NR Band n12	Voice / Data	701.5 MHz ~ 713.5 MHz
NR Band n25	Voice / Data	1 852.5 MHz ~ 1 912.5 MHz
NR Band n30	Voice / Data	2 307.5 MHz ~ 2 312.5 MHz
NR Band n41	Voice / Data	2 506.02 MHz ~ 2 679.99 MHz
NR Band n66	Voice / Data	1 712.5 MHz ~ 1 777.5 MHz
NR Band n71	Voice / Data	665.5 MHz ~ 695.5 MHz
NR Band n77	Voice / Data	3 710 MHz ~ 3 969.99 MHz
NR Band n77 (DoD)	Voice / Data	3 460.02 MHz ~ 3 540 MHz
NR Band n260	Data	37000 MHz ~ 40000 MHz
NR Band n261	Data	27500 MHz ~ 28350 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
2.4 GHz WLAN	Voice / Data	2 412 MHz ~ 2 462 MHz
Bluetooth / LE 5.0	Data	2 402 MHz ~ 2 480 MHz
NFC	Data	13.56 MHz

Device Description		
H/W	REV1.0	
S/W	G990U2.001	
Device Serial Numbers	Mode	Serial Number
	GSM850, WCDMA 5, LTE Band 26, LTE Band 71	VD10410M,
	GSM1900, WCDMA 2, WCDMA 4, LTE Band 25, LTE Band 26, NR n25, NR n66, NR n41	VD10400M, VD10379M,
	CDMA (BC0, BC10), NR n5, NR n12, NR n71	VD10402M,VD10316M
	LTE Band 12, LTE Band 13, LTE Band 14,	VD10379M,VD10220M
	LTE Band 7, LTE Band 40, LTE Band 41	VD10410M, VD10379M,
	LTE Band 30, LTE Band 48, NR n30, NR n77	VD10400M, VD10402M
	WLAN 2.4GHz, WLAN 5GHz	VD10307M, VD10289M, VD10306M
	The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics are within operational tolerances expected for production units.	

4.2 Time-Averaging Algorithm for RF Exposure Compliance

This equipment contains the Qualcomm modem supporting 2G/3G/4G WWAN technologies and Sub6/ mmW 5G NR bands. This modems are enabled with Qualcomm Smart Transmit feature to control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is in compliance with the FCC requirement.

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. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit 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. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit feature.

WLAN/BT operations are not enabled with Smart Transmit.

Smart Transmit allows the device to transmit at higher power instantaneously, as high as P_{max}, when needed, but enforces power limiting to maintain time-averaged transmit power to P_{limit}. Below table shows P_{limit} EFS settings and maximum tune up output power P_{max} configured for this EUT for various transmit conditions (Device State Index DSI). Note that the device uncertainty for sub-6GHz WWAN is 1.0dB for this EUT.

The purpose of this report (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 were performed by setting Reserve_power_margin (Smart Transmit EFS entry) to 0dB.

Plim values in green indicate Plimt < Pmax			Plim values in grey indicate Plim > Pmax				
Plimt corresponding to 1 W/kg (1g) 2.5W/kg(10g) SAR_Design_target							Pmax
SAR Exposure Position		Body worn/ Phablet	Phablet (Grip On)	Head (RCV ON)	Hotspot	EarJack	Maximum Tune-up Output Power (Frame Averaged Power) [dBm]
Averaging volume		1g/10g	10g	1g	1g	10g	
seperation Distance		5/0,8,6,13 mm	0 mm	0 mm	10 mm	0 mm	
Mode	Band	DSI = 0	DSI = 1	DSI = 2	DSI = 3	DSI = 4	
CDMA	BC10	26.5	26.5	31.3	26.7	26.5	24.0
CDMA	BC0	26.2	26.2	31.7	26.3	26.2	24.0
CDMA	BC1	24.3	19.5	31.0	18.5	19.5	23.5
GSM/GPRS/EDGE	850	28.7	28.7	31.2	27.7	28.7	25.5
GSM/GPRS/EDGE	1900	26.2	17.5	33.8	17.5	17.5	22.7
UMTS	5	26.3	26.3	34.0	26.0	26.3	24.0
UMTS	4	25.2	18.5	31.1	18.5	18.5	23.5
UMTS	2	24.8	18.0	30.5	18.0	18.0	23.5
LTE FDD	12	25.3	25.3	33.5	30.1	25.3	24.5
LTE FDD	13	26.5	26.5	31.6	26.9	26.5	24.5
LTE FDD	14	26.4	26.4	30.8	26.2	26.4	24.5
LTE FDD	26	26.2	26.2	31.2	27.7	26.2	24.5
LTE FDD	5	26.2	26.2	31.3	27.7	26.2	24.5
LTE FDD	66	27.9	20.0	30.3	19.5	20.0	24.5
LTE FDD	4	27.9	20.0	30.3	19.5	20.0	24.5
LTE FDD	2	27.6	20.5	30.3	18.5	20.5	24.5
LTE FDD	25	27.6	20.5	30.3	18.5	20.5	24.5
LTE FDD	71	26.8	26.8	33.8	26.8	26.8	24.5
LTE FDD	7	26.9	20.0	32.8	20.0	20.0	23.5
LTE FDD	30	26.0	18.0	33.9	18.0	18.0	22.0
LTE TDD	40	22.2	22.2	33.1	19.7	22.2	11.0
LTE TDD	48	22.0	22.0	14.5	18.0	22.0	22.0
LTE TDD PC3	41	27.8	19.5	33.2	19.5	19.5	22.5
LTE TDD PC2	41	26.2	18.4	30.6	18.4	18.4	22.4
LTE TDD	38	27.8	17.5	33.2	17.5	17.5	22.5
NR FDD	5	27.9	27.9	35.2	29.1	27.9	24.5
NR FDD	12	26.9	26.9	35.5	31.1	26.9	24.5
NR FDD	71	29.2	29.2	34.6	30.3	26.9	24.5
NR FDD	30	24.9	17.5	32.7	17.5	17.5	23.5
NR FDD	66	25.8	19.0	31.0	19.0	19.0	23.5
NR FDD	2	24.9	18.5	31.7	18.5	18.5	23.5
NR FDD	25	24.9	18.5	31.7	18.5	18.5	23.5
NR TDD PC3	41	18.0	18.0	18.0	18.0	18.0	24.0
NR TDD PC2	41	18.0	18.0	18.0	18.0	18.0	26.0
NR TDD SRS1(PC3)	n77 DoD	17.0	17.0	14.0	17.0	17.0	24.0
NR TDD SRS1(PC2)	n77 DoD	17.0	17.0	14.0	17.0	17.0	26.5
NR TDD SRS2(PC3)	n77 DoD	12.0	12.0	12.0	12.0	12.0	20.5
NR TDD SRS2(PC2)	n77 DoD	12.0	12.0	12.0	12.0	12.0	22.0
NR TDD SRS3(PC3)	n77 DoD	12.0	12.0	12.0	12.0	12.0	20.0
NR TDD SRS3(PC2)	n77 DoD	12.0	12.0	12.0	12.0	12.0	21.0
NR TDD SRS4(PC3)	n77 DoD	12.0	12.0	12.0	12.0	12.0	18.5
NR TDD SRS4(PC2)	n77 DoD	12.0	12.0	12.0	12.0	12.0	20.5
NR TDD SRS1(PC3)	n77	17.0	17.0	14.0	17.0	17.0	24.0
NR TDD SRS1(PC2)	n77	17.0	17.0	14.0	17.0	17.0	26.5
NR TDD SRS2(PC3)	n77	12.0	12.0	12.0	12.0	12.0	20.5
NR TDD SRS2(PC2)	n77	12.0	12.0	12.0	12.0	12.0	22.0
NR TDD SRS3(PC3)	n77	12.0	12.0	12.0	12.0	12.0	20.0
NR TDD SRS3(PC2)	n77	12.0	12.0	12.0	12.0	12.0	21.0
NR TDD SRS4(PC3)	n77	12.0	12.0	12.0	12.0	12.0	18.5
NR TDD SRS4(PC2)	n77	12.0	12.0	12.0	12.0	12.0	20.5

*Note all P_{limit} EFS and maximum tune up output power P_{max} levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of TDD modulation schemes (for e.g., GSM, TDD).

*Maximum tune up output power P_{max} is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum Tune up output power + 1dB device design uncertainty.

The maximum time-averaged output power (dBm) for any 2G/3G/4G/5G WWAN technology, band, and DSI = minimum of "P_{limit} EFS" and "Maximum tune up output power P_{max} " + 1dB device uncertainty. SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB Publication 447498 D01v06.

4.3 Power Reduction for SAR

This device uses an independent fixed level power reduction mechanism for WLAN operations when 5G NR is active and also during all voice or VoIP held to ear scenarios. Per FCC Guidance, the held-to-ear exposure conditions were evaluated at reduced power according to the head SAR positions described in IEEE 1528-2013. Detailed descriptions of the power reduction mechanism are included in the operational description.

The reduced powers for the power reduction mechanisms were conformed via conducted power measurements at the RF Port

4.4 Nominal and Maximum Output Power Specifications

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

The contents of DSI are as follows.

- DSI (0) : Free, Maximum Power
- DSI (1) : Reduced- Capacitive Sensor On
- DSI (2) : Reduced-RCV ON
- DSI (3) : Reduced-Hotspot Mode On
- DSI (4) : Reduced-Ear Phone

4.4.1 Maximum PCE Output Power

The maximum output power declared in this section is burst average and not time or frame average.

CDMA/EVDO Mode: Antenna A

Mode / Band	DSI (Device Status indicator)	Modulated Average
		(in dBm)
Cell. CDMA/EVDO	0,1,2,3,4	24.0
PCS CDMA/EVDO	0,2	23.5
	3 (Hotspot)	18.5
	1,4 (Grip ON/ Ear Jack ON)	19.5
Cell BC10. CDMA/EVDO	0,1,2,3,4	24.0

(Tolerance: -1.5 dB ~ +1.0 dB)

GSM Mode: Antenna A

Mode/Band	Ant	DSI (Device Status indicator)	Voice (in Bm)	Burst Average GSMK (in dBm)				Burst Average EDGE 8-PSK (in dBm)			
			1 Tx Slot	1 Tx Slot	2 Tx Slot	3 Tx Slot	4 Tx Slot	1 Tx Slot	2 Tx Slot	3 Tx Slot	4 Tx Slot
GSM/GPRS/EDGE 850	A	0,1,2,3,4	32.5	32.5	31.5	29.0	27.0	26.5	25.0	23.0	22.0
GSM/GPRS/EDGE 1900	A	0,2	29.5	29.5	28.5	27.0	25.0	25.0	24.0	22.0	21.0
		3 (Hotspot)	26.5	26.5	23.0	21.5	20.0	25.5	22.5	21.0	19.5
		1,4 (Grip ON/ Ear Jack ON)	26.5	26.5	23.0	21.5	20.0	25.5	22.5	21.0	19.5

(Tolerance: -1.5 dB ~ +1.0 dB)

UMTS Mode: Antenna A

Mode/Band	Antenna	DSI (Device Status indicator)	Modulated Average (dBm)			
			3GPP Rel99	HSDPA	HSUPA	DC-HSDPA
				3GPP Cat.24	3GPP Cat.6	3GPP Cat.24
UMTS B2	A	0,2	23.5	22.5	22.5	22.5
		3 (Hotspot)	18.0	17.0	17.0	17.0
		1,4 (Grip ON/ Ear Jack ON)	18.0	17.0	17.0	17.0
UMTS B4	A	0,2	23.5	22.5	22.5	22.5
		3 (Hotspot)	18.5	17.5	17.5	17.5
		1,4 (Grip ON/ Ear Jack ON)	18.5	17.5	17.5	17.5
UMTS B5	A	0,1,2,3,4	24.0	23.0	23.0	23.0

(Tolerance: -1.5 dB ~ +1.0 dB)

LTE Mode 5G NR SUB 6 Modes:

Mode / Band	Antenna	Burst Average Power[dBm]			
		DSI=0	DSI=3	DSI=1, 4	DSI=2
		Body Worn Max Power	Hotspot	Grip Sensor ON Ear jack ON	RCV ON
LTE B2	A	24.5	18.5	20.5	24.5
LTE B4	A	24.5	19.5	20.0	24.5
LTE B5	A	24.5	24.5	24.5	24.5
LTE B7	B	23.5	20.0	20.0	23.5
LTE B12	A	24.5	24.5	24.5	24.5
LTE B13	A	24.5	24.5	24.5	24.5
LTE B14	A	24.5	24.5	24.5	24.5
LTE B25	A	24.5	18.5	20.5	24.5
LTE B26	A	24.5	24.5	24.5	24.5
LTE B30	B	22.0	18.0	18.0	22.0
LTE B38	B	24.5	19.5	19.5	24.5
LTE B40	B	13.0	13.0	13.0	13.0
LTE B41(PC2)	B	26.0	22.0	22.0	26.0
LTE B41(PC3)	B	24.5	21.5	21.5	24.5
LTE B48	H	24.0	20.0	24.0	16.5
LTE B66	A	24.5	19.5	20.0	24.5
LTE B71	A	24.5	24.5	24.5	24.5
NR n2	A	23.5	18.5	18.5	23.5
NR n5	A	24.5	24.5	24.5	24.5
NR n12	A	24.5	24.5	24.5	24.5
NR n25	A	23.5	18.5	18.5	23.5
NR n30	B	23.5	17.5	17.5	23.5
NR n41 (PC2)	B	18.0	18.0	18.0	18.0
NR n41 (PC3)	B	18.0	18.0	18.0	18.0
NR n66	A	23.5	19.0	19.0	23.5
NR n71	A	24.5	24.5	24.5	24.5
NR n77 SRS1(PC2)	H	17.0	17.0	17.0	14.0
NR n77 SRS2(PC2)	E	12.0	12.0	12.0	12.0
NR n77 SRS3(PC2)	M	12.0	12.0	12.0	12.0
NR n77 SRS4(PC2)	D	12.0	12.0	12.0	12.0
NR n77 SRS1 (PC3)	H	17.0	17.0	17.0	14.0
NR n77 SRS2(PC3)	E	12.0	12.0	12.0	12.0
NR n77 SRS3(PC3)	M	12.0	12.0	12.0	12.0
NR n77 SRS4(PC3)	D	12.0	12.0	12.0	12.0

(Tolerance: -1.5 dB ~ +1.0 dB)

4.4.3 Maximum 2.4 GHz, 5 GHz WIFI output power

Maximum WLAN Power

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz								18.5	16	16 (Ch 1, 11 : 15)		15.5		21.5	19	19 (Ch 1, 11 : 18)		18.5
5GHz (20MHz)	5200MHz													20			20	19	18
	5300MHz													20			20	19	18
	5500MHz													20			20	19	18
	5800MHz													20			20	19	18
5GHz (40MHz)	5200MHz																19	18	15.5
	5300MHz																19	18	15.5
	5500MHz																19	18	15.5
	5800MHz																19	18	15.5
5GHz (80MHz)	5200MHz																	17	14.5
	5300MHz																	17	14.5
	5500MHz																	17	14.5
	5800MHz																	17	14.5

(Upper tolerance: target +1.0dB)

Reduced Power - RCV Active / mmWave + RCV active / sub6 + RCV active

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz								12	12	12		12		15	15	15		15
5GHz (20MHz)	5200MHz													13			13	13	13
	5300MHz													13			13	13	13
	5500MHz													13			13	13	13
	5800MHz													13			13	13	13
5GHz (40MHz)	5200MHz																13	13	13
	5300MHz																13	13	13
	5500MHz																13	13	13
	5800MHz																13	13	13
5GHz (80MHz)	5200MHz																	13	13
	5300MHz																	13	13
	5500MHz																	13	13
	5800MHz																	13	13

(Upper tolerance: target +1.0dB)

Reduced WLAN Power – RSDB

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax(SU)	a	b	g		ac	ax(SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz								13	13	13		13		16	16	16		16
5GHz (20MHz)	5200MHz													13			13	13	13
	5300MHz													13			13	13	13
	5500MHz													13			13	13	13
	5800MHz													13			13	13	13
5GHz (40MHz)	5200MHz																13	13	13
	5300MHz																13	13	13
	5500MHz																13	13	13
	5800MHz																13	13	13
5GHz (80MHz)	5200MHz																	13	13
	5300MHz																	13	13
	5500MHz																	13	13
	5800MHz																	13	13

(Upper tolerance: target +1.0dB)

Reduced WLAN Power - RSDB with RCV active

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz								10	10	10		10		13	13	13		13
5GHz (20MHz)	5200MHz													13			13	13	13
	5300MHz													13			13	13	13
	5500MHz													13			13	13	13
	5800MHz													13			13	13	13
5GHz (40MHz)	5200MHz																13	13	13
	5300MHz																13	13	13
	5500MHz																13	13	13
	5800MHz																13	13	13
5GHz (80MHz)	5200MHz																	13	13
	5300MHz																	13	13
	5500MHz																	13	13
	5800MHz																	13	13

(Upper tolerance: target +1.0dB)

Reduced WLAN Power - with mmWave / Sub 6 Active

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz								13	13	13		13		16	16	16		16
5GHz (20MHz)	5200MHz													13			13	13	13
	5300MHz													13			13	13	13
	5500MHz													13			13	13	13
	5800MHz													13			13	13	13
5GHz (40MHz)	5200MHz																13	13	13
	5300MHz																13	13	13
	5500MHz																13	13	13
	5800MHz																13	13	13
5GHz (80MHz)	5200MHz																	13	13
	5300MHz																	13	13
	5500MHz																	13	13
	5800MHz																	13	13

(Upper tolerance: target +1.0dB)

Reduced Power – mmWave + RSDB + RCV active / sub6 + RSDB + RCV active

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)	a	b	g	n	ac	ax(SU)
2.4GHz	2.45GHz								10	10	10		10		13	13	13		13
5GHZ (20MHz)	5200MHz																13	13	13
	5300MHz																13	13	13
	5500MHz																13	13	13
	5800MHz																13	13	13
5GHZ (40MHz)	5200MHz																13	13	13
	5300MHz																13	13	13
	5500MHz																13	13	13
	5800MHz																13	13	13
5GHZ (80MHz)	5200MHz																	13	13
	5300MHz																	13	13
	5500MHz																	13	13
	5800MHz																	13	13

(Upper tolerance: target +1.0dB)

802.11ax RU Tx power Tables

Tones	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
	2.4G	5G/20MHz	5G/40MHz	5G/80MHz	2.4G	5G/20MHz	5G/40MHz	5G/80MHz	2.4G	5G/20MHz	5G/40MHz	5G/80MHz
	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					13.5				16.5	13	13	13
52T					14				17	15.5	14	13
106T					15.5				18.5	17	15	14
242T					15.5				18.5	18	15.5	14.5
484T											15.5	14.5
996T												14.5

(Upper tolerance: target +1.0dB)

Reduced Power 11ax RU Tx power Tables - RCV active

Tones	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
	2.4G	5G/20MHz	5G/40MHz	5G/80MHz	2.4G	5G/20MHz	5G/40MHz	5G/80MHz	2.4G	5G/20MHz	5G/40MHz	5G/80MHz
	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					12				15	13	13	13
52T					12				15	13	13	13
106T					12				15	13	13	13
242T					12				15	13	13	13
484T											13	13
996T												13

(Upper tolerance: target +1.0dB)

Reduced Power 11ax RU Tx power Tables - RSDB Mode

Tones	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
	2.4G	5G/20MHz	5G/40MHz	5G/80MHz	2.4G	5G/20MHz	5G/40MHz	5G/80MHz	2.4G	5G/20MHz	5G/40MHz	5G/80MHz
	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					12				15	13	13	13
52T					12				15	13	13	13
106T					12				15	13	13	13
242T					12				15	13	13	13
484T											13	13
996T												13

(Upper tolerance: target +1.0dB)

Reduced Power 11ax RU Tx power Tables - RSDB With RCV active

Tones	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
	2.4G	5G/20MHz	5G/40MHz	5G/80MHz	2.4G	5G/20MHz	5G/40MHz	5G/80MHz	2.4G	5G/20MHz	5G/40MHz	5G/80MHz
	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					10				13	13	13	13
52T					10				13	13	13	13
106T					10				13	13	13	13
242T					10				13	13	13	13
484T											13	13
996T												13

(Upper tolerance: target +1.0dB)

Reduced Power 11ax RU Tx power Tables - mmWave

Tones	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz
	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					12				15	13	13	13
52T					12				15	13	13	13
106T					12				15	13	13	13
242T					12				15	13	13	13
484T											13	13
996T												13

(Upper tolerance: target +1.0dB)

Reduced Power 11ax RU Tx power Tables – SUB 6 Active

Tones	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz
	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					12				15	13	13	13
52T					12				15	13	13	13
106T					12				15	13	13	13
242T					12				15	13	13	13
484T											13	13
996T												13

(Upper tolerance: target +1.0dB)

Reduced Power 11ax RU Tx power Tables – mmWave/SUB 6 Active with RCV or mmWave/ SUB 6 Active with RSDB

Tones	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz
	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					12				15	13	13	13
52T					12				15	13	13	13
106T					12				15	13	13	13
242T					12				15	13	13	13
484T											13	13
996T												13

(Upper tolerance: target +1.0dB)

Reduced Power 11ax RU Tx power Tables – mmWave/Sub6 Active RSDB with receiver Active

Tones	SISO (ANT1) /in dBm				SISO (ANT2) /in dBm				MIMO (ALL) /in dBm			
	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz
	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					10				13	13	13	13
52T					10				13	13	13	13
106T					10				13	13	13	13
242T					10				13	13	13	13
484T											13	13
996T												13

(Upper tolerance: target +1.0dB)

Real Simultaneous Dual Band (RSDB) Power

	# TX	5GHz WIFI[dBm]		2.4GHz WIFI[dBm]		802.11 Modes
		Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	13	13	2.4 GHz: b, g, n 5 GHz: a, n, ac
2.4 GHz(ax) + 5 GHz RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	13	13	2.4 GHz: ax 5 GHz: a,n,ac
2.4 GHz + 5 GHz(ax) RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	13	13	2.4 GHz: b,g,n 5 GHz: ax

(Upper tolerance: target +1.0 dB)

Real Simultaneous Dual Band (RSDB) Power with RCV On

	# TX	5GHz WIFI[dBm]		2.4GHz WIFI[dBm]		802.11 Modes
		Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	10	10	2.4 GHz: b, g, n 5 GHz: a, n, ac
2.4 GHz(ax) + 5 GHz RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	10	10	2.4 GHz: ax 5 GHz: a, n, ac
2.4 GHz + 5 GHz(ax) RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	10	10	2.4 GHz: b, g, n 5 GHz: ax

(Upper tolerance: target +1.0dB)

802.11ax Simultaneous Dual Band (RSDB) Power

	# TX	5GHz WIFI[dBm]		2.4GHz WIFI[dBm]		802.11 Modes
		Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 10.0 BW40: 10.0 BW80: 10.0	BW20: 10.0 BW40: 10.0 BW80: 10.0	13	13	2.4 GHz: 11ax 5 GHz: 11ax

(Upper tolerance: target +1.0dB)

802.11ax(SU, 242T) Real Simultaneous Dual Band (RSDB) Power with RCV On

	# TX	5GHz WIFI[dBm]		2.4GHz WIFI[dBm]		802.11 Modes
		Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	10	10	2.4 GHz: 11ax 5 GHz: 11ax

(Upper tolerance: target +1.0dB)

802.11ax(SU, 242T) Real Simultaneous Dual Band (RSDB) Power with mmWave & Receiver Active

	# TX	5GHz WIFI[dBm]		2.4GHz WIFI[dBm]		802.11 Modes
		Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 10 BW40: 10 BW80: 10	BW20: 10 BW40: 10 BW80: 10	10	10	2.4 GHz: 11ax 5 GHz: 11ax

(Upper tolerance: target +1.0dB)

4.4.4 Maximum Bluetooth Power

Mode / Band				Modulated Average (dBm)	
Bluetooth	1Mbps	0ch~8ch	Maximum	15.0	
			Nominal	14.0	
		9ch~71ch	Maximum	15.5	
			Nominal	14.5	
		72ch~78ch	Maximum	15.0	
			Nominal	14.0	
	EDR		Maximum	12.0	
			Nominal	11.0	
Bluetooth LE	2M Mbps		Maximum	10.5	
			Nominal	9.5	

4.5 LTE Information

Item.	Description
Frequency Range	LTE Band 2 (PCS) 1 850.7 MHz ~ 1 909.3 MHz
	LTE Band 4 (AWS) 1 710.7 MHz ~ 1 754.3 MHz
	LTE Band 5 (Cell) 824.7 MHz ~ 848.3 MHz
	LTE Band 7 2 502.5 MHz ~ 2 567.5 MHz
	LTE Band 12 699.7 MHz ~ 715.3 MHz
	LTE Band 13 779.5 MHz ~ 784.5 MHz
	LTE Band 14 790.5 MHz ~ 795.5 MHz
	LTE Band 25(PCS) 1 850.7 MHz ~ 1 914.3 MHz
	LTE Band 26 (Cell) 814.7 MHz ~ 848.3 MHz
	LTE Band 30 2 307.5 MHz ~ 2 312.5 MHz
	LTE TDD Band 38 2 572.5 MHz ~ 2 617.5 MHz
	LTE TDD Band 40 2 302.5 MHz ~ 2 397.5 MHz
	LTE TDD Band 41 2 498.5 MHz ~ 2 687.5 MHz
	LTE TDD Band 48 3552.5 MHz ~ 3697.5 MHz
	LTE Band 66 (AWS) 1 710.7 MHz ~ 1 779.3 MHz
	LTE Band 71 665.5 MHz ~ 695.5 MHz
	NR Band n2 (PCS) 1 852.5 MHz ~ 1 907.5 MHz
	NR Band n5 (Cell) 826.5 MHz ~ 846.5 MHz
	NR Band n12 701.5 MHz ~ 713.5 MHz
	NR Band n25 1 852.5 MHz ~ 1 912.5 MHz
	NR Band n30 2 307.5 MHz ~ 2 312.5 MHz
	NR Band n41 2 506.02 MHz ~ 2 679.99 MHz
	NR Band n66 (AWS) 1 712.5 MHz ~ 1 777.5 MHz
	NR Band n71 665.5 MHz ~ 695.5 MHz
	NR Band n77 3 710 MHz ~ 3 969.99 MHz
Channel Bandwidths	LTE Band 2 (PCS) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE Band 4 (AWS) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE Band 5 (Cell) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz
	LTE Band 7 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE Band 12 1.4 MHz, 3 MHz, 5 MHz, 10 MHz
	LTE Band 13 5 MHz, 10 MHz
	LTE Band 14 5 MHz, 10 MHz
	LTE Band 25 (PCS) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE Band 26 (Cell) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz
	LTE Band 30 5 MHz, 10 MHz
	LTE TDD Band 38 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE TDD Band 40 5 MHz, 10 MHz
	LTE TDD Band 41 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE TDD Band 48 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE Band 66 (AWS) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
	LTE Band 71 5 MHz, 10 MHz, 15 MHz, 20 MHz
	NR Band n2 (PCS) 5 MHz, 10 MHz, 15 MHz, 20 MHz
	NR Band n5 (Cell) 5 MHz, 10 MHz, 15 MHz, 20 MHz
	NR Band n12 5 MHz, 10 MHz, 15 MHz
	NR Band n25 5 MHz, 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz
	NR Band n30 5 MHz, 10 MHz
	NR Band n41 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz
	NR Band n66(AWS) 5 MHz, 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz
	NR Band n71 5 MHz, 10 MHz, 15 MHz, 20 MHz
	NR Band n77 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz
	NR Band n77 (DoD) 20 MHz, 25 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz

Ch. No.& Freq.(MHz)		Low	Mid	High
LTE Band 2 (PCS)	1.4 MHz	1 850.7 (18607)	1 880.0 (18900)	1 909.3 (19193)
	3 MHz	1 851.5 (18615)	1 880.0 (18900)	1 908.5 (19185)
	5 MHz	1 852.5 (18625)	1 880.0 (18900)	1 907.5 (19175)
	10 MHz	1 855.0 (18650)	1 880.0 (18900)	1 905.0 (19150)
	15 MHz	1 857.5 (18675)	1 880.0 (18900)	1 902.5 (19125)
	20 MHz	1 860.0 (18700)	1 880.0 (18900)	1 900.0 (19100)
LTE Band 4 (AWS)	1.4 MHz	1 710.7 (19957)	1 732.5 (20175)	1 754.3 (20393)
	3 MHz	1 711.5 (19965)	1 732.5 (20175)	1 753.5 (20385)
	5 MHz	1 712.5 (19975)	1 732.5 (20175)	1 752.5 (20375)
	10 MHz	1 715.0 (20000)	1 732.5 (20175)	1 750.0 (20350)
	15 MHz	1 717.5 (20025)	1 732.5 (20175)	1 747.5 (20325)
	20 MHz	1 720.0 (20050)	1 732.5 (20175)	1 745.0 (20300)
LTE Band 5 (Cell)	1.4 MHz	824.7 (20407)	836.5 (20525)	848.3 (20643)
	3 MHz	825.5 (20415)	836.5 (20525)	847.5 (20635)
	5 MHz	826.5 (20425)	836.5 (20525)	846.5 (20625)
	10 MHz	829.0 (20450)	836.5 (20525)	844.0 (20600)
LTE Band 7	5 MHz	2502.5 (20775)	2535 (21100)	2567.5 (21425)
	10 MHz	2505 (20800)	2535 (21100)	2565 (21400)
	15 MHz	2507.5 (20825)	2535 (21100)	2562.5 (21375)
	20 MHz	2510 (20850)	2535 (21100)	2560 (21350)
LTE Band 12	1.4 MHz	699.7 (23017)	707.5 (23095)	715.3 (23173)
	3 MHz	700.5 (23025)	707.5 (23095)	714.5 (23165)
	5 MHz	701.5 (23035)	707.5 (23095)	713.5 (23155)
	10 MHz	704.0 (23060)	707.5 (23095)	711.0 (23130)
LTE Band 13	5 MHz	779.5 (23205)	782 (23230)	784.5 (23255)
	10 MHz		782 (23230)	
LTE Band 14	5 MHz	790.5 (23305)	793 (23330)	795.5 (23355)
	10 MHz		793 (23330)	
LTE Band 25(PCS)	1.4 MHz	1 850.7 (26047)	1 882.5 (26365)	1 914.3 (26683)
	3 MHz	1 851.5 (26055)	1 882.5 (26365)	1 913.5 (26675)
	5 MHz	1 852.5 (26065)	1 882.5 (26365)	1 912.5 (26665)
	10 MHz	1 855 (26090)	1 882.5 (26365)	1 910 (26640)
	15 MHz	1 857.5 (26115)	1 882.5 (26365)	1 907.5 (26615)
	20 MHz	1 860 (26140)	1 882.5 (26365)	1 905 (26590)
LTE Band 26 (Cell)	1.4 MHz	814.7 (26697)	831.5 (26865)	848.3 (27033)
	3 MHz	815.5 (26705)	831.5 (26865)	847.5 (27025)
	5 MHz	816.5 (26715)	831.5 (26865)	846.5 (27015)
	10 MHz	819.0 (26740)	831.5 (26865)	844.0 (26990)
	15 MHz	821.5 (26765)	831.5 (26865)	841.5 (26965)
LTE Band 30	5 MHz	2 307.5 (27685)	2 310 (27710)	2 312.5 (27735)
	10 MHz		2 310 (27710)	
LTE TDD Band 38	5 MHz	2572.5 (37775)	2 595 (38000)	2617.5 (38225)
	10 MHz	2575 (37800)	2 595 (38000)	2615 (38200)
	15 MHz	2577.5 (37825)	2 595 (38000)	2612.5 (38175)
	20 MHz	2580 (37850)	2 595 (38000)	2610 (38150)
LTE TDD Band 40(Lower)	5 MHz	2 307.5 (38725)	2 310 (39750)	2 312.5 (38775)
	10 MHz		2 310 (39750)	
LTE TDD Band 40(Upper)	5 MHz	2 352.5 (39175)	2 355 (39200)	2 357.5 (39225)
	10 MHz		2 355 (39200)	

Ch. No.& Freq.(MHz)		Low		Mid		High	
LTE 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 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	673 (133222)		680.5 (133297)		688 (133372)	
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. 14, DL: Category 20, UL: Category 18					
HPUE Power Class		LTE TDD 41 Power Class 3: (Duty: 63.3%) Power Class 2: (Duty:43.3%)					
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 intra-band UL-link Carrier aggregations. Detaled information of Down-Link CA are included in the Appendix.I and Technical Description document.					
LTE Release information		This device does not support full CA features on 3GPP Release 16. It supports carrier aggregation, downlink MIMO. All other uplink communications are identical to the release 8 specifications. The following LTE Release 16 Features are not supported: Relay, Hetnet, Enhanced eCI, MDH, cross-carrier Scheduling, Enhanced SC-FDMA.					

Ch. No.& Freq.(MHz)		Low / Low-Mid		Mid		Mid-High / High	
NR Band n2 (PCS)	5 MHz	1852.5 (370500)		1880 (376000)		1907.5 (381500)	
	10 MHz	1855 (371000)		1880 (376000)		1905 (381000)	
	15 MHz	1857.5 (371500)		1880 (376000)		1902.5 (380500)	
	20 MHz	1860 (372000)		1880 (376000)		1900 (380000)	
NR Band n5 (Cell)	5 MHz	826.5 (165300)		836.5 (167300)		846.5 (169300)	
	10 MHz	829 (165800)		836.5 (167300)		844 (168800)	
	15 MHz	831.5 (166300)		836.5 (167300)		841.5 (168300)	
	20 MHz	834 (166800)		836.5 (167300)		839 (167800)	
NR Band n12	5 MHz	701.5 (140300)		707.5 (141500)		713.5 (142700)	
	10 MHz			707.5 (141500)			
	15 MHz			707.5 (141500)			
NR Band n25	5 MHz	1852.5 (370500)		1882.5 (376500)		1912.5 (382500)	
	10 MHz	1855 (371000)		1882.5 (376500)		1910 (382000)	
	15 MHz	1857.5 (371500)		1882.5 (376500)		1907.5 (381500)	
	20 MHz	1860 (372000)		1882.5 (376500)		1905 (381000)	
	30 MHz	1865 (373000)				1900 (380000)	
	40 MHz			1882.5 (376500)			
NR Band n30	5 MHz			2310 (462000)			
	10 MHz			2310 (462000)			
NR 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 Band n66(AWS)	5 MHz	1712.5 (342500)	1734.1 (346820)	1755.8 (351160)		1777.5 (355500)	
	10 MHz	1715 (343000)	1735 (347000)	1755 (351000)		1775 (355000)	
	15 MHz	1717.5 (343500)	1735.8 (347160)	1754.1 (350820)		1772.5 (354500)	
	20 MHz	1720 (344000)	1745 (349000)			1770 (354000)	
	30 MHz	1725 (345000)				1765 (353000)	
	40 MHz		1745 (349000)				
NR Band n41	20 MHz	2506.02 (501204)	2549.49 (509898)	2592.99 (518598)	2636.49 (527298)	2679.99 (535998)	
	30 MHz	(2511) 502200	(2552.01) 510402	(2592.99) 518598	(2634) 526800	(2674.98) 534996	
	40 MHz	2516.01 (503202)	2567.34 (513468)		2618.67 (523734)	2670 (534000)	
	50 MHz	2521.02 (504204)		2592.99 (518598)		2664.99 (532998)	
	60 MHz	2526 (505200)		2592.99 (518598)		2659.98 (531996)	
	80 MHz	2536.02 (507204)				2649.99 (529998)	
	90 MHz	2541 (508200)				2644.98 (528996)	
	100 MHz			2592.99 (518598)			
NR Band n77	20 MHz	3710.01 (647334)	3762 (650800)	3813.99(654266)	3866.01 (657734)	3918 (661200)	3969.99 (664666)
	30 MHz	3714.99 (647666)	3765 (651000)	3815.01(654334)	3864.99 (657666)	3915 (661000)	3965.01 (664334)
	40 MHz	3720 (648000)	3768 (651200)	3816 (654400)	3864 (657600)	3912 (660800)	3960 (664000)
	50 MHz	3725.01 (648334)	3782.49 (652166)	3840 (656000)		3897.51 (659834)	3954.99 (663666)
	60 MHz	3730.02 (648668)	3803.34(653556)			3876.66(658444)	3949.98 (663332)
	70 MHz	3735 (649000)	3804.99 (654336)			3875.01 (658334)	3945(663000)
	80 MHz	3740.01 (649334)		3840 (656000)			3939.99 (662666)
	90 MHz	3745.02 (649668)		3840 (656000)		3934.98 (662332)	
	100 MHz	3750 (650000)		3840 (656000)		3930 (662000)	

Ch. No.& Freq.(MHz)		Low / Low-Mid	Mid	Mid-High / High
NR Band n77 (DoD)	20 MHz	3460.02 (630668)	3500.01 (633334)	3540 (636000)
	30 MHz	3465 (631000)	3500.01 (633334)	3534.99 (635666)
	40 MHz	3470.01 (631334)		3529.98 (635332)
	50 MHz	3475.02 (631668)		3525 (635000)
	60 MHz		3500.01 (633334)	
	70 MHz		3500.01 (633334)	
	80 MHz		3500.01 (633334)	
	90 MHz		3500.01 (633334)	
	100 MHz		3500.01 (633334)	
Item.		Description		
NR Band n2/n5/n12/n25/n30/n66/n71 SCS		15 kHz		
NR Band n41/n77 SCS		30 kHz		
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: $\pi/2$ -BPSK(UL Only), QPSK, 16QAM, 64QAM, 256QAM		
Non-Standalone & Standalone are supported. 5G NR FR1 Bands,except n30 are supported to NSA and SA Connectivity. n30 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		

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 mm and < 200 mm, 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.

Mode	Antenna	Rear	Front	Left	Right	Bottom	Top
EVDO BC10 (\$90S)	A	Yes	Yes	Yes	Yes	Yes	No
EVDO BC0 (\$22H)	A	Yes	Yes	Yes	Yes	Yes	No
PCS EVDO	A	Yes	Yes	Yes	Yes	Yes	No
GSM/GPRS/EDGE 850	A	Yes	Yes	Yes	Yes	Yes	No
GSM/GPRS/EDGE 1900	A	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 5	A	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 4	A	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 2	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 2 (PCS)	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 4 (AWS)	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 5 (Cell)	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 7	B	Yes	Yes	Yes	No	Yes	No
LTE Band 12	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 13	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 14	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 25	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 26	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 30	B	Yes	Yes	Yes	No	Yes	No
LTE TDD Band 38	B	Yes	Yes	Yes	No	Yes	No
LTE TDD Band 40	B	Yes	Yes	Yes	No	Yes	No
LTE TDD Band 41	B	Yes	Yes	Yes	No	Yes	No
LTE TDD Band 48	H	Yes	Yes	Yes	No	No	Yes
LTE Band 66 (AWS)	A	Yes	Yes	Yes	Yes	Yes	No
LTE Band 71	A	Yes	Yes	Yes	Yes	Yes	No
NR Band n2	A	Yes	Yes	Yes	Yes	Yes	No
NR Band n5	A	Yes	Yes	Yes	Yes	Yes	No
NR Band n12	A	Yes	Yes	Yes	Yes	Yes	No
NR Band n25	A	Yes	Yes	Yes	Yes	Yes	No
NR Band n30	B	Yes	Yes	Yes	No	Yes	No
NR Band n41	B	Yes	Yes	Yes	No	Yes	No
NR Band n66	A	Yes	Yes	Yes	Yes	Yes	No
NR Band n71	A	Yes	Yes	Yes	Yes	Yes	No
NR Band n77	H	Yes	Yes	Yes	No	No	Yes
NR Band n77 SRS #2	E	Yes	Yes	Yes	No	Yes	No
NR Band n77 SRS #3	M	Yes	Yes	Yes	No	No	No
NR Band n77 SRS #4	D	Yes	Yes	Yes	No	Yes	No
2.4 GHz WLAN	WIFI #2	Yes	Yes	Yes	No	No	Yes
5 GHz WLAN	WIFI #1,#2	Yes	Yes	Yes	No	No	Yes
Bluetooth	WIFI #1	Yes	Yes	Yes	No	No	Yes

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

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	Wireless	Phablet
		Accessory	Router	
1xCDMA voice + 2.4GHz Bluetooth	Yes^	Yes	N/A	Yes^
1xCDMA voice + 2.4GHz WI-FI MIMO	Yes	Yes	N/A	Yes
1xCDMA voice + 5GHz WI-FI MIMO	Yes	Yes	N/A	Yes
1xCDMA voice + 2.4GHz WI-FI Ant 2+ 2.4GHz Bluetooth	Yes	Yes	N/A	Yes
1xCDMA voice + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO	Yes	Yes	N/A	Yes
1xCDMA voice + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes^	Yes	N/A	Yes^
GSM voice + 2.4GHz Bluetooth	Yes^	Yes	N/A	Yes^
GSM voice + 2.4GHz WI-FI MIMO	Yes	Yes	N/A	Yes
GSM voice + 5GHz WI-FI MIMO	Yes	Yes	N/A	Yes
GSM voice + 2.4GHz WI-FI Ant 2+ 2.4GHz Bluetooth	Yes	Yes	N/A	Yes
GSM voice + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes^	Yes	N/A	Yes^
UMTS + 2.4GHz Bluetooth	Yes^	Yes	Yes^	Yes^
UMTS + 2.4GHz WI-FI MIMO	Yes	Yes	Yes	Yes
UMTS + 5GHz WI-FI MIMO	Yes	Yes	Yes	Yes
UMTS + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO	Yes	Yes	Yes	Yes
UMTS + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes^
UMTS + 2.4GHz WI-FI Ant 2+ 2.4GHz Bluetooth	Yes^	Yes	Yes^	Yes^
LTE + 5G NR	Yes	Yes	N/A	Yes
LTE + 2.4GHz Bluetooth	Yes^	Yes	Yes^	Yes^
LTE + 2.4GHz Bluetooth + 5G NR	Yes^	Yes	Yes^	Yes^
LTE + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes^
LTE + 2.4GHz WI-FI MIMO	Yes	Yes	Yes	Yes
LTE + 2.4GHz WI-FI MIMO + 5G NR	Yes*	Yes	Yes	Yes
LTE + 5GHz WI-FI MIMO	Yes	Yes	Yes	Yes
LTE + 5GHz WI-FI MIMO + 5G NR	Yes*	Yes	Yes	Yes
LTE + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO	Yes	Yes	Yes	Yes
LTE + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO + 5G NR	Yes*	Yes	Yes	Yes
LTE + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes^^	Yes	Yes^	Yes^
LTE + 2.4GHz Bluetooth + 5GHz WI-FI MIMO + 5G NR	Yes^^	Yes	Yes^	Yes^
LTE + 2.4GHz WI-FI Ant 2+ 2.4GHz Bluetooth	Yes^^	Yes	Yes^	Yes^
LTE + 2.4GHz WI-FI Ant 2+ 2.4GHz Bluetooth + 5G NR	Yes^^	Yes	Yes^	Yes^
CDMA/EVDO Data + 2.4GHz Bluetooth	Yes*^	Yes*	Yes^	Yes*^
CDMA/EVDO Data + 2.4GHz Bluetooth + 5GHz WI-FI MIMO	Yes*^	Yes*	Yes^	Yes*^
CDMA/EVDO Data + 2.4GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes*
CDMA/EVDO Data + 5GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes*
CDMA/EVDO Data + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes*
CDMA/EVDO Data + 2.4GHz Bluetooth+ 5GHz WI-FI MIMO	Yes*^	Yes*	Yes^	Yes*^
CDMA/EVDO Data + 2.4GHz WI-FI Ant 2+ 2.4GHz Bluetooth	Yes*^	Yes*	Yes^	Yes*^
GPRS/EDGE Data + 2.4GHz Bluetooth	Yes*^	Yes*	Yes^	Yes*^
GPRS/EDGE Data + 2.4GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes*
GPRS/EDGE Data + 5GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes*
GPRS/EDGE Data + 2.4GHz WI-FI MIMO + 5GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes*
GPRS/EDGE Data + 2.4GHz Bluetooth+ 5GHz WI-FI MIMO	Yes*^	Yes*	Yes^	Yes*^
GPRS/EDGE Data + 2.4GHz WI-FI Ant 2+ 2.4GHz Bluetooth	Yes*^	Yes*	Yes^	Yes*^

Note:

1. The device does not support licensed bands simultaneously transmitting.
2. UMTS +WLAN scenario also represents the UMTS Voice/DATA + WLAN hotspot scenario.
3. VoIP is supported in GPRS/EDGE and EVDO RevA
4. The highest reported SAR for each exposure condition is used for SAR summation purpose.
5. Wi-Fi Hotspot is supported for 2.4 GHz/ UNII-3 of 5 GHz WLAN.
6. This device supports Bluetooth tethering. ^ BluetoothTetheringis considered.
7. * Pre-installedVOIP applications areconsidered
8. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held to ear or Body worn accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFI Direct beyond that listed in the above table.
9. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac/ax. 802.11a/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM. Each WLAN antenna can transmit independently or together when operating with MIMO.
10. This device supports VOLTE.
11. This device supports VOWIFI
12. 5G NR FR1 Scenarios, except n30 are supported to NSA and SA Connectivity. n30 is only supported to SA connectivity
13. LTE + 5G NR FR2 n260 and n261 operations are possible only with LTE B2/5/12/13/48/66 for n261 and LTE B2/5/12/13/14/30/48/66 for n260 under EN-DC mode only.
14. 5G NR FR1 and 5G NR FR 2 cannot transmit simultaneously

4.9 SAR Test Considerations

4.9.1 WiFi

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

Since U-NII-1 and U-NII-2A bands have the same maximum output power and the highest reported SAR for U-NII-2A is less than 1.2 W/kg for 1g SAR and is less than 3.0 W/kg for 10g SAR, SAR is not required for U-NII-1 band according to FCC KDB 248227D01v02r02.

This device supports IEEE 802.11ax with the following features:

- a) Up to 160 MHz Bandwidth only for 5 GHz
- b) Up to 20 MHz Bandwidth only for 2.4 GHz
- c) No aggregate channel configurations
- d) 2 Tx antenna output
- e) Up to 1024 QAM is supported
- f) TDWR and Band gap channels are supported for 5 GHz
- g) MU-MIMO UL Operations are supported

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is greater than 160mm and less than 200mm. Phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. 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 when applying the initial test Configuration procedures of KDB 248227, with 802.11ax considered a higher order 802.11 mode.

4.8.2 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.

CDMA 1X Advanced technology was not required for SAR since the maximum allowed output powers for 1xAdvanced was not more than 0.25 dB higher than the maximum powers for 1x and the measured SAR in any 1x mode exposure conditions was not greater than 1.2 W/kg per FCC KDB Publication 941225 D01v03r01

LTE SAR for the higher modulations and lower bandwidths were not tested since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth; and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg for all configurations according to FCC KDB 941225 D05v02r05.

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

This Device supports 64QAM and 256QAM on the uplink and 256QAM on the downlink for LTE Operations. Conducted powers for 64QAM and 256QAM uplink configurations were measured per section 5.1 of FCC KDB 941225 D05v02r05. SAR was not required for 64QAM or 256QAM since the highest maximum output power for

64QAM and 256QAM is $\leq 0.5\text{dB}$ higher than the same configuration in QPSK and the reported SAR for QPSK configuration is $\leq 1.45\text{ W/Kg}$, 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 B26 and LTE B5, LTE B25 and LTE B2, LTE b66 and LTE B4, and LTE b38 and LTE B41 of this model.

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

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 $>0.25\text{ dB}$ higher than the maximum output power when downlink carrier aggregation was inactive.

This device supports LTE Carrier Aggregation (CA) for LTE band 5/48/41/66 with two component carriers in the uplink. SAR measurements and conducted powers were evaluated per 2017 Fall TCBC Workshop Notes.

This device supports downlink 4x4 MIMO operations for some LTE bands. Per Ma 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

This device supports NSA(Non-standalone) and SA(Stand alone) connectivity for 5G NR FR1 Bands, except n30(SA only). More detailed specifications of the bands are contained in the Technical description document.

This device supports NSA(Non-standalone) only for 5G FR2 Band n260 and n261.
RF Exposure assessment and simultaneous transmission analysis for these bands can be found in the Part 1 PD Report.

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

Per FCC KDB 941225 D01v03r01, 12.2 kbps RMC is the primary mode and HSPA (HSUPA/HSDPA with RMC) is the secondary mode.

Per FCC KDB 941225 D01v03r01, The SAR test exclusion is applied to the secondary mode by the following equation.

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

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

Per FCC KDB 690783 1 D01 SAR Listings on Grants v01r03 and KDB 447498 D01 General RF Exposure Guidance v06 The SAR numbers listed must be consistent with the highest reported test results required by the published RF exposure KDB procedures. When the measured SAR is not at the maximum tune-up tolerance limit or maximum output power allowed for production units, the measured results are scaled to the maximum conditions to determine compliance; the scaled results are referred to as the reported SAR.

The Reported SAR = The Measured SAR x $\frac{\text{Maximum tune-up (mW)}}{\text{Measured Conducted Power(mW)}}$

The Reported SAR for WLAN and Bluetooth

The Reported SAR = The Measured SAR x $\frac{\text{Maximum tune-up (mW)}}{\text{Measured Conducted Power(mW)}}$ x Duty factor

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 (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). 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.

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 is working with SAR Measurement system DASY4 & DASY5, 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.

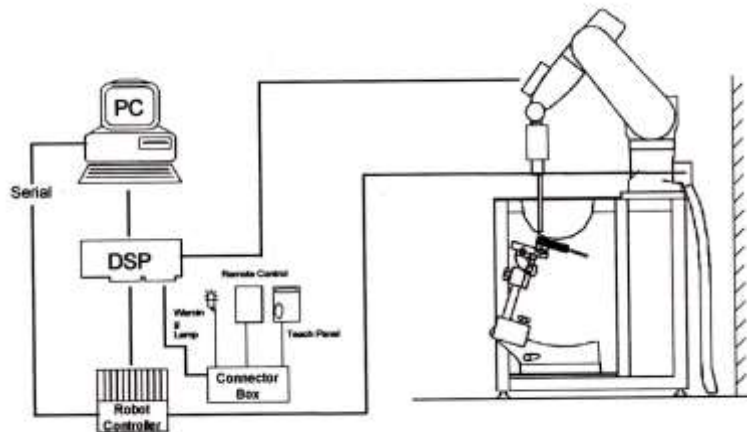


Figure 2. HCT SAR Lab. Test Measurement Set-up

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.

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.

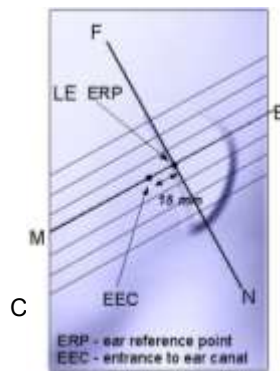
Area scan and zoom scan resolution setting follow KDB 865664 D01v01r04 quoted below.

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

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 point 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.



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 then 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

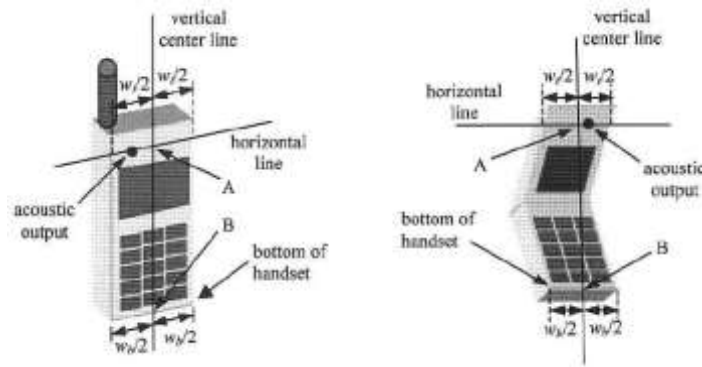


Figure 6-3. Handset vertical and horizontal reference lines

8.3 Device Holder

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

8.4 Position for cheek

Figure 6.4. shows cheek 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.

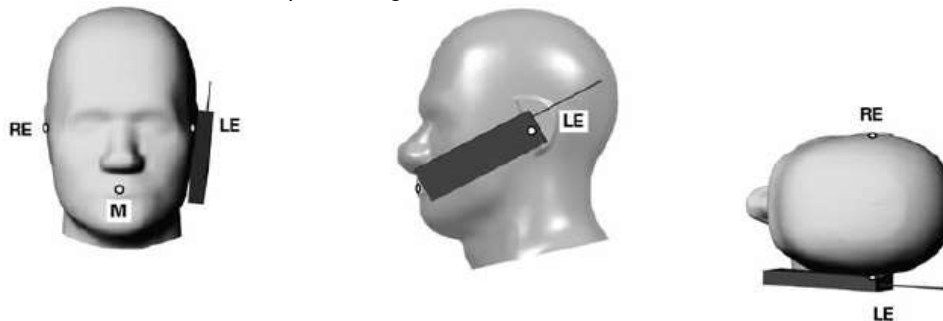


Figure 8.4 Cheek/ Touch position of the wireless device

8.5 Definition of the “tilted” position

Figure 6.5. shows tilted position. Place the device in the cheek 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

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 6-6). 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 ≥ 9cm x 5 cm) are based on a composite test separation distance of 10 mm 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.

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-worn 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 Additional Test Positions due to Proximity Conditions

This device uses a sensor to reduce output powers in extremity (hand-held) use conditions.

When the sensor detects a user is touching the device on or near to the antenna the device reduces the maximum allowed output power. However, the proximity sensor is not active when the device is moved beyond the sensor triggering distance and the maximum output power is no longer limited. Therefore, an additional exposure condition is needed in the vicinity of the triggering distance to ensure SAR is compliant when the device is allowed to operate at a non-reduced output power level.

FCC KDB 616217 D04 v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device at these additional exposure conditions. The smallest separation distance determined by the sensor triggering and sensor coverage for each applicable edge, minus 1 mm, was used as the test separation distance for SAR testing. Sensor triggering distance summary data is included in below table.

Wireless technologies	Position	§6.2 Triggering Distance	§6.3 Coverage	§6.4 Tilt Angle	Worst case distance for Phablet SAR
GSM1900/ CDMA BC1/ UMTS B2/B4 LTE B2/B4/B7/B25/B30/B66/B41(HPUE) NR n2, n25,n30, n66	Rear	9	N/A	N/A	8
	Front	7	N/A	N/A	6
	Bottom	14	N/A	N/A	13

8.10 Bluetooth tethering Configurations

Per May 2017 TCBC Workshop documents 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 BR tethering applications.

9. RF Exposure Limits

HUMAN EXPOSURE	UNCONTROLLED ENVIRONMENT General Population (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT Occupational (W/kg) or (mW/g)
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 made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

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.

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 Check for power drifts. If conducted Power deviations of more than 5 % occurred, the tests were repeated.

10.3 SAR Measurement Conditions for CDMA2000

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

10.3.1 Output Power Verification

See 3GPP2 C.S0011/TIA-98-E as recommended by FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.” Maximum output power is verified on the High, Middle and Low channels according to procedures in section 4.4.5.2 of 3GPP2 C.S0011/TIA-98-E. SO55 tests were measured with power control bits in the “All Up” condition.

1. If the mobile station (MS) supports Reverse TCH RC 1 and Forward TCH RC 1, set up a call using Fundamental Channel Test Mode 1 (RC=1/1) with 9600 bps data rate only.
2. Under RC1, C.S0011 Table 4.4.5.2-1, Table 8-1 parameters were applied.
3. If the MS supports the RC 3 Reverse FCH, RC3 Reverse SCH₀ and demodulation of RC 3,4, or 5, set up a call using Supplemental Channel Test Mode 3 (RC 3/3) with 9600 bps Fundamental Channel and 9600 bps SCH₀ data rate.
4. Under RC3, C.S0011 Table 4.4.5.2-2, Table 8-2 was applied.
5. FCHs were configured at full rate for maximum SAR with “All Up” power control bits.

Parameters for Max. Power for RC1

Parameter	Units	Value
I_{or}	dBm/1.23 MHz	-104
$\frac{Pilot E_c}{I_{or}}$	dB	-7
$\frac{Traffic E_c}{I_{or}}$	dB	-7.4

Parameters for Max. Power for RC3

Parameter	Units	Value
I_{or}	dBm/1.23 MHz	-86
$\frac{Pilot E_c}{I_{or}}$	dB	-7
$\frac{Traffic E_c}{I_{or}}$	dB	-7.4

10.3.2 Head SAR Measurements

SAR for next to the ear head exposure is measured in RC3 with the handset configured to transmit at full rate in SO55. The 3G SAR test reduction procedure is applied to RC1 with RC3 as the primary mode; otherwise, SAR is required for the channel with maximum measured output in RC1 using the head exposure configuration that results in the highest reported SAR in RC3.

Head SAR is additionally evaluated using EVDO Rev. A to support compliance for VoIP operations. See Section 8.4.5 for EVDO Rev. A configuration parameters

10.3.3 Body-worn SAR Measurements

SAR for body-worn exposure configurations is measured in RC3 with the DUT configured to transmit at full rate on FCH with all other code channels disabled using TDSO / SO32. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCH_n), with FCH only as the primary mode. Otherwise, SAR is required for multiple code channel configuration (FCH + SCH_n), with FCH at full rate and SCH₀ enabled at 9600 bps, using the highest reported SAR configuration for FCH only. When multiple code channels are enabled, the transmitter output can shift by more than 0.5 dB and may lead to higher SAR drifts and SCH dropouts.

The 3G SAR test reduction procedure is applied to body-worn accessory SAR in RC1 with RC3 as the primary mode. Otherwise, SAR is required for RC1, with SO55 and full rate, using the highest reported SAR configuration for body-worn accessory exposure in RC3.

10.3.4 Body-worn SAR Measurements for EVDO Devices

For handsets with EVDO capabilities, the 3G SAR test reduction procedure is applied to EVDO Rev. 0 with 1x RTT RC3 as the primary mode to determine body-worn accessory test requirements. Otherwise, body-worn accessory SAR is required for Rev. 0, at 153.6 kbps, using the highest reported SAR configuration for body-worn accessory exposure in RC3.

The 3G SAR test reduction procedure is applied to Rev. A, with Rev. 0 as the primary mode to determine body-worn accessory SAR test requirements. When SAR is not required for Rev. 0, the 3G SAR test reduction is applied with 1x RTT RC3 as the primary mode.

When SAR is required for EVDO Rev. A, SAR is measured with a Reverse Data Channel payload size of 4096 bits and a Termination Target of 16 slots defined for Subtype 2 Physical Layer configurations, using the highest reported SAR configuration for body-worn accessory exposure in Rev. 0 or 1x RTT RC3, as appropriate.

10.3.5 Body SAR Measurements for EVDO Hotspot

Hotspot Body SAR is measured using Subtype 0/1 Physical Layer configurations for Rev. 0. The 3G SAR test reduction procedure is applied to Rev. A, Subtype 2 Physical layer configuration, with Rev. 0 as the primary mode; otherwise, SAR is measured for Rev. A using the highest reported SAR configuration for body-worn accessory exposure in Rev. 0. The AT is tested with a Reverse Data Channel rate of 153.6 kbps in Subtype 0/1 Physical Layer configurations; and a Reverse Data Channel payload size of 4096 bits and Termination Target of 16 slots in Subtype 2 Physical Layer configurations.

For EVDO data devices that also support 1x RTT voice and/or data operations, the 3G SAR test reduction procedure is applied to 1x RTT RC3 and RC1 with EVDO Rev. 0 and Rev. A as the respective primary modes. Otherwise, the 'Body-Worn Accessory SAR' procedures in the '3GPP2 CDMA 2000 1x Handsets' section are applied.

10.3.6 CDMA2000 1x Advanced

This device additionally supports 1x Advanced. Conducted powers are measured using SO75 with RC8 on the uplink and RC11 on the downlink per FCC KDB Publication 941225 D01v03r01. Smart blanking is disabled for all measurements. The EUT is configured with forward power control Mode 000 and reverse power control at 400 bps. Conducted powers are measured on an Agilent 8960 Series 10 Wireless Communications Test Set, Model E5515C using the CDMA2000 1x Advanced application, Option E1962B-410.

The 3G SAR test reduction procedure is applied to the 1x-Advanced transmission mode with 1x RTT RC3 as the primary mode. When SAR measurement is required, the 1x-Advanced power measurement configurations are used. The 1x Advanced SAR procedures are applied separately to head, body-worn accessory and other exposure conditions.

10.4 SAR Measurement Conditions for UMTS

10.4.1 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.

10.4.2 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.

10.4.3 SAR Measurements with Rel. 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using 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.

10.4.4 SAR Measurements with Rel. 6 HSUPA

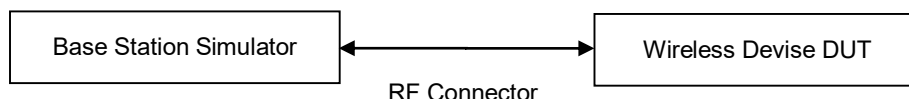
The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA.

10.4.5DC-HSDPA

SAR is required for Rel.8 DC-HSDPA when SAR is required for Rel.5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in table C.8.1.12 of 3GPP TS34.121-1 to determine SAR test reduction. Primary and secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

DC-HSDPA Configurations

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



10.5 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r05 publication. 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).

10.5.1 Spectrum Plots for RB Configurations

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

10.5.2 MPR

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

10.5.3 A-MPR

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

10.5.4 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.

10.5.5 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.

10.5.6 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_41C and the single carrier LTE 41. Both Uplink carrier aggregation and single carrier are operating with Power class 3.

This device support intra-band contiguous UL CA: LTE CA_41C with a maximum of 20 MHz component carriers. 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.

This device does not have any operating restrictions, Power reduction or variations among the different LTE operating mode configurations on single carrier LTE 41 and intra-band contiguous up-link LTE CA_41C operations.

The measured power results of single carrier LTE41 and intra-band contiguous up-link LTE CA_41C 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.

Because the maximum output for UL CA of LTE 41 is $\leq$ standalone LTE mode (without CA), SAR for LTE B41 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 > 1.2 W/kg

10.5.7 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	$26336 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$			$20480 \cdot T_s$		
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 $\times (T_s) \times$ 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 = $(5120 \times (1/(15000 \times 2048))) \times 2 + 0.006)/0.01 = 63.33 \%$

Where

$T_s = 1/(15000 \times 2048)$ seconds

HPUE :

Calculated Duty Cycle for Uplink-Downlink Configuration 1:

Calculated Duty Cycle = $5120 \times (1/(15000 \times 2048)) \times 2 + 0.004)/0.01 = 43.33 \%$

10.5.6 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.

2018/01/08 11:00		Idle(Regist)		Phone-2	Phone-1
<Fundamental Measurement> Output Main		Continuous		W-CDMA	LTE
Parameter	Fundamental	UE Report			
Reference Signal not found		UE Power : -21.5 dBm		Parameter	
Power Measurement		(Meas. Count : 11/ 20)		Common	
TX Power		Avg.	Max.	Min.	Limit
Channel Power		*****	*****	*****	20.3 to 25.7 dBm
Modulation Analysis		View		(Meas. Count : 1/ 1)	
Common Parameter		TX1 - Max. Power(QPSK/1 RB)		Physical Channel	
Test Parameter				Call Processing	
Call Processing		On		Scenario Normal	
Frequency		TDD		TX Measurement Setup	
Frame Structure		FDD Hz		RX Measurement Setup	
Channel Bandwidth		TDD 20		Fundamental Measurement	
UL Channel & Frequency		CH = 2593.000000 MHz			
DL Channel & Frequency		40620 CH = 2593.000000 MHz			
Operation Band		41			
Frequency Separation		(0)MHz			
Level		30.0 dBm			
Input Level				1 2 3 4	

2018/01/08 11:01		Idle(Regist)		Phone-2	Phone-1
<Fundamental Measurement> Output Main		Continuous		W-CDMA	LTE
Parameter	Fundamental	UE Report			
Reference Signal not found		UE Power : -21.5 dBm		Parameter	
Power Measurement		(Meas. Count : 11/ 20)		Common	
TX Power		Avg.	Max.	Min.	Limit
Channel Power		*****	*****	*****	20.3 to 25.7 dBm
Modulation Analysis		View		(Meas. Count : 1/ 1)	
MCS Index (-)		5 (QPSK)	(5)	(2216)	-
MCS Index (5)		5 (QPSK)	(5)	(1864)	4
MCS Index (0)		5 (QPSK)	(5)	(2216)	2
MCS Index (1,6)		N/A (-----)	(--)	(-----)	2
CFI		3			
TDD		subframe 0 1 2 3 4 5 6 7 8 9			
Uplink Downlink Configuration		0 : (5ms) D S U U U D S U U U			
Special Subframe Configuration		6			
Physical Channel Parameter					
PSS Power		0.0 dB			
SSS Power		0.0 dB			
PBCH Power		0.0 dB			
PCFICH Power		0.0 dB			
PHICH Power		0.0 dB			
		1 2 3 4			

10.6 SAR Testing with 802.11 Transmitters

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

10.6.1 General Device Setup

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

A periodic duty factor is required for current generation SAR 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.

10.6.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is > 1.2 W/kg 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.

10.6.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 GHz – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 GHz – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification.

Unless band gap channels are permanently disabled, SAR must be considered for these channels.

10.6.4 Initial Test Position Procedure

For exposure conditions with multiple test positions, such as handset operating next 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.

10.6.5 2.4 GHz SAR test Requirements

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

- 1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS is that exposure configuration.
- 2) When the reported SAR is > 0.8 W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

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

10.6.6 OFDM Transmission Mode and SAR Test Channel Selection

For the 2.4 GHz and 5 GHz bands, when the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate and lowest order 802.11 a/g/n/ac mode. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11 ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 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.

10.6.7 Initial Test Configuration Procedure

For OFDM, in both 2.4 GHz and 5 GHz bands, an initial test configuration is determined for each frequency band and aggregated band, according to the transmission mode with the highest maximum output power specified for SAR measurements. When the same maximum output power is specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration(s) with the largest channel bandwidth, lowest order modulation, and lowest data rate. If the average RF output powers of the highest identical transmission modes are within 0.25 dB of each other, mid channel of the transmission mode with highest average RF output power is the initial test channel. Otherwise, the channel of the transmission mode with the highest average RF output conducted power will be the initial test configuration.

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

10.6.8 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.

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

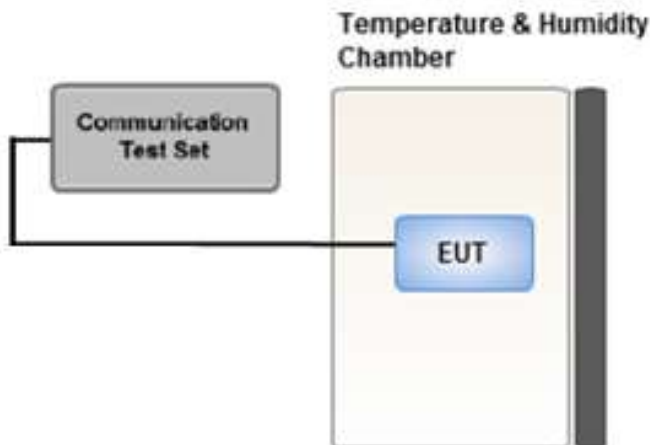
According to ANSI C63.26-2015 Section 5.2.1 when measuring the maximum RF output power from such devices, control over the EUT must be provided either through special test software (provided by manufacturer specifically for compliance testing, but not accessible by an end user) or through use of a base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



11.1 CDMA

11.1.1 CDMA Maximum Conducted Output Power

DSI = 0,2 P_{Limit} Calculations – Body-Worn, Phablet Max, Head SAR

Measured P_{max}

Band	Ch.	SO2	SO2	SO55	SO55	SO75	TDSO	1xEVDO	1xEVDO	1xEVDO	1xEVDO
		RC1/1	RC3/3	RC1/1	RC3/3	RC1/1	SO32	Rev.0	Rev.0	Rev.A	Rev.A
		(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	FTAP	RTAP	FETAP	RETAP
CDMA (BC0)	1013	24.12	24.15	24.12	24.09	24.25	24.10	23.72	23.71	23.69	23.70
	384	24.34	24.29	24.31	24.30	24.29	24.32	23.89	23.89	23.88	23.89
	777	24.30	24.19	24.15	24.22	24.21	24.19	23.78	23.77	23.75	23.76
PCS (BC1)	25	23.68	23.70	23.66	23.65	23.51	23.60	23.78	23.76	23.86	23.75
	600	24.12	24.09	24.05	24.10	24.15	24.15	24.18	24.14	24.15	24.11
	1175	23.92	23.90	23.92	23.89	23.96	23.92	24.01	23.97	23.96	23.90
Secondary (BC10)	450	24.25	24.19	24.18	24.22	24.23	24.21	23.60	23.63	23.59	23.61
	560	24.22	24.18	24.14	24.16	24.30	24.20	23.61	23.60	23.59	23.57
	670	24.25	24.21	24.26	24.22	24.19	24.13	23.60	23.61	23.62	23.58

CDMA Average Conducted output powers (dBm)

11.1.2 CDMA Reduced Conducted Output Power (Hotspot mode activated)

DSI = 3 P_{Limit} Calculations - Hotspot SAR

Band	Ch.	SO2	SO2	SO55	SO55	SO75	TDSO	1xEVDO	1xEVDO	1xEVDO	1xEVDO
		RC1/1	RC3/3	RC1/1	RC3/3	RC1/1	SO32	Rev.0	Rev.0	Rev.A	Rev.A
		(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	FTAP	RTAP	FETAP	RETAP
PCS (BC1)	25	18.53	18.61	18.55	18.60	18.67	18.59	18.65	18.64	18.58	18.63
	600	19.05	18.98	19.04	19.02	19.10	19.01	19.08	19.03	19.08	19.03
	1175	18.67	18.63	18.51	18.58	18.65	18.60	18.56	18.57	18.54	18.57

CDMA Average Conducted output powers (dBm)

11.1.3 CDMA Reduced Conducted Output Power (Grip/Ear-jack Sensor on)

DSI = 1,4 P_{Limit} Calculations - Phablet, Ear-jack Reduced SAR

Band	Ch.	SO2	SO2	SO55	SO55	SO75	TDSO	1xEVDO	1xEVDO	1xEVDO	1xEVDO
		RC1/1	RC3/3	RC1/1	RC3/3	RC1/1	SO32	Rev.0	Rev.0	Rev.A	Rev.A
		(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	FTAP	RTAP	FETAP	RETAP
PCS (BC1)	25	19.62	19.64	19.61	19.58	19.63	19.61	19.67	19.67	19.48	19.63
	600	20.01	20.03	20.05	20.02	20.09	20.02	20.09	20.04	20.08	20.04
	1175	19.58	19.57	19.59	19.56	19.69	19.59	19.58	19.60	19.57	19.62

CDMA Average Conducted output powers (dBm)

11.2 GSM

11.2.1 GSM Maximum Conducted Output Power

-GSM850

DSI = 0,1,2,3,4 P_{Limit} Calculations - 2G Body-Worn, Phablet Max, Hotspot SAR, Head SAR, Ear-jack inserted mode

Measured P_{max}

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		33.50	33.50	32.50	30.00	28.00	27.50	26.00	24.00	23.00
Nominal		32.50	32.50	31.50	29.00	27.00	26.50	25.00	23.00	22.00
GSM 850	128	31.73	32.01	30.87	29.05	27.11	26.33	24.70	22.73	21.84
	190	32.09	32.07	31.58	29.49	27.25	26.49	25.04	23.01	21.94
	251	31.97	32.04	31.03	29.17	27.05	26.42	24.62	22.74	21.56

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		24.47	24.47	26.48	25.74	24.99	18.47	19.98	19.74	19.99
Nominal		23.47	23.47	25.48	24.74	23.99	17.47	18.98	18.74	18.99
GSM 850	128	22.70	22.98	24.85	24.79	24.10	17.30	18.68	18.47	18.83
	190	23.06	23.04	25.56	25.23	24.24	17.46	19.02	18.75	18.93
	251	22.94	23.01	25.01	24.91	24.04	17.39	18.60	18.48	18.55

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

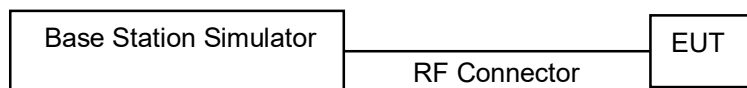
4 Tx slot = 3.01 dB, Frame-Average output power = Burst-Average output power – 3.01 dB

GSM Class: B

GSM voice: Head SAR, Body worn SAR

GPRS/EDGE Multi-slots 33: Hotspot SAR with GPRS/EDGE

Multi-slot Class 33 with CS 1 (GMSK)



-GSM1900

DSI = 0,2 P_{Limit} Calculations - 2G Body-Worn, Phablet Max, Head SAR

Measured P_{max}

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		30.50	30.50	29.50	28.00	26.00	26.00	25.00	23.00	22.00
Nominal		29.50	29.50	28.50	27.00	25.00	25.00	24.00	22.00	21.00
GSM 1900	512	29.10	29.10	28.10	26.71	24.55	24.60	23.10	22.00	20.47
	661	29.52	29.47	28.42	26.71	24.62	24.62	23.50	22.33	21.20
	810	29.07	29.11	28.12	26.51	24.60	24.43	23.23	22.12	21.09

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		21.47	21.47	23.48	23.74	22.99	16.97	18.98	18.74	18.99
Nominal		20.47	20.47	22.48	22.74	21.99	15.97	17.98	17.74	17.99
GSM 1900	512	20.07	20.07	22.08	22.45	21.54	15.57	17.08	17.74	17.46
	661	20.49	20.44	22.40	22.45	21.61	15.59	17.48	18.07	18.19
	810	20.04	20.08	22.10	22.25	21.59	15.40	17.21	17.86	18.08

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

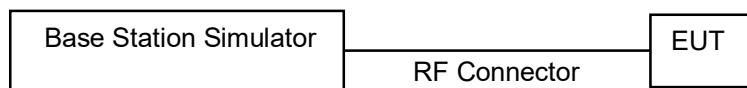
4 Tx slot = 3.01 dB, Frame-Average output power = Burst-Average output power – 3.01 dB

GSM Class: B

GSM voice: Head SAR, Body worn SAR

GPRS/EDGE Multi-slots 33: Hotspot SAR with GPRS/EDGE

Multi-slot Class 33 with CS 1 (GMSK)



11.2.2 GSM Reduced Conducted Output Power (Hotspot mode activated) -GSM1900

DSI = 3 P_{Limit} Calculations - 2G Hotspot SAR

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		27.50	27.50	24.00	22.50	21.00	26.50	23.50	22.00	20.50
Nominal		26.50	26.50	23.00	21.50	20.00	25.50	22.50	21.00	19.50
GSM 1900	512	25.69	25.65	22.64	20.85	19.71	24.64	22.96	21.01	19.63
	661	26.24	26.15	22.90	20.88	19.78	24.40	22.67	21.29	19.85
	810	25.89	25.89	22.60	20.71	19.51	24.37	22.83	20.86	19.67

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		18.47	18.47	17.98	18.24	17.99	17.47	17.48	17.74	17.49
Nominal		17.47	17.47	16.98	17.24	16.99	16.47	16.48	16.74	16.49
GSM 1900	512	16.66	16.62	16.62	16.59	16.70	15.61	16.94	16.75	16.62
	661	17.21	17.12	16.88	16.62	16.77	15.37	16.65	17.03	16.84
	810	16.86	16.86	16.58	16.45	16.50	15.34	16.81	16.60	16.66

GSM Conducted output powers (Frame-Average)

Note:

Time slot average factor is as follows:

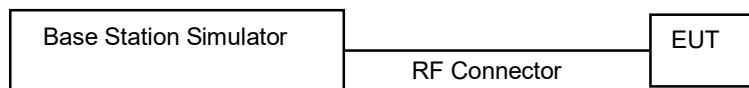
- 1 Tx slot = 9.03 dB, Frame-Average output power = Burst-Average output power – 9.03 dB
- 2 Tx slot = 6.02 dB, Frame-Average output power = Burst-Average output power – 6.02 dB
- 3 Tx slot = 4.26 dB, Frame-Average output power = Burst-Average output power – 4.26 dB
- 4 Tx slot = 3.01 dB, Frame-Average output power = Burst-Average output power – 3.01 dB

GSM Class: B

GSM voice: Head SAR, Body worn SAR

GPRS/EDGE Multi-slots 33: Hotspot SAR with GPRS/EDGE

Multi-slot Class 33 with CS 1 (GMSK)



11.2.3 GSM Reduced Conducted Output Power (Grip back-off and Ear-jack Activated)

DSI = 1,4 P_{Limit} Calculations – Phablet, Ear-jack Reduced SAR

-GSM1900

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		27.50	27.50	24.00	22.50	21.00	26.50	23.50	22.00	20.50
Nominal		26.50	26.50	23.00	21.50	20.00	25.50	22.50	21.00	19.50
GSM 1900	512	25.71	25.67	22.70	20.93	19.81	24.54	22.90	21.06	19.59
	661	26.26	26.25	22.95	20.93	19.81	24.42	22.61	21.24	19.85
	810	25.92	25.93	22.64	20.76	19.57	24.45	22.91	20.96	19.71

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		18.47	18.47	17.98	18.24	17.99	17.47	17.48	17.74	17.49
Nominal		17.47	17.47	16.98	17.24	16.99	16.47	16.48	16.74	16.49
GSM 1900	512	16.68	16.64	16.68	16.67	16.80	15.51	16.88	16.80	16.58
	661	17.23	17.22	16.93	16.67	16.80	15.39	16.59	16.98	16.84
	810	16.89	16.90	16.62	16.50	16.56	15.42	16.89	16.70	16.70

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

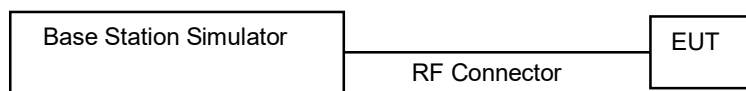
4 Tx slot = 3.01 dB, Frame-Average output power = Burst-Average output power – 3.01 dB

GSM Class: B

GSM voice: Head SAR, Body worn SAR

GPRS/EDGE Multi-slots 33: Hotspot SAR with GPRS/EDGE

Multi-slot Class 33 with CS 1 (GMSK)



11.3 UMTS

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.

11.3.1 UMTS Maximum Conducted Output Power

UMTS Band 5 Maximum Conducted Output Power (All DSI)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 5 [dBm]			3GPP MPR
		Subtest	UL4132 DL4357	UL4183 DL4408	UL4233 DL4458	
99	UMTS	12.2 kbps RMC	24.05	23.96	23.92	-
99		12.2 kbps AMR	24.04	23.97	23.93	-
5	HSDPA	Subtest 1	22.94	22.91	22.86	0
5		Subtest 2	22.95	22.90	22.86	0
5		Subtest 3	22.43	22.39	22.36	0.5
5		Subtest 4	22.46	22.39	22.35	0.5
6	HSUPA	Subtest 1	22.94	22.88	22.86	0
6		Subtest 2	20.95	20.89	20.85	2
6		Subtest 3	21.93	21.89	21.85	1
6		Subtest 4	20.95	20.89	20.85	2
6		Subtest 5	22.94	22.88	22.87	0
8	DC-HSDPA	Subtest1	22.80	22.72	22.60	0
8		Subtest2	22.83	22.71	22.62	0
8		Subtest3	22.34	22.24	22.12	0.5
8		Subtest4	22.35	22.24	22.14	0.5

UMTS Average Conducted output powers

UMTS Band 4 Maximum Conducted Output Power (DSI = 0,2)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 4 [dBm]			3GPP MPR
		Subtest	UL 1312 DL 1537	UL 1412 DL 1637	UL 1513 DL 1738	
99	UMTS	12.2 kbps RMC	23.46	23.28	23.27	-
99		12.2 kbps AMR	23.43	23.28	23.26	-
5	HSDPA	Subtest 1	22.45	22.33	22.35	0
5		Subtest 2	22.43	22.32	22.33	0
5		Subtest 3	21.93	21.83	21.84	0.5
5		Subtest 4	21.95	21.82	21.84	0.5
6	HSUPA	Subtest 1	22.43	22.31	22.33	0
6		Subtest 2	20.44	20.32	20.33	2
6		Subtest 3	21.45	21.35	21.33	1
6		Subtest 4	20.44	20.33	20.33	2
6		Subtest 5	22.45	22.31	22.33	0
8	DC-HSDPA	Subtest1	22.13	21.97	21.98	0
8		Subtest2	22.12	21.98	22.01	0
8		Subtest3	21.57	21.50	21.50	0.5
8		Subtest4	21.63	21.51	21.52	0.5

UMTS Average Conducted output powers

UMTS Band 2 Maximum Conducted Output Power (DSI = 0,2)

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	23.50	23.47	23.50	-
99		12.2 kbps AMR	23.50	23.46	23.49	-
5	HSDPA	Subtest 1	22.55	22.52	22.59	0
5		Subtest 2	22.56	22.53	22.57	0
5		Subtest 3	22.05	22.03	22.08	0.5
5		Subtest 4	22.04	22.03	22.08	0.5
6	HSUPA	Subtest 1	22.54	22.54	22.58	0
6		Subtest 2	20.55	20.54	20.58	2
6		Subtest 3	21.53	21.53	21.59	1
6		Subtest 4	20.55	20.55	20.58	2
6		Subtest 5	22.54	22.52	22.58	0
8	DC-HSDPA	Subtest 1	22.60	22.51	22.51	0
8		Subtest2	22.61	22.57	22.53	0
8		Subtest3	22.12	22.09	22.03	0.5
8		Subtest4	22.12	22.07	22.02	0.5

UMTS Average Conducted output powers

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.



11.3.2 UMTS Reduced Conducted Output Power (Hotspot mode activated) DSI = 3 P_{Limit} Calculations - 3G Hotspot SAR

UMTS Band 4 Hotspot Back-off Power(DSI= 3)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 4 [dBm]			3GPP MPR
		Subtest	UL 1312 DL 1537	UL 1412 DL 1637	UL 1513 DL 1738	
99	UMTS	12.2 kbps RMC	18.41	18.27	18.24	-
99		12.2 kbps AMR	18.39	18.28	18.23	-
5	HSDPA	Subtest 1	17.42	17.32	17.33	0
5		Subtest 2	17.43	17.33	17.30	0
5		Subtest 3	16.93	16.81	16.80	0.5
5		Subtest 4	16.93	16.82	16.82	0.5
6	HSUPA	Subtest 1	17.44	17.30	17.33	0
6		Subtest 2	15.44	15.33	15.35	2
6		Subtest 3	16.53	16.33	16.33	1
6		Subtest 4	15.46	15.32	15.33	2
6		Subtest 5	17.42	17.31	17.31	0
8	DC-HSDPA	Subtest 1	17.04	16.91	16.90	0
8		Subtest2	17.06	16.89	16.98	0
8		Subtest3	16.61	16.44	16.49	0.5
8		Subtest4	16.59	16.43	16.49	0.5

UMTS Average Conducted output powers

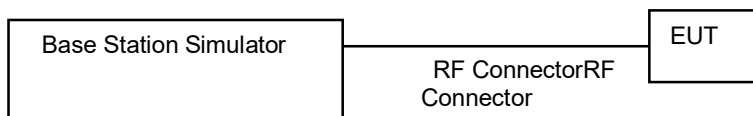
UMTS Band 2 Hotspot Back-off Power (DSI= 3)

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	18.47	18.44	18.47	-
99		12.2 kbps AMR	18.49	18.45	18.49	-
5	HSDPA	Subtest 1	17.55	17.54	17.58	0
5		Subtest 2	17.54	17.54	17.58	0
5		Subtest 3	17.04	17.02	17.07	0.5
5		Subtest 4	17.04	17.02	17.07	0.5
6	HSUPA	Subtest 1	17.54	17.54	17.59	0
6		Subtest 2	15.56	15.57	15.58	2
6		Subtest 3	16.53	16.55	16.59	1
6		Subtest 4	15.55	15.55	15.59	2
6		Subtest 5	17.55	17.56	17.60	0
8	DC-HSDPA	Subtest 1	17.52	17.43	17.42	0
8		Subtest2	17.51	17.49	17.47	0
8		Subtest3	17.04	16.97	16.95	0.5
8		Subtest4	17.04	16.99	16.94	0.5

UMTS Average Conducted output powers

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.



11.3.3 UMTS Reduced Conducted Output Power (Grip back Activated/ Ear jack Activated) DSI = 1, 4 P_{Limit} Calculations - 3G Phablet Reduced SAR

UMTS Band 4 Grip Back-off Power (DSI=1.4)

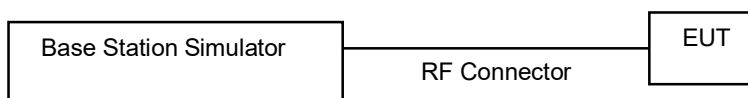
3GPP Release Version	Mode	3GPP 34.121	UMTS Band 4 [dBm]			3GPP MPR
		Subtest	UL 1312 DL 1537	UL 1412 DL 1637	UL 1513 DL 1738	
99	UMTS	12.2 kbps RMC	18.40	18.27	18.25	-
99		12.2 kbps AMR	18.41	18.27	18.25	-
5	HSDPA	Subtest 1	17.45	17.32	17.33	0
5		Subtest 2	17.45	17.32	17.33	0
5		Subtest 3	16.95	16.83	16.82	0.5
5		Subtest 4	16.95	16.83	16.82	0.5
6	HSUPA	Subtest 1	17.45	17.33	17.31	0
6		Subtest 2	15.47	15.32	15.30	2
6		Subtest 3	16.45	16.33	16.33	1
6		Subtest 4	15.45	15.33	15.31	2
6		Subtest 5	17.44	17.32	17.35	0
8	DC-HSDPA	Subtest 1	17.00	16.91	16.89	0
8		Subtest2	17.07	16.94	16.97	0
8		Subtest3	16.60	16.45	16.47	0.5
8		Subtest4	16.59	16.45	16.48	0.5

UMTS Average Conducted output powers

UMTS Band 2 Grip back-off Power(DSI=1.4)

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	18.48	18.46	18.48	-
99		12.2 kbps AMR	18.49	18.46	18.48	-
5	HSDPA	Subtest 1	17.55	17.53	17.57	0
5		Subtest 2	17.55	17.53	17.57	0
5		Subtest 3	17.05	17.04	17.07	0.5
5		Subtest 4	17.04	17.03	17.08	0.5
6	HSUPA	Subtest 1	17.56	17.55	17.61	0
6		Subtest 2	15.56	15.54	15.59	2
6		Subtest 3	16.55	16.53	16.58	1
6		Subtest 4	15.55	15.55	15.60	2
6		Subtest 5	17.56	17.53	17.58	0
8	DC-HSDPA	Subtest 1	17.51	17.49	17.42	0
8		Subtest 2	17.55	17.54	17.49	0
8		Subtest 3	17.05	17.03	16.98	0.5
8		Subtest 4	17.06	17.01	16.99	0.5

- ◆ 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.



11.4 LTE Maximum Output Power

LTE B2/B4/B5/B7/B12/B13/B14/B25/B26/B30/B38/B40/B41/B66/B71 at 20 MHz 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.

11.4.1 LTE Maximum Conducted Power

DSI = 0, 2 P_{Limit} Calculations - 4G Body-Worn, Phablet Max, Head SAR

[LTE Band 2 Conducted Power DSI = 0,2]

LTE Band 2 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 MHz	18900 Ch. 1880 MHz	19193 Ch. 1909.3 MHz		
1.4 MHz	QPSK	1	0	23.97	24.76	24.01	0	0
		1	3	24.01	24.80	24.08	0	0
		1	5	23.89	24.62	23.91	0	0
		3	0	23.96	24.72	23.99	0	0
		3	1	24.04	24.67	24.08	0	0
		3	3	23.92	24.66	24.05	0	0
		6	0	23.02	23.75	23.15	0-1	1
	16QAM	1	0	23.31	23.93	23.23	0-1	1
		1	3	23.46	24.13	23.57	0-1	1
		1	5	23.36	23.96	23.45	0-1	1
		3	0	23.16	23.91	23.22	0-1	1
		3	1	23.23	23.89	23.25	0-1	1
		3	3	23.15	23.81	23.21	0-1	1
		6	0	22.15	22.84	22.19	0-2	2
	64QAM	1	0	22.19	22.86	22.23	0-2	2
		1	3	22.22	22.92	22.40	0-2	2
		1	5	22.02	22.86	22.26	0-2	2
		3	0	22.14	22.74	22.22	0-2	2
		3	1	22.20	22.81	22.28	0-2	2
		3	3	22.06	22.80	22.20	0-2	2
		6	0	21.11	21.78	21.15	0-3	3
	256QAM	1	0	19.19	19.85	19.13	0-5	5
		1	3	19.18	19.94	19.26	0-5	5
		1	5	19.11	19.80	19.20	0-5	5
		3	0	19.15	19.92	19.16	0-5	5
		3	1	19.18	19.90	19.23	0-5	5
		3	3	19.16	19.89	19.23	0-5	5
		6	0	19.05	19.79	19.09	0-5	5

LTE Band 2 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 MHz	18900 Ch. 1880 MHz	19185 Ch. 1908.5 MHz		
3 MHz	QPSK	1	0	24.03	24.71	24.16	0	0
		1	7	23.98	24.75	24.04	0	0
		1	14	23.95	24.73	24.09	0	0
		8	0	23.13	23.83	23.21	0-1	1
		8	3	23.13	23.85	23.16	0-1	1
		8	7	23.10	23.83	23.11	0-1	1
		15	0	23.08	23.82	23.18	0-1	1
	16QAM	1	0	23.36	24.13	23.43	0-1	1
		1	7	23.43	24.14	23.37	0-1	1
		1	14	23.33	23.89	23.31	0-1	1
		8	0	22.20	22.96	22.29	0-2	2
		8	3	22.29	22.92	22.25	0-2	2
		8	7	22.18	22.90	22.29	0-2	2
		15	0	22.09	22.88	22.22	0-2	2
	64QAM	1	0	22.32	22.84	22.34	0-2	2
		1	7	22.21	22.88	22.32	0-2	2
		1	14	22.15	22.95	22.22	0-2	2
		8	0	21.15	21.84	21.17	0-3	3
		8	3	21.13	21.87	21.28	0-3	3
		8	7	21.12	21.79	21.19	0-3	3
		15	0	21.11	21.83	21.16	0-3	3
	256QAM	1	0	19.16	19.91	19.28	0-5	5
		1	7	19.20	20.01	19.25	0-5	5
		1	14	19.16	19.89	19.17	0-5	5
		8	0	19.13	19.86	19.24	0-5	5
		8	3	19.20	19.95	19.17	0-5	5
		8	7	19.11	19.87	19.15	0-5	5
		15	0	19.17	19.87	19.22	0-5	5

LTE Band 2 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 MHz	18900 Ch. 1880 MHz	19175 Ch. 1907.5 MHz		
5 MHz	QPSK	1	0	23.98	24.59	24.01	0	0
		1	12	23.97	24.81	24.06	0	0
		1	24	23.89	24.63	24.08	0	0
		12	0	23.10	23.81	23.17	0-1	1
		12	6	23.10	23.86	23.18	0-1	1
		12	11	23.01	23.76	23.10	0-1	1
		25	0	23.05	23.80	23.17	0-1	1
	16QAM	1	0	23.16	24.03	23.25	0-1	1
		1	12	23.38	24.20	23.48	0-1	1
		1	24	23.37	24.01	23.44	0-1	1
		12	0	22.21	22.90	22.27	0-2	2
		12	6	22.18	22.91	22.25	0-2	2
		12	11	22.10	22.85	22.18	0-2	2
		25	0	22.08	22.78	22.17	0-2	2
	64QAM	1	0	22.20	22.77	22.24	0-2	2
		1	12	22.24	22.87	22.26	0-2	2
		1	24	22.08	22.83	22.20	0-2	2
		12	0	21.18	21.77	21.24	0-3	3
		12	6	21.19	21.87	21.19	0-3	3
		12	11	21.12	21.88	21.20	0-3	3
		25	0	21.07	21.77	21.18	0-3	3
	256QAM	1	0	19.20	19.81	19.18	0-5	5
		1	12	19.16	20.04	19.24	0-5	5
		1	24	19.11	19.77	19.15	0-5	5
		12	0	19.11	19.80	19.12	0-5	5
		12	6	19.12	19.91	19.18	0-5	5
		12	11	19.02	19.77	19.14	0-5	5
		25	0	19.07	19.74	19.11	0-5	5

LTE Band 2 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 MHz	18900 Ch. 1880 MHz	19150 Ch. 1905 MHz		
10 MHz	QPSK	1	0	23.44	24.31	24.21	0	0
		1	24	24.02	24.72	24.11	0	0
		1	49	23.88	24.39	24.14	0	0
		25	0	22.95	23.66	23.15	0-1	1
		25	12	23.11	23.75	23.19	0-1	1
		25	24	23.01	23.71	23.13	0-1	1
		50	0	23.07	23.68	23.13	0-1	1
	16QAM	1	0	22.91	23.65	23.71	0-1	1
		1	24	23.29	24.22	23.59	0-1	1
		1	49	23.18	23.76	23.57	0-1	1
		25	0	22.06	22.66	22.17	0-2	2
		25	12	22.12	22.84	22.19	0-2	2
		25	24	22.03	22.67	22.07	0-2	2
		50	0	22.09	22.72	22.10	0-2	2
	64QAM	1	0	22.01	22.54	22.30	0-2	2
		1	24	22.30	22.92	22.36	0-2	2
		1	49	22.18	22.65	22.30	0-2	2
		25	0	21.06	21.70	21.19	0-3	3
		25	12	21.13	21.86	21.29	0-3	3
		25	24	21.05	21.70	21.18	0-3	3
		50	0	21.03	21.67	21.08	0-3	3
	256QAM	1	0	18.91	19.41	19.04	0-5	5
		1	24	19.27	20.02	19.38	0-5	5
		1	49	19.20	19.53	18.98	0-5	5
		25	0	19.03	19.69	19.17	0-5	5
		25	12	19.14	19.85	19.24	0-5	5
		25	24	19.06	19.72	19.08	0-5	5
		50	0	19.05	19.75	19.00	0-5	5

LTE Band 2 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 MHz	18900 Ch. 1880 MHz	19125 Ch. 1902.5 MHz		
15 MHz	QPSK	1	0	23.77	24.49	24.19	0	0
		1	36	24.03	24.62	23.98	0	0
		1	74	24.05	24.54	24.07	0	0
		36	0	22.99	23.59	23.25	0-1	1
		36	18	23.12	23.73	23.23	0-1	1
		36	39	23.28	23.73	23.15	0-1	1
		75	0	23.13	23.64	23.20	0-1	1
	16QAM	1	0	23.09	23.81	23.55	0-1	1
		1	36	23.39	24.09	23.42	0-1	1
		1	74	23.32	23.86	23.29	0-1	1
		36	0	22.04	22.61	22.22	0-2	2
		36	18	22.19	22.70	22.25	0-2	2
		36	39	22.24	22.67	22.13	0-2	2
		75	0	22.09	22.66	22.17	0-2	2
	64QAM	1	0	22.05	22.60	22.54	0-2	2
		1	36	22.20	22.94	22.26	0-2	2
		1	74	22.33	22.80	22.11	0-2	2
		36	0	20.99	21.61	21.17	0-3	3
		36	18	21.12	21.80	21.28	0-3	3
		36	39	21.25	21.74	21.09	0-3	3
		75	0	21.16	21.70	21.22	0-3	3
	256QAM	1	0	19.02	19.47	19.38	0-5	5
		1	36	19.17	19.76	19.19	0-5	5
		1	74	19.28	19.57	19.05	0-5	5
		36	0	18.96	19.57	19.19	0-5	5
		36	18	19.09	19.73	19.25	0-5	5
		36	39	19.29	19.67	19.14	0-5	5
		75	0	19.10	19.64	19.10	0-5	5

LTE Band 2 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 MHz	18900 Ch. 1880 MHz	19100 Ch. 1900 MHz		
20 MHz	QPSK	1	0	23.88	24.35	24.40	0	0
		1	49	23.78	24.74	24.03	0	0
		1	99	24.34	24.43	23.98	0	0
		50	0	22.96	23.52	23.33	0-1	1
		50	25	23.22	23.79	23.23	0-1	1
		50	49	23.32	23.67	23.15	0-1	1
		100	0	23.13	23.58	23.17	0-1	1
	16QAM	1	0	23.35	23.76	23.72	0-1	1
		1	49	23.37	24.09	23.40	0-1	1
		1	99	23.59	23.79	23.16	0-1	1
		50	0	21.87	22.50	22.26	0-2	2
		50	25	22.27	22.73	22.30	0-2	2
		50	49	22.30	22.63	22.17	0-2	2
		100	0	22.23	22.59	22.27	0-2	2
	64QAM	1	0	22.20	22.54	22.68	0-2	2
		1	49	22.21	22.90	22.40	0-2	2
		1	99	22.63	22.75	22.20	0-2	2
		50	0	20.98	21.52	21.30	0-3	3
		50	25	21.24	21.73	21.28	0-3	3
		50	49	21.32	21.69	21.12	0-3	3
		100	0	21.17	21.52	21.22	0-3	3
	256QAM	1	0	18.83	19.17	19.39	0-5	5
		1	49	19.16	19.94	19.30	0-5	5
		1	99	19.49	19.44	19.13	0-5	5
		50	0	18.94	19.52	19.20	0-5	5
		50	25	19.26	19.75	19.25	0-5	5
		50	49	19.26	19.64	19.17	0-5	5
		100	0	19.16	19.59	19.24	0-5	5

[LTE Band 4 Conducted Power DSI = 0,2]

LTE Band 4 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19957 Ch. 1710.7 MHz	20175 Ch. 1732.5 MHz	20393 Ch. 1754.3 MHz		
1.4 MHz	QPSK	1	0	24.31	24.36	24.07	0	0
		1	3	24.28	24.30	24.13	0	0
		1	5	24.25	24.22	24.01	0	0
		3	0	24.30	24.32	24.09	0	0
		3	1	24.26	24.34	24.11	0	0
		3	3	24.24	24.28	24.08	0	0
		6	0	23.40	23.39	23.20	0-1	1
	16QAM	1	0	23.73	23.68	23.36	0-1	1
		1	3	23.90	23.57	23.65	0-1	1
		1	5	23.47	23.58	23.40	0-1	1
		3	0	23.44	23.46	23.30	0-1	1
		3	1	23.57	23.49	23.33	0-1	1
		3	3	23.49	23.42	23.19	0-1	1
		6	0	22.41	22.45	22.26	0-2	2
	64QAM	1	0	22.28	22.10	21.98	0-2	2
		1	3	22.47	22.07	22.06	0-2	2
		1	5	22.40	22.07	22.08	0-2	2
		3	0	22.30	22.02	21.90	0-2	2
		3	1	22.38	22.08	21.97	0-2	2
		3	3	22.32	21.99	21.95	0-2	2
		6	0	21.25	20.96	20.87	0-3	3
	256QAM	1	0	19.51	19.50	19.27	0-5	5
		1	3	19.51	19.59	19.33	0-5	5
		1	5	19.46	19.40	19.29	0-5	5
		3	0	19.53	19.56	19.31	0-5	5
		3	1	19.54	19.54	19.30	0-5	5
		3	3	19.45	19.49	19.26	0-5	5
		6	0	19.38	19.40	19.14	0-5	5

LTE Band 4 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19965 Ch. 1711.5 MHz	20175 Ch. 1732.5 MHz	20385 Ch. 1753.5 MHz		
3 MHz	QPSK	1	0	24.40	24.39	24.22	0	0
		1	7	24.31	24.37	24.11	0	0
		1	14	24.29	24.35	24.05	0	0
		8	0	23.50	23.48	23.26	0-1	1
		8	3	23.48	23.44	23.24	0-1	1
		8	7	23.39	23.40	23.24	0-1	1
		15	0	23.44	23.48	23.21	0-1	1
	16QAM	1	0	23.67	23.73	23.51	0-1	1
		1	7	23.74	23.74	23.36	0-1	1
		1	14	23.68	23.60	23.31	0-1	1
		8	0	22.54	22.55	22.33	0-2	2
		8	3	22.62	22.59	22.38	0-2	2
		8	7	22.50	22.47	22.34	0-2	2
		15	0	22.43	22.49	22.28	0-2	2
	64QAM	1	0	22.43	22.10	22.00	0-2	2
		1	7	22.46	22.17	21.98	0-2	2
		1	14	22.50	22.24	22.08	0-2	2
		8	0	21.30	21.06	20.85	0-3	3
		8	3	21.39	21.12	20.93	0-3	3
		8	7	21.38	21.12	20.92	0-3	3
		15	0	21.37	21.05	20.91	0-3	3
	256QAM	1	0	19.62	19.69	19.43	0-5	5
		1	7	19.59	19.58	19.32	0-5	5
		1	14	19.45	19.60	19.27	0-5	5
		8	0	19.54	19.48	19.37	0-5	5
		8	3	19.50	19.55	19.33	0-5	5
		8	7	19.50	19.47	19.25	0-5	5
		15	0	19.48	19.50	19.30	0-5	5

LTE Band 4 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19975 Ch. 1712.5 MHz	20175 Ch. 1732.5 MHz	20375 Ch. 1752.5 MHz		
5 MHz	QPSK	1	0	24.38	24.36	24.14	0	0
		1	12	24.44	24.32	24.21	0	0
		1	24	24.25	24.16	24.03	0	0
		12	0	23.49	23.48	23.31	0-1	1
		12	6	23.46	23.49	23.26	0-1	1
		12	11	23.46	23.43	23.27	0-1	1
	16QAM	25	0	23.46	23.48	23.27	0-1	1
		1	0	23.71	23.76	23.51	0-1	1
		1	12	23.71	23.85	23.37	0-1	1
		1	24	23.66	23.52	23.50	0-1	1
		12	0	22.52	22.54	22.34	0-2	2
		12	6	22.51	22.60	22.31	0-2	2
	64QAM	12	11	22.47	22.53	22.32	0-2	2
		25	0	22.41	22.47	22.25	0-2	2
		1	0	22.33	21.99	21.93	0-2	2
		1	12	22.52	22.20	22.02	0-2	2
		1	24	22.53	22.29	22.21	0-2	2
		12	0	21.34	21.10	20.89	0-3	3
	256QAM	12	6	21.43	21.17	21.02	0-3	3
		12	11	21.42	21.12	21.04	0-3	3
		25	0	21.33	21.06	20.91	0-3	3
		1	0	19.44	19.58	19.33	0-5	5
		1	12	19.56	19.57	19.40	0-5	5
		1	24	19.51	19.45	19.30	0-5	5
		12	0	19.50	19.52	19.28	0-5	5
		12	6	19.50	19.49	19.37	0-5	5
		12	11	19.49	19.48	19.29	0-5	5
		25	0	19.46	19.48	19.34	0-5	5

LTE Band 4 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20000 Ch. 1715 MHz	20175 Ch. 1732.5 MHz	20350 Ch. 1750 MHz		
10 MHz	QPSK	1	0	24.12	24.31	23.97	0	0
		1	24	24.37	24.36	24.22	0	0
		1	49	24.04	24.01	23.99	0	0
		25	0	23.46	23.40	23.24	0-1	1
		25	12	23.43	23.51	23.31	0-1	1
		25	24	23.32	23.40	23.25	0-1	1
	16QAM	50	0	23.35	23.43	23.23	0-1	1
		1	0	23.42	23.33	23.55	0-1	1
		1	24	23.94	23.92	23.57	0-1	1
		1	49	23.43	23.44	23.37	0-1	1
		25	0	22.35	22.39	22.30	0-2	2
		25	12	22.43	22.56	22.38	0-2	2
	64QAM	25	24	22.31	22.45	22.25	0-2	2
		50	0	22.34	22.39	22.19	0-2	2
		1	0	22.27	21.59	21.93	0-2	2
		1	24	22.58	22.29	22.09	0-2	2
		1	49	22.31	22.19	22.07	0-2	2
		25	0	21.33	21.10	20.87	0-3	3
	256QAM	25	12	21.48	21.19	21.01	0-3	3
		25	24	21.38	21.13	20.98	0-3	3
		50	0	21.34	20.98	20.92	0-3	3
		1	0	19.14	19.35	19.18	0-5	5
		1	24	19.59	19.72	19.54	0-5	5
		1	49	19.31	19.22	19.10	0-5	5
		25	0	19.44	19.50	19.24	0-5	5
		25	12	19.49	19.56	19.40	0-5	5
		25	24	19.40	19.43	19.19	0-5	5
		50	0	19.43	19.43	19.27	0-5	5

LTE Band 4 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20025 Ch. 1717.5 MHz	20175 Ch. 1732.5 MHz	20325 Ch. 1747.5 MHz		
15 MHz	QPSK	1	0	24.10	24.09	24.01	0	0
		1	36	24.30	24.30	24.17	0	0
		1	74	24.12	24.18	23.98	0	0
		36	0	23.35	23.40	23.23	0-1	1
		36	18	23.38	23.46	23.36	0-1	1
		36	39	23.38	23.34	23.28	0-1	1
		75	0	23.32	23.42	23.27	0-1	1
	16QAM	1	0	23.33	23.28	23.52	0-1	1
		1	36	23.56	23.77	23.67	0-1	1
		1	74	23.49	23.54	23.23	0-1	1
		36	0	22.38	22.36	22.30	0-2	2
		36	18	22.41	22.44	22.35	0-2	2
		36	39	22.37	22.43	22.33	0-2	2
		75	0	22.37	22.37	22.33	0-2	2
	64QAM	1	0	22.44	21.62	22.11	0-2	2
		1	36	22.58	22.20	22.09	0-2	2
		1	74	22.41	22.42	22.13	0-2	2
		36	0	21.36	21.21	20.98	0-3	3
		36	18	21.41	21.23	20.98	0-3	3
		36	39	21.44	21.14	20.99	0-3	3
		75	0	21.32	21.05	20.99	0-3	3
	256QAM	1	0	19.42	19.19	19.27	0-5	5
		1	36	19.50	19.60	19.42	0-5	5
		1	74	19.38	19.21	19.22	0-5	5
		36	0	19.40	19.39	19.30	0-5	5
		36	18	19.42	19.59	19.30	0-5	5
		36	39	19.32	19.36	19.31	0-5	5
		75	0	19.35	19.35	19.30	0-5	5

LTE Band 4 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				20175 Ch. 1732.5 MHz		
20 MHz	QPSK	1	0	23.97	0	0
		1	49	24.30	0	0
		1	99	23.96	0	0
		50	0	23.37	0-1	1
		50	25	23.53	0-1	1
		50	49	23.32	0-1	1
		100	0	23.37	0-1	1
	16QAM	1	0	23.17	0-1	1
		1	49	23.81	0-1	1
		1	99	23.36	0-1	1
		50	0	22.34	0-2	2
		50	25	22.45	0-2	2
		50	49	22.32	0-2	2
		100	0	22.27	0-2	2
	64QAM	1	0	21.46	0-2	2
		1	49	22.29	0-2	2
		1	99	22.30	0-2	2
		50	0	21.28	0-3	3
		50	25	21.22	0-3	3
		50	49	21.12	0-3	3
		100	0	21.05	0-3	3
	256QAM	1	0	18.93	0-5	5
		1	49	19.54	0-5	5
		1	99	18.99	0-5	5
		50	0	19.27	0-5	5
		50	25	19.49	0-5	5
		50	49	19.30	0-5	5
		100	0	19.30	0-5	5

[LTE Band 5 Conducted Power DSI= 0,1,2,3,4]

LTE Band 5 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20407 Ch. 824.7 MHz	20525 Ch. 836.5 MHz	20643 Ch. 848.3 MHz		
1.4 MHz	QPSK	1	0	23.65	23.82	24.16	0	0
		1	3	23.81	24.00	24.27	0	0
		1	5	23.67	23.99	24.22	0	0
		3	0	23.66	23.85	24.11	0	0
		3	1	23.74	23.95	24.16	0	0
		3	3	23.76	23.98	24.21	0	0
		6	0	22.88	23.05	23.25	0-1	1
	16QAM	1	0	23.00	23.16	23.57	0-1	1
		1	3	23.19	23.39	23.67	0-1	1
		1	5	23.14	23.23	23.50	0-1	1
		3	0	23.15	23.09	23.45	0-1	1
		3	1	23.15	23.27	23.44	0-1	1
		3	3	23.08	23.21	23.30	0-1	1
		6	0	21.90	22.06	22.49	0-2	2
	64QAM	1	0	21.86	22.11	22.43	0-2	2
		1	3	22.15	22.21	22.51	0-2	2
		1	5	21.94	22.19	22.35	0-2	2
		3	0	21.90	22.11	22.29	0-2	2
		3	1	21.97	22.17	22.47	0-2	2
		3	3	21.95	22.19	22.32	0-2	2
		6	0	20.89	21.04	21.32	0-3	3
	256QAM	1	0	18.93	19.07	19.40	0-5	5
		1	3	19.03	19.16	19.41	0-5	5
		1	5	18.94	19.01	19.36	0-5	5
		3	0	18.94	19.09	19.36	0-5	5
		3	1	19.03	19.16	19.45	0-5	5
		3	3	19.02	19.25	19.50	0-5	5
		6	0	18.80	19.06	19.30	0-5	5

LTE Band 5 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20415 Ch. 825.5 MHz	20525 Ch. 836.5 MHz	20635 Ch. 847.5 MHz		
3 MHz	QPSK	1	0	23.72	23.97	24.21	0	0
		1	7	23.88	23.99	24.16	0	0
		1	14	23.84	24.02	24.28	0	0
		8	0	22.93	23.09	23.33	0-1	1
		8	3	22.99	23.10	23.45	0-1	1
		8	7	22.93	23.17	23.41	0-1	1
	16QAM	15	0	22.94	23.14	23.37	0-1	1
		1	0	22.98	23.19	23.75	0-1	1
		1	7	23.09	23.29	23.69	0-1	1
		1	14	23.27	23.35	23.75	0-1	1
		8	0	21.93	22.20	22.43	0-2	2
		8	3	22.03	22.24	22.46	0-2	2
	64QAM	8	7	22.06	22.31	22.50	0-2	2
		15	0	21.98	22.11	22.37	0-2	2
		1	0	21.99	22.20	22.41	0-2	2
		1	7	22.07	22.20	22.50	0-2	2
		1	14	22.09	22.29	22.50	0-2	2
		8	0	20.91	21.14	21.37	0-3	3
	256QAM	8	3	21.01	21.24	21.48	0-3	3
		8	7	20.96	21.22	21.45	0-3	3
		15	0	20.96	21.15	21.41	0-3	3
		1	0	18.96	19.11	19.46	0-5	5
		1	7	18.97	19.27	19.52	0-5	5
		1	14	18.95	19.18	19.43	0-5	5
		8	0	18.89	19.09	19.34	0-5	5
		8	3	19.06	19.16	19.42	0-5	5
		8	7	19.02	19.16	19.48	0-5	5
		15	0	18.96	19.14	19.35	0-5	5

LTE Band 5 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20425 Ch. 826.5 MHz	20525 Ch. 836.5 MHz	20625 Ch. 846.5 MHz		
5 MHz	QPSK	1	0	23.65	23.78	24.02	0	0
		1	12	23.90	23.93	24.17	0	0
		1	24	23.88	23.94	24.29	0	0
		12	0	22.91	23.07	23.37	0-1	1
		12	6	22.99	23.20	23.41	0-1	1
		12	11	22.99	23.17	23.47	0-1	1
		25	0	22.92	23.10	23.38	0-1	1
	16QAM	1	0	22.98	23.34	23.44	0-1	1
		1	12	23.22	23.44	23.66	0-1	1
		1	24	23.16	23.38	23.58	0-1	1
		12	0	21.94	22.14	22.38	0-2	2
		12	6	22.08	22.18	22.47	0-2	2
		12	11	21.98	22.25	22.57	0-2	2
		25	0	22.02	22.13	22.43	0-2	2
	64QAM	1	0	21.95	22.09	22.38	0-2	2
		1	12	22.16	22.18	22.55	0-2	2
		1	24	22.08	22.30	22.54	0-2	2
		12	0	20.91	21.12	21.31	0-3	3
		12	6	21.01	21.22	21.51	0-3	3
		12	11	21.04	21.20	21.50	0-3	3
		25	0	20.97	21.16	21.45	0-3	3
	256QAM	1	0	18.96	19.02	19.40	0-5	5
		1	12	19.05	19.28	19.57	0-5	5
		1	24	19.12	19.19	19.51	0-5	5
		12	0	18.94	19.09	19.25	0-5	5
		12	6	18.96	19.07	19.37	0-5	5
		12	11	18.99	19.23	19.33	0-5	5
		25	0	18.94	19.08	19.35	0-5	5

LTE Band 5 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				20525 Ch. 836.5 MHz		
10 MHz	QPSK	1	0	23.79	0	0
		1	24	23.85	0	0
		1	49	24.04	0	0
		25	0	23.08	0-1	1
		25	12	23.06	0-1	1
		25	24	23.11	0-1	1
		50	0	23.03	0-1	1
	16QAM	1	0	23.69	0-1	1
		1	24	23.62	0-1	1
		1	49	23.58	0-1	1
		25	0	22.19	0-2	2
		25	12	22.08	0-2	2
		25	24	22.11	0-2	2
		50	0	22.12	0-2	2
	64QAM	1	0	22.14	0-2	2
		1	24	22.18	0-2	2
		1	49	22.38	0-2	2
		25	0	21.05	0-3	3
		25	12	21.13	0-3	3
		25	24	21.16	0-3	3
		50	0	21.12	0-3	3
	256QAM	1	0	18.88	0-5	5
		1	24	19.22	0-5	5
		1	49	19.08	0-5	5
		25	0	19.00	0-5	5
		25	12	19.04	0-5	5
		25	24	19.04	0-5	5
		50	0	19.03	0-5	5

[LTE Band 7 Conducted Power DSI= 0,2]

LTE Band 7 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20775 Ch. 2502.5 MHz	21100 Ch. 2535 MHz	21425 Ch. 2567.5 MHz		
5 MHz	QPSK	1	0	23.89	23.83	24.03	0	0
		1	12	23.89	23.86	24.01	0	0
		1	24	23.82	23.88	24.00	0	0
		12	0	23.02	22.92	23.06	0-1	1
		12	6	22.99	22.96	23.11	0-1	1
		12	11	22.97	22.92	23.15	0-1	1
		25	0	23.02	22.94	23.07	0-1	1
	16QAM	1	0	23.33	23.16	23.43	0-1	1
		1	12	23.16	23.21	23.47	0-1	1
		1	24	23.29	23.27	23.29	0-1	1
		12	0	22.08	21.98	22.19	0-2	2
		12	6	22.12	22.07	22.23	0-2	2
		12	11	22.06	21.99	22.14	0-2	2
		25	0	21.97	21.98	22.10	0-2	2
	64QAM	1	0	22.20	22.07	21.56	0-2	2
		1	12	22.19	22.13	21.64	0-2	2
		1	24	21.99	22.10	21.64	0-2	2
		12	0	20.98	20.99	20.48	0-3	3
		12	6	21.06	21.09	20.64	0-3	3
		12	11	21.04	21.03	20.65	0-3	3
		25	0	21.03	20.93	20.56	0-3	3
	256QAM	1	0	19.06	18.91	19.26	0-5	5
		1	12	19.16	19.08	19.28	0-5	5
		1	24	19.00	19.04	19.21	0-5	5
		12	0	18.98	18.99	19.06	0-5	5
		12	6	19.01	19.03	19.17	0-5	5
		12	11	18.96	19.00	19.07	0-5	5
		25	0	18.96	18.92	19.12	0-5	5

LTE Band 7_ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20800 Ch. 2505 MHz	21100 Ch. 2535 MHz	21400 Ch. 2565 MHz		
10 MHz	QPSK	1	0	23.72	23.98	24.10	0	0
		1	24	23.80	23.87	23.99	0	0
		1	49	23.74	23.93	23.94	0	0
		25	0	23.00	22.95	23.01	0-1	1
		25	12	23.03	23.00	23.05	0-1	1
		25	24	22.96	22.98	23.14	0-1	1
		50	0	22.90	22.93	22.97	0-1	1
	16QAM	1	0	23.24	23.24	23.25	0-1	1
		1	24	23.40	23.28	23.23	0-1	1
		1	49	23.33	23.34	23.33	0-1	1
		25	0	21.96	21.96	21.99	0-2	2
		25	12	21.99	22.03	22.04	0-2	2
		25	24	21.96	21.94	22.11	0-2	2
		50	0	21.95	21.98	21.94	0-2	2
	64QAM	1	0	22.05	21.86	21.88	0-2	2
		1	24	21.94	22.06	21.68	0-2	2
		1	49	21.70	22.15	21.89	0-2	2
		25	0	21.05	20.96	20.64	0-3	3
		25	12	21.04	21.05	20.57	0-3	3
		25	24	20.69	20.95	20.55	0-3	3
		50	0	20.72	20.91	20.51	0-3	3
	256QAM	1	0	18.74	18.70	18.67	0-5	5
		1	24	19.08	19.07	19.05	0-5	5
		1	49	18.89	18.89	19.00	0-5	5
		25	0	18.95	18.97	18.96	0-5	5
		25	12	19.01	19.00	19.02	0-5	5
		25	24	18.89	18.88	19.08	0-5	5
		50	0	18.87	18.89	19.01	0-5	5

LTE Band 7 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20825 Ch. 2507.5 MHz	21100 Ch. 2535 MHz	21375 Ch. 2562.5 MHz		
15 MHz	QPSK	1	0	23.93	23.91	23.79	0	0
		1	36	23.73	23.79	23.90	0	0
		1	74	23.72	23.73	23.94	0	0
		36	0	22.89	22.83	22.98	0-1	1
		36	18	22.96	22.90	23.06	0-1	1
		36	39	22.88	22.88	23.03	0-1	1
		75	0	22.92	22.88	22.90	0-1	1
	16QAM	1	0	23.06	23.10	23.08	0-1	1
		1	36	23.36	23.16	23.11	0-1	1
		1	74	23.26	23.19	23.41	0-1	1
		36	0	22.00	21.86	21.96	0-2	2
		36	18	21.98	21.96	22.04	0-2	2
		36	39	21.94	21.89	22.09	0-2	2
		75	0	21.90	21.90	22.01	0-2	2
	64QAM	1	0	21.93	21.96	22.10	0-2	2
		1	36	21.47	22.07	21.87	0-2	2
		1	74	21.61	22.01	21.86	0-2	2
		36	0	20.89	20.84	21.01	0-3	3
		36	18	20.76	20.99	21.01	0-3	3
		36	39	20.40	20.90	20.70	0-3	3
		75	0	20.54	20.91	20.80	0-3	3
	256QAM	1	0	18.83	18.81	18.83	0-5	5
		1	36	19.15	18.96	19.11	0-5	5
		1	74	18.91	18.87	19.05	0-5	5
		36	0	18.89	18.93	18.93	0-5	5
		36	18	18.98	19.03	19.08	0-5	5
		36	39	18.90	18.91	19.05	0-5	5
		75	0	18.95	18.94	18.97	0-5	5

LTE Band 7 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20850 Ch. 2510 MHz	21100 Ch. 2535 MHz	21350 Ch. 2560 MHz		
20 MHz	QPSK	1	0	23.92	23.81	23.78	0	0
		1	49	23.62	23.83	23.93	0	0
		1	99	23.81	23.81	23.84	0	0
		50	0	22.78	22.86	22.95	0-1	1
		50	25	22.92	22.93	23.05	0-1	1
		50	49	22.80	22.87	22.98	0-1	1
		100	0	22.89	22.89	22.94	0-1	1
	16QAM	1	0	23.22	22.90	23.05	0-1	1
		1	49	23.24	23.03	23.29	0-1	1
		1	99	23.23	23.19	23.50	0-1	1
		50	0	21.78	21.90	21.90	0-2	2
		50	25	21.86	21.97	22.07	0-2	2
		50	49	21.93	21.78	21.90	0-2	2
		100	0	21.89	21.92	21.93	0-2	2
	64QAM	1	0	21.98	22.05	22.00	0-2	2
		1	49	21.52	22.04	22.05	0-2	2
		1	99	21.70	21.94	22.10	0-2	2
		50	0	20.75	20.85	20.93	0-3	3
		50	25	20.46	20.94	21.10	0-3	3
		50	49	20.31	20.84	20.76	0-3	3
		100	0	20.51	20.87	20.96	0-3	3
	256QAM	1	0	18.63	18.76	18.89	0-5	5
		1	49	18.91	19.00	19.16	0-5	5
		1	99	18.70	18.78	18.67	0-5	5
		50	0	18.77	18.79	18.93	0-5	5
		50	25	18.98	18.98	19.08	0-5	5
		50	49	18.94	18.84	18.92	0-5	5
		100	0	18.92	18.93	18.87	0-5	5

[LTE Band 12 Conducted Power DSI= 0,1,2,3,4]

LTE Band 12 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23017 Ch. 699.7 MHz	23095 Ch. 707.5 MHz	23173 Ch. 715.3 MHz		
1.4 MHz	QPSK	1	0	24.07	23.73	23.59	0	0
		1	3	24.05	23.80	23.66	0	0
		1	5	24.02	23.65	23.61	0	0
		3	0	24.03	23.69	23.58	0	0
		3	1	24.11	23.73	23.64	0	0
		3	3	24.07	23.67	23.64	0	0
		6	0	23.16	22.86	22.73	0-1	1
	16QAM	1	0	23.29	23.22	22.99	0-1	1
		1	3	23.46	23.24	22.99	0-1	1
		1	5	23.41	23.10	23.10	0-1	1
		3	0	23.46	23.05	22.84	0-1	1
		3	1	23.40	22.95	22.99	0-1	1
		3	3	23.27	22.90	22.92	0-1	1
		6	0	22.31	22.03	21.92	0-2	2
	64QAM	1	0	22.50	22.15	21.93	0-2	2
		1	3	22.32	22.15	21.98	0-2	2
		1	5	22.20	21.87	21.88	0-2	2
		3	0	22.33	21.93	21.87	0-2	2
		3	1	22.25	22.00	21.93	0-2	2
		3	3	22.21	21.88	21.85	0-2	2
		6	0	21.20	20.91	20.79	0-3	3
	256QAM	1	0	19.30	18.94	18.75	0-5	5
		1	3	19.38	19.02	18.93	0-5	5
		1	5	19.17	18.86	18.83	0-5	5
		3	0	19.29	18.96	18.89	0-5	5
		3	1	19.42	19.00	18.98	0-5	5
		3	3	19.33	18.93	18.84	0-5	5
		6	0	19.11	18.88	18.70	0-5	5

LTE Band 12 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23025 Ch. 700.5 MHz	23095 Ch. 707.5 MHz	23165 Ch. 714.5 MHz		
3 MHz	QPSK	1	0	24.21	23.91	23.78	0	0
		1	7	24.06	23.84	23.68	0	0
		1	14	23.94	23.75	23.74	0	0
		8	0	23.25	23.04	22.87	0-1	1
		8	3	23.27	23.04	22.90	0-1	1
		8	7	23.18	23.00	22.84	0-1	1
		15	0	23.20	23.01	22.83	0-1	1
	16QAM	1	0	23.51	23.38	23.12	0-1	1
		1	7	23.39	23.09	22.97	0-1	1
		1	14	23.40	23.19	23.03	0-1	1
		8	0	22.34	22.16	22.08	0-2	2
		8	3	22.33	22.17	21.99	0-2	2
		8	7	22.24	22.03	21.88	0-2	2
		15	0	22.23	22.09	21.82	0-2	2
	64QAM	1	0	22.41	22.08	22.06	0-2	2
		1	7	22.27	22.12	21.88	0-2	2
		1	14	22.21	21.93	21.90	0-2	2
		8	0	21.30	20.99	20.90	0-3	3
		8	3	21.32	21.07	20.93	0-3	3
		8	7	21.23	20.91	20.89	0-3	3
		15	0	21.20	21.07	20.97	0-3	3
	256QAM	1	0	19.39	19.16	19.06	0-5	5
		1	7	19.49	19.03	18.90	0-5	5
		1	14	19.22	18.94	18.81	0-5	5
		8	0	19.24	19.02	18.86	0-5	5
		8	3	19.25	19.03	18.99	0-5	5
		8	7	19.17	18.99	18.91	0-5	5
		15	0	19.15	19.00	18.91	0-5	5

LTE Band 12 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23035 Ch. 701.5 MHz	23095 Ch. 707.5 MHz	23155 Ch. 713.5 MHz		
5 MHz	QPSK	1	0	24.14	23.88	23.80	0	0
		1	12	24.05	23.82	23.88	0	0
		1	24	23.90	23.83	23.64	0	0
		12	0	23.30	23.07	22.93	0-1	1
		12	6	23.25	23.12	22.94	0-1	1
		12	11	23.16	22.92	22.87	0-1	1
		25	0	23.18	22.98	22.88	0-1	1
	16QAM	1	0	23.63	23.22	23.12	0-1	1
		1	12	23.31	23.34	23.10	0-1	1
		1	24	23.22	23.19	23.21	0-1	1
		12	0	22.37	22.13	21.99	0-2	2
		12	6	22.32	22.11	21.94	0-2	2
		12	11	22.20	21.99	21.92	0-2	2
		25	0	22.22	22.14	21.83	0-2	2
	64QAM	1	0	22.40	22.17	21.99	0-2	2
		1	12	22.43	22.13	21.99	0-2	2
		1	24	22.15	22.08	22.08	0-2	2
		12	0	21.30	21.10	20.92	0-3	3
		12	6	21.28	21.07	20.91	0-3	3
		12	11	21.24	20.96	20.92	0-3	3
		25	0	21.18	21.07	20.88	0-3	3
	256QAM	1	0	19.28	19.23	18.96	0-5	5
		1	12	19.33	19.12	19.04	0-5	5
		1	24	19.15	19.05	18.90	0-5	5
		12	0	19.29	19.04	18.93	0-5	5
		12	6	19.24	19.01	18.92	0-5	5
		12	11	19.16	19.00	18.87	0-5	5
		25	0	19.15	18.97	18.88	0-5	5

LTE Band 12 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				23095 Ch. 707.5 MHz		
10 MHz	QPSK	1	0	24.02	0	0
		1	24	23.84	0	0
		1	49	23.75	0	0
		25	0	23.00	0-1	1
		25	12	23.05	0-1	1
		25	24	22.94	0-1	1
		50	0	22.92	0-1	1
	16QAM	1	0	23.54	0-1	1
		1	24	23.46	0-1	1
		1	49	23.21	0-1	1
		25	0	22.05	0-2	2
		25	12	22.04	0-2	2
		25	24	21.82	0-2	2
		50	0	21.95	0-2	2
	64QAM	1	0	22.43	0-2	2
		1	24	22.19	0-2	2
		1	49	22.08	0-2	2
		25	0	21.05	0-3	3
		25	12	21.06	0-3	3
		25	24	20.88	0-3	3
		50	0	20.99	0-3	3
	256QAM	1	0	19.02	0-5	5
		1	24	18.83	0-5	5
		1	49	18.87	0-5	5
		25	0	18.94	0-5	5
		25	12	19.11	0-5	5
		25	24	18.84	0-5	5
		50	0	18.93	0-5	5

[LTE Band 13 Conducted Power DSI= 0,1,2,3,4]

LTE Band 13 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				23230 Ch. 782 MHz		
5 MHz	QPSK	1	0	24.02	0	0
		1	12	24.06	0	0
		1	24	24.07	0	0
		12	0	23.08	0-1	1
		12	6	23.11	0-1	1
		12	11	23.16	0-1	1
		25	0	23.08	0-1	1
	16QAM	1	0	23.26	0-1	1
		1	12	23.52	0-1	1
		1	24	23.57	0-1	1
		12	0	22.07	0-2	2
		12	6	22.12	0-2	2
		12	11	22.21	0-2	2
		25	0	22.09	0-2	2
	64QAM	1	0	22.17	0-2	2
		1	12	22.35	0-2	2
		1	24	22.37	0-2	2
		12	0	21.06	0-3	3
		12	6	21.18	0-3	3
		12	11	21.25	0-3	3
		25	0	21.15	0-3	3
	256QAM	1	0	19.08	0-5	5
		1	12	19.18	0-5	5
		1	24	19.34	0-5	5
		12	0	19.07	0-5	5
		12	6	19.13	0-5	5
		12	11	19.18	0-5	5
		25	0	19.18	0-5	5

LTE Band 13 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				23230 Ch. 782 MHz		
10 MHz	QPSK	1	0	23.92	0	0
		1	24	24.05	0	0
		1	49	24.15	0	0
		25	0	23.12	0-1	1
		25	12	23.12	0-1	1
		25	24	23.17	0-1	1
		50	0	22.96	0-1	1
	16QAM	1	0	23.26	0-1	1
		1	24	23.46	0-1	1
		1	49	23.46	0-1	1
		25	0	22.09	0-2	2
		25	12	22.06	0-2	2
		25	24	22.09	0-2	2
		50	0	22.00	0-2	2
	64QAM	1	0	22.06	0-2	2
		1	24	22.16	0-2	2
		1	49	22.38	0-2	2
		25	0	21.08	0-3	3
		25	12	21.17	0-3	3
		25	24	21.13	0-3	3
		50	0	21.14	0-3	3
	256QAM	1	0	18.74	0-5	5
		1	24	19.13	0-5	5
		1	49	19.19	0-5	5
		25	0	18.88	0-5	5
		25	12	19.14	0-5	5
		25	24	19.10	0-5	5
		50	0	19.02	0-5	5

[LTE Band 14 Conducted Power DSI= 0,1,2,3,4]

LTE Band 14 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				23330 Ch. 793 MHz		
5 MHz	QPSK	1	0	23.92	0	0
		1	12	24.05	0	0
		1	24	24.15	0	0
		12	0	23.12	0-1	1
		12	6	23.12	0-1	1
		12	11	23.17	0-1	1
		25	0	22.96	0-1	1
	16QAM	1	0	23.26	0-1	1
		1	12	23.46	0-1	1
		1	24	23.46	0-1	1
		12	0	22.09	0-2	2
		12	6	22.06	0-2	2
		12	11	22.09	0-2	2
		25	0	22.00	0-2	2
	64QAM	1	0	22.06	0-2	2
		1	12	22.16	0-2	2
		1	24	22.38	0-2	2
		12	0	21.08	0-3	3
		12	6	21.17	0-3	3
		12	11	21.13	0-3	3
		25	0	21.14	0-3	3
	256QAM	1	0	18.74	0-5	5
		1	12	19.13	0-5	5
		1	24	19.19	0-5	5
		12	0	18.88	0-5	5
		12	6	19.14	0-5	5
		12	11	19.10	0-5	5
		25	0	19.02	0-5	5

LTE Band 14 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				23330 Ch. 793 MHz		
10 MHz	QPSK	1	0	24.24	0	0
		1	24	24.28	0	0
		1	49	24.16	0	0
		25	0	23.35	0-1	1
		25	12	23.35	0-1	1
		25	24	23.36	0-1	1
		50	0	23.32	0-1	1
	16QAM	1	0	24.16	0-1	1
		1	24	23.98	0-1	1
		1	49	23.93	0-1	1
		25	0	22.37	0-2	2
		25	12	22.42	0-2	2
		25	24	22.38	0-2	2
		50	0	22.27	0-2	2
	64QAM	1	0	22.71	0-2	2
		1	24	22.55	0-2	2
		1	49	22.66	0-2	2
		25	0	21.40	0-3	3
		25	12	21.44	0-3	3
		25	24	21.34	0-3	3
		50	0	21.38	0-3	3
	256QAM	1	0	19.21	0-5	5
		1	24	19.58	0-5	5
		1	49	19.37	0-5	5
		25	0	19.36	0-5	5
		25	12	19.37	0-5	5
		25	24	19.40	0-5	5
		50	0	19.27	0-5	5

[LTE Band 25 Conducted Power DSI= 0,2]

LTE Band 25 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26047 Ch. 1850.7 MHz	26365 Ch. 1882.5 MHz	26683 Ch. 1914.3 MHz		
1.4 MHz	QPSK	1	0	23.90	24.77	24.01	0	0
		1	3	23.97	24.90	23.73	0	0
		1	5	23.91	24.63	23.41	0	0
		3	0	23.99	24.71	23.81	0	0
		3	1	24.06	24.77	23.63	0	0
		3	3	23.94	24.72	23.33	0	0
		6	0	23.05	23.83	22.85	0-1	1
	16QAM	1	0	23.21	24.12	23.25	0-1	1
		1	3	23.41	24.08	23.07	0-1	1
		1	5	23.34	24.05	22.81	0-1	1
		3	0	23.17	23.91	23.13	0-1	1
		3	1	23.14	23.94	23.03	0-1	1
		3	3	23.18	23.88	22.75	0-1	1
		6	0	22.13	22.91	22.15	0-2	2
	64QAM	1	0	21.71	22.27	21.75	0-2	2
		1	3	21.83	22.33	21.61	0-2	2
		1	5	21.75	22.28	21.36	0-2	2
		3	0	21.62	22.16	21.64	0-2	2
		3	1	21.75	22.26	21.62	0-2	2
		3	3	21.65	22.22	21.31	0-2	2
		6	0	20.60	21.15	20.58	0-3	3
	256QAM	1	0	19.10	19.97	19.14	0-5	5
		1	3	19.23	19.96	19.38	0-5	5
		1	5	19.13	19.86	19.22	0-5	5
		3	0	19.18	19.98	19.21	0-5	5
		3	1	19.22	20.06	19.29	0-5	5
		3	3	19.14	19.96	19.20	0-5	5
		6	0	19.04	19.81	19.09	0-5	5

LTE Band 25 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26055 Ch. 1851.5 MHz	26365 Ch. 1882.5 MHz	26675Ch. 1913.5 MHz		
3 MHz	QPSK	1	0	24.01	24.85	24.10	0	0
		1	7	23.96	24.86	24.02	0	0
		1	14	24.07	24.78	23.46	0	0
		8	0	23.07	23.86	23.23	0-1	1
		8	3	23.14	23.96	23.23	0-1	1
		8	7	23.13	23.91	23.02	0-1	1
		15	0	23.17	23.88	23.21	0-1	1
	16QAM	1	0	23.26	24.07	23.46	0-1	1
		1	7	23.29	24.01	23.36	0-1	1
		1	14	23.50	24.17	22.80	0-1	1
		8	0	22.22	22.96	22.28	0-2	2
		8	3	22.26	23.00	22.28	0-2	2
		8	7	22.20	22.94	22.28	0-2	2
		15	0	22.14	22.93	22.18	0-2	2
	64QAM	1	0	21.74	22.28	22.30	0-2	2
		1	7	21.79	22.33	21.93	0-2	2
		1	14	21.87	22.40	21.43	0-2	2
		8	0	20.67	21.20	21.25	0-3	3
		8	3	20.77	21.29	21.13	0-3	3
		8	7	20.76	21.34	20.78	0-3	3
		15	0	20.68	21.27	21.02	0-3	3
	256QAM	1	0	19.18	19.99	19.20	0-5	5
		1	7	19.03	20.07	19.27	0-5	5
		1	14	19.29	19.91	19.24	0-5	5
		8	0	19.15	19.90	19.18	0-5	5
		8	3	19.22	19.96	19.25	0-5	5
		8	7	19.21	19.98	19.25	0-5	5
		15	0	19.19	19.96	19.19	0-5	5

LTE Band 25_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26065 Ch. 1852.5 MHz	26365 Ch. 1882.5 MHz	26665 Ch. 1912.5 MHz		
5 MHz	QPSK	1	0	24.01	24.74	24.18	0	0
		1	12	23.99	24.85	24.08	0	0
		1	24	24.01	24.70	23.52	0	0
		12	0	23.14	23.88	23.24	0-1	1
		12	6	23.12	23.95	23.27	0-1	1
		12	11	23.14	23.83	23.28	0-1	1
		25	0	23.11	23.94	23.19	0-1	1
	16QAM	1	0	23.23	24.21	23.47	0-1	1
		1	12	23.21	24.06	23.49	0-1	1
		1	24	23.43	24.12	23.03	0-1	1
		12	0	22.19	22.97	22.23	0-2	2
		12	6	22.24	23.01	22.31	0-2	2
		12	11	22.16	22.88	22.21	0-2	2
		25	0	22.16	22.97	22.14	0-2	2
	64QAM	1	0	21.70	22.17	22.42	0-2	2
		1	12	21.83	22.32	22.34	0-2	2
		1	24	21.91	22.40	21.56	0-2	2
		12	0	20.67	21.21	21.20	0-3	3
		12	6	20.77	21.32	21.22	0-3	3
		12	11	20.81	21.35	21.17	0-3	3
		25	0	20.70	21.25	21.18	0-3	3
	256QAM	1	0	19.19	20.01	19.24	0-5	5
		1	12	19.29	19.98	19.43	0-5	5
		1	24	19.22	19.98	19.28	0-5	5
		12	0	19.07	19.95	19.19	0-5	5
		12	6	19.17	19.98	19.18	0-5	5
		12	11	19.11	19.94	19.22	0-5	5
		25	0	19.14	19.92	19.22	0-5	5

LTE Band 25 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26090 Ch. 1855 MHz	26365 Ch. 1882.5 MHz	26640 Ch. 1910 MHz		
10 MHz	QPSK	1	0	23.85	24.58	24.13	0	0
		1	24	23.90	24.94	24.05	0	0
		1	49	23.85	24.60	23.71	0	0
		25	0	23.07	23.84	23.25	0-1	1
		25	12	23.15	23.97	23.21	0-1	1
		25	24	23.17	23.81	23.23	0-1	1
		50	0	23.15	23.75	23.20	0-1	1
	16QAM	1	0	23.07	24.01	23.60	0-1	1
		1	24	23.38	24.36	23.50	0-1	1
		1	49	23.16	23.75	23.15	0-1	1
		25	0	22.11	22.92	22.20	0-2	2
		25	12	22.17	23.01	22.21	0-2	2
		25	24	22.19	22.80	22.19	0-2	2
		50	0	22.14	22.80	22.30	0-2	2
	64QAM	1	0	21.59	21.93	22.24	0-2	2
		1	24	22.09	22.39	22.31	0-2	2
		1	49	22.04	22.47	21.66	0-2	2
		25	0	20.67	21.12	20.97	0-3	3
		25	12	20.97	21.32	21.18	0-3	3
		25	24	21.06	21.37	21.23	0-3	3
		50	0	20.91	21.23	21.02	0-3	3
	256QAM	1	0	18.94	19.54	19.04	0-5	5
		1	24	19.21	19.91	19.42	0-5	5
		1	49	19.02	19.57	19.07	0-5	5
		25	0	19.11	19.88	19.17	0-5	5
		25	12	19.18	19.97	19.27	0-5	5
		25	24	19.14	19.85	19.17	0-5	5
		50	0	19.10	19.81	19.27	0-5	5

LTE Band 25 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26115 Ch. 1857.5 MHz	26365 Ch. 1882.5 MHz	26615 Ch. 1907.5 MHz		
15 MHz	QPSK	1	0	23.79	24.74	24.41	0	0
		1	36	24.05	24.81	24.15	0	0
		1	74	24.19	24.72	23.81	0	0
		36	0	23.14	23.85	23.36	0-1	1
		36	18	23.22	24.02	23.37	0-1	1
		36	39	23.37	23.84	23.25	0-1	1
		75	0	23.30	23.84	23.45	0-1	1
	16QAM	1	0	23.15	24.31	23.77	0-1	1
		1	36	23.46	24.42	23.70	0-1	1
		1	74	23.47	24.08	23.32	0-1	1
		36	0	22.21	22.87	22.29	0-2	2
		36	18	22.31	23.00	22.40	0-2	2
		36	39	22.37	22.86	22.23	0-2	2
		75	0	22.33	22.89	22.35	0-2	2
	64QAM	1	0	21.76	22.26	22.56	0-2	2
		1	36	22.22	22.49	21.99	0-2	2
		1	74	22.54	22.92	21.70	0-2	2
		36	0	20.89	21.31	21.09	0-3	3
		36	18	21.19	21.43	20.98	0-3	3
		36	39	21.36	21.63	21.29	0-3	3
		75	0	21.22	21.40	21.09	0-3	3
	256QAM	1	0	19.02	19.62	19.35	0-5	5
		1	36	19.30	20.10	19.41	0-5	5
		1	74	19.40	19.74	19.40	0-5	5
		36	0	19.10	19.81	19.35	0-5	5
		36	18	19.22	20.05	19.31	0-5	5
		36	39	19.36	19.85	19.24	0-5	5
		75	0	19.25	19.88	19.39	0-5	5

LTE Band 25_ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 MHz	26365 Ch. 1882.5 MHz	26590 Ch. 1905 MHz		
20 MHz	QPSK	1	0	23.96	24.66	24.47	0	0
		1	49	24.03	24.69	24.32	0	0
		1	99	24.49	24.62	23.82	0	0
		50	0	23.13	23.83	23.51	0-1	1
		50	25	23.28	23.86	23.31	0-1	1
		50	49	23.36	23.73	23.24	0-1	1
		100	0	23.21	23.74	23.35	0-1	1
	16QAM	1	0	23.40	24.00	23.73	0-1	1
		1	49	23.53	24.41	23.57	0-1	1
		1	99	23.78	24.01	23.37	0-1	1
		50	0	22.15	22.85	22.47	0-2	2
		50	25	22.33	22.82	22.34	0-2	2
		50	49	22.45	22.74	22.21	0-2	2
		100	0	22.16	22.72	22.31	0-2	2
	64QAM	1	0	23.36	22.42	22.70	0-2	2
		1	49	23.31	22.45	21.99	0-2	2
		1	99	23.63	22.83	21.73	0-2	2
		50	0	22.09	21.22	21.36	0-3	3
		50	25	22.33	21.35	20.99	0-3	3
		50	49	22.39	21.56	20.95	0-3	3
		100	0	22.25	21.24	21.12	0-3	3
	256QAM	1	0	18.91	19.38	19.24	0-5	5
		1	49	19.34	19.84	19.41	0-5	5
		1	99	19.53	19.51	19.26	0-5	5
		50	0	19.00	19.70	19.37	0-5	5
		50	25	19.31	19.81	19.38	0-5	5
		50	49	19.33	19.76	19.22	0-5	5
		100	0	19.24	19.72	19.38	0-5	5

[LTE Band 26 Conducted Power DSI= 0,1,2,3,4]

LTE Band 26 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26697 Ch. 814.7 MHz	26865 Ch. 831.5 MHz	27033 Ch. 848.3 MHz		
1.4 MHz	QPSK	1	0	23.91	23.73	24.14	0	0
		1	3	23.97	23.83	24.09	0	0
		1	5	23.93	23.77	24.18	0	0
		3	0	23.94	23.71	24.07	0	0
		3	1	23.98	23.75	24.22	0	0
		3	3	23.94	23.76	24.11	0	0
		6	0	23.05	22.91	23.26	0-1	1
	16QAM	1	0	23.18	23.13	23.42	0-1	1
		1	3	23.32	23.29	23.46	0-1	1
		1	5	23.28	23.05	23.32	0-1	1
		3	0	23.27	22.94	23.57	0-1	1
		3	1	23.50	23.05	23.44	0-1	1
		3	3	23.20	22.93	23.29	0-1	1
		6	0	22.25	21.92	22.35	0-2	2
	64QAM	1	0	22.22	22.00	22.35	0-2	2
		1	3	22.35	22.18	22.49	0-2	2
		1	5	22.17	22.07	22.51	0-2	2
		3	0	22.19	22.01	22.29	0-2	2
		3	1	22.18	21.91	22.38	0-2	2
		3	3	22.11	21.89	22.32	0-2	2
		6	0	21.10	20.91	21.30	0-3	3
	256QAM	1	0	19.15	18.91	19.36	0-5	5
		1	3	19.20	19.11	19.48	0-5	5
		1	5	19.21	19.01	19.36	0-5	5
		3	0	19.16	18.97	19.35	0-5	5
		3	1	19.33	19.08	19.36	0-5	5
		3	3	19.26	19.03	19.34	0-5	5
		6	0	19.07	18.87	19.23	0-5	5

LTE Band 26 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26705 Ch. 815.5 MHz	26865 Ch. 831.5 MHz	27025 Ch. 847.5 MHz		
3 MHz	QPSK	1	0	24.01	23.84	24.24	0	0
		1	7	23.92	23.77	24.08	0	0
		1	14	23.89	23.88	24.17	0	0
		8	0	23.17	22.90	23.30	0-1	1
		8	3	23.22	22.97	23.31	0-1	1
		8	7	23.09	22.96	23.32	0-1	1
		15	0	23.10	22.92	23.26	0-1	1
	16QAM	1	0	23.24	23.17	23.38	0-1	1
		1	7	23.27	23.06	23.50	0-1	1
		1	14	23.08	23.41	23.75	0-1	1
		8	0	22.18	21.92	22.43	0-2	2
		8	3	22.21	22.07	22.36	0-2	2
		8	7	22.19	22.06	22.44	0-2	2
		15	0	22.13	21.95	22.24	0-2	2
	64QAM	1	0	22.17	22.03	22.43	0-2	2
		1	7	22.32	22.06	22.42	0-2	2
		1	14	22.15	22.31	22.51	0-2	2
		8	0	21.12	20.83	21.31	0-3	3
		8	3	21.17	21.04	21.36	0-3	3
		8	7	21.12	20.96	21.39	0-3	3
		15	0	21.14	20.99	21.33	0-3	3
	256QAM	1	0	19.27	18.94	19.30	0-5	5
		1	7	19.28	18.97	19.33	0-5	5
		1	14	19.15	19.02	19.40	0-5	5
		8	0	19.12	18.87	19.31	0-5	5
		8	3	19.17	18.96	19.31	0-5	5
		8	7	19.14	19.00	19.36	0-5	5
		15	0	19.14	18.98	19.34	0-5	5

LTE Band 26 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26715 Ch. 816.5 MHz	26865 Ch. 831.5 MHz	27015 Ch. 846.5 MHz		
5 MHz	QPSK	1	0	23.91	23.79	24.15	0	0
		1	12	23.87	23.67	24.15	0	0
		1	24	23.88	23.76	24.26	0	0
		12	0	23.06	22.89	23.22	0-1	1
		12	6	23.13	23.03	23.29	0-1	1
		12	11	23.11	22.93	23.34	0-1	1
		25	0	23.09	22.84	23.20	0-1	1
	16QAM	1	0	23.31	23.23	23.64	0-1	1
		1	12	23.28	23.11	23.63	0-1	1
		1	24	23.39	23.28	23.56	0-1	1
		12	0	22.16	21.94	22.29	0-2	2
		12	6	22.19	22.04	22.45	0-2	2
		12	11	22.13	22.09	22.39	0-2	2
		25	0	22.06	21.98	22.36	0-2	2
	64QAM	1	0	22.22	22.00	22.41	0-2	2
		1	12	22.23	22.11	22.67	0-2	2
		1	24	22.06	22.16	22.70	0-2	2
		12	0	21.03	20.85	21.24	0-3	3
		12	6	21.14	20.98	21.37	0-3	3
		12	11	21.11	20.97	21.33	0-3	3
		25	0	21.11	20.95	21.27	0-3	3
	256QAM	1	0	19.11	18.93	19.23	0-5	5
		1	12	19.19	18.98	19.38	0-5	5
		1	24	19.18	19.02	19.33	0-5	5
		12	0	19.04	18.84	19.23	0-5	5
		12	6	19.10	18.96	19.24	0-5	5
		12	11	19.06	18.94	19.34	0-5	5
		25	0	19.10	18.87	19.26	0-5	5

LTE Band 26 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26740 Ch. 819 MHz	26865 Ch. 831.5 MHz	26990 Ch. 844 MHz		
10 MHz	QPSK	1	0	24.21	24.02	24.21	0	0
		1	24	23.78	23.62	23.93	0	0
		1	49	23.69	23.80	24.09	0	0
		25	0	22.87	22.67	23.10	0-1	1
		25	12	23.06	22.91	23.21	0-1	1
		25	24	22.96	22.86	23.18	0-1	1
		50	0	22.94	22.92	23.07	0-1	1
	16QAM	1	0	23.72	23.13	23.53	0-1	1
		1	24	23.51	23.54	23.99	0-1	1
		1	49	23.44	23.58	24.07	0-1	1
		25	0	21.93	21.82	22.11	0-2	2
		25	12	22.07	22.03	22.28	0-2	2
		25	24	21.99	21.80	22.17	0-2	2
		50	0	21.87	21.88	22.13	0-2	2
	64QAM	1	0	22.12	22.20	22.31	0-2	2
		1	24	22.12	22.15	22.54	0-2	2
		1	49	21.99	22.20	22.41	0-2	2
		25	0	20.89	20.77	21.13	0-3	3
		25	12	21.07	20.97	21.18	0-3	3
		25	24	20.99	20.91	21.18	0-3	3
		50	0	21.00	20.85	21.12	0-3	3
	256QAM	1	0	18.80	18.65	18.90	0-5	5
		1	24	19.11	18.96	19.38	0-5	5
		1	49	18.77	19.00	19.30	0-5	5
		25	0	18.95	18.78	19.03	0-5	5
		25	12	19.05	18.97	19.19	0-5	5
		25	24	18.96	18.87	19.34	0-5	5
		50	0	18.96	18.93	19.11	0-5	5

LTE Band 26 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				26865 Ch. 831.5 MHz		
15 MHz	QPSK	1	0	23.95	0	0
		1	36	23.58	0	0
		1	74	23.67	0	0
		36	0	22.77	0-1	1
		36	18	22.89	0-1	1
		36	39	22.88	0-1	1
		75	0	22.81	0-1	1
	16QAM	1	0	23.29	0-1	1
		1	36	23.81	0-1	1
		1	74	23.25	0-1	1
		36	0	21.72	0-2	2
		36	18	21.91	0-2	2
		36	39	21.85	0-2	2
		75	0	21.81	0-2	2
	64QAM	1	0	22.12	0-2	2
		1	36	21.98	0-2	2
		1	74	22.33	0-2	2
		36	0	20.83	0-3	3
		36	18	20.94	0-3	3
		36	39	20.98	0-3	3
		75	0	20.87	0-3	3
	256QAM	1	0	18.70	0-5	5
		1	36	18.86	0-5	5
		1	74	18.90	0-5	5
		36	0	18.75	0-5	5
		36	18	18.94	0-5	5
		36	39	18.90	0-5	5
		75	0	18.80	0-5	5

[LTE Band 30 Conducted Power DSI= 0, 2]

LTE Band 30 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				27710 Ch. 2310 MHz		
5 MHz	QPSK	1	0	22.05	0	0
		1	12	22.26	0	0
		1	24	22.09	0	0
		12	0	21.28	0-1	1
		12	6	21.29	0-1	1
		12	11	21.25	0-1	1
		25	0	21.20	0-1	1
	16QAM	1	0	21.59	0-1	1
		1	12	21.51	0-1	1
		1	24	21.56	0-1	1
		12	0	20.35	0-2	2
		12	6	20.32	0-2	2
		12	11	20.31	0-2	2
		25	0	20.22	0-2	2
	64QAM	1	0	20.36	0-2	2
		1	12	20.38	0-2	2
		1	24	20.35	0-2	2
		12	0	19.21	0-3	3
		12	6	19.29	0-3	3
		12	11	19.36	0-3	3
		25	0	19.27	0-3	3
	256QAM	1	0	17.32	0-5	5
		1	12	17.32	0-5	5
		1	24	17.24	0-5	5
		12	0	17.30	0-5	5
		12	6	17.21	0-5	5
		12	11	17.20	0-5	5
		25	0	17.22	0-5	5

LTE Band 30 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				27710 Ch. 2310 MHz		
10 MHz	QPSK	1	0	22.21	0	0
		1	24	22.12	0	0
		1	49	22.42	0	0
		25	0	21.17	0-1	1
		25	12	21.32	0-1	1
		25	24	21.18	0-1	1
		50	0	21.22	0-1	1
	16QAM	1	0	21.63	0-1	1
		1	24	21.66	0-1	1
		1	49	21.67	0-1	1
		25	0	20.25	0-2	2
		25	12	20.34	0-2	2
		25	24	20.15	0-2	2
		50	0	20.17	0-2	2
	64QAM	1	0	20.33	0-2	2
		1	24	20.39	0-2	2
		1	49	20.61	0-2	2
		25	0	19.26	0-3	3
		25	12	19.38	0-3	3
		25	24	19.25	0-3	3
		50	0	19.29	0-3	3
	256QAM	1	0	17.13	0-5	5
		1	24	17.45	0-5	5
		1	49	17.14	0-5	5
		25	0	17.23	0-5	5
		25	12	17.34	0-5	5
		25	24	17.22	0-5	5
		50	0	17.21	0-5	5

[LTE TDD Band 38 Conducted Power DSI= 0, 2]

LTE Band 38_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37775 Ch. 2572.5 MHz	38000 Ch. 2595 MHz	38225 Ch. 2617.5 MHz		
5 MHz	QPSK	1	0	24.22	24.50	24.21	0	0
		1	12	24.35	24.57	24.21	0	0
		1	24	24.20	24.45	24.17	0	0
		12	0	23.29	23.65	23.31	0-1	1
		12	6	23.29	23.66	23.32	0-1	1
		12	11	23.30	23.61	23.32	0-1	1
		25	0	23.30	23.60	23.32	0-1	1
	16QAM	1	0	23.25	23.63	23.31	0-1	1
		1	12	23.34	23.69	23.35	0-1	1
		1	24	23.25	23.55	23.27	0-1	1
		12	0	22.23	22.58	22.26	0-2	2
		12	6	22.28	22.60	22.25	0-2	2
		12	11	22.25	22.56	22.23	0-2	2
		25	0	22.33	22.72	22.35	0-2	2
	64QAM	1	0	21.91	22.11	21.55	0-2	2
		1	12	21.97	22.15	21.54	0-2	2
		1	24	21.97	22.11	21.55	0-2	2
		12	0	21.24	21.49	20.91	0-3	3
		12	6	21.29	21.55	20.94	0-3	3
		12	11	21.32	21.51	20.92	0-3	3
		25	0	21.32	21.53	20.93	0-3	3
	256QAM	1	0	19.04	19.39	19.10	0-5	5
		1	12	19.07	19.47	19.14	0-5	5
		1	24	19.06	19.34	19.09	0-5	5
		12	0	19.31	19.69	19.33	0-5	5
		12	6	19.39	19.74	19.38	0-5	5
		12	11	19.37	19.61	19.35	0-5	5
		25	0	19.27	19.61	19.31	0-5	5

LTE Band 38 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37800 Ch. 2575 MHz	38000 Ch. 2595 MHz	38200 Ch. 2615 MHz		
10 MHz	QPSK	1	0	23.95	24.63	24.29	0	0
		1	24	24.16	24.54	24.24	0	0
		1	49	24.04	24.46	24.19	0	0
		25	0	23.22	23.61	23.27	0-1	1
		25	12	23.33	23.67	23.34	0-1	1
		25	24	23.24	23.49	23.28	0-1	1
		50	0	23.24	23.58	23.27	0-1	1
	16QAM	1	0	23.05	23.76	23.47	0-1	1
		1	24	23.36	23.70	23.39	0-1	1
		1	49	23.17	23.59	23.36	0-1	1
		25	0	22.25	22.60	22.29	0-2	2
		25	12	22.34	22.67	22.39	0-2	2
		25	24	22.25	22.51	22.31	0-2	2
		50	0	22.28	22.60	22.30	0-2	2
	64QAM	1	0	21.70	22.11	21.69	0-2	2
		1	24	21.97	22.08	21.63	0-2	2
		1	49	21.77	22.13	21.59	0-2	2
		25	0	21.21	21.49	21.02	0-3	3
		25	12	21.36	21.54	21.08	0-3	3
		25	24	21.30	21.49	21.05	0-3	3
		50	0	21.34	21.56	21.07	0-3	3
	256QAM	1	0	18.79	19.16	18.89	0-5	5
		1	24	19.01	19.39	19.16	0-5	5
		1	49	18.87	19.04	18.80	0-5	5
		25	0	19.25	19.64	19.31	0-5	5
		25	12	19.30	19.66	19.36	0-5	5
		25	24	19.26	19.53	19.28	0-5	5
		50	0	19.25	19.63	19.36	0-5	5

LTE Band 38 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37825 Ch. 2577.5 MHz	38000 Ch. 2595 MHz	38175 Ch. 2612.5 MHz		
15 MHz	QPSK	1	0	24.23	24.62	24.35	0	0
		1	36	24.20	24.48	24.23	0	0
		1	74	24.36	24.45	24.17	0	0
		36	0	23.23	23.63	23.32	0-1	1
		36	18	23.36	23.68	23.36	0-1	1
		36	39	23.35	23.47	23.17	0-1	1
		75	0	23.30	23.58	23.29	0-1	1
	16QAM	1	0	23.31	23.69	23.45	0-1	1
		1	36	23.27	23.61	23.32	0-1	1
		1	74	23.50	23.55	23.28	0-1	1
		36	0	22.18	22.58	22.29	0-2	2
		36	18	22.31	22.61	22.33	0-2	2
		36	39	22.34	22.41	22.13	0-2	2
		75	0	22.31	22.59	22.32	0-2	2
	64QAM	1	0	21.98	22.21	21.77	0-2	2
		1	36	22.04	22.03	21.67	0-2	2
		1	74	22.20	22.10	21.65	0-2	2
		36	0	21.26	21.64	21.21	0-3	3
		36	18	21.37	21.61	21.21	0-3	3
		36	39	21.39	21.49	21.07	0-3	3
		75	0	21.33	21.46	21.02	0-3	3
	256QAM	1	0	18.92	19.32	19.07	0-5	5
		1	36	19.17	19.48	19.18	0-5	5
		1	74	19.18	19.14	18.92	0-5	5
		36	0	19.24	19.62	19.35	0-5	5
		36	18	19.44	19.72	19.42	0-5	5
		36	39	19.39	19.52	19.19	0-5	5
		75	0	19.33	19.62	19.32	0-5	5

LTE Band 38_ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 2580 MHz	38000 Ch. 2595 MHz	38150 2610 MHz		
20 MHz	QPSK	1	0	24.26	24.56	24.48	0	0
		1	49	24.31	24.54	24.29	0	0
		1	99	24.44	24.31	24.16	0	0
		50	0	23.21	23.55	23.35	0-1	1
		50	25	23.44	23.63	23.40	0-1	1
		50	49	23.40	23.40	23.17	0-1	1
		100	0	23.33	23.41	23.29	0-1	1
	16QAM	1	0	23.32	23.59	23.52	0-1	1
		1	49	23.38	23.58	23.35	0-1	1
		1	99	23.59	23.45	23.30	0-1	1
		50	0	22.23	22.57	22.34	0-2	2
		50	25	22.39	22.64	22.40	0-2	2
		50	49	22.45	22.41	22.21	0-2	2
		100	0	22.36	22.47	22.34	0-2	2
	64QAM	1	0	21.97	22.21	21.94	0-2	2
		1	49	22.06	22.06	21.79	0-2	2
		1	99	22.24	22.05	21.74	0-2	2
		50	0	21.28	21.64	21.27	0-3	3
		50	25	21.46	21.59	21.26	0-3	3
		50	49	21.44	21.45	21.10	0-3	3
		100	0	21.35	21.45	21.06	0-3	3
	256QAM	1	0	18.75	19.05	19.06	0-5	5
		1	49	19.27	19.47	19.28	0-5	5
		1	99	19.14	18.98	18.77	0-5	5
		50	0	19.31	19.64	19.41	0-5	5
		50	25	19.51	19.72	19.46	0-5	5
		50	49	19.50	19.51	19.29	0-5	5
		100	0	19.39	19.52	19.38	0-5	5

[LTE Band 40 Low Side (MCC310) Conducted Power, DSI= 0, 1, 2, 3, 4]

LTE Band 40 Low Side (MCC310) _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				38725 Ch. 2307.5 MHz	38750 Ch. 2310 MHz	38775 Ch. 2312.5 MHz		
5 MHz	QPSK	1	0	12.86	12.86	12.89	0	0
		1	12	12.91	12.89	12.85	0	0
		1	24	12.79	12.77	12.80	0	0
		12	0	12.98	12.98	12.97	0-1	0
		12	6	13.09	13.09	13.01	0-1	0
		12	11	13.04	13.05	13.00	0-1	0
		25	0	13.01	12.99	13.03	0-1	0
	16QAM	1	0	13.07	13.09	12.99	0-1	0
		1	12	13.08	13.10	13.01	0-1	0
		1	24	13.05	12.98	12.97	0-1	0
		12	0	12.82	12.99	12.94	0-2	0
		12	6	12.98	13.04	13.02	0-2	0
		12	11	12.99	13.00	12.99	0-2	0
		25	0	13.08	13.02	13.05	0-2	0
	64QAM	1	0	12.66	12.69	12.69	0-2	0
		1	12	12.65	12.67	12.66	0-2	0
		1	24	12.64	12.64	12.61	0-2	0
		12	0	12.96	12.95	12.95	0-3	0
		12	6	13.05	13.03	13.07	0-3	0
		12	11	13.03	13.02	13.02	0-3	0
		25	0	12.99	13.01	13.02	0-3	0
	256QAM	1	0	12.80	12.84	12.82	0-5	0
		1	12	12.93	12.96	12.93	0-5	0
		1	24	12.76	12.71	12.75	0-5	0
		12	0	13.10	13.17	13.13	0-5	0
		12	6	13.21	13.21	13.18	0-5	0
		12	11	13.18	13.20	13.20	0-5	0
		25	0	13.09	13.09	13.09	0-5	0

LTE Band 40 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				38750 Ch. 2310 MHz		
10 MHz	QPSK	1	0	12.75	0	0
		1	24	12.89	0	0
		1	49	12.61	0	0
		25	0	13.01	0-1	0
		25	12	13.09	0-1	0
		25	24	12.95	0-1	0
		50	0	13.01	0-1	0
	16QAM	1	0	12.99	0-1	0
		1	24	13.12	0-1	0
		1	49	12.79	0-1	0
		25	0	13.04	0-2	0
		25	12	13.08	0-2	0
		25	24	13.00	0-2	0
		50	0	13.02	0-2	0
	64QAM	1	0	12.57	0-2	0
		1	24	12.79	0-2	0
		1	49	12.42	0-2	0
		25	0	13.05	0-3	0
		25	12	13.10	0-3	0
		25	24	13.00	0-3	0
		50	0	13.10	0-3	0
	256QAM	1	0	12.72	0-5	0
		1	24	12.87	0-5	0
		1	49	12.61	0-5	0
		25	0	13.04	0-5	0
		25	12	13.16	0-5	0
		25	24	13.04	0-5	0
		50	0	13.13	0-5	0

[LTE Band 40 Upper Side (MCC310) Conducted Power, DSI= 0, 1, 2, 3, 4]

LTE Band 40 Upper Side (MCC310) _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				39175 Ch. 2352.5 MHz	39200 Ch. 2355 MHz	39225 Ch. 2357.5 MHz		
5MHz	QPSK	1	0	12.62	12.61	12.55	0	0
		1	12	12.57	12.52	12.57	0	0
		1	24	12.47	12.45	12.43	0	0
		12	0	12.73	12.70	12.67	0-1	0
		12	6	12.78	12.78	12.73	0-1	0
		12	11	12.76	12.74	12.61	0-1	0
		25	0	12.72	12.69	12.65	0-1	0
	16QAM	1	0	12.86	12.83	12.77	0-1	0
		1	12	12.76	12.77	12.70	0-1	0
		1	24	12.66	12.60	12.57	0-1	0
		12	0	12.65	12.63	12.66	0-2	0
		12	6	12.71	12.72	12.66	0-2	0
		12	11	12.70	12.67	12.58	0-2	0
		25	0	12.78	12.72	12.65	0-2	0
	64QAM	1	0	12.48	12.43	12.40	0-2	0
		1	12	12.40	12.37	12.37	0-2	0
		1	24	12.27	12.23	12.20	0-2	0
		12	0	12.69	12.66	12.62	0-3	0
		12	6	12.73	12.73	12.73	0-3	0
		12	11	12.72	12.71	12.60	0-3	0
		25	0	12.75	12.71	12.68	0-3	0
	256QAM	1	0	12.63	12.57	12.55	0-5	0
		1	12	12.64	12.61	12.56	0-5	0
		1	24	12.38	12.31	12.34	0-5	0
		12	0	12.90	12.81	12.82	0-5	0
		12	6	12.94	12.87	12.85	0-5	0
		12	11	12.93	12.88	12.76	0-5	0
		25	0	12.83	12.75	12.75	0-5	0

LTE Band 40 Upper Side (MCC310) _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				39200Ch. 2355 MHz		
10 MHz	QPSK	1	0	12.55	0	0
		1	24	12.56	0	0
		1	49	12.19	0	0
		25	0	12.73	0-1	0
		25	12	12.79	0-1	0
		25	24	12.58	0-1	0
		50	0	12.69	0-1	0
	16QAM	1	0	12.69	0-1	0
		1	24	12.78	0-1	0
		1	49	12.40	0-1	0
		25	0	12.75	0-2	0
		25	12	12.79	0-2	0
		25	24	12.58	0-2	0
		50	0	12.74	0-2	0
	64QAM	1	0	12.38	0-2	0
		1	24	12.45	0-2	0
		1	49	12.02	0-2	0
		25	0	12.76	0-3	0
		25	12	12.78	0-3	0
		25	24	12.60	0-3	0
		50	0	12.78	0-3	0
	256QAM	1	0	12.50	0-5	0
		1	24	12.60	0-5	0
		1	49	12.13	0-5	0
		25	0	12.76	0-5	0
		25	12	12.83	0-5	0
		25	24	12.64	0-5	0
		50	0	12.80	0-5	0

[LTE Band 41 Conducted Power] - Power Class 3, DSI= 0, 2]

LTE Band 41 _ 5 MHz Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
5 MHz	QPSK	1	0	24.17	24.15	25.09	24.80	24.40	0	0
		1	12	24.17	24.25	25.15	24.80	24.43	0	0
		1	24	24.16	24.29	25.04	24.65	24.31	0	0
		12	0	23.34	23.34	24.22	23.96	23.56	0-1	1
		12	6	23.35	23.43	24.22	23.95	23.54	0-1	1
		12	11	23.32	23.45	24.20	23.89	23.50	0-1	1
		25	0	23.29	23.41	24.20	23.87	23.56	0-1	1
	16QAM	1	0	23.38	23.26	24.24	23.95	23.54	0-1	1
		1	12	23.30	23.49	24.33	23.96	23.64	0-1	1
		1	24	23.20	23.41	24.19	23.80	23.45	0-1	1
		12	0	22.28	22.26	23.14	22.90	22.45	0-2	2
		12	6	22.30	22.40	23.19	22.85	22.51	0-2	2
		12	11	22.27	22.33	23.16	22.82	22.44	0-2	2
		25	0	22.33	22.47	23.26	22.97	22.61	0-2	2
	64QAM	1	0	21.98	21.93	22.82	22.58	22.21	0-2	2
		1	12	21.96	22.07	22.92	22.60	22.21	0-2	2
		1	24	21.91	22.02	22.85	22.48	22.01	0-2	2
		12	0	21.32	21.29	22.17	21.86	21.49	0-3	3
		12	6	21.36	21.45	22.21	21.89	21.50	0-3	3
		12	11	21.33	21.37	22.19	21.86	21.48	0-3	3
		25	0	21.37	21.45	22.25	21.94	21.53	0-3	3
	256QAM	1	0	19.17	19.13	20.06	19.86	19.41	0-5	5
		1	12	19.17	19.21	20.13	19.80	19.39	0-5	5
		1	24	19.07	19.18	19.99	19.65	19.25	0-5	5
		12	0	19.47	19.41	20.35	20.10	19.71	0-5	5
		12	6	19.48	19.52	20.33	20.13	19.68	0-5	5
		12	11	19.40	19.50	20.30	20.06	19.64	0-5	5
		25	0	19.41	19.50	20.31	20.06	19.65	0-5	5

LTE Band 41 _ 10 MHz Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	24.24	23.97	24.85	24.63	24.29	0	0
		1	24	24.13	24.28	25.18	24.81	24.42	0	0
		1	49	24.10	24.09	24.84	24.51	24.16	0	0
		25	0	23.33	23.24	24.14	23.89	23.48	0-1	1
		25	12	23.33	23.44	24.19	23.93	23.54	0-1	1
		25	24	23.31	23.32	24.11	23.82	23.37	0-1	1
		50	0	23.25	23.32	24.13	23.85	23.48	0-1	1
	16QAM	1	0	23.35	23.07	23.99	23.74	23.35	0-1	1
		1	24	23.33	23.38	24.30	23.94	23.54	0-1	1
		1	49	23.26	23.19	23.99	23.62	23.23	0-1	1
		25	0	22.37	22.28	23.16	22.89	22.51	0-2	2
		25	12	22.31	22.47	23.24	22.97	22.54	0-2	2
		25	24	22.29	22.36	23.12	22.87	22.37	0-2	2
		50	0	22.28	22.37	23.14	22.93	22.48	0-2	2
	64QAM	1	0	21.98	21.70	22.59	22.38	21.99	0-2	2
		1	24	21.90	22.01	22.91	22.57	22.17	0-2	2
		1	49	21.84	21.81	22.58	22.18	21.78	0-2	2
		25	0	21.36	21.27	22.17	21.86	21.48	0-3	3
		25	12	21.34	21.42	22.22	21.92	21.59	0-3	3
		25	24	21.29	21.37	22.09	21.84	21.37	0-3	3
		50	0	21.34	21.42	22.22	21.93	21.53	0-3	3
	256QAM	1	0	19.03	18.88	19.78	19.61	19.18	0-5	5
		1	24	19.15	19.20	20.09	19.77	19.35	0-5	5
		1	49	18.82	19.02	19.77	19.40	19.00	0-5	5
		25	0	19.39	19.34	20.23	20.03	19.63	0-5	5
		25	12	19.42	19.48	20.33	20.03	19.66	0-5	5
		25	24	19.33	19.43	20.21	19.96	19.47	0-5	5
		50	0	19.38	19.43	20.24	20.05	19.62	0-5	5

LTE Band 41 _ 15 MHz Bandwidth- Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	24.19	23.91	24.86	24.76	24.17	0	0
		1	36	24.12	24.17	25.13	24.75	24.36	0	0
		1	74	24.12	24.09	24.94	24.45	24.30	0	0
		36	0	23.22	23.22	24.11	23.92	23.45	0-1	1
		36	18	23.28	23.38	24.19	23.90	23.54	0-1	1
		36	39	23.14	23.27	24.12	23.71	23.42	0-1	1
		75	0	23.25	23.29	24.12	23.86	23.48	0-1	1
	16QAM	1	0	23.27	23.00	23.91	23.83	23.21	0-1	1
		1	36	23.21	23.21	24.17	23.81	23.35	0-1	1
		1	74	23.19	23.09	24.03	23.51	23.30	0-1	1
		36	0	22.18	22.19	23.04	22.86	22.42	0-2	2
		36	18	22.23	22.30	23.12	22.86	22.48	0-2	2
		36	39	22.13	22.27	23.09	22.64	22.37	0-2	2
		75	0	22.23	22.30	23.12	22.89	22.47	0-2	2
	64QAM	1	0	21.95	21.66	22.54	22.56	21.98	0-2	2
		1	36	21.95	22.00	22.93	22.54	22.17	0-2	2
		1	74	21.84	21.89	22.65	22.19	21.98	0-2	2
		36	0	21.28	21.22	22.11	21.94	21.49	0-3	3
		36	18	21.33	21.39	22.20	21.91	21.57	0-3	3
		36	39	21.17	21.30	22.18	21.71	21.44	0-3	3
		75	0	21.28	21.34	22.18	21.90	21.50	0-3	3
	256QAM	1	0	19.03	18.89	19.80	19.80	19.22	0-5	5
		1	36	19.16	19.18	20.12	19.79	19.39	0-5	5
		1	74	18.97	19.09	19.88	19.44	19.30	0-5	5
		36	0	19.31	19.28	20.20	20.02	19.52	0-5	5
		36	18	19.37	19.42	20.29	20.06	19.61	0-5	5
		36	39	19.24	19.33	20.23	19.84	19.53	0-5	5
		75	0	19.34	19.36	20.21	19.97	19.58	0-5	5

LTE Band 41 _ 20 MHz Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
20 MHz	QPSK	1	0	24.23	24.07	24.65	24.64	24.04	0	0
		1	49	24.17	24.19	25.13	24.76	24.38	0	0
		1	99	24.08	24.36	24.78	24.25	24.21	0	0
		50	0	23.18	23.17	24.04	23.89	23.42	0-1	1
		50	25	23.27	23.33	24.15	23.87	23.54	0-1	1
		50	49	23.14	23.30	24.08	23.65	23.38	0-1	1
		100	0	23.22	23.22	24.07	23.82	23.46	0-1	1
	16QAM	1	0	23.28	23.15	23.55	23.70	23.11	0-1	1
		1	49	23.22	23.21	24.15	23.81	23.39	0-1	1
		1	99	23.18	23.40	23.82	23.24	23.20	0-1	1
		50	0	22.20	22.21	23.08	22.92	22.43	0-2	2
		50	25	22.30	22.34	23.22	22.95	22.53	0-2	2
		50	49	22.13	22.31	23.12	22.68	22.42	0-2	2
		100	0	22.25	22.27	23.11	22.87	22.49	0-2	2
	64QAM	1	0	21.98	21.80	22.35	22.43	21.84	0-2	2
		1	49	21.94	21.93	22.89	22.56	22.15	0-2	2
		1	99	21.80	22.10	22.48	21.95	21.91	0-2	2
		50	0	21.29	21.25	22.15	21.97	21.49	0-3	3
		50	25	21.37	21.43	22.27	21.99	21.58	0-3	3
		50	49	21.19	21.37	22.17	21.71	21.48	0-3	3
		100	0	21.26	21.29	22.09	21.82	21.49	0-3	3
	256QAM	1	0	18.88	18.68	19.59	19.69	19.15	0-5	5
		1	49	19.15	19.19	20.15	19.81	19.42	0-5	5
		1	99	18.81	18.97	19.73	19.23	19.18	0-5	5
		50	0	19.35	19.27	20.21	20.06	19.54	0-5	5
		50	25	19.45	19.43	20.34	20.06	19.70	0-5	5
		50	49	19.27	19.43	20.25	19.83	19.57	0-5	5
		100	0	19.31	19.28	20.14	19.93	19.57	0-5	5

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

[LTE Band 41 Conducted Power] - Power Class 2, DSI= 0, 2]

LTE Band 41 _ 5 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
5 MHz	QPSK	1	0	25.64	25.76	25.85	25.86	25.83	0	0
		1	12	25.58	25.77	25.89	25.90	25.85	0	0
		1	24	25.61	25.76	25.85	25.79	25.84	0	0
		12	0	24.80	24.85	24.92	24.90	24.92	0-1	1
		12	6	24.79	24.90	24.95	24.98	24.94	0-1	1
		12	11	24.74	24.84	25.00	24.85	24.94	0-1	1
		25	0	24.65	24.90	24.91	24.88	24.91	0-1	1
	16QAM	1	0	25.06	25.12	25.20	25.20	25.17	0-1	1
		1	12	24.98	25.19	25.38	25.27	25.31	0-1	1
		1	24	25.03	25.05	25.20	25.16	25.22	0-1	1
		12	0	23.85	23.88	23.86	23.90	23.85	0-2	2
		12	6	23.82	23.96	23.89	24.08	23.99	0-2	2
		12	11	23.84	23.86	23.97	23.94	23.98	0-2	2
		25	0	23.88	23.88	23.92	23.92	23.95	0-2	2
	64QAM	1	0	22.87	23.43	23.80	23.72	23.06	0-2	2
		1	12	22.82	23.43	24.00	23.66	23.18	0-2	2
		1	24	22.87	23.42	23.87	23.54	23.34	0-2	2
		12	0	21.83	22.44	22.88	22.71	22.11	0-3	3
		12	6	21.92	22.48	22.94	22.72	22.19	0-3	3
		12	11	21.90	22.45	22.95	22.62	22.27	0-3	3
		25	0	21.90	22.45	22.89	22.64	22.24	0-3	3
	256QAM	1	0	21.83	20.83	20.92	20.82	20.88	0-5	5
		1	12	21.81	20.90	20.99	20.96	21.01	0-5	5
		1	24	21.68	20.80	20.94	20.92	20.90	0-5	5
		12	0	21.97	21.04	21.07	21.01	21.04	0-5	5
		12	6	21.95	21.06	21.10	21.15	21.09	0-5	5
		12	11	21.92	21.00	21.11	21.09	21.11	0-5	5
		25	0	21.84	20.93	20.97	20.94	20.96	0-5	5

LTE Band 41 _ 10 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	25.64	25.64	25.75	25.70	25.55	0	0
		1	24	25.56	25.86	25.99	25.94	25.84	0	0
		1	49	25.58	25.52	25.69	25.60	25.68	0	0
		25	0	24.85	24.87	24.91	24.89	24.87	0-1	1
		25	12	24.86	24.96	24.99	24.94	24.96	0-1	1
		25	24	24.81	24.81	24.99	24.88	24.92	0-1	1
		50	0	24.61	24.86	24.90	24.85	24.88	0-1	1
	16QAM	1	0	25.05	24.99	25.07	25.05	25.01	0-1	1
		1	24	24.98	25.17	25.25	25.26	25.35	0-1	1
		1	49	25.00	24.87	25.05	24.93	25.02	0-1	1
		25	0	23.98	23.89	23.91	23.84	23.93	0-2	2
		25	12	24.00	23.96	24.01	23.91	24.03	0-2	2
		25	24	23.97	23.83	23.95	23.87	23.94	0-2	2
		50	0	23.85	23.88	23.93	23.91	23.91	0-2	2
	64QAM	1	0	22.93	23.43	23.62	23.62	22.92	0-2	2
		1	24	22.88	23.47	23.90	23.67	23.17	0-2	2
		1	49	22.89	23.33	23.72	23.39	23.44	0-2	2
		25	0	21.91	22.51	22.93	22.74	22.05	0-3	3
		25	12	21.94	22.54	22.99	22.67	22.23	0-3	3
		25	24	21.93	22.50	22.99	22.54	22.45	0-3	3
		50	0	21.95	22.55	23.00	22.64	22.34	0-3	3
	256QAM	1	0	21.65	20.71	20.75	20.75	20.67	0-5	5
		1	24	21.86	20.92	21.00	20.94	21.02	0-5	5
		1	49	21.46	20.55	20.77	20.66	20.74	0-5	5
		25	0	21.89	20.97	20.96	20.97	20.96	0-5	5
		25	12	21.92	21.01	21.06	21.01	21.04	0-5	5
		25	24	21.75	20.90	21.03	20.99	21.02	0-5	5
		50	0	21.87	20.93	20.99	20.94	20.93	0-5	5

LTE Band 41 _ 15 MHz Bandwidth- Power Class 2

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	25.80	25.70	25.76	25.85	25.62	0	0
		1	36	25.71	25.75	25.94	25.89	25.89	0	0
		1	74	25.73	25.51	25.77	25.60	25.91	0	0
		36	0	24.94	24.78	24.85	24.89	24.79	0-1	1
		36	18	24.86	24.87	24.95	24.89	24.92	0-1	1
		36	39	24.87	24.73	24.98	24.84	24.97	0-1	1
		75	0	24.74	24.79	24.87	24.83	24.88	0-1	1
	16QAM	1	0	25.10	24.93	24.93	25.09	25.00	0-1	1
		1	36	25.00	25.02	25.15	25.20	25.25	0-1	1
		1	74	25.05	24.72	25.02	24.86	25.06	0-1	1
		36	0	23.93	23.72	23.83	23.86	23.77	0-2	2
		36	18	23.91	23.84	23.92	23.86	23.88	0-2	2
		36	39	23.91	23.69	23.92	23.80	23.94	0-2	2
		75	0	23.92	23.83	23.91	23.82	23.90	0-2	2
	64QAM	1	0	22.93	23.66	23.72	23.78	22.98	0-2	2
		1	36	22.85	23.45	23.97	23.61	23.26	0-2	2
		1	74	22.90	23.44	23.80	23.40	23.80	0-2	2
		36	0	22.08	22.72	22.93	22.92	22.15	0-3	3
		36	18	22.13	22.70	22.97	22.87	22.39	0-3	3
		36	39	22.11	22.61	22.98	22.63	22.79	0-3	3
		75	0	22.07	22.64	22.93	22.81	22.48	0-3	3
	256QAM	1	0	21.68	20.69	20.77	20.88	20.62	0-5	5
		1	36	21.81	20.86	20.95	20.96	20.97	0-5	5
		1	74	21.55	20.55	20.83	20.65	20.98	0-5	5
		36	0	21.78	20.80	20.91	20.94	20.86	0-5	5
		36	18	21.89	20.93	20.99	20.93	20.97	0-5	5
		36	39	21.73	20.78	20.98	20.91	21.03	0-5	5
		75	0	21.85	20.84	20.91	20.90	20.92	0-5	5

LTE Band 41 _ 20 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
20 MHz	QPSK	1	0	25.88	25.89	25.65	25.75	25.43	0	0
		1	49	25.81	25.82	25.98	25.81	25.92	0	0
		1	99	25.85	25.65	25.65	25.32	25.84	0	0
		50	0	25.07	24.74	24.84	24.90	24.76	0-1	1
		50	25	24.91	24.84	24.94	24.88	24.91	0-1	1
		50	49	24.74	24.66	24.90	24.77	24.95	0-1	1
		100	0	24.80	24.74	24.81	24.81	24.84	0-1	1
	16QAM	1	0	25.13	25.18	24.82	24.95	24.84	0-1	1
		1	49	25.07	25.00	25.13	25.13	25.20	0-1	1
		1	99	25.12	24.92	24.83	24.59	24.96	0-1	1
		50	0	24.00	23.74	23.84	23.93	23.78	0-2	2
		50	25	24.09	23.86	23.96	23.91	23.97	0-2	2
		50	49	24.00	23.69	23.95	23.83	24.01	0-2	2
		100	0	23.82	23.78	23.93	23.84	23.88	0-2	2
	64QAM	1	0	22.99	23.70	23.56	23.63	22.65	0-2	2
		1	49	22.94	23.37	23.91	23.75	23.27	0-2	2
		1	99	23.00	23.45	23.59	23.04	23.46	0-2	2
		50	0	22.07	22.66	22.94	22.94	22.01	0-3	3
		50	25	22.14	22.72	23.06	22.90	22.45	0-3	3
		50	49	22.06	22.55	23.01	22.63	22.85	0-3	3
		100	0	21.93	22.48	22.90	22.70	22.33	0-3	3
	256QAM	1	0	21.57	20.61	20.66	20.76	20.45	0-5	5
		1	49	21.82	20.84	20.99	20.98	20.96	0-5	5
		1	99	21.37	20.36	20.68	20.40	20.91	0-5	5
		50	0	21.86	20.87	20.90	21.01	20.86	0-5	5
		50	25	21.93	20.94	21.06	20.99	21.04	0-5	5
		50	49	21.73	20.80	21.04	20.88	21.10	0-5	5
		100	0	21.81	20.79	20.92	20.88	20.86	0-5	5

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

[LTE Band 48 Conducted Power, DSI= 0,1,4]

LTE Band 48 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55265 Ch. 3552.5 MHz	55748 Ch. 3600.8 MHz	56232 Ch. 3649.2 MHz	56715 Ch. 3697.5 MHz		
5 MHz	QPSK	1	0	24.47	24.08	24.09	23.69	0	0
		1	12	24.55	24.21	24.18	23.81	0	0
		1	24	24.56	24.21	24.21	23.82	0	0
		12	0	23.64	23.33	23.32	22.87	0-1	1
		12	6	23.78	23.44	23.45	23.01	0-1	1
		12	11	23.74	23.45	23.41	22.99	0-1	1
		25	0	23.67	23.37	23.33	22.88	0-1	1
	16QAM	1	0	23.57	23.30	23.29	22.82	0-1	1
		1	12	23.72	23.39	23.42	22.92	0-1	1
		1	24	23.67	23.41	23.35	22.95	0-1	1
		12	0	22.60	22.28	22.23	21.84	0-2	2
		12	6	22.75	22.39	22.39	22.02	0-2	2
		12	11	22.74	22.36	22.34	21.98	0-2	2
		25	0	22.70	22.41	22.37	21.93	0-2	2
	64QAM	1	0	22.23	21.97	21.43	21.39	0-2	2
		1	12	22.29	22.05	21.46	21.42	0-2	2
		1	24	22.34	22.11	21.59	21.57	0-2	2
		12	0	21.67	21.28	20.81	20.85	0-3	3
		12	6	21.85	21.41	20.87	20.91	0-3	3
		12	11	21.82	21.39	20.90	20.94	0-3	3
		25	0	21.72	21.36	20.89	20.91	0-3	3
	256QAM	1	0	19.43	19.04	19.08	18.64	0-5	5
		1	12	19.61	19.31	19.34	18.90	0-5	5
		1	24	19.54	19.16	19.12	18.80	0-5	5
		12	0	19.78	19.44	19.46	18.99	0-5	5
		12	6	19.84	19.56	19.52	19.10	0-5	5
		12	11	19.86	19.53	19.57	19.12	0-5	5
		25	0	19.74	19.41	19.42	19.01	0-5	5

LTE Band 48 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55290 Ch. 3555 MHz	55757 Ch. 3601.7 MHz	56223 Ch. 3648.3 MHz	56690 Ch. 3695 MHz		
10 MHz	QPSK	1	0	24.29	23.92	23.87	23.39	0	0
		1	24	24.59	24.26	24.26	23.73	0	0
		1	49	24.44	24.02	24.09	23.64	0	0
		25	0	23.62	23.24	23.30	22.81	0-1	1
		25	12	23.78	23.46	23.44	22.99	0-1	1
		25	24	23.74	23.38	23.36	22.99	0-1	1
		50	0	23.68	23.36	23.36	22.90	0-1	1
	16QAM	1	0	23.52	23.22	23.22	22.63	0-1	1
		1	24	23.83	23.56	23.49	23.07	0-1	1
		1	49	23.68	23.33	23.30	22.87	0-1	1
		25	0	22.62	22.28	22.29	21.86	0-2	2
		25	12	22.82	22.51	22.49	22.02	0-2	2
		25	24	22.76	22.39	22.47	21.98	0-2	2
		50	0	22.71	22.41	22.39	21.96	0-2	2
	64QAM	1	0	22.18	21.82	21.40	22.20	0-2	2
		1	24	22.52	22.01	21.43	22.53	0-2	2
		1	49	22.32	22.00	21.66	22.41	0-2	2
		25	0	21.67	21.28	20.80	21.43	0-3	3
		25	12	21.82	21.42	20.88	21.61	0-3	3
		25	24	21.76	21.43	20.96	21.57	0-3	3
		50	0	21.75	21.44	20.97	21.50	0-3	3
	256QAM	1	0	19.28	18.92	18.93	18.48	0-5	5
		1	24	19.56	19.24	19.29	18.80	0-5	5
		1	49	19.43	19.07	19.06	18.72	0-5	5
		25	0	19.69	19.30	19.33	18.86	0-5	5
		25	12	19.85	19.51	19.50	19.06	0-5	5
		25	24	19.75	19.42	19.46	18.99	0-5	5
		50	0	19.76	19.45	19.45	18.99	0-5	5

LTE Band 48 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55315Ch. 3557.5 MHz	55765 Ch. 3602.5 MHz	56215 Ch. 3647.5 MHz	56665 Ch. 3692.5 MHz		
15 MHz	QPSK	1	0	24.20	24.18	24.06	23.61	0	0
		1	36	24.36	24.20	24.20	23.71	0	0
		1	74	24.28	23.95	24.06	23.66	0	0
		36	0	23.57	23.35	23.32	22.85	0-1	1
		36	18	23.59	23.41	23.45	22.98	0-1	1
		36	39	23.51	23.30	23.41	22.91	0-1	1
		75	0	23.51	23.34	23.34	22.90	0-1	1
	16QAM	1	0	23.38	23.42	23.32	22.84	0-1	1
		1	36	23.64	23.44	23.50	23.05	0-1	1
		1	74	23.50	23.20	23.38	22.94	0-1	1
		36	0	22.48	22.30	22.26	21.85	0-2	2
		36	18	22.50	22.35	22.39	21.95	0-2	2
		36	39	22.46	22.25	22.35	21.91	0-2	2
		75	0	22.49	22.38	22.37	21.90	0-2	2
	64QAM	1	0	21.98	22.01	21.66	22.29	0-2	2
		1	36	22.23	22.00	21.44	22.41	0-2	2
		1	74	22.11	21.84	21.93	22.34	0-2	2
		36	0	21.58	21.42	20.96	21.47	0-3	3
		36	18	21.59	21.45	20.95	21.57	0-3	3
		36	39	21.56	21.33	21.18	21.56	0-3	3
		75	0	21.56	21.39	21.09	21.53	0-3	3
	256QAM	1	0	19.14	19.15	19.03	18.60	0-5	5
		1	36	19.40	19.23	19.24	18.75	0-5	5
		1	74	19.25	18.97	19.04	18.69	0-5	5
		36	0	19.53	19.40	19.37	18.92	0-5	5
		36	18	19.63	19.45	19.47	19.01	0-5	5
		36	39	19.55	19.32	19.43	18.94	0-5	5
		75	0	19.52	19.35	19.39	18.92	0-5	5

LTE Band 48 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55340Ch. 3560.0 MHz	55773 Ch. 3603.3 MHz	56207 Ch. 3646.7 MHz	56640 Ch. 3690.0 MHz		
20 MHz	QPSK	1	0	24.12	24.13	23.91	23.47	0	0
		1	49	24.31	24.13	24.19	23.76	0	0
		1	99	24.33	23.76	23.94	23.54	0	0
		50	0	23.41	23.34	23.30	22.83	0-1	1
		50	25	23.62	23.41	23.44	22.98	0-1	1
		50	49	23.49	23.26	23.37	22.92	0-1	1
		100	0	23.49	23.32	23.33	22.87	0-1	1
	16QAM	1	0	23.33	23.38	23.17	22.69	0-1	1
		1	49	23.64	23.41	23.48	23.00	0-1	1
		1	99	23.36	23.05	23.20	22.77	0-1	1
		50	0	22.47	22.33	22.34	21.92	0-2	2
		50	25	22.64	22.44	22.47	22.06	0-2	2
		50	49	22.50	22.25	22.39	21.98	0-2	2
		100	0	22.53	22.35	22.36	21.93	0-2	2
	64QAM	1	0	21.92	21.89	21.19	22.01	0-2	2
		1	49	22.28	21.98	21.44	22.33	0-2	2
		1	99	21.97	21.63	21.66	22.09	0-2	2
		50	0	21.49	21.35	20.76	21.34	0-3	3
		50	25	21.68	21.44	20.93	21.48	0-3	3
		50	49	21.58	21.34	21.02	21.41	0-3	3
		100	0	21.52	21.34	20.87	21.43	0-3	3
	256QAM	1	0	19.06	19.07	18.86	18.44	0-5	5
		1	49	19.43	19.18	19.22	18.78	0-5	5
		1	99	19.10	18.78	18.93	18.53	0-5	5
		50	0	19.48	19.41	19.36	18.92	0-5	5
		50	25	19.67	19.49	19.55	19.04	0-5	5
		50	49	19.55	19.31	19.46	18.96	0-5	5
		100	0	19.50	19.38	19.37	18.91	0-5	5

[LTE Band 66 Conducted Power, DSI= 0, 2]

LTE Band 66 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979Ch. 1710.7 MHz	132322 Ch. 1745 MHz	132665 Ch. 1779.3 MHz		
1.4 MHz	QPSK	1	0	24.31	24.68	24.49	0	0
		1	3	24.28	24.77	24.58	0	0
		1	5	24.22	24.67	24.49	0	0
		3	0	24.28	24.77	24.55	0	0
		3	1	24.30	24.72	24.55	0	0
		3	3	24.29	24.72	24.51	0	0
	16QAM	6	0	23.36	23.74	23.59	0-1	1
		1	0	23.67	24.11	24.03	0-1	1
		1	3	23.87	24.14	23.90	0-1	1
		1	5	23.68	24.15	23.96	0-1	1
		3	0	23.57	23.92	23.83	0-1	1
		3	1	23.61	23.95	23.81	0-1	1
	64QAM	3	3	23.50	23.91	23.82	0-1	1
		6	0	22.50	22.97	22.65	0-2	2
		1	0	22.55	22.11	22.04	0-2	2
		1	3	22.67	22.23	22.10	0-2	2
		1	5	22.57	22.24	22.08	0-2	2
		3	0	22.47	22.05	22.00	0-2	2
	256QAM	3	1	22.59	22.09	22.09	0-2	2
		3	3	22.40	22.06	22.00	0-2	2
		6	0	21.45	21.00	21.01	0-3	3
		1	0	19.49	20.00	19.77	0-5	5
		1	3	19.50	20.05	19.76	0-5	5
		1	5	19.47	19.83	19.69	0-5	5
		3	0	19.52	19.97	19.73	0-5	5
		3	1	19.57	20.03	19.82	0-5	5
		3	3	19.44	19.94	19.73	0-5	5
		6	0	19.31	19.85	19.66	0-5	5

LTE Band 66 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131987 Ch. 1711.5 MHz	132322 Ch. 1745 MHz	132657 Ch. 1778.5 MHz		
3 MHz	QPSK	1	0	24.40	24.78	24.66	0	0
		1	7	24.38	24.74	24.60	0	0
		1	14	24.33	24.80	24.58	0	0
		8	0	23.48	23.91	23.76	0-1	1
		8	3	23.45	23.94	23.80	0-1	1
		8	7	23.42	23.93	23.65	0-1	1
		15	0	23.50	23.86	23.72	0-1	1
	16QAM	1	0	23.73	24.14	23.96	0-1	1
		1	7	23.65	24.09	23.93	0-1	1
		1	14	23.78	23.98	23.87	0-1	1
		8	0	22.61	22.99	22.79	0-2	2
		8	3	22.64	22.97	22.88	0-2	2
		8	7	22.51	22.99	22.71	0-2	2
		15	0	22.53	22.89	22.78	0-2	2
	64QAM	1	0	22.61	22.11	22.17	0-2	2
		1	7	22.62	22.24	22.20	0-2	2
		1	14	22.57	22.21	22.18	0-2	2
		8	0	21.57	21.09	21.06	0-3	3
		8	3	21.64	21.16	21.17	0-3	3
		8	7	21.48	21.13	21.11	0-3	3
		15	0	21.55	21.14	21.12	0-3	3
	256QAM	1	0	19.60	20.01	19.82	0-5	5
		1	7	19.57	20.01	19.82	0-5	5
		1	14	19.41	19.98	19.79	0-5	5
		8	0	19.51	19.98	19.79	0-5	5
		8	3	19.46	19.94	19.81	0-5	5
		8	7	19.46	19.99	19.71	0-5	5
		15	0	19.56	19.97	19.71	0-5	5

LTE Band 66 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131997 Ch. 1712.5 MHz	132322Ch. 1745 MHz	132647 Ch. 1777.5 MHz		
5 MHz	QPSK	1	0	24.32	24.78	24.70	0	0
		1	12	24.36	24.74	24.67	0	0
		1	24	24.30	24.70	24.58	0	0
		12	0	23.48	23.92	23.75	0-1	1
		12	6	23.55	23.91	23.73	0-1	1
		12	11	23.45	23.93	23.72	0-1	1
		25	0	23.50	23.85	23.72	0-1	1
	16QAM	1	0	23.78	24.19	24.00	0-1	1
		1	12	23.61	24.14	23.92	0-1	1
		1	24	23.63	24.11	23.93	0-1	1
		12	0	22.62	23.04	22.87	0-2	2
		12	6	22.61	23.01	22.89	0-2	2
		12	11	22.54	22.97	22.74	0-2	2
		25	0	22.51	22.87	22.76	0-2	2
	64QAM	1	0	22.59	22.13	22.30	0-2	2
		1	12	22.60	22.19	22.21	0-2	2
		1	24	22.50	22.17	22.18	0-2	2
		12	0	21.57	21.09	21.21	0-3	3
		12	6	21.54	21.18	21.17	0-3	3
		12	11	21.46	21.16	21.13	0-3	3
		25	0	21.45	21.08	21.11	0-3	3
	256QAM	1	0	19.58	19.97	19.78	0-5	5
		1	12	19.65	20.01	19.86	0-5	5
		1	24	19.49	20.01	19.78	0-5	5
		12	0	19.53	19.91	19.79	0-5	5
		12	6	19.53	19.91	19.79	0-5	5
		12	11	19.42	19.89	19.74	0-5	5
		25	0	19.47	19.85	19.72	0-5	5

LTE Band 66 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132022 Ch. 1715 MHz	132322 Ch. 1745 MHz	132622 Ch. 1775 MHz		
10 MHz	QPSK	1	0	24.13	24.56	24.36	0	0
		1	24	24.31	24.72	24.65	0	0
		1	49	24.18	24.52	24.45	0	0
		25	0	23.47	23.79	23.70	0-1	1
		25	12	23.51	23.90	23.76	0-1	1
		25	24	23.37	23.82	23.70	0-1	1
		50	0	23.43	23.75	23.66	0-1	1
	16QAM	1	0	23.51	23.78	23.79	0-1	1
		1	24	23.76	24.24	24.21	0-1	1
		1	49	23.51	23.99	23.93	0-1	1
		25	0	22.41	22.91	22.62	0-2	2
		25	12	22.51	22.88	22.73	0-2	2
		25	24	22.36	22.82	22.67	0-2	2
		50	0	22.42	22.84	22.66	0-2	2
	64QAM	1	0	22.24	22.05	22.33	0-2	2
		1	24	22.70	22.28	22.34	0-2	2
		1	49	22.44	22.11	21.89	0-2	2
		25	0	21.48	21.06	21.26	0-3	3
		25	12	21.46	21.17	21.19	0-3	3
		25	24	21.40	21.14	21.09	0-3	3
		50	0	21.48	21.09	21.19	0-3	3
	256QAM	1	0	19.17	19.66	19.70	0-5	5
		1	24	19.40	20.03	19.83	0-5	5
		1	49	19.33	19.80	19.65	0-5	5
		25	0	19.42	19.88	19.66	0-5	5
		25	12	19.51	19.94	19.77	0-5	5
		25	24	19.35	19.83	19.71	0-5	5
		50	0	19.37	19.75	19.56	0-5	5

LTE Band 66 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132047 Ch. 1717.5 MHz	132322 Ch. 1745 MHz	132597 Ch. 1772.5 MHz		
15 MHz	QPSK	1	0	24.22	24.75	24.62	0	0
		1	36	24.30	24.74	24.55	0	0
		1	74	24.17	24.67	24.53	0	0
		36	0	23.45	23.92	23.78	0-1	1
		36	18	23.45	23.85	23.74	0-1	1
		36	39	23.43	23.95	23.70	0-1	1
		75	0	23.46	23.82	23.71	0-1	1
	16QAM	1	0	23.61	24.16	24.14	0-1	1
		1	36	23.82	24.01	24.22	0-1	1
		1	74	23.52	24.29	23.84	0-1	1
		36	0	22.52	22.90	22.72	0-2	2
		36	18	22.46	22.93	22.74	0-2	2
		36	39	22.42	22.90	22.72	0-2	2
		75	0	22.47	22.89	22.74	0-2	2
	64QAM	1	0	22.49	22.29	22.57	0-2	2
		1	36	22.57	22.12	22.33	0-2	2
		1	74	22.48	22.37	21.85	0-2	2
		36	0	21.47	21.13	21.36	0-3	3
		36	18	21.52	21.13	21.30	0-3	3
		36	39	21.45	21.16	21.18	0-3	3
		75	0	21.46	21.16	21.30	0-3	3
	256QAM	1	0	19.50	19.69	19.75	0-5	5
		1	36	19.54	19.99	19.86	0-5	5
		1	74	19.39	19.90	19.70	0-5	5
		36	0	19.46	19.91	19.71	0-5	5
		36	18	19.50	19.96	19.72	0-5	5
		36	39	19.39	19.90	19.82	0-5	5
		75	0	19.38	19.88	19.73	0-5	5

LTE Band 66 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 MHz	132322 Ch. 1745 MHz	132572 Ch. 1770 MHz		
20 MHz	QPSK	1	0	24.00	24.50	24.79	0	0
		1	49	24.19	24.71	24.62	0	0
		1	99	23.91	24.46	24.53	0	0
		50	0	23.38	23.82	23.75	0-1	1
		50	25	23.40	23.89	23.84	0-1	1
		50	49	23.36	23.88	23.72	0-1	1
		100	0	23.42	23.81	23.70	0-1	1
	16QAM	1	0	23.41	23.86	24.08	0-1	1
		1	49	23.66	24.13	24.03	0-1	1
		1	99	23.45	23.85	23.93	0-1	1
		50	0	22.36	22.84	22.78	0-2	2
		50	25	22.49	22.93	22.83	0-2	2
		50	49	22.30	22.88	22.69	0-2	2
		100	0	22.32	22.87	22.57	0-2	2
	64QAM	1	0	22.27	22.37	22.49	0-2	2
		1	49	22.64	22.22	22.60	0-2	2
		1	99	22.34	22.41	22.06	0-2	2
		50	0	21.41	21.19	21.41	0-3	3
		50	25	21.49	21.20	21.41	0-3	3
		50	49	21.40	21.24	21.23	0-3	3
		100	0	21.38	21.22	21.30	0-3	3
	256QAM	1	0	19.33	19.80	19.67	0-5	5
		1	49	19.41	19.99	19.84	0-5	5
		1	99	19.28	19.82	19.69	0-5	5
		50	0	19.38	19.80	19.69	0-5	5
		50	25	19.45	19.94	19.85	0-5	5
		50	49	19.40	19.84	19.72	0-5	5
		100	0	19.34	19.87	19.73	0-5	5

[LTE Band 71 Conducted Power, DSI= 0, 1,2,3,4]

LTE Band 71_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				133147 Ch. 665.5 MHz	133297 Ch. 680.5 MHz	133447 Ch. 695.5 MHz		
5 MHz	QPSK	1	0	24.13	24.32	24.05	0	0
		1	12	24.39	24.41	24.09	0	0
		1	24	24.40	24.29	24.12	0	0
		12	0	23.50	23.45	23.20	0-1	1
		12	6	23.61	23.54	23.26	0-1	1
		12	11	23.71	23.53	23.27	0-1	1
		25	0	23.67	23.53	23.17	0-1	1
	16QAM	1	0	23.15	23.57	23.46	0-1	1
		1	12	23.83	23.77	23.68	0-1	1
		1	24	23.96	23.77	23.52	0-1	1
		12	0	22.49	22.52	22.24	0-2	2
		12	6	22.79	22.59	22.24	0-2	2
		12	11	22.79	22.60	22.39	0-2	2
		25	0	22.73	22.49	22.22	0-2	2
	64QAM	1	0	22.06	22.59	22.36	0-2	2
		1	12	22.46	22.76	22.45	0-2	2
		1	24	22.78	22.68	22.37	0-2	2
		12	0	21.34	21.50	21.25	0-3	3
		12	6	21.21	21.58	21.27	0-3	3
		12	11	21.64	21.53	21.32	0-3	3
		25	0	21.30	21.47	21.21	0-3	3
	256QAM	1	0	19.64	19.56	19.28	0-5	5
		1	12	19.92	19.70	19.49	0-5	5
		1	24	19.68	19.63	19.15	0-5	5
		12	0	19.80	19.55	19.21	0-5	5
		12	6	19.62	19.45	19.26	0-5	5
		12	11	19.62	19.54	19.25	0-5	5
		25	0	19.74	19.57	19.23	0-5	5

LTE Band 71 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				133172 Ch. 668 MHz	133297 Ch. 680.5 MHz	133422 Ch. 693 MHz		
10 MHz	QPSK	1	0	24.13	24.46	24.39	0	0
		1	24	24.43	24.53	24.18	0	0
		1	49	24.44	24.27	24.09	0	0
		25	0	23.60	23.60	23.30	0-1	1
		25	12	23.70	23.46	23.26	0-1	1
		25	24	23.52	23.55	23.28	0-1	1
		50	0	23.61	23.42	23.18	0-1	1
	16QAM	1	0	23.51	23.88	23.72	0-1	1
		1	24	23.21	23.89	23.79	0-1	1
		1	49	23.71	23.92	23.54	0-1	1
		25	0	22.76	22.52	22.27	0-2	2
		25	12	22.72	22.50	22.24	0-2	2
		25	24	22.60	22.59	22.20	0-2	2
		50	0	22.67	22.39	22.18	0-2	2
	64QAM	1	0	22.28	22.67	22.42	0-2	2
		1	24	22.83	22.55	22.37	0-2	2
		1	49	22.75	22.69	22.38	0-2	2
		25	0	21.51	21.52	21.39	0-3	3
		25	12	21.64	21.58	21.30	0-3	3
		25	24	21.64	21.48	21.22	0-3	3
		50	0	21.61	21.43	21.16	0-3	3
	256QAM	1	0	19.57	19.51	19.09	0-5	5
		1	24	19.81	19.76	19.51	0-5	5
		1	49	19.29	19.33	19.11	0-5	5
		25	0	19.43	19.49	19.22	0-5	5
		25	12	19.66	19.57	19.24	0-5	5
		25	24	19.68	19.49	19.28	0-5	5
		50	0	19.71	19.52	19.21	0-5	5

LTE Band 71 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				133297 Ch. 680.5 MHz		
15 MHz	QPSK	1	0	24.50	0	0
		1	36	24.37	0	0
		1	74	24.09	0	0
		36	0	23.45	0-1	1
		36	18	23.45	0-1	1
		36	39	23.44	0-1	1
		75	0	23.56	0-1	1
	16QAM	1	0	23.84	0-1	1
		1	36	23.80	0-1	1
		1	74	23.98	0-1	1
		36	0	22.48	0-2	2
		36	18	22.57	0-2	2
		36	39	22.56	0-2	2
		75	0	22.51	0-2	2
	64QAM	1	0	22.75	0-2	2
		1	36	22.68	0-2	2
		1	74	22.44	0-2	2
		36	0	21.49	0-3	3
		36	18	21.51	0-3	3
		36	39	21.55	0-3	3
		75	0	21.55	0-3	3
	256QAM	1	0	19.39	0-5	5
		1	36	19.67	0-5	5
		1	74	19.47	0-5	5
		36	0	19.46	0-5	5
		36	18	19.47	0-5	5
		36	39	19.39	0-5	5
		75	0	19.50	0-5	5

LTE Band 71 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				133297 Ch. 680.5 MHz		
20 MHz	QPSK	1	0	24.50	0	0
		1	49	24.51	0	0
		1	99	24.29	0	0
		50	0	23.45	0-1	1
		50	25	23.54	0-1	1
		50	49	23.44	0-1	1
		100	0	23.44	0-1	1
	16QAM	1	0	23.82	0-1	1
		1	49	23.78	0-1	1
		1	99	23.92	0-1	1
		50	0	22.37	0-2	2
		50	25	22.50	0-2	2
		50	49	22.41	0-2	2
		100	0	22.40	0-2	2
	64QAM	1	0	22.76	0-2	2
		1	49	22.70	0-2	2
		1	99	22.64	0-2	2
		50	0	21.42	0-3	3
		50	25	21.52	0-3	3
		50	49	21.51	0-3	3
		100	0	21.37	0-3	3
	256QAM	1	0	19.30	0-5	5
		1	49	19.69	0-5	5
		1	99	19.25	0-5	5
		50	0	19.40	0-5	5
		50	25	19.47	0-5	5
		50	49	19.37	0-5	5
		100	0	19.54	0-5	5

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.

11.4.2 LTE Reduced Conducted Power (Hotspot activated)

DSI = 3 PLimit Calculations - 4G Hotspot SAR

[LTE Band 2 Conducted Power, DSI = 3]

LTE Band 2 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 MHz	18900 Ch. 1880 MHz	19193 Ch. 1909.3 MHz		
1.4 MHz	QPSK	1	0	18.34	18.08	18.47	0	0
		1	3	18.34	18.14	18.55	0	0
		1	5	18.28	18.04	18.39	0	0
		3	0	18.36	18.18	18.46	0	0
		3	1	18.34	18.21	18.50	0	0
		3	3	18.38	18.16	18.44	0	0
		6	0	18.42	18.15	18.59	0-1	0
	16QAM	1	0	18.75	18.45	18.79	0-1	0
		1	3	18.73	18.46	18.90	0-1	0
		1	5	18.64	18.57	18.86	0-1	0
		3	0	18.53	18.46	18.66	0-1	0
		3	1	18.57	18.41	18.80	0-1	0
		3	3	18.56	18.30	18.62	0-1	0
		6	0	18.48	18.26	18.33	0-2	0
	64QAM	1	0	18.53	18.39	18.75	0-2	0
		1	3	18.58	18.56	18.64	0-2	0
		1	5	18.39	18.31	18.57	0-2	0
		3	0	18.51	18.33	18.73	0-2	0
		3	1	18.59	18.35	18.68	0-2	0
		3	3	18.48	18.29	18.53	0-2	0
		6	0	18.48	18.26	18.63	0-3	0
	256QAM	1	0	18.43	18.46	18.71	0-5	0
		1	3	18.46	18.22	18.62	0-5	0
		1	5	18.57	18.24	18.64	0-5	0
		3	0	18.56	18.28	18.59	0-5	0
		3	1	18.56	18.31	18.88	0-5	0
		3	3	18.28	18.16	18.66	0-5	0
		6	0	18.44	18.22	18.61	0-5	0

LTE Band 2 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 MHz	18900 Ch. 1880 MHz	19185 Ch. 1908.5 MHz		
3 MHz	QPSK	1	0	18.45	18.19	18.49	0	0
		1	7	18.28	18.16	18.47	0	0
		1	14	18.29	18.07	18.44	0	0
		8	0	18.41	18.16	18.60	0-1	0
		8	3	18.48	18.30	18.67	0-1	0
		8	7	18.40	18.20	18.46	0-1	0
		15	0	18.36	18.29	18.66	0-1	0
	16QAM	1	0	18.59	18.46	18.96	0-1	0
		1	7	18.69	18.48	18.90	0-1	0
		1	14	18.68	18.58	18.89	0-1	0
		8	0	18.64	18.35	18.73	0-2	0
		8	3	18.61	18.37	18.79	0-2	0
		8	7	18.50	18.37	18.67	0-2	0
		15	0	18.52	18.30	18.72	0-2	0
	64QAM	1	0	18.62	18.49	18.80	0-2	0
		1	7	18.43	18.29	18.83	0-2	0
		1	14	18.53	18.39	18.72	0-2	0
		8	0	18.53	18.37	18.75	0-3	0
		8	3	18.51	18.09	18.68	0-3	0
		8	7	18.44	18.27	18.68	0-3	0
		15	0	18.55	18.35	18.73	0-3	0
	256QAM	1	0	18.81	18.43	18.87	0-5	0
		1	7	18.55	17.72	18.69	0-5	0
		1	14	18.50	18.22	18.69	0-5	0
		8	0	18.43	18.35	18.60	0-5	0
		8	3	18.59	18.40	18.75	0-5	0
		8	7	18.42	18.03	18.50	0-5	0
		15	0	18.54	18.32	18.70	0-5	0

LTE Band 2 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 MHz	18900 Ch. 1880 MHz	19175 Ch. 1907.5 MHz		
5 MHz	QPSK	1	0	18.37	18.08	18.40	0	0
		1	12	18.32	17.85	18.49	0	0
		1	24	18.26	18.08	18.38	0	0
		12	0	18.46	18.24	18.61	0-1	0
		12	6	18.41	18.30	18.67	0-1	0
		12	11	18.45	18.23	18.56	0-1	0
		25	0	18.43	18.22	18.61	0-1	0
	16QAM	1	0	18.70	18.36	18.68	0-1	0
		1	12	18.72	18.57	18.92	0-1	0
		1	24	18.71	18.42	18.87	0-1	0
		12	0	18.49	18.31	18.65	0-2	0
		12	6	18.56	18.26	18.74	0-2	0
		12	11	18.57	18.33	18.66	0-2	0
		25	0	18.49	18.22	18.57	0-2	0
	64QAM	1	0	18.67	18.40	18.79	0-2	0
		1	12	18.80	18.23	18.87	0-2	0
		1	24	18.56	18.28	18.60	0-2	0
		12	0	18.51	18.26	18.65	0-3	0
		12	6	18.59	18.31	18.73	0-3	0
		12	11	18.44	18.30	18.43	0-3	0
		25	0	18.43	18.14	18.61	0-3	0
	256QAM	1	0	18.71	18.33	18.64	0-5	0
		1	12	18.61	18.30	18.66	0-5	0
		1	24	18.51	18.33	18.62	0-5	0
		12	0	18.45	18.20	18.68	0-5	0
		12	6	18.57	18.27	18.68	0-5	0
		12	11	18.57	18.27	18.60	0-5	0
		25	0	18.50	18.15	18.50	0-5	0

LTE Band 2 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 MHz	18900 Ch. 1880 MHz	19150 Ch. 1905 MHz		
10 MHz	QPSK	1	0	17.96	17.88	18.45	0	0
		1	24	18.28	18.18	18.46	0	0
		1	49	18.14	18.01	18.53	0	0
		25	0	18.36	18.24	18.44	0-1	0
		25	12	18.44	18.26	18.49	0-1	0
		25	24	18.27	18.19	18.53	0-1	0
		50	0	18.27	18.20	18.48	0-1	0
	16QAM	1	0	18.46	18.43	19.03	0-1	0
		1	24	18.82	18.63	18.92	0-1	0
		1	49	18.48	18.33	18.85	0-1	0
		25	0	18.42	18.20	18.45	0-2	0
		25	12	18.44	18.29	18.57	0-2	0
		25	24	18.23	18.16	18.41	0-2	0
		50	0	18.23	18.23	18.49	0-2	0
	64QAM	1	0	18.23	18.05	18.78	0-2	0
		1	24	18.54	18.33	18.77	0-2	0
		1	49	18.26	18.13	18.82	0-2	0
		25	0	18.38	18.27	18.53	0-3	0
		25	12	18.49	18.32	18.56	0-3	0
		25	24	18.37	18.23	18.49	0-3	0
		50	0	18.30	18.22	18.52	0-3	0
	256QAM	1	0	18.23	17.78	18.23	0-5	0
		1	24	18.66	18.50	18.69	0-5	0
		1	49	18.25	18.01	18.67	0-5	0
		25	0	18.43	18.32	18.50	0-5	0
		25	12	18.46	18.31	18.67	0-5	0
		25	24	18.34	18.36	18.62	0-5	0
		50	0	18.29	18.18	18.50	0-5	0

LTE Band 2 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 MHz	18900 Ch. 1880 MHz	19125 Ch. 1902.5 MHz		
15 MHz	QPSK	1	0	18.09	18.06	18.35	0	0
		1	36	18.20	18.03	18.41	0	0
		1	74	18.15	18.17	18.44	0	0
		36	0	18.32	18.10	18.37	0-1	0
		36	18	18.37	18.20	18.55	0-1	0
		36	39	18.23	18.15	18.54	0-1	0
		75	0	18.32	18.27	18.43	0-1	0
	16QAM	1	0	18.43	18.26	18.75	0-1	0
		1	36	18.59	18.47	18.74	0-1	0
		1	74	18.50	18.55	18.75	0-1	0
		36	0	18.33	18.07	18.44	0-2	0
		36	18	18.38	18.19	18.48	0-2	0
		36	39	18.28	18.19	18.60	0-2	0
		75	0	18.34	18.16	18.43	0-2	0
	64QAM	1	0	18.23	18.39	18.69	0-2	0
		1	36	18.42	18.31	18.67	0-2	0
		1	74	18.39	18.41	18.78	0-2	0
		36	0	18.38	18.17	18.41	0-3	0
		36	18	18.46	18.29	18.56	0-3	0
		36	39	18.29	18.31	18.61	0-3	0
		75	0	18.34	18.19	18.56	0-3	0
	256QAM	1	0	18.30	18.05	18.38	0-5	0
		1	36	18.47	18.39	18.72	0-5	0
		1	74	18.45	18.24	18.56	0-5	0
		36	0	18.32	18.16	18.43	0-5	0
		36	18	18.45	18.25	18.50	0-5	0
		36	39	18.31	18.21	18.56	0-5	0
		75	0	18.33	18.19	18.51	0-5	0

LTE Band 2 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 MHz	18900 Ch. 1880 MHz	19100 Ch. 1900 MHz		
20 MHz	QPSK	1	0	18.25	18.09	18.25	0	0
		1	49	18.15	18.07	18.40	0	0
		1	99	18.11	18.17	18.37	0	0
		50	0	18.30	18.14	18.35	0-1	0
		50	25	18.37	18.22	18.39	0-1	0
		50	49	18.24	18.19	18.48	0-1	0
		100	0	18.29	18.15	18.38	0-1	0
	16QAM	1	0	18.58	18.33	18.64	0-1	0
		1	49	18.53	18.51	18.70	0-1	0
		1	99	18.61	18.60	18.71	0-1	0
		50	0	18.27	18.12	18.32	0-2	0
		50	25	18.34	18.19	18.45	0-2	0
		50	49	18.21	18.20	18.57	0-2	0
		100	0	18.23	18.19	18.38	0-2	0
	64QAM	1	0	18.55	18.35	18.48	0-2	0
		1	49	18.56	18.31	18.59	0-2	0
		1	99	18.36	18.46	18.72	0-2	0
		50	0	18.32	18.16	18.32	0-3	0
		50	25	18.42	18.22	18.57	0-3	0
		50	49	18.26	18.17	18.56	0-3	0
		100	0	18.21	18.14	18.41	0-3	0
	256QAM	1	0	18.08	17.86	18.11	0-5	0
		1	49	18.49	18.13	18.46	0-5	0
		1	99	18.26	18.31	18.61	0-5	0
		50	0	18.31	18.17	18.31	0-5	0
		50	25	18.44	18.21	18.51	0-5	0
		50	49	18.34	18.25	18.49	0-5	0
		100	0	18.26	18.21	18.45	0-5	0

[LTE Band 4 Conducted Power, DSI = 3]

LTE Band 4 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19957 Ch. 1710.7 MHz	20175 Ch. 1732.5 MHz	20393 Ch. 1754.3 MHz		
1.4 MHz	QPSK	1	0	19.45	19.33	18.95	0	0
		1	3	19.62	19.36	19.04	0	0
		1	5	19.40	19.29	19.03	0	0
		3	0	19.45	19.33	19.03	0	0
		3	1	19.52	19.38	19.06	0	0
		3	3	19.47	19.33	19.01	0	0
		6	0	19.57	19.44	19.00	0-1	0
	16QAM	1	0	19.89	19.67	19.29	0-1	0
		1	3	19.89	19.72	19.40	0-1	0
		1	5	19.74	19.58	19.23	0-1	0
		3	0	19.65	19.52	19.25	0-1	0
		3	1	19.74	19.54	19.19	0-1	0
		3	3	19.64	19.48	19.15	0-1	0
		6	0	19.41	19.34	19.18	0-2	0
	64QAM	1	0	19.73	19.57	19.20	0-2	0
		1	3	19.79	19.66	19.32	0-2	0
		1	5	19.63	19.54	19.25	0-2	0
		3	0	19.63	19.59	19.14	0-2	0
		3	1	19.69	19.43	19.29	0-2	0
		3	3	19.68	19.48	19.20	0-2	0
		6	0	19.60	19.42	19.14	0-3	0
	256QAM	1	0	18.83	18.75	18.45	0-5	0
		1	3	18.99	18.83	18.57	0-5	0
		1	5	18.89	18.68	18.40	0-5	0
		3	0	18.93	18.68	18.51	0-5	0
		3	1	18.99	18.84	18.57	0-5	0
		3	3	18.88	18.69	18.65	0-5	0
		6	0	18.82	18.75	18.55	0-5	0

LTE Band 4 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19965 Ch. 1711.5 MHz	20175 Ch. 1732.5 MHz	20385 Ch. 1753.5 MHz		
3 MHz	QPSK	1	0	19.50	19.36	19.05	0	0
		1	7	19.45	19.38	19.10	0	0
		1	14	19.42	19.39	19.04	0	0
		8	0	19.58	19.50	19.13	0-1	0
		8	3	19.59	19.49	19.15	0-1	0
		8	7	19.56	19.46	19.21	0-1	0
		15	0	19.61	19.52	19.10	0-1	0
	16QAM	1	0	19.90	19.69	19.35	0-1	0
		1	7	19.76	19.64	19.34	0-1	0
		1	14	19.93	19.68	19.53	0-1	0
		8	0	19.75	19.64	19.31	0-2	0
		8	3	19.67	19.56	19.13	0-2	0
		8	7	19.76	19.54	19.26	0-2	0
		15	0	19.66	19.56	19.26	0-2	0
	64QAM	1	0	19.88	19.67	19.32	0-2	0
		1	7	19.92	19.51	19.12	0-2	0
		1	14	19.70	19.57	19.27	0-2	0
		8	0	19.70	19.57	19.26	0-3	0
		8	3	19.70	19.29	19.26	0-3	0
		8	7	19.62	19.50	19.22	0-3	0
		15	0	19.64	19.52	19.23	0-3	0
	256QAM	1	0	19.18	18.72	18.48	0-5	0
		1	7	18.84	19.19	18.75	0-5	0
		1	14	19.13	18.42	18.47	0-5	0
		8	0	18.80	18.76	18.46	0-5	0
		8	3	18.97	18.82	18.54	0-5	0
		8	7	18.78	18.66	18.54	0-5	0
		15	0	18.84	18.74	18.50	0-5	0

LTE Band 4 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19975 Ch. 1712.5 MHz	20175 Ch. 1732.5 MHz	20375 Ch. 1752.5 MHz		
5 MHz	QPSK	1	0	19.41	19.37	18.98	0	0
		1	12	19.52	19.30	19.05	0	0
		1	24	19.37	19.25	18.88	0	0
		12	0	19.57	19.43	19.16	0-1	0
		12	6	19.60	19.59	19.19	0-1	0
		12	11	19.56	19.42	19.16	0-1	0
	16QAM	25	0	19.53	19.45	19.13	0-1	0
		1	0	19.80	19.60	19.47	0-1	0
		1	12	19.81	19.80	19.43	0-1	0
		1	24	19.85	19.50	19.46	0-1	0
		12	0	19.72	19.57	19.23	0-2	0
		12	6	19.58	19.60	19.25	0-2	0
	64QAM	12	11	19.73	19.58	19.27	0-2	0
		25	0	19.55	19.48	19.18	0-2	0
		1	0	19.75	19.47	19.27	0-2	0
		1	12	19.86	19.73	19.43	0-2	0
		1	24	19.64	19.52	19.20	0-2	0
		12	0	19.73	19.53	19.20	0-3	0
	256QAM	12	6	19.69	19.44	19.27	0-3	0
		12	11	19.61	19.60	19.12	0-3	0
		25	0	19.62	19.48	19.17	0-3	0
		1	0	18.75	18.80	18.55	0-5	0
		1	12	19.09	18.81	18.95	0-5	0
		1	24	18.87	18.39	18.58	0-5	0
		12	0	18.85	18.68	18.44	0-5	0
		12	6	18.89	18.80	18.49	0-5	0
		12	11	18.87	18.66	18.43	0-5	0
		25	0	18.89	18.68	18.41	0-5	0

LTE Band 4 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20000 Ch. 1715 MHz	20175 Ch. 1732.5 MHz	20350 Ch. 1750 MHz		
10 MHz	QPSK	1	0	19.20	19.23	18.96	0	0
		1	24	19.47	19.40	19.05	0	0
		1	49	19.23	19.09	18.77	0	0
		25	0	19.51	19.44	19.15	0-1	0
		25	12	19.58	19.54	19.25	0-1	0
		25	24	19.53	19.36	19.08	0-1	0
		50	0	19.49	19.42	19.07	0-1	0
	16QAM	1	0	19.53	19.48	19.11	0-1	0
		1	24	19.91	19.90	19.60	0-1	0
		1	49	19.63	19.49	19.25	0-1	0
		25	0	19.49	19.43	19.14	0-2	0
		25	12	19.57	19.51	19.15	0-2	0
		25	24	19.58	19.31	19.05	0-2	0
		50	0	19.59	19.39	19.11	0-2	0
	64QAM	1	0	19.42	19.39	19.00	0-2	0
		1	24	19.67	19.63	19.26	0-2	0
		1	49	19.38	19.32	19.10	0-2	0
		25	0	19.58	19.47	19.15	0-3	0
		25	12	19.60	19.57	19.18	0-3	0
		25	24	19.53	19.36	19.10	0-3	0
		50	0	19.52	19.45	19.17	0-3	0
	256QAM	1	0	18.63	18.64	18.43	0-5	0
		1	24	18.93	18.93	18.79	0-5	0
		1	49	18.71	18.37	18.29	0-5	0
		25	0	18.94	18.63	18.50	0-5	0
		25	12	18.87	18.79	18.51	0-5	0
		25	24	18.80	18.58	18.43	0-5	0
		50	0	18.68	18.62	18.43	0-5	0

LTE Band 4 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20025 Ch. 1717.5 MHz	20175 Ch. 1732.5 MHz	20325 Ch. 1747.5 MHz		
15 MHz	QPSK	1	0	19.15	18.96	18.83	0	0
		1	36	19.44	19.25	18.96	0	0
		1	74	19.31	19.17	18.89	0	0
		36	0	19.49	19.35	19.15	0-1	0
		36	18	19.56	19.48	19.18	0-1	0
		36	39	19.42	19.34	19.16	0-1	0
		75	0	19.44	19.41	19.15	0-1	0
	16QAM	1	0	19.55	19.43	19.14	0-1	0
		1	36	19.76	19.63	19.37	0-1	0
		1	74	19.69	19.68	19.16	0-1	0
		36	0	19.50	19.39	19.12	0-2	0
		36	18	19.54	19.48	19.22	0-2	0
		36	39	19.51	19.42	19.19	0-2	0
		75	0	19.45	19.43	19.20	0-2	0
	64QAM	1	0	19.47	19.29	19.19	0-2	0
		1	36	19.76	19.62	19.35	0-2	0
		1	74	19.47	19.51	19.14	0-2	0
		36	0	19.53	19.46	19.26	0-3	0
		36	18	19.67	19.51	19.26	0-3	0
		36	39	19.47	19.39	19.18	0-3	0
		75	0	19.41	19.51	19.19	0-3	0
	256QAM	1	0	18.73	18.64	18.42	0-5	0
		1	36	18.87	18.71	18.62	0-5	0
		1	74	18.68	18.37	18.32	0-5	0
		36	0	18.76	18.68	18.38	0-5	0
		36	18	18.87	18.65	18.51	0-5	0
		36	39	18.76	18.57	18.49	0-5	0
		75	0	18.65	18.64	18.51	0-5	0

LTE Band 4 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				20175 Ch. 1732.5 MHz		
20 MHz	QPSK	1	0	18.84	0	0
		1	49	19.25	0	0
		1	99	19.03	0	0
		50	0	19.38	0-1	0
		50	25	19.45	0-1	0
		50	49	19.25	0-1	0
		100	0	19.39	0-1	0
	16QAM	1	0	19.27	0-1	0
		1	49	19.72	0-1	0
		1	99	19.61	0-1	0
		50	0	19.28	0-2	0
		50	25	19.43	0-2	0
		50	49	19.22	0-2	0
		100	0	19.43	0-2	0
	64QAM	1	0	19.27	0-2	0
		1	49	19.72	0-2	0
		1	99	19.38	0-2	0
		50	0	19.34	0-3	0
		50	25	19.49	0-3	0
		50	49	19.37	0-3	0
		100	0	19.41	0-3	0
	256QAM	1	0	18.47	0-5	0
		1	49	18.67	0-5	0
		1	99	18.49	0-5	0
		50	0	18.62	0-5	0
		50	25	18.63	0-5	0
		50	49	18.59	0-5	0
		100	0	18.60	0-5	0

[LTE Band 7 Conducted Powe, DSI = 3]

LTE Band 7 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20775 Ch. 2502.5 MHz	21100 Ch. 2535 MHz	21425 Ch. 2567.5 MHz		
5 MHz	QPSK	1	0	19.73	19.61	19.52	0	0
		1	12	19.70	19.67	19.45	0	0
		1	24	19.69	19.61	19.53	0	0
		12	0	19.79	19.69	19.43	0-1	0
		12	6	19.86	19.79	19.54	0-1	0
		12	11	19.79	19.72	19.58	0-1	0
		25	0	19.81	19.73	19.54	0-1	0
	16QAM	1	0	20.06	19.96	19.92	0-1	0
		1	12	20.15	20.13	19.79	0-1	0
		1	24	20.31	20.07	19.95	0-1	0
		12	0	19.97	19.81	19.69	0-2	0
		12	6	19.84	19.74	19.64	0-2	0
		12	11	19.84	19.72	19.70	0-2	0
		25	0	19.73	19.65	19.53	0-2	0
	64QAM	1	0	19.97	19.88	19.84	0-2	0
		1	12	19.81	19.91	19.60	0-2	0
		1	24	19.91	19.86	19.71	0-2	0
		12	0	19.85	19.79	19.61	0-3	0
		12	6	19.84	19.82	19.60	0-3	0
		12	11	19.83	19.77	19.65	0-3	0
		25	0	19.86	19.71	19.53	0-3	0
	256QAM	1	0	18.54	18.47	18.30	0-5	1.5
		1	12	18.37	18.57	18.00	0-5	1.5
		1	24	18.51	18.11	18.23	0-5	1.5
		12	0	18.53	18.48	18.31	0-5	1.5
		12	6	18.50	18.48	18.33	0-5	1.5
		12	11	18.44	18.48	18.30	0-5	1.5
		25	0	18.53	18.49	18.32	0-5	1.5

LTE Band 7_ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20800 Ch. 2505 MHz	21100 Ch. 2535 MHz	21400 Ch. 2565 MHz		
10 MHz	QPSK	1	0	19.65	19.60	19.50	0	0
		1	24	19.68	19.46	19.65	0	0
		1	49	19.81	19.62	19.57	0	0
		25	0	19.82	19.84	19.48	0-1	0
		25	12	19.86	19.72	19.51	0-1	0
		25	24	19.78	19.68	19.56	0-1	0
		50	0	19.87	19.75	19.51	0-1	0
	16QAM	1	0	20.05	20.09	20.14	0-1	0
		1	24	20.29	20.13	19.91	0-1	0
		1	49	20.25	20.00	20.00	0-1	0
		25	0	19.87	19.78	19.59	0-2	0
		25	12	19.87	19.79	19.67	0-2	0
		25	24	19.79	19.69	19.59	0-2	0
		50	0	19.77	19.78	19.55	0-2	0
	64QAM	1	0	19.96	20.01	19.68	0-2	0
		1	24	19.88	19.94	19.64	0-2	0
		1	49	19.98	19.96	19.65	0-2	0
		25	0	19.83	19.81	19.48	0-3	0
		25	12	19.90	19.85	19.56	0-3	0
		25	24	19.89	19.71	19.51	0-3	0
		50	0	19.84	19.72	19.49	0-3	0
	256QAM	1	0	18.23	18.21	18.07	0-5	1.5
		1	24	18.70	18.55	18.21	0-5	1.5
		1	49	18.40	18.36	18.22	0-5	1.5
		25	0	18.51	18.45	18.31	0-5	1.5
		25	12	18.65	18.54	18.34	0-5	1.5
		25	24	18.54	18.44	18.22	0-5	1.5
		50	0	18.56	18.42	18.15	0-5	1.5

LTE Band 7 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20825 Ch. 2507.5 MHz	21100 Ch. 2535 MHz	21375 Ch. 2562.5 MHz		
15 MHz	QPSK	1	0	19.73	19.68	19.48	0	0
		1	36	19.64	19.55	19.45	0	0
		1	74	19.69	19.49	19.35	0	0
		36	0	19.75	19.71	19.54	0-1	0
		36	18	19.79	19.75	19.52	0-1	0
		36	39	19.81	19.58	19.52	0-1	0
		75	0	19.85	19.73	19.44	0-1	0
	16QAM	1	0	19.97	19.99	19.84	0-1	0
		1	36	19.93	19.92	19.96	0-1	0
		1	74	20.08	19.71	19.57	0-1	0
		36	0	19.81	19.76	19.62	0-2	0
		36	18	19.88	19.71	19.56	0-2	0
		36	39	19.80	19.66	19.51	0-2	0
		75	0	19.81	19.78	19.51	0-2	0
	64QAM	1	0	19.91	19.84	19.78	0-2	0
		1	36	19.93	19.75	19.58	0-2	0
		1	74	19.98	19.72	19.62	0-2	0
		36	0	19.88	19.80	19.63	0-3	0
		36	18	19.96	19.84	19.54	0-3	0
		36	39	19.85	19.68	19.59	0-3	0
		75	0	19.82	19.76	19.51	0-3	0
	256QAM	1	0	18.51	18.41	18.27	0-5	1.5
		1	36	18.49	18.49	18.40	0-5	1.5
		1	74	18.62	18.31	18.17	0-5	1.5
		36	0	18.46	18.46	18.31	0-5	1.5
		36	18	18.57	18.45	18.33	0-5	1.5
		36	39	18.56	18.40	18.23	0-5	1.5
		75	0	18.58	18.36	18.23	0-5	1.5

LTE Band 7 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20850 Ch. 2510 MHz	21100 Ch. 2535 MHz	21350 Ch. 2560 MHz		
20 MHz	QPSK	1	0	19.76	19.71	19.54	0	0
		1	49	19.70	19.62	19.41	0	0
		1	99	19.68	19.55	19.32	0	0
		50	0	19.77	19.76	19.50	0-1	0
		50	25	19.83	19.80	19.58	0-1	0
		50	49	19.76	19.62	19.42	0-1	0
		100	0	19.76	19.69	19.54	0-1	0
	16QAM	1	0	20.02	20.01	19.86	0-1	0
		1	49	20.17	19.91	19.81	0-1	0
		1	99	20.07	19.75	19.78	0-1	0
		50	0	19.79	19.75	19.58	0-2	0
		50	25	19.86	19.74	19.55	0-2	0
		50	49	19.78	19.66	19.41	0-2	0
		100	0	19.77	19.66	19.56	0-2	0
	64QAM	1	0	19.81	19.93	19.71	0-2	0
		1	49	20.02	19.88	19.71	0-2	0
		1	99	19.98	19.81	19.74	0-2	0
		50	0	19.80	19.76	19.59	0-3	0
		50	25	19.88	19.80	19.62	0-3	0
		50	49	19.81	19.65	19.49	0-3	0
		100	0	19.80	19.73	19.57	0-3	0
	256QAM	1	0	18.24	18.32	18.06	0-5	1.5
		1	49	18.58	18.38	18.37	0-5	1.5
		1	99	18.40	18.18	17.90	0-5	1.5
		50	0	18.46	18.44	18.25	0-5	1.5
		50	25	18.54	18.52	18.30	0-5	1.5
		50	49	18.49	18.33	18.16	0-5	1.5
		100	0	18.43	18.41	18.28	0-5	1.5

[LTE Band 25 Conducted Power, DSI = 3]

LTE Band 25 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26047 Ch. 1850.7 MHz	26365 Ch. 1882.5 MHz	26683 Ch. 1914.3 MHz		
1.4 MHz	QPSK	1	0	18.42	18.19	18.33	0	0
		1	3	18.54	18.41	18.38	0	0
		1	5	18.36	18.29	18.38	0	0
		3	0	18.42	18.26	18.44	0	0
		3	1	18.59	18.26	18.38	0	0
		3	3	18.42	18.21	18.44	0	0
		6	0	18.52	18.31	18.43	0-1	0
	16QAM	1	0	18.77	18.45	18.67	0-1	0
		1	3	18.79	18.65	18.85	0-1	0
		1	5	18.64	18.61	18.64	0-1	0
		3	0	18.73	18.40	18.60	0-1	0
		3	1	18.68	18.44	18.66	0-1	0
		3	3	18.62	18.47	18.47	0-1	0
		6	0	18.50	18.17	18.60	0-2	0
	64QAM	1	0	18.62	18.41	18.60	0-2	0
		1	3	18.76	18.62	18.63	0-2	0
		1	5	18.67	18.55	18.67	0-2	0
		3	0	18.69	18.36	18.53	0-2	0
		3	1	18.76	18.56	18.62	0-2	0
		3	3	18.66	18.44	18.61	0-2	0
		6	0	18.53	18.45	18.53	0-3	0
	256QAM	1	0	18.54	18.21	18.56	0-5	0
		1	3	18.62	18.43	18.56	0-5	0
		1	5	18.64	18.30	18.54	0-5	0
		3	0	18.60	18.20	18.60	0-5	0
		3	1	18.69	18.48	18.70	0-5	0
		3	3	18.68	18.47	18.34	0-5	0
		6	0	18.54	18.34	18.48	0-5	0

LTE Band 25_ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26055 Ch. 1851.5 MHz	26365 Ch. 1882.5 MHz	26675Ch. 1913.5 MHz		
3 MHz	QPSK	1	0	18.50	18.19	18.27	0	0
		1	7	18.44	18.29	18.44	0	0
		1	14	18.55	18.33	18.49	0	0
		8	0	18.50	18.10	18.45	0-1	0
		8	3	18.57	18.37	18.59	0-1	0
		8	7	18.59	18.50	18.51	0-1	0
		15	0	18.60	18.38	18.52	0-1	0
	16QAM	1	0	18.74	18.70	18.74	0-1	0
		1	7	18.79	18.66	18.68	0-1	0
		1	14	18.93	18.66	18.60	0-1	0
		8	0	18.68	18.44	18.67	0-2	0
		8	3	18.68	18.43	18.69	0-2	0
		8	7	18.77	18.59	18.64	0-2	0
		15	0	18.67	18.40	18.55	0-2	0
	64QAM	1	0	18.80	18.42	18.67	0-2	0
		1	7	18.49	18.54	18.70	0-2	0
		1	14	18.77	18.72	18.81	0-2	0
		8	0	18.63	18.46	18.59	0-3	0
		8	3	18.68	18.42	18.35	0-3	0
		8	7	18.58	18.50	18.65	0-3	0
		15	0	18.57	18.48	18.53	0-3	0
	256QAM	1	0	18.76	18.35	18.70	0-5	0
		1	7	18.70	18.49	18.46	0-5	0
		1	14	18.61	18.57	18.47	0-5	0
		8	0	18.63	18.25	18.44	0-5	0
		8	3	18.68	18.45	18.67	0-5	0
		8	7	18.65	18.40	18.54	0-5	0
		15	0	18.63	18.45	18.64	0-5	0

LTE Band 25_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26065 Ch. 1852.5 MHz	26365 Ch. 1882.5 MHz	26665 Ch. 1912.5 MHz		
5 MHz	QPSK	1	0	18.50	18.22	18.42	0	0
		1	12	18.54	18.27	18.35	0	0
		1	24	18.50	18.28	18.49	0	0
		12	0	18.60	18.28	18.47	0-1	0
		12	6	18.63	18.35	18.57	0-1	0
		12	11	18.59	18.39	18.54	0-1	0
		25	0	18.57	18.33	18.52	0-1	0
	16QAM	1	0	18.77	18.64	18.78	0-1	0
		1	12	18.89	18.64	18.82	0-1	0
		1	24	18.84	18.64	18.99	0-1	0
		12	0	18.70	18.34	18.58	0-2	0
		12	6	18.63	18.42	18.62	0-2	0
		12	11	18.74	18.45	18.65	0-2	0
		25	0	18.64	18.32	18.45	0-2	0
	64QAM	1	0	18.75	18.49	18.75	0-2	0
		1	12	18.92	18.57	18.88	0-2	0
		1	24	18.89	18.64	18.83	0-2	0
		12	0	18.68	18.31	18.54	0-3	0
		12	6	18.65	18.38	18.45	0-3	0
		12	11	18.68	18.53	18.62	0-3	0
		25	0	18.67	18.40	18.57	0-3	0
	256QAM	1	0	18.73	18.34	18.65	0-5	0
		1	12	18.29	18.59	18.32	0-5	0
		1	24	18.73	18.51	18.53	0-5	0
		12	0	18.63	18.32	18.50	0-5	0
		12	6	18.64	18.40	18.60	0-5	0
		12	11	18.74	18.48	18.59	0-5	0
		25	0	18.67	18.43	18.75	0-5	0

LTE Band 25 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26090 Ch. 1855 MHz	26365 Ch. 1882.5 MHz	26640 Ch. 1910 MHz		
10 MHz	QPSK	1	0	18.19	18.04	18.45	0	0
		1	24	18.51	18.29	18.49	0	0
		1	49	18.25	18.13	18.48	0	0
		25	0	18.52	18.25	18.42	0-1	0
		25	12	18.53	18.39	18.58	0-1	0
		25	24	18.49	18.44	18.51	0-1	0
		50	0	18.53	18.34	18.43	0-1	0
	16QAM	1	0	18.60	18.41	18.86	0-1	0
		1	24	18.95	18.58	18.78	0-1	0
		1	49	18.67	18.41	18.85	0-1	0
		25	0	18.52	18.28	18.45	0-2	0
		25	12	18.52	18.39	18.52	0-2	0
		25	24	18.43	18.34	18.43	0-2	0
		50	0	18.44	18.39	18.48	0-2	0
	64QAM	1	0	18.50	18.23	18.71	0-2	0
		1	24	18.68	18.59	18.68	0-2	0
		1	49	18.44	18.35	18.77	0-2	0
		25	0	18.62	18.31	18.45	0-3	0
		25	12	18.65	18.44	18.63	0-3	0
		25	24	18.59	18.48	18.66	0-3	0
		50	0	18.52	18.41	18.51	0-3	0
	256QAM	1	0	18.57	18.07	18.30	0-5	0
		1	24	18.83	18.61	18.64	0-5	0
		1	49	18.40	18.31	18.38	0-5	0
		25	0	18.59	18.32	18.52	0-5	0
		25	12	18.58	18.46	18.54	0-5	0
		25	24	18.56	18.48	18.58	0-5	0
		50	0	18.51	18.43	18.94	0-5	0

LTE Band 25 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26115 Ch. 1857.5 MHz	26365 Ch. 1882.5 MHz	26615 Ch. 1907.5 MHz		
15 MHz	QPSK	1	0	18.27	18.39	18.54	0	0
		1	36	18.53	18.33	18.53	0	0
		1	74	18.33	18.48	18.47	0	0
		36	0	18.53	18.34	18.40	0-1	0
		36	18	18.68	18.39	18.56	0-1	0
		36	39	18.54	18.51	18.60	0-1	0
		75	0	18.53	18.48	18.49	0-1	0
	16QAM	1	0	18.59	18.78	18.86	0-1	0
		1	36	18.77	18.70	18.82	0-1	0
		1	74	18.74	18.72	18.76	0-1	0
		36	0	18.55	18.37	18.48	0-2	0
		36	18	18.61	18.38	18.58	0-2	0
		36	39	18.55	18.51	18.63	0-2	0
		75	0	18.53	18.43	18.50	0-2	0
	64QAM	1	0	18.57	18.61	18.74	0-2	0
		1	36	18.75	18.64	18.78	0-2	0
		1	74	18.60	18.64	18.70	0-2	0
		36	0	18.61	18.41	18.45	0-3	0
		36	18	18.68	18.45	18.63	0-3	0
		36	39	18.52	18.54	18.62	0-3	0
		75	0	18.55	18.46	18.51	0-3	0
	256QAM	1	0	18.48	18.15	18.53	0-5	0
		1	36	18.77	18.52	18.69	0-5	0
		1	74	18.59	18.53	18.66	0-5	0
		36	0	18.56	18.27	18.49	0-5	0
		36	18	18.73	18.39	18.54	0-5	0
		36	39	18.50	18.49	18.63	0-5	0
		75	0	18.51	18.51	18.45	0-5	0

LTE Band 25_ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 MHz	26365 Ch. 1882.5 MHz	26590 Ch. 1905 MHz		
20 MHz	QPSK	1	0	18.54	18.45	18.37	0	0
		1	49	18.46	18.37	18.45	0	0
		1	99	18.40	18.46	18.53	0	0
		50	0	18.64	18.47	18.52	0-1	0
		50	25	18.60	18.51	18.60	0-1	0
		50	49	18.54	18.49	18.62	0-1	0
		100	0	18.39	18.49	18.39	0-1	0
	16QAM	1	0	18.82	18.79	18.76	0-1	0
		1	49	18.77	18.75	18.80	0-1	0
		1	99	18.93	18.93	18.83	0-1	0
		50	0	18.65	18.44	18.53	0-2	0
		50	25	18.61	18.53	18.61	0-2	0
		50	49	18.56	18.48	18.56	0-2	0
		100	0	18.45	18.47	18.47	0-2	0
	64QAM	1	0	18.79	18.67	18.59	0-2	0
		1	49	18.83	18.63	18.75	0-2	0
		1	99	18.66	18.79	18.74	0-2	0
		50	0	18.63	18.49	18.56	0-3	0
		50	25	18.62	18.53	18.62	0-3	0
		50	49	18.60	18.58	18.63	0-3	0
		100	0	18.50	18.42	18.49	0-3	0
	256QAM	1	0	18.26	18.16	18.21	0-5	0
		1	49	18.72	18.56	18.66	0-5	0
		1	99	18.30	18.42	18.39	0-5	0
		50	0	18.53	18.30	18.36	0-5	0
		50	25	18.69	18.51	18.66	0-5	0
		50	49	18.50	18.46	18.50	0-5	0
		100	0	18.47	18.42	18.50	0-5	0

[LTE Band 30 Conducted Power, DSI = 3]

LTE Band 30 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				27710 Ch. 2310 MHz		
5 MHz	QPSK	1	0	17.90	0	0
		1	12	18.04	0	0
		1	24	17.83	0	0
		12	0	18.00	0-1	0
		12	6	18.04	0-1	0
		12	11	17.94	0-1	0
		25	0	17.89	0-1	0
	16QAM	1	0	18.25	0-1	0
		1	12	18.39	0-1	0
		1	24	18.40	0-1	0
		12	0	17.95	0-2	0
		12	6	18.08	0-2	0
		12	11	17.98	0-2	0
		25	0	17.98	0-2	0
	64QAM	1	0	18.08	0-2	0
		1	12	18.14	0-2	0
		1	24	18.03	0-2	0
		12	0	18.03	0-3	0
		12	6	18.09	0-3	0
		12	11	17.99	0-3	0
		25	0	17.97	0-3	0
	256QAM	1	0	17.13	0-5	1.5
		1	12	17.37	0-5	1.5
		1	24	17.18	0-5	1.5
		12	0	17.26	0-5	1.5
		12	6	17.30	0-5	1.5
		12	11	17.17	0-5	1.5
		25	0	17.20	0-5	1.5

LTE Band 30 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				27710 Ch. 2310 MHz		
10 MHz	QPSK	1	0	17.97	0	0
		1	24	17.81	0	0
		1	49	18.00	0	0
		25	0	17.93	0-1	0
		25	12	18.02	0-1	0
		25	24	17.92	0-1	0
		50	0	17.98	0-1	0
	16QAM	1	0	18.28	0-1	0
		1	24	18.44	0-1	0
		1	49	18.32	0-1	0
		25	0	18.01	0-2	0
		25	12	17.97	0-2	0
		25	24	17.83	0-2	0
		50	0	17.95	0-2	0
	64QAM	1	0	18.23	0-2	0
		1	24	18.03	0-2	0
		1	49	18.10	0-2	0
		25	0	17.97	0-3	0
		25	12	18.06	0-3	0
		25	24	17.90	0-3	0
		50	0	18.07	0-3	0
	256QAM	1	0	17.09	0-5	1.5
		1	24	17.45	0-5	1.5
		1	49	16.98	0-5	1.5
		25	0	17.24	0-5	1.5
		25	12	17.15	0-5	1.5
		25	24	17.17	0-5	1.5
		50	0	17.21	0-5	1.5

[LTE TDD Band 38 Conducted Power, DSI = 3]

LTE Band 38_5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37775 Ch. 2572.5 MHz	38000 Ch. 2595 MHz	38225 Ch. 2617.5 MHz		
5 MHz	QPSK	1	0	18.68	18.73	18.77	0	0
		1	12	18.71	18.83	18.82	0	0
		1	24	18.65	18.84	18.80	0	0
		12	0	18.83	18.84	18.92	0-1	0
		12	6	18.86	18.55	18.99	0-1	0
		12	11	18.83	18.92	18.91	0-1	0
		25	0	18.83	18.93	18.93	0-1	0
	16QAM	1	0	18.90	18.95	18.99	0-1	0
		1	12	18.88	18.96	18.96	0-1	0
		1	24	18.85	18.96	18.95	0-1	0
		12	0	18.77	18.80	18.89	0-2	0
		12	6	18.86	18.92	18.93	0-2	0
		12	11	18.81	18.85	18.88	0-2	0
		25	0	18.90	19.01	19.01	0-2	0
	64QAM	1	0	18.57	18.53	18.54	0-2	0
		1	12	18.56	18.66	18.62	0-2	0
		1	24	18.51	18.62	18.59	0-2	0
		12	0	18.84	18.82	18.89	0-3	0
		12	6	18.87	18.97	18.95	0-3	0
		12	11	18.86	18.93	18.94	0-3	0
		25	0	18.85	18.99	18.94	0-3	0
	256QAM	1	0	18.61	18.66	18.73	0-5	0.5
		1	12	18.75	18.85	18.85	0-5	0.5
		1	24	18.63	18.72	18.70	0-5	0.5
		12	0	18.94	18.97	19.03	0-5	0.5
		12	6	19.06	19.11	19.10	0-5	0.5
		12	11	18.98	19.07	19.07	0-5	0.5
		25	0	18.89	18.99	18.97	0-5	0.5

LTE Band 38 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37800 Ch. 2575 MHz	38000 Ch. 2595 MHz	38200 Ch. 2615 MHz		
10 MHz	QPSK	1	0	18.52	18.87	18.88	0	0
		1	24	18.75	18.84	18.85	0	0
		1	49	18.51	18.85	18.85	0	0
		25	0	18.81	18.81	18.82	0-1	0
		25	12	18.93	18.98	18.90	0-1	0
		25	24	18.80	18.91	18.91	0-1	0
		50	0	18.79	18.89	18.85	0-1	0
	16QAM	1	0	18.71	19.04	19.06	0-1	0
		1	24	18.96	19.00	19.07	0-1	0
		1	49	18.67	19.06	19.06	0-1	0
		25	0	18.81	18.86	18.86	0-2	0
		25	12	18.96	19.00	18.96	0-2	0
		25	24	18.84	18.94	18.95	0-2	0
		50	0	18.86	18.94	18.88	0-2	0
	64QAM	1	0	18.37	18.61	18.66	0-2	0
		1	24	18.60	18.74	18.62	0-2	0
		1	49	18.28	18.72	18.61	0-2	0
		25	0	18.84	18.87	18.86	0-3	0
		25	12	18.93	19.07	18.96	0-3	0
		25	24	18.81	18.96	18.93	0-3	0
		50	0	18.90	19.00	18.94	0-3	0
	256QAM	1	0	18.48	18.44	18.43	0-5	0.5
		1	24	18.70	18.80	18.84	0-5	0.5
		1	49	18.49	18.58	18.52	0-5	0.5
		25	0	18.83	18.91	18.87	0-5	0.5
		25	12	18.95	19.07	18.98	0-5	0.5
		25	24	18.88	19.00	18.98	0-5	0.5
		50	0	18.94	19.01	18.93	0-5	0.5

LTE Band 38 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37825 Ch. 2577.5 MHz	38000 Ch. 2595 MHz	38175 Ch. 2612.5 MHz		
15 MHz	QPSK	1	0	18.77	18.84	18.84	0	0
		1	36	18.77	18.85	18.88	0	0
		1	74	18.75	18.87	18.84	0	0
		36	0	18.90	18.87	18.84	0-1	0
		36	18	18.93	18.92	18.90	0-1	0
		36	39	18.84	18.90	18.90	0-1	0
		75	0	18.83	18.93	18.85	0-1	0
	16QAM	1	0	19.02	19.07	19.04	0-1	0
		1	36	18.89	18.98	19.01	0-1	0
		1	74	18.91	19.03	19.05	0-1	0
		36	0	18.84	18.81	18.82	0-2	0
		36	18	18.86	18.87	18.90	0-2	0
		36	39	18.81	18.87	18.90	0-2	0
		75	0	18.87	18.96	18.86	0-2	0
	64QAM	1	0	18.61	18.61	18.64	0-2	0
		1	36	18.57	18.68	18.68	0-2	0
		1	74	18.55	18.71	18.69	0-2	0
		36	0	18.91	18.89	18.91	0-3	0
		36	18	18.97	18.97	18.97	0-3	0
		36	39	18.86	18.98	18.97	0-3	0
		75	0	18.91	19.02	18.92	0-3	0
	256QAM	1	0	18.56	18.60	18.62	0-5	0.5
		1	36	18.76	18.85	18.85	0-5	0.5
		1	74	18.57	18.64	18.60	0-5	0.5
		36	0	18.93	18.88	18.90	0-5	0.5
		36	18	18.97	19.00	18.98	0-5	0.5
		36	39	18.88	18.99	18.97	0-5	0.5
		75	0	18.90	18.97	18.88	0-5	0.5

LTE Band 38 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 2580 MHz	38000 Ch. 2595 MHz	38150 2610 MHz		
20 MHz	QPSK	1	0	18.83	18.86	18.86	0	0
		1	49	18.73	18.83	18.82	0	0
		1	99	18.73	18.83	18.82	0	0
		50	0	18.75	18.79	18.78	0-1	0
		50	25	18.93	18.97	18.89	0-1	0
		50	49	18.81	18.88	18.89	0-1	0
		100	0	18.80	18.92	18.80	0-1	0
	16QAM	1	0	19.07	19.00	19.02	0-1	0
		1	49	18.94	19.00	19.02	0-1	0
		1	99	18.92	19.01	19.05	0-1	0
		50	0	18.80	18.83	18.86	0-2	0
		50	25	18.94	19.02	18.94	0-2	0
		50	49	18.82	18.90	18.93	0-2	0
		100	0	18.87	18.95	18.83	0-2	0
	64QAM	1	0	18.68	18.67	18.65	0-2	0
		1	49	18.58	18.68	18.67	0-2	0
		1	99	18.59	18.73	18.68	0-2	0
		50	0	18.85	18.89	18.91	0-3	0
		50	25	19.01	19.08	19.01	0-3	0
		50	49	18.90	18.99	18.98	0-3	0
		100	0	18.87	18.94	18.87	0-3	0
	256QAM	1	0	18.41	18.49	18.46	0-5	0.5
		1	49	18.78	18.85	18.85	0-5	0.5
		1	99	18.42	18.51	18.50	0-5	0.5
		50	0	18.84	18.92	18.93	0-5	0.5
		50	25	19.01	19.11	19.02	0-5	0.5
		50	49	18.89	19.00	18.98	0-5	0.5
		100	0	18.88	18.96	18.84	0-5	0.5

[LTE Band 41 Conducted Power, DSI = 3] - Power Class 3

LTE Band 41 _ 5 MHz Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
5 MHz	QPSK	1	0	20.95	20.62	20.73	20.62	20.58	0	0
		1	12	20.89	20.61	20.72	20.58	20.61	0	0
		1	24	20.87	20.56	20.69	20.56	20.56	0	0
		12	0	21.05	20.74	20.75	20.65	20.63	0-1	0
		12	6	21.09	20.78	20.82	20.77	20.70	0-1	0
		12	11	21.07	20.73	20.80	20.70	20.67	0-1	0
		25	0	21.05	20.73	20.75	20.63	20.63	0-1	0
	16QAM	1	0	21.17	20.81	20.95	20.80	20.70	0-1	0
		1	12	21.07	20.79	20.83	20.75	20.76	0-1	0
		1	24	21.09	20.72	20.89	20.75	20.75	0-1	0
		12	0	21.05	20.70	20.73	20.62	20.60	0-2	0
		12	6	21.10	20.78	20.79	20.79	20.63	0-2	0
		12	11	21.03	20.70	20.83	20.69	20.68	0-2	0
		25	0	21.13	20.77	20.78	20.70	20.70	0-2	0
	64QAM	1	0	20.74	20.37	20.48	20.40	20.36	0-2	0
		1	12	20.67	20.41	20.53	20.46	20.39	0-2	0
		1	24	20.64	20.39	20.47	20.42	20.34	0-2	0
		12	0	21.06	20.76	20.83	20.72	20.67	0-3	0
		12	6	21.09	20.84	20.81	20.84	20.73	0-3	0
		12	11	21.08	20.71	20.89	20.74	20.79	0-3	0
		25	0	21.06	20.75	20.86	20.77	20.69	0-3	0
	256QAM	1	0	19.36	18.96	19.04	18.94	18.92	0-5	2
		1	12	19.39	18.97	19.18	19.09	18.99	0-5	2
		1	24	19.18	18.94	19.03	18.93	18.92	0-5	2
		12	0	19.65	19.33	19.33	19.23	19.23	0-5	2
		12	6	19.67	19.34	19.37	19.33	19.24	0-5	2
		12	11	19.61	19.30	19.43	19.33	19.28	0-5	2
		25	0	19.57	19.25	19.31	19.18	19.13	0-5	2

LTE Band 41 _ 10 MHz Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	21.00	20.49	20.58	20.49	20.36	0	0
		1	24	20.96	20.59	20.76	20.65	20.62	0	0
		1	49	20.94	20.39	20.49	20.37	20.38	0	0
		25	0	21.11	20.73	20.76	20.63	20.61	0-1	0
		25	12	21.10	20.81	20.83	20.72	20.70	0-1	0
		25	24	20.98	20.68	20.77	20.66	20.66	0-1	0
		50	0	21.03	20.71	20.72	20.63	20.59	0-1	0
	16QAM	1	0	21.20	20.57	20.61	20.57	20.54	0-1	0
		1	24	21.08	20.78	20.87	20.78	20.72	0-1	0
		1	49	21.11	20.49	20.62	20.53	20.56	0-1	0
		25	0	21.12	20.78	20.78	20.70	20.67	0-2	0
		25	12	21.15	20.86	20.86	20.76	20.72	0-2	0
		25	24	21.03	20.72	20.84	20.73	20.68	0-2	0
		50	0	21.09	20.77	20.79	20.72	20.68	0-2	0
	64QAM	1	0	20.81	20.22	20.30	20.25	20.21	0-2	0
		1	24	20.72	20.44	20.58	20.47	20.44	0-2	0
		1	49	20.65	20.15	20.27	20.19	20.14	0-2	0
		25	0	21.13	20.79	20.84	20.75	20.71	0-3	0
		25	12	21.17	20.84	20.91	20.77	20.80	0-3	0
		25	24	21.01	20.74	20.88	20.78	20.76	0-3	0
		50	0	21.13	20.83	20.90	20.78	20.74	0-3	0
	256QAM	1	0	19.13	18.83	18.89	18.82	18.70	0-5	2
		1	24	19.37	19.10	19.15	19.09	19.02	0-5	2
		1	49	19.03	18.82	18.96	18.72	18.88	0-5	2
		25	0	19.54	19.22	19.31	19.19	19.10	0-5	2
		25	12	19.62	19.32	19.31	19.25	19.21	0-5	2
		25	24	19.47	19.16	19.28	19.22	19.16	0-5	2
		50	0	19.55	19.27	19.24	19.19	19.16	0-5	2

LTE Band 41 _ 15 MHz Bandwidth- Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	20.96	20.47	20.54	20.56	20.28	0	0
		1	36	20.94	20.56	20.74	20.55	20.55	0	0
		1	74	20.87	20.30	20.55	20.28	20.56	0	0
		36	0	20.98	20.58	20.70	20.68	20.59	0-1	0
		36	18	21.08	20.71	20.76	20.64	20.63	0-1	0
		36	39	20.93	20.56	20.75	20.59	20.74	0-1	0
		75	0	21.02	20.63	20.71	20.61	20.61	0-1	0
	16QAM	1	0	21.07	20.58	20.57	20.68	20.47	0-1	0
		1	36	20.98	20.66	20.74	20.72	20.66	0-1	0
		1	74	20.94	20.43	20.62	20.43	20.51	0-1	0
		36	0	21.01	20.60	20.72	20.66	20.55	0-2	0
		36	18	21.06	20.70	20.73	20.69	20.64	0-2	0
		36	39	20.93	20.58	20.80	20.63	20.73	0-2	0
		75	0	21.06	20.70	20.76	20.68	20.65	0-2	0
	64QAM	1	0	20.81	20.27	20.36	20.34	20.10	0-2	0
		1	36	20.76	20.41	20.54	20.46	20.44	0-2	0
		1	74	20.61	20.11	20.38	20.11	20.36	0-2	0
		36	0	21.09	20.69	20.80	20.77	20.63	0-3	0
		36	18	21.15	20.80	20.83	20.76	20.72	0-3	0
		36	39	21.00	20.66	20.88	20.67	20.79	0-3	0
		75	0	21.11	20.75	20.83	20.72	20.70	0-3	0
	256QAM	1	0	19.25	18.90	18.99	18.95	18.73	0-5	2
		1	36	19.36	19.05	19.22	19.07	19.04	0-5	2
		1	74	19.14	18.75	18.98	18.73	19.05	0-5	2
		36	0	19.50	19.11	19.24	19.18	19.02	0-5	2
		36	18	19.58	19.23	19.31	19.16	19.17	0-5	2
		36	39	19.48	19.10	19.34	19.10	19.21	0-5	2
		75	0	19.51	19.11	19.24	19.12	19.12	0-5	2

LTE Band 41 _ 20 MHz Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
20 MHz	QPSK	1	0	20.99	20.65	20.45	20.52	20.16	0	0
		1	49	20.89	20.56	20.71	20.61	20.60	0	0
		1	99	21.01	20.45	20.37	20.07	20.50	0	0
		50	0	20.92	20.54	20.65	20.67	20.52	0-1	0
		50	25	21.03	20.69	20.74	20.66	20.63	0-1	0
		50	49	20.86	20.53	20.76	20.54	20.70	0-1	0
		100	0	20.97	20.60	20.67	20.54	20.57	0-1	0
	16QAM	1	0	21.09	20.87	20.41	20.51	20.21	0-1	0
		1	49	21.01	20.69	20.80	20.70	20.69	0-1	0
		1	99	20.96	20.64	20.40	20.12	20.39	0-1	0
		50	0	21.02	20.66	20.76	20.71	20.56	0-2	0
		50	25	21.13	20.77	20.85	20.73	20.71	0-2	0
		50	49	20.93	20.59	20.80	20.65	20.79	0-2	0
		100	0	21.05	20.68	20.79	20.66	20.67	0-2	0
	64QAM	1	0	20.79	20.54	20.19	20.22	20.04	0-2	0
		1	49	20.78	20.36	20.52	20.44	20.39	0-2	0
		1	99	20.60	20.35	20.21	20.13	20.22	0-2	0
		50	0	21.10	20.72	20.79	20.81	20.63	0-3	0
		50	25	21.18	20.84	20.90	20.78	20.80	0-3	0
		50	49	21.02	20.66	20.87	20.67	20.84	0-3	0
		100	0	21.10	20.69	20.76	20.67	20.69	0-3	0
	256QAM	1	0	19.14	18.79	18.86	18.86	18.56	0-5	2
		1	49	19.32	19.02	19.14	19.06	19.03	0-5	2
		1	99	18.96	18.55	18.82	18.57	19.03	0-5	2
		50	0	19.51	19.15	19.23	19.18	19.05	0-5	2
		50	25	19.62	19.23	19.33	19.22	19.20	0-5	2
		50	49	19.45	19.11	19.30	19.11	19.28	0-5	2
		100	0	19.50	19.11	19.20	19.09	19.08	0-5	2

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

[LTE Band 41 Conducted Power, DSI = 3] - Power Class 2

LTE Band 41 _ 5 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
5 MHz	QPSK	1	0	22.00	21.53	21.74	21.59	21.65	0	0
		1	12	21.96	21.53	21.73	21.65	21.66	0	0
		1	24	21.96	21.49	21.76	21.58	21.62	0	0
		12	0	22.08	21.65	21.74	21.60	21.67	0-1	0
		12	6	22.10	21.66	21.72	21.74	21.72	0-1	0
		12	11	22.05	21.63	21.73	21.67	21.75	0-1	0
		25	0	22.07	21.63	21.66	21.62	21.70	0-1	0
	16QAM	1	0	22.40	21.85	21.97	21.88	21.83	0-1	0
		1	12	22.44	21.79	21.94	21.84	21.89	0-1	0
		1	24	22.32	21.76	21.94	21.86	21.86	0-1	0
		12	0	22.05	21.71	21.71	21.65	21.72	0-2	0
		12	6	22.13	21.80	21.81	21.84	21.74	0-2	0
		12	11	22.04	21.70	21.80	21.79	21.78	0-2	0
		25	0	22.13	21.69	21.72	21.65	21.64	0-2	0
	64QAM	1	0	22.05	21.54	21.63	21.65	21.62	0-2	0
		1	12	22.09	21.68	21.70	21.66	21.68	0-2	0
		1	24	21.94	21.57	21.69	21.62	21.67	0-2	0
		12	0	21.91	21.72	21.76	21.76	21.73	0-3	0
		12	6	21.98	21.78	21.83	21.86	21.76	0-3	0
		12	11	21.97	21.71	21.83	21.78	21.80	0-3	0
		25	0	21.95	21.74	21.75	21.70	21.73	0-3	0
	256QAM	1	0	21.80	20.79	20.90	20.78	20.80	0-5	1
		1	12	21.77	20.82	20.94	20.91	20.95	0-5	1
		1	24	21.66	20.78	20.95	20.79	20.89	0-5	1
		12	0	21.89	20.97	20.98	21.00	20.96	0-5	1
		12	6	21.95	21.01	21.04	21.10	21.03	0-5	1
		12	11	21.92	20.96	21.05	21.05	21.07	0-5	1
		25	0	21.85	20.91	20.90	20.91	20.95	0-5	1

LTE Band 41 _ 10 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	22.07	21.43	21.50	21.47	21.48	0	0
		1	24	21.99	21.61	21.69	21.59	21.71	0	0
		1	49	21.93	21.27	21.48	21.34	21.57	0	0
		25	0	22.15	21.67	21.67	21.65	21.68	0-1	0
		25	12	22.13	21.73	21.74	21.69	21.76	0-1	0
		25	24	22.05	21.61	21.68	21.65	21.72	0-1	0
		50	0	22.06	21.64	21.65	21.59	21.67	0-1	0
	16QAM	1	0	22.41	21.66	21.77	21.79	21.73	0-1	0
		1	24	22.35	21.91	21.99	22.00	22.00	0-1	0
		1	49	22.32	21.59	21.73	21.67	21.71	0-1	0
		25	0	22.18	21.68	21.67	21.65	21.62	0-2	0
		25	12	22.16	21.75	21.78	21.72	21.74	0-2	0
		25	24	22.08	21.61	21.74	21.71	21.69	0-2	0
		50	0	22.11	21.66	21.72	21.65	21.67	0-2	0
	64QAM	1	0	22.07	21.38	21.43	21.46	21.45	0-2	0
		1	24	22.00	21.60	21.69	21.70	21.75	0-2	0
		1	49	21.91	21.37	21.46	21.44	21.47	0-2	0
		25	0	22.01	21.75	21.72	21.72	21.74	0-3	0
		25	12	22.04	21.81	21.84	21.79	21.82	0-3	0
		25	24	22.01	21.69	21.78	21.76	21.79	0-3	0
		50	0	22.02	21.65	21.68	21.64	21.68	0-3	0
	256QAM	1	0	21.55	20.59	20.65	20.65	20.63	0-5	1
		1	24	21.79	20.84	20.97	20.92	20.96	0-5	1
		1	49	21.42	20.50	20.71	20.61	20.65	0-5	1
		25	0	21.87	20.94	20.96	20.92	20.94	0-5	1
		25	12	21.91	20.97	21.02	20.96	20.98	0-5	1
		25	24	21.74	20.87	21.00	20.96	20.99	0-5	1
		50	0	21.88	20.93	20.93	20.93	20.89	0-5	1

LTE Band 41 _ 15 MHz Bandwidth- Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	22.03	21.46	21.50	21.56	21.36	0	0
		1	36	21.99	21.58	21.73	21.63	21.69	0	0
		1	74	21.89	21.26	21.51	21.34	21.65	0	0
		36	0	22.03	21.52	21.62	21.66	21.55	0-1	0
		36	18	22.12	21.62	21.70	21.63	21.65	0-1	0
		36	39	21.98	21.51	21.72	21.58	21.71	0-1	0
		75	0	22.06	21.54	21.62	21.59	21.63	0-1	0
	16QAM	1	0	22.32	21.72	21.80	21.85	21.64	0-1	0
		1	36	22.20	21.76	21.90	21.90	21.88	0-1	0
		1	74	22.17	21.45	21.78	21.58	21.90	0-1	0
		36	0	22.00	21.51	21.64	21.68	21.55	0-2	0
		36	18	22.05	21.60	21.69	21.63	21.67	0-2	0
		36	39	21.92	21.45	21.72	21.59	21.73	0-2	0
		75	0	22.04	21.53	21.69	21.62	21.67	0-2	0
	64QAM	1	0	22.08	21.38	21.43	21.50	21.38	0-2	0
		1	36	22.00	21.52	21.66	21.63	21.63	0-2	0
		1	74	21.89	21.25	21.48	21.36	21.53	0-2	0
		36	0	22.06	21.53	21.63	21.68	21.60	0-3	0
		36	18	22.14	21.61	21.67	21.68	21.66	0-3	0
		36	39	21.98	21.51	21.72	21.61	21.76	0-3	0
		75	0	22.06	21.58	21.68	21.67	21.66	0-3	0
	256QAM	1	0	21.66	20.63	20.72	20.82	20.60	0-5	1
		1	36	21.73	20.80	20.96	20.91	20.90	0-5	1
		1	74	21.54	20.53	20.79	20.62	20.89	0-5	1
		36	0	21.79	20.78	20.83	20.89	20.83	0-5	1
		36	18	21.84	20.85	20.94	20.94	20.91	0-5	1
		36	39	21.72	20.75	20.97	20.82	21.01	0-5	1
		75	0	21.78	20.80	20.88	20.87	20.90	0-5	1

LTE Band 41 _ 20 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
20 MHz	QPSK	1	0	22.07	21.67	21.38	21.50	21.20	0	0
		1	49	22.03	21.60	21.74	21.66	21.69	0	0
		1	99	21.88	21.45	21.35	21.10	21.56	0	0
		50	0	22.03	21.51	21.59	21.65	21.49	0-1	0
		50	25	22.10	21.62	21.69	21.64	21.66	0-1	0
		50	49	21.92	21.47	21.67	21.55	21.70	0-1	0
		100	0	22.02	21.54	21.61	21.59	21.59	0-1	0
	16QAM	1	0	22.30	21.94	21.59	21.77	21.49	0-1	0
		1	49	22.20	21.79	21.97	21.90	21.92	0-1	0
		1	99	22.15	21.65	21.62	21.38	21.74	0-1	0
		50	0	22.04	21.58	21.67	21.68	21.59	0-2	0
		50	25	22.10	21.64	21.74	21.71	21.71	0-2	0
		50	49	21.92	21.48	21.76	21.62	21.79	0-2	0
		100	0	22.02	21.56	21.68	21.62	21.66	0-2	0
	64QAM	1	0	22.09	21.63	21.29	21.39	21.20	0-2	0
		1	49	22.02	21.50	21.62	21.64	21.62	0-2	0
		1	99	21.87	21.46	21.33	21.12	21.48	0-2	0
		50	0	22.09	21.57	21.64	21.70	21.60	0-3	0
		50	25	22.20	21.68	21.72	21.68	21.70	0-3	0
		50	49	21.99	21.49	21.73	21.58	21.79	0-3	0
		100	0	22.06	21.56	21.63	21.58	21.63	0-3	0
	256QAM	1	0	21.56	20.55	20.63	20.75	20.45	0-5	1
		1	49	21.73	20.77	20.94	20.92	20.97	0-5	1
		1	99	21.37	20.28	20.65	20.37	20.88	0-5	1
		50	0	21.81	20.78	20.90	20.96	20.84	0-5	1
		50	25	21.91	20.91	20.99	20.98	20.97	0-5	1
		50	49	21.71	20.74	20.97	20.86	21.04	0-5	1
		100	0	21.78	20.73	20.84	20.82	20.82	0-5	1

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

[LTE Band 48 Conducted Power, DSI = 3]

LTE Band 48 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55265 Ch. 3552.5 MHz	55748 Ch. 3600.8 MHz	6232 Ch. 3649.2 MHz	56715 Ch. 3697.5 MHz		
5 MHz	QPSK	1	0	19.18	19.08	19.11	19.03	0	0
		1	12	19.26	19.23	19.28	19.19	0	0
		1	24	19.29	19.21	19.23	19.14	0	0
		12	0	19.36	19.30	19.30	19.20	0-1	0
		12	6	19.48	19.40	19.44	19.36	0-1	0
		12	11	19.42	19.37	19.43	19.33	0-1	0
		25	0	19.37	19.32	19.34	19.25	0-1	0
	16QAM	1	0	19.30	19.25	19.25	19.11	0-1	0
		1	12	19.40	19.32	19.37	19.11	0-1	0
		1	24	19.39	19.32	19.38	19.28	0-1	0
		12	0	19.25	19.18	19.21	19.15	0-2	0
		12	6	19.39	19.35	19.36	19.31	0-2	0
		12	11	19.31	19.31	19.32	19.31	0-2	0
		25	0	19.38	19.37	19.32	19.25	0-2	0
	64QAM	1	0	18.99	18.87	18.96	18.89	0-2	0
		1	12	19.06	19.04	19.15	19.08	0-2	0
		1	24	19.06	19.00	18.97	19.02	0-2	0
		12	0	19.27	19.24	19.21	19.21	0-3	0
		12	6	19.41	19.39	19.38	19.33	0-3	0
		12	11	19.37	19.35	19.30	19.33	0-3	0
		25	0	19.35	19.32	19.33	19.24	0-3	0
	256QAM	1	0	19.10	18.95	18.98	18.89	0-5	1
		1	12	19.31	19.16	19.17	19.11	0-5	1
		1	24	19.20	19.03	19.02	19.00	0-5	1
		12	0	19.45	19.33	19.35	19.20	0-5	1
		12	6	19.54	19.43	19.41	19.35	0-5	1
		12	11	19.54	19.39	19.43	19.37	0-5	1
		25	0	19.41	19.31	19.32	19.20	0-5	1

LTE Band 48 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55290Ch. 3555 MHz	55757 Ch. 3601.7 MHz	56223 Ch. 3648.3 MHz	56690 Ch. 3695 MHz		
10 MHz	QPSK	1	0	18.96	18.88	18.90	18.79	0	0
		1	24	19.28	19.26	19.26	19.14	0	0
		1	49	19.17	19.12	19.12	19.01	0	0
		25	0	19.30	19.20	19.24	19.13	0-1	0
		25	12	19.48	19.40	19.41	19.30	0-1	0
		25	24	19.44	19.33	19.40	19.27	0-1	0
		50	0	19.36	19.30	19.30	19.19	0-1	0
	16QAM	1	0	19.13	19.13	19.16	18.96	0-1	0
		1	24	19.51	19.45	19.46	19.39	0-1	0
		1	49	19.33	19.24	19.26	19.22	0-1	0
		25	0	19.28	19.18	19.30	19.16	0-2	0
		25	12	19.45	19.41	19.44	19.34	0-2	0
		25	24	19.40	19.33	19.42	19.25	0-2	0
		50	0	19.34	19.32	19.37	19.24	0-2	0
	64QAM	1	0	18.81	18.73	18.80	18.81	0-2	0
		1	24	19.14	19.10	19.14	19.16	0-2	0
		1	49	18.92	18.90	18.89	19.04	0-2	0
		25	0	19.31	19.21	19.28	19.10	0-3	0
		25	12	19.43	19.39	19.47	19.28	0-3	0
		25	24	19.39	19.36	19.44	19.25	0-3	0
		50	0	19.43	19.33	19.42	19.19	0-3	0
	256QAM	1	0	18.95	18.73	18.77	18.78	0-5	1
		1	24	19.28	19.11	19.15	18.94	0-5	1
		1	49	19.11	18.96	18.95	18.85	0-5	1
		25	0	19.37	19.15	19.23	19.04	0-5	1
		25	12	19.54	19.36	19.40	19.17	0-5	1
		25	24	19.45	19.25	19.33	19.14	0-5	1
		50	0	19.46	19.29	19.32	19.10	0-5	1

LTE Band 48 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55315Ch. 3557.5 MHz	55765 Ch. 3602.5 MHz	56215 Ch. 3647.5 MHz	56665 Ch. 3692.5 MHz		
15 MHz	QPSK	1	0	19.30	19.12	19.05	18.99	0	0
		1	36	19.24	19.17	19.28	19.09	0	0
		1	74	19.17	18.91	19.11	19.03	0	0
		36	0	19.36	19.26	19.33	19.21	0-1	0
		36	18	19.43	19.35	19.43	19.29	0-1	0
		36	39	19.36	19.22	19.37	19.23	0-1	0
		75	0	19.34	19.30	19.32	19.23	0-1	0
	16QAM	1	0	19.19	19.33	19.21	19.13	0-1	0
		1	36	19.46	19.34	19.44	19.27	0-1	0
		1	74	19.29	19.09	19.25	19.19	0-1	0
		36	0	19.32	19.21	19.25	19.17	0-2	0
		36	18	19.40	19.28	19.35	19.25	0-2	0
		36	39	19.31	19.19	19.34	19.21	0-2	0
		75	0	19.34	19.30	19.34	19.23	0-2	0
	64QAM	1	0	18.79	18.93	18.87	18.93	0-2	0
		1	36	19.08	18.98	19.10	19.05	0-2	0
		1	74	18.95	18.76	18.83	18.94	0-2	0
		36	0	19.39	19.34	19.33	19.18	0-3	0
		36	18	19.44	19.40	19.44	19.29	0-3	0
		36	39	19.34	19.26	19.37	19.25	0-3	0
		75	0	19.40	19.32	19.38	19.24	0-3	0
	256QAM	1	0	18.87	19.00	18.90	18.85	0-5	1
		1	36	19.19	19.05	19.12	19.02	0-5	1
		1	74	19.04	18.86	18.91	18.89	0-5	1
		36	0	19.32	19.22	19.24	19.10	0-5	1
		36	18	19.38	19.33	19.38	19.22	0-5	1
		36	39	19.32	19.22	19.37	19.21	0-5	1
		75	0	19.31	19.22	19.27	19.19	0-5	1

LTE Band 48 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55340Ch. 3560.0 MHz	55773 Ch. 3603.3 MHz	56207 Ch. 3646.7 MHz	56640 Ch. 3690.0 MHz		
20 MHz	QPSK	1	0	18.99	19.03	18.92	18.84	0	0
		1	49	18.99	19.10	19.28	19.16	0	0
		1	99	19.30	18.73	18.95	18.96	0	0
		50	0	19.26	19.24	19.30	19.19	0-1	0
		50	25	19.42	19.33	19.44	19.35	0-1	0
		50	49	19.35	19.19	19.38	19.26	0-1	0
		100	0	19.34	19.23	19.35	19.21	0-1	0
	16QAM	1	0	19.13	19.24	19.04	19.01	0-1	0
		1	49	19.43	19.30	19.43	19.33	0-1	0
		1	99	19.18	18.90	19.12	19.09	0-1	0
		50	0	19.26	19.27	19.28	19.22	0-2	0
		50	25	19.48	19.36	19.43	19.32	0-2	0
		50	49	19.39	19.23	19.36	19.27	0-2	0
		100	0	19.39	19.28	19.32	19.25	0-2	0
	64QAM	1	0	18.74	18.83	18.72	18.79	0-2	0
		1	49	19.10	18.98	19.09	19.08	0-2	0
		1	99	18.83	18.57	18.70	18.83	0-2	0
		50	0	19.33	19.33	19.32	19.15	0-3	0
		50	25	19.53	19.43	19.43	19.24	0-3	0
		50	49	19.41	19.30	19.38	19.21	0-3	0
		100	0	19.38	19.29	19.33	19.26	0-3	0
	256QAM	1	0	18.83	18.91	18.79	18.75	0-5	1
		1	49	19.21	19.03	19.12	18.92	0-5	1
		1	99	18.91	18.67	18.77	18.70	0-5	1
		50	0	19.24	19.24	19.24	19.11	0-5	1
		50	25	19.46	19.35	19.42	19.19	0-5	1
		50	49	19.32	19.20	19.30	19.11	0-5	1
		100	0	19.26	19.19	19.24	19.04	0-5	1

[LTE Band 66 Conducted Power, DSI = 3]

LTE Band 66 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979Ch. 1710.7 MHz	132322 Ch. 1745 MHz	132665 Ch. 1779.3 MHz		
1.4 MHz	QPSK	1	0	19.31	18.90	19.29	0	0
		1	3	19.31	18.94	19.35	0	0
		1	5	19.29	18.77	19.24	0	0
		3	0	19.43	18.93	19.33	0	0
		3	1	19.42	19.01	19.35	0	0
		3	3	19.37	18.92	19.23	0	0
	16QAM	6	0	19.35	19.04	19.42	0-1	0
		1	0	19.59	19.39	19.74	0-1	0
		1	3	19.74	19.46	19.71	0-1	0
		1	5	19.79	19.29	19.56	0-1	0
		3	0	19.54	19.25	19.56	0-1	0
		3	1	19.60	19.21	19.49	0-1	0
	64QAM	3	3	19.47	19.11	19.48	0-1	0
		6	0	19.39	19.14	19.40	0-2	0
		1	0	19.52	19.16	19.47	0-2	0
		1	3	19.70	19.28	19.68	0-2	0
		1	5	19.48	19.14	19.44	0-2	0
		3	0	19.62	19.18	19.58	0-2	0
	256QAM	3	1	19.50	19.15	19.53	0-2	0
		3	3	19.48	19.08	19.51	0-2	0
		6	0	19.49	19.10	19.36	0-3	0
		1	0	18.87	18.63	18.74	0-5	1
		1	3	18.93	18.62	18.88	0-5	1
		1	5	18.84	18.54	18.80	0-5	1
		3	0	18.93	18.62	18.96	0-5	1
		3	1	18.92	18.65	18.93	0-5	1
		3	3	18.92	18.58	18.87	0-5	1
		6	0	18.80	18.52	18.73	0-5	1

LTE Band 66 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131987 Ch. 1711.5 MHz	132322 Ch. 1745 MHz	132657 Ch. 1778.5 MHz		
3 MHz	QPSK	1	0	19.39	19.04	19.45	0	0
		1	7	19.29	18.86	19.33	0	0
		1	14	19.40	18.89	19.29	0	0
		8	0	19.53	19.13	19.46	0-1	0
		8	3	19.49	19.10	19.49	0-1	0
		8	7	19.37	19.08	19.39	0-1	0
		15	0	19.47	19.06	19.46	0-1	0
	16QAM	1	0	19.66	19.29	19.70	0-1	0
		1	7	19.68	19.34	19.59	0-1	0
		1	14	19.83	19.40	19.73	0-1	0
		8	0	19.62	19.33	19.56	0-2	0
		8	3	19.60	19.18	19.56	0-2	0
		8	7	19.65	19.13	19.51	0-2	0
		15	0	19.60	19.16	19.46	0-2	0
	64QAM	1	0	19.74	19.35	19.57	0-2	0
		1	7	19.82	19.12	19.40	0-2	0
		1	14	19.59	19.16	19.53	0-2	0
		8	0	19.53	19.17	19.47	0-3	0
		8	3	19.60	19.19	19.18	0-3	0
		8	7	19.45	19.10	19.45	0-3	0
		15	0	19.60	19.15	19.51	0-3	0
	256QAM	1	0	19.13	18.77	18.91	0-5	1
		1	7	18.85	18.20	18.93	0-5	1
		1	14	18.92	18.70	18.90	0-5	1
		8	0	18.96	18.59	18.88	0-5	1
		8	3	18.95	18.57	18.87	0-5	1
		8	7	18.85	18.39	18.69	0-5	1
		15	0	18.82	18.63	18.88	0-5	1

LTE Band 66 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131997 Ch. 1712.5 MHz	132322Ch. 1745 MHz	132647 Ch. 1777.5 MHz		
5 MHz	QPSK	1	0	19.35	18.91	19.30	0	0
		1	12	19.35	19.05	19.39	0	0
		1	24	19.33	18.83	19.23	0	0
		12	0	19.48	19.10	19.47	0-1	0
		12	6	19.59	19.07	19.41	0-1	0
		12	11	19.47	19.12	19.40	0-1	0
		25	0	19.44	19.06	19.44	0-1	0
	16QAM	1	0	19.80	19.38	19.67	0-1	0
		1	12	19.75	19.34	19.65	0-1	0
		1	24	19.81	19.40	19.73	0-1	0
		12	0	19.62	19.19	19.51	0-2	0
		12	6	19.55	19.16	19.55	0-2	0
		12	11	19.54	19.08	19.42	0-2	0
		25	0	19.44	19.09	19.44	0-2	0
	64QAM	1	0	19.55	19.33	19.61	0-2	0
		1	12	19.57	19.33	19.43	0-2	0
		1	24	19.52	19.17	19.52	0-2	0
		12	0	19.53	19.16	19.52	0-3	0
		12	6	19.60	19.19	19.51	0-3	0
		12	11	19.46	19.06	19.36	0-3	0
		25	0	19.42	19.08	19.40	0-3	0
	256QAM	1	0	19.17	18.76	19.03	0-5	1
		1	12	19.01	18.57	18.95	0-5	1
		1	24	18.81	18.49	18.81	0-5	1
		12	0	18.93	18.54	18.92	0-5	1
		12	6	18.96	18.61	18.87	0-5	1
		12	11	18.80	18.55	18.82	0-5	1
		25	0	18.85	18.54	18.86	0-5	1

LTE Band 66 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132022 Ch. 1715 MHz	132322 Ch. 1745 MHz	132622 Ch. 1775 MHz		
10 MHz	QPSK	1	0	18.91	18.78	18.99	0	0
		1	24	19.38	19.01	19.35	0	0
		1	49	19.32	18.84	19.22	0	0
		25	0	19.47	19.00	19.40	0-1	0
		25	12	19.53	19.14	19.41	0-1	0
		25	24	19.41	19.06	19.40	0-1	0
		50	0	19.47	19.08	19.40	0-1	0
	16QAM	1	0	19.41	19.31	19.47	0-1	0
		1	24	19.77	19.45	19.85	0-1	0
		1	49	19.49	19.25	19.56	0-1	0
		25	0	19.44	19.04	19.34	0-2	0
		25	12	19.52	19.18	19.46	0-2	0
		25	24	19.50	19.10	19.36	0-2	0
		50	0	19.43	19.10	19.28	0-2	0
	64QAM	1	0	19.43	19.01	19.26	0-2	0
		1	24	19.63	19.25	19.65	0-2	0
		1	49	19.22	19.04	19.35	0-2	0
		25	0	19.45	19.09	19.41	0-3	0
		25	12	19.54	19.18	19.50	0-3	0
		25	24	19.49	19.15	19.47	0-3	0
		50	0	19.43	19.14	19.38	0-3	0
	256QAM	1	0	18.84	18.51	18.51	0-5	1
		1	24	18.93	18.68	18.88	0-5	1
		1	49	18.62	18.48	18.69	0-5	1
		25	0	18.84	18.58	18.76	0-5	1
		25	12	18.94	18.63	18.90	0-5	1
		25	24	18.89	18.55	18.77	0-5	1
		50	0	18.87	18.51	18.80	0-5	1

LTE Band 66 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132047 Ch. 1717.5 MHz	132322 Ch. 1745 MHz	132597 Ch. 1772.5 MHz		
15 MHz	QPSK	1	0	19.15	18.94	19.07	0	0
		1	36	19.36	18.93	19.31	0	0
		1	74	19.11	18.90	19.39	0	0
		36	0	19.45	19.09	19.34	0-1	0
		36	18	19.51	19.16	19.41	0-1	0
		36	39	19.30	19.06	19.42	0-1	0
		75	0	19.41	19.10	19.30	0-1	0
	16QAM	1	0	19.59	19.16	19.66	0-1	0
		1	36	19.56	19.31	19.58	0-1	0
		1	74	19.47	19.21	19.59	0-1	0
		36	0	19.49	19.17	19.38	0-2	0
		36	18	19.52	19.06	19.40	0-2	0
		36	39	19.34	19.10	19.48	0-2	0
		75	0	19.36	19.12	19.30	0-2	0
	64QAM	1	0	19.45	19.09	19.49	0-2	0
		1	36	19.72	19.15	19.37	0-2	0
		1	74	19.34	19.16	19.69	0-2	0
		36	0	19.55	19.16	19.47	0-3	0
		36	18	19.54	19.21	19.39	0-3	0
		36	39	19.43	19.09	19.46	0-3	0
		75	0	19.46	19.13	19.42	0-3	0
	256QAM	1	0	18.92	18.59	18.55	0-5	1
		1	36	18.90	18.62	18.89	0-5	1
		1	74	18.84	18.51	18.86	0-5	1
		36	0	18.90	18.65	18.74	0-5	1
		36	18	18.93	18.65	18.78	0-5	1
		36	39	18.73	18.62	18.79	0-5	1
		75	0	18.81	18.63	18.81	0-5	1

LTE Band 66 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 MHz	132322 Ch. 1745 MHz	132572 Ch. 1770 MHz		
20 MHz	QPSK	1	0	18.95	18.71	19.13	0	0
		1	49	19.28	18.94	19.39	0	0
		1	99	19.07	18.91	19.27	0	0
		50	0	19.40	19.06	19.26	0-1	0
		50	25	19.41	19.13	19.37	0-1	0
		50	49	19.34	19.07	19.37	0-1	0
		100	0	19.32	19.06	19.27	0-1	0
	16QAM	1	0	19.37	19.18	19.48	0-1	0
		1	49	19.67	19.29	19.79	0-1	0
		1	99	19.22	19.22	19.73	0-1	0
		50	0	19.42	19.09	19.31	0-2	0
		50	25	19.41	19.14	19.40	0-2	0
		50	49	19.30	19.07	19.36	0-2	0
		100	0	19.33	19.08	19.28	0-2	0
	64QAM	1	0	19.29	19.11	19.44	0-2	0
		1	49	19.58	19.22	19.47	0-2	0
		1	99	19.30	19.12	19.64	0-2	0
		50	0	19.45	19.10	19.30	0-3	0
		50	25	19.41	19.14	19.39	0-3	0
		50	49	19.30	19.14	19.30	0-3	0
		100	0	19.31	19.05	19.25	0-3	0
	256QAM	1	0	18.68	18.44	18.46	0-5	1
		1	49	18.84	18.66	18.81	0-5	1
		1	99	18.62	18.52	18.84	0-5	1
		50	0	18.81	18.51	18.69	0-5	1
		50	25	18.82	18.54	18.83	0-5	1
		50	49	18.72	18.48	18.77	0-5	1
		100	0	18.71	18.51	18.68	0-5	1

11.4.3 LTE Reduced Conducted Power(Grip Sensor on, Earjack)

DSI = 1, 4 PLimit Calculations - 4G Phablet Reduced SAR

[LTE Band 2 Conducted Power, DSI = 1, 4]

LTE Band 2 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 MHz	18900 Ch. 1880 MHz	19193 Ch. 1909.3 MHz		
1.4 MHz	QPSK	1	0	20.31	20.21	20.32	0	0
		1	3	20.40	20.36	20.31	0	0
		1	5	20.33	20.19	20.35	0	0
		3	0	20.35	20.18	20.35	0	0
		3	1	20.33	20.30	20.36	0	0
		3	3	20.28	20.26	20.37	0	0
		6	0	20.38	20.25	20.40	0-1	0
	16QAM	1	0	20.65	20.50	20.57	0-1	0
		1	3	20.70	20.53	20.77	0-1	0
		1	5	20.53	20.52	20.66	0-1	0
		3	0	20.50	20.46	20.58	0-1	0
		3	1	20.57	20.42	20.56	0-1	0
		3	3	20.42	20.31	20.44	0-1	0
		6	0	20.41	20.19	20.52	0-2	0
	64QAM	1	0	20.55	20.43	20.60	0-2	0
		1	3	20.63	20.50	20.62	0-2	0
		1	5	20.56	20.36	20.48	0-2	0
		3	0	20.47	20.39	20.51	0-2	0
		3	1	20.46	20.44	20.76	0-2	0
		3	3	20.49	20.34	20.43	0-2	0
		6	0	20.46	20.26	20.37	0-3	0
	256QAM	1	0	19.62	19.32	19.36	0-5	1
		1	3	19.58	19.24	19.52	0-5	1
		1	5	19.49	19.19	19.42	0-5	1
		3	0	19.56	19.25	19.55	0-5	1
		3	1	19.85	19.44	19.57	0-5	1
		3	3	19.35	19.27	19.53	0-5	1
		6	0	19.41	19.20	19.45	0-5	1

LTE Band 2 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 MHz	18900 Ch. 1880 MHz	19185 Ch. 1908.5 MHz		
3 MHz	QPSK	1	0	20.31	20.18	20.47	0	0
		1	7	20.25	20.25	20.24	0	0
		1	14	20.28	20.20	20.34	0	0
		8	0	20.48	20.39	20.42	0-1	0
		8	3	20.46	20.33	20.55	0-1	0
		8	7	20.45	20.23	20.42	0-1	0
		15	0	20.39	20.32	20.51	0-1	0
	16QAM	1	0	20.70	20.53	20.81	0-1	0
		1	7	20.67	20.60	20.95	0-1	0
		1	14	20.73	20.40	20.79	0-1	0
		8	0	20.55	20.45	20.62	0-2	0
		8	3	20.55	20.48	20.57	0-2	0
		8	7	20.54	20.44	20.63	0-2	0
		15	0	20.53	20.41	20.52	0-2	0
	64QAM	1	0	20.63	20.50	20.67	0-2	0
		1	7	20.59	20.36	20.78	0-2	0
		1	14	20.56	20.53	20.46	0-2	0
		8	0	20.54	20.50	20.58	0-3	0
		8	3	20.32	20.36	20.33	0-3	0
		8	7	20.51	20.28	20.57	0-3	0
		15	0	20.45	20.34	20.50	0-3	0
	256QAM	1	0	19.64	19.68	19.63	0-5	1
		1	7	19.63	19.40	19.91	0-5	1
		1	14	19.52	19.38	19.47	0-5	1
		8	0	19.64	19.26	19.49	0-5	1
		8	3	19.58	19.28	19.58	0-5	1
		8	7	19.49	19.23	19.39	0-5	1
		15	0	19.59	19.27	19.51	0-5	1

LTE Band 2 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 MHz	18900 Ch. 1880 MHz	19175 Ch. 1907.5 MHz		
5 MHz	QPSK	1	0	20.24	20.14	20.33	0	0
		1	12	20.41	20.24	20.58	0	0
		1	24	20.26	20.19	20.37	0	0
		12	0	20.43	20.34	20.50	0-1	0
		12	6	20.55	20.40	20.51	0-1	0
		12	11	20.45	20.30	20.52	0-1	0
		25	0	20.42	20.29	20.51	0-1	0
	16QAM	1	0	20.54	20.47	20.57	0-1	0
		1	12	20.75	20.64	20.78	0-1	0
		1	24	20.58	20.52	20.66	0-1	0
		12	0	20.60	20.42	20.58	0-2	0
		12	6	20.50	20.45	20.49	0-2	0
		12	11	20.47	20.36	20.56	0-2	0
		25	0	20.45	20.36	20.40	0-2	0
	64QAM	1	0	20.54	20.31	20.67	0-2	0
		1	12	20.50	20.58	20.42	0-2	0
		1	24	20.52	20.43	20.59	0-2	0
		12	0	20.51	20.27	20.59	0-3	0
		12	6	20.49	20.34	20.59	0-3	0
		12	11	20.41	20.34	20.59	0-3	0
		25	0	20.49	20.33	20.47	0-3	0
	256QAM	1	0	19.68	19.29	19.63	0-5	1
		1	12	19.33	19.44	19.28	0-5	1
		1	24	19.59	19.27	19.33	0-5	1
		12	0	19.55	19.25	19.52	0-5	1
		12	6	19.66	19.32	19.58	0-5	1
		12	11	19.54	19.30	19.42	0-5	1
		25	0	19.59	19.25	19.44	0-5	1

LTE Band 2 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 MHz	18900 Ch. 1880 MHz	19150 Ch. 1905 MHz		
10 MHz	QPSK	1	0	19.89	19.85	20.46	0	0
		1	24	20.39	20.14	20.46	0	0
		1	49	20.10	20.02	20.30	0	0
		25	0	20.35	20.27	20.37	0-1	0
		25	12	20.41	20.38	20.48	0-1	0
		25	24	20.25	20.28	20.46	0-1	0
		50	0	20.30	20.26	20.40	0-1	0
	16QAM	1	0	20.41	20.34	20.96	0-1	0
		1	24	20.72	20.72	20.87	0-1	0
		1	49	20.57	20.48	20.76	0-1	0
		25	0	20.33	20.32	20.33	0-2	0
		25	12	20.49	20.37	20.42	0-2	0
		25	24	20.34	20.22	20.37	0-2	0
		50	0	20.35	20.34	20.39	0-2	0
	64QAM	1	0	20.28	20.14	20.51	0-2	0
		1	24	20.60	20.48	20.63	0-2	0
		1	49	20.23	20.08	20.60	0-2	0
		25	0	20.36	20.29	20.38	0-3	0
		25	12	20.38	20.36	20.44	0-3	0
		25	24	20.27	20.31	20.50	0-3	0
		50	0	20.34	20.28	20.35	0-3	0
	256QAM	1	0	19.32	18.87	19.12	0-5	1
		1	24	19.71	19.33	19.60	0-5	1
		1	49	19.30	19.16	19.29	0-5	1
		25	0	19.46	19.27	19.42	0-5	1
		25	12	19.55	19.37	19.46	0-5	1
		25	24	19.50	19.24	19.43	0-5	1
		50	0	19.44	19.23	19.34	0-5	1

LTE Band 2 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 MHz	18900 Ch. 1880 MHz	19125 Ch. 1902.5 MHz		
15 MHz	QPSK	1	0	20.11	20.25	20.35	0	0
		1	36	20.20	20.08	20.30	0	0
		1	74	20.13	20.24	20.24	0	0
		36	0	20.26	20.22	20.25	0-1	0
		36	18	20.37	20.24	20.36	0-1	0
		36	39	20.23	20.30	20.45	0-1	0
		75	0	20.21	20.22	20.34	0-1	0
	16QAM	1	0	20.36	20.61	20.57	0-1	0
		1	36	20.56	20.51	20.67	0-1	0
		1	74	20.59	20.66	20.62	0-1	0
		36	0	20.35	20.19	20.29	0-2	0
		36	18	20.42	20.34	20.39	0-2	0
		36	39	20.34	20.35	20.52	0-2	0
		75	0	20.31	20.25	20.36	0-2	0
	64QAM	1	0	20.39	20.45	20.49	0-2	0
		1	36	20.49	20.42	20.56	0-2	0
		1	74	20.39	20.44	20.55	0-2	0
		36	0	20.39	20.33	20.32	0-3	0
		36	18	20.42	20.34	20.49	0-3	0
		36	39	20.40	20.28	20.48	0-3	0
		75	0	20.28	20.30	20.29	0-3	0
	256QAM	1	0	19.31	19.10	19.29	0-5	1
		1	36	19.49	19.41	19.47	0-5	1
		1	74	19.48	19.34	19.42	0-5	1
		36	0	19.44	19.22	19.32	0-5	1
		36	18	19.45	19.25	19.44	0-5	1
		36	39	19.43	19.33	19.56	0-5	1
		75	0	19.35	19.24	19.41	0-5	1

LTE Band 2 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 MHz	18900 Ch. 1880 MHz	19100 Ch. 1900 MHz		
20 MHz	QPSK	1	0	20.20	20.16	20.03	0	0
		1	49	20.15	20.18	20.24	0	0
		1	99	20.12	20.29	20.33	0	0
		50	0	20.20	20.18	20.22	0-1	0
		50	25	20.30	20.25	20.32	0-1	0
		50	49	20.20	20.30	20.38	0-1	0
		100	0	20.24	20.22	20.20	0-1	0
	16QAM	1	0	20.53	20.55	20.60	0-1	0
		1	49	20.45	20.59	20.57	0-1	0
		1	99	20.50	20.77	20.52	0-1	0
		50	0	20.19	20.18	20.25	0-2	0
		50	25	20.39	20.26	20.35	0-2	0
		50	49	20.21	20.27	20.42	0-2	0
		100	0	20.21	20.35	20.32	0-2	0
	64QAM	1	0	20.53	20.54	20.40	0-2	0
		1	49	20.47	20.54	20.39	0-2	0
		1	99	20.39	20.54	20.60	0-2	0
		50	0	20.18	20.22	20.22	0-3	0
		50	25	20.36	20.36	20.35	0-3	0
		50	49	20.25	20.37	20.45	0-3	0
		100	0	20.26	20.24	20.26	0-3	0
	256QAM	1	0	19.25	19.06	19.05	0-5	1
		1	49	19.50	19.25	19.35	0-5	1
		1	99	19.38	19.37	19.22	0-5	1
		50	0	19.36	19.16	19.21	0-5	1
		50	25	19.46	19.25	19.42	0-5	1
		50	49	19.28	19.22	19.49	0-5	1
		100	0	19.34	19.22	19.28	0-5	1

[LTE Band 4 Conducted Power, DSI = 1, 4]

LTE Band 4 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19957 Ch. 1710.7 MHz	20175 Ch. 1732.5 MHz	20393 Ch. 1754.3 MHz		
1.4 MHz	QPSK	1	0	20.42	20.23	19.91	0	0
		1	3	20.54	20.28	20.11	0	0
		1	5	20.47	20.15	20.03	0	0
		3	0	20.45	20.23	20.07	0-1	0
		3	1	20.56	20.26	20.12	0-1	0
		3	3	20.43	20.17	19.99	0-1	0
		6	0	20.44	20.28	20.22	0-1	0
	16QAM	1	0	20.70	20.54	20.38	0-1	0
		1	3	20.89	20.81	20.40	0-1	0
		1	5	20.78	20.54	20.37	0-1	0
		3	0	20.69	20.41	20.21	0-2	0
		3	1	20.69	20.42	20.27	0-2	0
		3	3	20.44	20.26	20.23	0-2	0
		6	0	20.66	20.29	20.03	0-2	0
	64QAM	1	0	20.70	20.49	20.29	0-2	0
		1	3	20.70	20.54	20.48	0-2	0
		1	5	20.61	20.41	20.24	0-2	0
		3	0	20.67	20.39	20.23	0-3	0
		3	1	20.59	20.48	20.53	0-3	0
		3	3	20.60	20.41	20.25	0-3	0
		6	0	20.54	20.38	20.14	0-3	0
	256QAM	1	0	19.13	19.06	18.66	0-5	1
		1	3	19.23	19.05	18.84	0-5	1
		1	5	19.23	19.09	18.71	0-5	1
		3	0	19.27	18.98	18.81	0-5	1
		3	1	19.48	19.18	18.94	0-5	1
		3	3	19.27	19.09	18.89	0-5	1
		6	0	19.08	19.11	18.72	0-5	1

LTE Band 4 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19965 Ch. 1711.5 MHz	20175 Ch. 1732.5 MHz	20385 Ch. 1753.5 MHz		
3 MHz	QPSK	1	0	20.57	20.26	20.06	0	0
		1	7	20.46	20.09	19.92	0	0
		1	14	20.48	20.21	20.03	0	0
		8	0	20.52	20.31	20.11	0-1	0
		8	3	20.59	20.41	20.23	0-1	0
		8	7	20.59	20.39	20.15	0-1	0
		15	0	20.56	20.39	20.16	0-1	0
	16QAM	1	0	20.92	20.55	20.42	0-1	0
		1	7	20.84	20.57	20.43	0-1	0
		1	14	20.83	20.65	20.51	0-1	0
		8	0	20.69	20.53	20.30	0-2	0
		8	3	20.62	20.47	20.28	0-2	0
		8	7	20.61	20.49	20.29	0-2	0
		15	0	20.61	20.41	20.28	0-2	0
	64QAM	1	0	20.77	20.53	20.39	0-2	0
		1	7	20.74	20.61	20.41	0-2	0
		1	14	20.68	20.45	20.21	0-2	0
		8	0	20.69	20.42	20.24	0-3	0
		8	3	20.64	20.40	20.17	0-3	0
		8	7	20.56	20.30	20.17	0-3	0
		15	0	20.61	20.43	20.17	0-3	0
	256QAM	1	0	19.25	19.28	18.90	0-5	1
		1	7	19.03	18.87	18.84	0-5	1
		1	14	19.14	18.98	18.89	0-5	1
		8	0	19.22	19.08	18.78	0-5	1
		8	3	19.27	19.15	18.93	0-5	1
		8	7	19.18	19.03	18.86	0-5	1
		15	0	19.22	19.03	18.88	0-5	1

LTE Band 4 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19975 Ch. 1712.5 MHz	20175 Ch. 1732.5 MHz	20375 Ch. 1752.5 MHz		
5 MHz	QPSK	1	0	20.37	20.20	20.05	0	0
		1	12	20.37	20.29	20.03	0	0
		1	24	20.35	20.06	20.03	0	0
		12	0	20.57	20.39	20.19	0-1	0
		12	6	20.57	20.37	20.26	0-1	0
		12	11	20.54	20.35	20.16	0-1	0
		25	0	20.60	20.33	20.11	0-1	0
	16QAM	1	0	20.87	20.65	20.25	0-1	0
		1	12	20.81	20.62	20.53	0-1	0
		1	24	20.83	20.51	20.35	0-1	0
		12	0	20.64	20.41	20.23	0-2	0
		12	6	20.67	20.43	20.37	0-2	0
		12	11	20.55	20.44	20.20	0-2	0
		25	0	20.54	20.32	20.14	0-2	0
	64QAM	1	0	20.66	20.46	20.34	0-2	0
		1	12	20.74	20.59	20.15	0-2	0
		1	24	20.55	20.32	20.18	0-2	0
		12	0	20.54	20.42	20.20	0-3	0
		12	6	20.59	20.37	20.17	0-3	0
		12	11	20.49	20.26	20.18	0-3	0
		25	0	20.56	20.35	20.17	0-3	0
	256QAM	1	0	19.13	19.09	19.15	0-5	1
		1	12	19.18	18.87	18.60	0-5	1
		1	24	19.24	18.88	18.56	0-5	1
		12	0	19.25	19.09	18.81	0-5	1
		12	6	19.18	19.08	18.79	0-5	1
		12	11	19.11	19.09	18.77	0-5	1
		25	0	19.21	19.05	18.77	0-5	1

LTE Band 4 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20000 Ch. 1715 MHz	20175 Ch. 1732.5 MHz	20350 Ch. 1750 MHz		
10 MHz	QPSK	1	0	20.12	20.13	19.86	0	0
		1	24	20.49	20.33	20.08	0	0
		1	49	20.36	20.05	19.86	0	0
		25	0	20.52	20.31	20.15	0-1	0
		25	12	20.56	20.43	20.24	0-1	0
		25	24	20.49	20.19	20.14	0-1	0
		50	0	20.47	20.32	20.16	0-1	0
	16QAM	1	0	20.67	20.48	20.21	0-1	0
		1	24	20.88	20.62	20.42	0-1	0
		1	49	20.41	20.42	20.37	0-1	0
		25	0	20.53	20.36	20.23	0-2	0
		25	12	20.59	20.43	20.22	0-2	0
		25	24	20.44	20.15	20.14	0-2	0
		50	0	20.47	20.35	20.15	0-2	0
	64QAM	1	0	20.38	20.18	20.07	0-2	0
		1	24	20.66	20.57	20.39	0-2	0
		1	49	20.42	20.25	20.05	0-2	0
		25	0	20.47	20.32	20.17	0-3	0
		25	12	20.52	20.38	20.24	0-3	0
		25	24	20.53	20.27	20.17	0-3	0
		50	0	20.53	20.34	20.22	0-3	0
	256QAM	1	0	18.99	18.59	18.50	0-5	1
		1	24	19.38	19.22	19.03	0-5	1
		1	49	19.06	18.79	18.57	0-5	1
		25	0	19.16	18.97	18.85	0-5	1
		25	12	19.27	19.08	18.93	0-5	1
		25	24	19.14	18.88	18.79	0-5	1
		50	0	19.11	18.97	18.78	0-5	1

LTE Band 4 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20025 Ch. 1717.5 MHz	20175 Ch. 1732.5 MHz	20325 Ch. 1747.5 MHz		
15 MHz	QPSK	1	0	20.10	20.04	19.90	0	0
		1	36	20.42	20.14	19.95	0	0
		1	74	20.30	20.06	19.92	0	0
		36	0	20.48	20.26	20.15	0-1	0
		36	18	20.49	20.32	20.21	0-1	0
		36	39	20.40	20.27	20.20	0-1	0
		75	0	20.39	20.30	20.19	0-1	0
	16QAM	1	0	20.48	20.28	20.20	0-1	0
		1	36	20.70	20.64	20.51	0-1	0
		1	74	20.45	20.60	20.31	0-1	0
		36	0	20.47	20.31	20.22	0-2	0
		36	18	20.53	20.38	20.27	0-2	0
		36	39	20.45	20.33	20.18	0-2	0
		75	0	20.38	20.29	20.24	0-2	0
	64QAM	1	0	20.46	20.34	20.26	0-2	0
		1	36	20.69	20.35	20.37	0-2	0
		1	74	20.45	20.35	20.23	0-2	0
		36	0	20.55	20.32	20.29	0-3	0
		36	18	20.58	20.35	20.25	0-3	0
		36	39	20.47	20.25	20.22	0-3	0
		75	0	20.44	20.29	20.18	0-3	0
	256QAM	1	0	19.10	18.75	18.77	0-5	1
		1	36	19.34	19.04	18.89	0-5	1
		1	74	19.09	18.80	18.65	0-5	1
		36	0	19.09	18.94	18.83	0-5	1
		36	18	19.16	19.02	18.86	0-5	1
		36	39	19.13	18.93	18.86	0-5	1
		75	0	19.06	19.02	18.87	0-5	1

LTE Band 4 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				20175 Ch. 1732.5 MHz		
20 MHz	QPSK	1	0	19.94	0	0
		1	49	20.24	0	0
		1	99	20.11	0	0
		50	0	20.23	0-1	0
		50	25	20.35	0-1	0
		50	49	20.18	0-1	0
		100	0	20.27	0-1	0
	16QAM	1	0	20.13	0-1	0
		1	49	20.59	0-1	0
		1	99	20.38	0-1	0
		50	0	20.29	0-2	0
		50	25	20.33	0-2	0
		50	49	20.23	0-2	0
		100	0	20.27	0-2	0
	64QAM	1	0	20.07	0-2	0
		1	49	20.33	0-2	0
		1	99	20.23	0-2	0
		50	0	20.28	0-3	0
		50	25	20.37	0-3	0
		50	49	20.19	0-3	0
		100	0	20.29	0-3	0
	256QAM	1	0	18.54	0-5	1
		1	49	19.10	0-5	1
		1	99	18.67	0-5	1
		50	0	19.02	0-5	1
		50	25	19.03	0-5	1
		50	49	18.91	0-5	1
		100	0	18.97	0-5	1

[LTE Band 7 Conducted Power, DSI = 1, 4]

LTE Band 7_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20775 Ch. 2502.5 MHz	21100 Ch. 2535 MHz	21425 Ch. 2567.5 MHz		
5 MHz	QPSK	1	0	19.73	19.54	19.45	0	0
		1	12	19.69	19.64	19.38	0	0
		1	24	19.65	19.58	19.53	0	0
		12	0	19.77	19.62	19.38	0-1	0
		12	6	19.79	19.71	19.48	0-1	0
		12	11	19.76	19.65	19.52	0-1	0
		25	0	19.77	19.72	19.53	0-1	0
	16QAM	1	0	19.98	19.88	19.85	0-1	0
		1	12	20.10	20.08	19.71	0-1	0
		1	24	20.26	20.04	19.93	0-1	0
		12	0	19.93	19.79	19.68	0-2	0
		12	6	19.82	19.72	19.62	0-2	0
		12	11	19.83	19.69	19.63	0-2	0
		25	0	19.70	19.65	19.45	0-2	0
	64QAM	1	0	19.94	19.88	19.82	0-2	0
		1	12	19.77	19.90	19.57	0-2	0
		1	24	19.84	19.82	19.65	0-2	0
		12	0	19.80	19.72	19.61	0-3	0
		12	6	19.80	19.75	19.54	0-3	0
		12	11	19.78	19.75	19.63	0-3	0
		25	0	19.85	19.67	19.45	0-3	0
	256QAM	1	0	18.50	18.42	18.29	0-5	1.5
		1	12	18.35	18.53	17.98	0-5	1.5
		1	24	18.45	18.10	18.17	0-5	1.5
		12	0	18.53	18.41	18.28	0-5	1.5
		12	6	18.49	18.42	18.31	0-5	1.5
		12	11	18.43	18.45	18.30	0-5	1.5
		25	0	18.49	18.48	18.28	0-5	1.5

LTE Band 7_ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20800 Ch. 2505 MHz	21100 Ch. 2535 MHz	21400 Ch. 2565 MHz		
10 MHz	QPSK	1	0	19.61	19.58	19.42	0	0
		1	24	19.63	19.46	19.57	0	0
		1	49	19.75	19.55	19.51	0	0
		25	0	19.78	19.76	19.44	0-1	0
		25	12	19.81	19.72	19.46	0-1	0
		25	24	19.72	19.64	19.55	0-1	0
		50	0	19.84	19.68	19.50	0-1	0
	16QAM	1	0	19.98	20.08	20.13	0-1	0
		1	24	20.23	20.11	19.87	0-1	0
		1	49	20.24	19.94	19.98	0-1	0
		25	0	19.82	19.76	19.51	0-2	0
		25	12	19.86	19.74	19.66	0-2	0
		25	24	19.77	19.62	19.53	0-2	0
		50	0	19.72	19.75	19.49	0-2	0
	64QAM	1	0	19.89	19.95	19.64	0-2	0
		1	24	19.86	19.93	19.63	0-2	0
		1	49	19.93	19.90	19.60	0-2	0
		25	0	19.76	19.78	19.46	0-3	0
		25	12	19.89	19.83	19.51	0-3	0
		25	24	19.89	19.68	19.44	0-3	0
		50	0	19.82	19.69	19.41	0-3	0
	256QAM	1	0	18.20	18.20	18.03	0-5	1.5
		1	24	18.66	18.50	18.17	0-5	1.5
		1	49	18.32	18.32	18.19	0-5	1.5
		25	0	18.50	18.42	18.27	0-5	1.5
		25	12	18.57	18.47	18.32	0-5	1.5
		25	24	18.47	18.38	18.15	0-5	1.5
		50	0	18.54	18.42	18.14	0-5	1.5

LTE Band 7 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20825 Ch. 2507.5 MHz	21100 Ch. 2535 MHz	21375 Ch. 2562.5 MHz		
15 MHz	QPSK	1	0	19.63	19.49	19.42	0	0
		1	36	19.61	19.38	19.53	0	0
		1	74	19.80	19.53	19.46	0	0
		36	0	19.76	19.75	19.47	0-1	0
		36	18	19.71	19.68	19.37	0-1	0
		36	39	19.72	19.64	19.50	0-1	0
		75	0	19.86	19.63	19.40	0-1	0
	16QAM	1	0	19.91	20.04	20.02	0-1	0
		1	36	20.24	20.10	19.88	0-1	0
		1	74	20.13	19.88	19.92	0-1	0
		36	0	19.78	19.73	19.53	0-2	0
		36	18	19.81	19.77	19.63	0-2	0
		36	39	19.73	19.60	19.48	0-2	0
		75	0	19.73	19.74	19.50	0-2	0
	64QAM	1	0	19.82	19.93	19.63	0-2	0
		1	36	19.82	19.85	19.60	0-2	0
		1	74	19.83	19.82	19.57	0-2	0
		36	0	19.75	19.74	19.36	0-3	0
		36	18	19.86	19.76	19.47	0-3	0
		36	39	19.77	19.61	19.49	0-3	0
		75	0	19.77	19.67	19.38	0-3	0
	256QAM	1	0	18.14	18.05	17.98	0-5	1.5
		1	36	18.64	18.46	18.16	0-5	1.5
		1	74	18.34	18.28	18.18	0-5	1.5
		36	0	18.40	18.37	18.19	0-5	1.5
		36	18	18.58	18.44	18.31	0-5	1.5
		36	39	18.47	18.36	18.16	0-5	1.5
		75	0	18.50	18.36	18.10	0-5	1.5

LTE Band 7 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20850 Ch. 2510 MHz	21100 Ch. 2535 MHz	21350 Ch. 2560 MHz		
20 MHz	QPSK	1	0	19.75	19.68	19.52	0	0
		1	49	19.64	19.59	19.35	0	0
		1	99	19.61	19.52	19.32	0	0
		50	0	19.70	19.76	19.48	0-1	0
		50	25	19.83	19.80	19.51	0-1	0
		50	49	19.71	19.61	19.37	0-1	0
		100	0	19.75	19.64	19.51	0-1	0
	16QAM	1	0	19.96	19.96	19.82	0-1	0
		1	49	20.11	19.89	19.78	0-1	0
		1	99	20.00	19.68	19.71	0-1	0
		50	0	19.74	19.75	19.50	0-2	0
		50	25	19.84	19.68	19.54	0-2	0
		50	49	19.72	19.63	19.33	0-2	0
		100	0	19.72	19.60	19.52	0-2	0
	64QAM	1	0	19.76	19.88	19.71	0-2	0
		1	49	19.98	19.80	19.69	0-2	0
		1	99	19.96	19.77	19.69	0-2	0
		50	0	19.73	19.74	19.57	0-3	0
		50	25	19.80	19.72	19.56	0-3	0
		50	49	19.77	19.57	19.43	0-3	0
		100	0	19.74	19.72	19.55	0-3	0
	256QAM	1	0	18.16	18.30	17.98	0-5	1.5
		1	49	18.56	18.36	18.35	0-5	1.5
		1	99	18.39	18.12	17.87	0-5	1.5
		50	0	18.44	18.41	18.23	0-5	1.5
		50	25	18.50	18.45	18.23	0-5	1.5
		50	49	18.41	18.33	18.12	0-5	1.5
		100	0	18.37	18.36	18.23	0-5	1.5

[LTE Band 25 Conducted Power, DSI = 1, 4]

LTE Band 25 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26047 Ch. 1850.7 MHz	26365 Ch. 1882.5 MHz	26683 Ch. 1914.3 MHz		
1.4 MHz	QPSK	1	0	20.30	20.09	20.38	0	0
		1	3	20.38	20.33	20.46	0	0
		1	5	20.35	20.18	20.36	0	0
		3	0	20.36	20.21	20.34	0-1	0
		3	1	20.44	20.27	20.36	0-1	0
		3	3	20.42	20.21	20.47	0-1	0
		6	0	20.42	20.36	20.41	0-1	0
	16QAM	1	0	20.67	20.55	20.55	0-1	0
		1	3	20.66	20.70	20.75	0-1	0
		1	5	20.67	20.47	20.64	0-1	0
		3	0	20.60	20.42	20.61	0-2	0
		3	1	20.58	20.41	20.53	0-2	0
		3	3	20.47	20.40	20.58	0-2	0
		6	0	20.59	20.39	20.59	0-2	0
	64QAM	1	0	20.53	20.37	20.55	0-2	0
		1	3	20.79	20.49	20.75	0-2	0
		1	5	20.68	20.49	20.62	0-2	0
		3	0	20.53	20.35	20.57	0-3	0
		3	1	20.59	20.56	20.73	0-3	0
		3	3	20.52	20.39	20.57	0-3	0
		6	0	20.46	20.28	20.57	0-3	0
	256QAM	1	0	19.51	19.22	19.57	0-5	1
		1	3	19.73	19.46	19.62	0-5	1
		1	5	19.69	19.49	19.56	0-5	1
		3	0	19.58	19.25	19.49	0-5	1
		3	1	19.91	19.61	19.60	0-5	1
		3	3	19.75	19.54	19.65	0-5	1
		6	0	19.59	19.37	19.52	0-5	1

LTE Band 25_ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26055 Ch. 1851.5 MHz	26365 Ch. 1882.5 MHz	26675Ch. 1913.5 MHz		
3 MHz	QPSK	1	0	20.39	20.21	20.44	0	0
		1	7	20.36	20.44	20.33	0	0
		1	14	20.45	20.30	20.44	0	0
		8	0	20.47	20.28	20.56	0-1	0
		8	3	20.52	20.32	20.51	0-1	0
		8	7	20.52	20.36	20.57	0-1	0
		15	0	20.55	20.43	20.54	0-1	0
	16QAM	1	0	20.68	20.49	20.81	0-1	0
		1	7	20.75	20.62	20.72	0-1	0
		1	14	20.83	20.77	20.84	0-1	0
		8	0	20.65	20.40	20.66	0-2	0
		8	3	20.78	20.33	20.49	0-2	0
		8	7	20.65	20.64	20.54	0-2	0
		15	0	20.62	20.48	20.41	0-2	0
	64QAM	1	0	20.67	20.48	20.72	0-2	0
		1	7	20.68	20.48	20.64	0-2	0
		1	14	20.73	20.55	20.71	0-2	0
		8	0	20.50	20.39	20.48	0-3	0
		8	3	20.60	20.26	20.51	0-3	0
		8	7	20.58	20.59	20.58	0-3	0
		15	0	20.56	20.44	20.54	0-3	0
	256QAM	1	0	19.75	19.25	19.53	0-5	1
		1	7	19.70	19.43	19.62	0-5	1
		1	14	19.56	19.35	19.56	0-5	1
		8	0	19.70	19.19	19.58	0-5	1
		8	3	19.66	19.33	19.36	0-5	1
		8	7	19.67	19.41	19.57	0-5	1
		15	0	19.63	19.49	19.57	0-5	1

LTE Band 25_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26065 Ch. 1852.5 MHz	26365 Ch. 1882.5 MHz	26665 Ch. 1912.5 MHz		
5 MHz	QPSK	1	0	20.40	20.21	20.56	0	0
		1	12	20.43	20.31	20.45	0	0
		1	24	20.52	20.26	20.51	0	0
		12	0	20.51	20.29	20.56	0-1	0
		12	6	20.53	20.37	20.56	0-1	0
		12	11	20.53	20.47	20.60	0-1	0
		25	0	20.52	20.39	20.50	0-1	0
	16QAM	1	0	20.82	20.60	20.85	0-1	0
		1	12	20.79	20.65	20.88	0-1	0
		1	24	20.82	20.79	20.79	0-1	0
		12	0	20.64	20.29	20.60	0-2	0
		12	6	20.64	20.34	20.69	0-2	0
		12	11	20.70	20.47	20.61	0-2	0
		25	0	20.59	20.34	20.55	0-2	0
	64QAM	1	0	20.69	20.33	20.84	0-2	0
		1	12	20.59	20.44	20.53	0-2	0
		1	24	20.72	20.52	20.72	0-2	0
		12	0	20.57	20.38	20.54	0-3	0
		12	6	20.66	20.36	20.65	0-3	0
		12	11	20.54	20.49	20.47	0-3	0
		25	0	20.51	20.46	20.58	0-3	0
	256QAM	1	0	19.77	19.48	19.76	0-5	1
		1	12	19.35	19.42	19.60	0-5	1
		1	24	19.62	19.52	19.65	0-5	1
		12	0	19.62	19.26	19.49	0-5	1
		12	6	19.73	19.37	19.61	0-5	1
		12	11	19.72	19.42	19.59	0-5	1
		25	0	19.59	19.40	19.55	0-5	1

LTE Band 25 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26090 Ch. 1855 MHz	26365 Ch. 1882.5 MHz	26640 Ch. 1910 MHz		
10 MHz	QPSK	1	0	20.03	20.13	20.44	0	0
		1	24	20.42	20.22	20.52	0	0
		1	49	20.10	20.09	20.46	0	0
		25	0	20.46	20.22	20.43	0-1	0
		25	12	20.48	20.42	20.55	0-1	0
		25	24	20.46	20.38	20.53	0-1	0
		50	0	20.48	20.40	20.45	0-1	0
	16QAM	1	0	20.45	20.37	20.89	0-1	0
		1	24	20.81	20.81	21.00	0-1	0
		1	49	20.50	20.45	20.81	0-1	0
		25	0	20.54	20.30	20.46	0-2	0
		25	12	20.52	20.37	20.56	0-2	0
		25	24	20.45	20.42	20.51	0-2	0
		50	0	20.41	20.37	20.44	0-2	0
	64QAM	1	0	20.38	20.16	20.71	0-2	0
		1	24	20.74	20.46	20.67	0-2	0
		1	49	20.38	20.31	20.81	0-2	0
		25	0	20.55	20.32	20.40	0-3	0
		25	12	20.59	20.43	20.55	0-3	0
		25	24	20.53	20.40	20.62	0-3	0
		50	0	20.46	20.43	20.46	0-3	0
	256QAM	1	0	19.58	18.98	19.11	0-5	1
		1	24	19.69	19.47	19.64	0-5	1
		1	49	19.41	19.25	19.34	0-5	1
		25	0	19.63	19.23	19.43	0-5	1
		25	12	19.66	19.38	19.48	0-5	1
		25	24	19.54	19.38	19.68	0-5	1
		50	0	19.52	19.46	19.46	0-5	1

LTE Band 25 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26115 Ch. 1857.5 MHz	26365 Ch. 1882.5 MHz	26615 Ch. 1907.5 MHz		
15 MHz	QPSK	1	0	20.11	20.34	20.52	0	0
		1	36	20.38	20.31	20.48	0	0
		1	74	20.22	20.29	20.55	0	0
		36	0	20.43	20.28	20.43	0-1	0
		36	18	20.51	20.37	20.55	0-1	0
		36	39	20.44	20.43	20.54	0-1	0
		75	0	20.38	20.41	20.51	0-1	0
	16QAM	1	0	20.49	20.78	21.10	0-1	0
		1	36	20.79	20.59	20.80	0-1	0
		1	74	20.67	20.84	20.82	0-1	0
		36	0	20.48	20.36	20.45	0-2	0
		36	18	20.57	20.33	20.53	0-2	0
		36	39	20.47	20.46	20.68	0-2	0
		75	0	20.44	20.45	20.53	0-2	0
	64QAM	1	0	20.41	20.51	20.73	0-2	0
		1	36	20.73	20.60	20.77	0-2	0
		1	74	20.45	20.65	20.75	0-2	0
		36	0	20.51	20.36	20.47	0-3	0
		36	18	20.62	20.34	20.62	0-3	0
		36	39	20.53	20.50	20.66	0-3	0
		75	0	20.49	20.47	20.43	0-3	0
	256QAM	1	0	19.54	19.22	19.45	0-5	1
		1	36	19.73	19.49	19.74	0-5	1
		1	74	19.60	19.58	19.66	0-5	1
		36	0	19.58	19.30	19.47	0-5	1
		36	18	19.70	19.40	19.52	0-5	1
		36	39	19.59	19.49	19.59	0-5	1
		75	0	19.51	19.47	19.53	0-5	1

LTE Band 25_ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 MHz	26365 Ch. 1882.5 MHz	26590 Ch. 1905 MHz		
20 MHz	QPSK	1	0	20.44	20.33	20.26	0	0
		1	49	20.28	20.36	20.46	0	0
		1	99	20.27	20.49	20.45	0	0
		50	0	20.52	20.33	20.49	0-1	0
		50	25	20.52	20.47	20.51	0-1	0
		50	49	20.40	20.41	20.57	0-1	0
		100	0	20.37	20.39	20.43	0-1	0
	16QAM	1	0	20.81	20.75	20.90	0-1	0
		1	49	20.85	20.68	20.90	0-1	0
		1	99	20.78	20.87	20.75	0-1	0
		50	0	20.54	20.36	20.47	0-2	0
		50	25	20.58	20.48	20.63	0-2	0
		50	49	20.44	20.44	20.59	0-2	0
		100	0	20.40	20.39	20.48	0-2	0
	64QAM	1	0	20.73	20.68	20.49	0-2	0
		1	49	20.75	20.66	20.69	0-2	0
		1	99	20.67	20.65	20.76	0-2	0
		50	0	20.61	20.41	20.50	0-3	0
		50	25	20.53	20.52	20.63	0-3	0
		50	49	20.42	20.41	20.57	0-3	0
		100	0	20.45	20.41	20.40	0-3	0
	256QAM	1	0	19.32	19.10	19.20	0-5	1
		1	49	19.69	19.49	19.67	0-5	1
		1	99	19.43	19.39	19.49	0-5	1
		50	0	19.54	19.34	19.38	0-5	1
		50	25	19.66	19.52	19.59	0-5	1
		50	49	19.52	19.44	19.54	0-5	1
		100	0	19.50	19.41	19.51	0-5	1

[LTE Band 30 Conducted Power, DSI = 1, 4]

LTE Band 30 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				27710 Ch. 2310 MHz		
5 MHz	QPSK	1	0	17.93	0	0
		1	12	17.99	0	0
		1	24	17.82	0	0
		12	0	17.87	0-1	0
		12	6	18.06	0-1	0
		12	11	17.96	0-1	0
		25	0	17.97	0-1	0
	16QAM	1	0	18.17	0-1	0
		1	12	18.44	0-1	0
		1	24	18.37	0-1	0
		12	0	17.95	0-2	0
		12	6	18.04	0-2	0
		12	11	18.03	0-2	0
		25	0	18.03	0-2	0
	64QAM	1	0	18.11	0-2	0
		1	12	18.30	0-2	0
		1	24	18.08	0-2	0
		12	0	17.94	0-3	0
		12	6	18.04	0-3	0
		12	11	17.97	0-3	0
		25	0	18.04	0-3	0
	256QAM	1	0	17.20	0-5	1.5
		1	12	17.32	0-5	1.5
		1	24	17.10	0-5	1.5
		12	0	17.15	0-5	1.5
		12	6	17.22	0-5	1.5
		12	11	17.13	0-5	1.5
		25	0	17.16	0-5	1.5

LTE Band 30 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				27710 Ch. 2310 MHz		
10 MHz	QPSK	1	0	17.94	0	0
		1	24	18.12	0	0
		1	49	17.95	0	0
		25	0	17.99	0-1	0
		25	12	17.93	0-1	0
		25	24	17.97	0-1	0
		50	0	17.92	0-1	0
	16QAM	1	0	18.31	0-1	0
		1	24	18.39	0-1	0
		1	49	18.28	0-1	0
		25	0	17.89	0-2	0
		25	12	18.02	0-2	0
		25	24	17.90	0-2	0
		50	0	17.96	0-2	0
	64QAM	1	0	18.30	0-2	0
		1	24	18.06	0-2	0
		1	49	18.14	0-2	0
		25	0	17.95	0-3	0
		25	12	18.06	0-3	0
		25	24	17.89	0-3	0
		50	0	17.95	0-3	0
	256QAM	1	0	16.99	0-5	1.5
		1	24	17.43	0-5	1.5
		1	49	16.94	0-5	1.5
		25	0	17.09	0-5	1.5
		25	12	17.30	0-5	1.5
		25	24	17.18	0-5	1.5
		50	0	17.22	0-5	1.5

[LTE TDD Band 38 Conducted Power, DSI = 1, 4]

LTE Band 38_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37775 Ch. 2572.5 MHz	38000 Ch. 2595 MHz	38225 Ch. 2617.5 MHz		
5 MHz	QPSK	1	0	18.63	18.71	18.72	0	0
		1	12	18.67	18.80	18.77	0	0
		1	24	18.65	18.84	18.77	0	0
		12	0	18.76	18.80	18.85	0-1	0
		12	6	18.82	18.54	18.97	0-1	0
		12	11	18.77	18.87	18.90	0-1	0
		25	0	18.80	18.86	18.87	0-1	0
	16QAM	1	0	18.86	18.94	18.93	0-1	0
		1	12	18.84	18.94	18.93	0-1	0
		1	24	18.78	18.93	18.91	0-1	0
		12	0	18.70	18.75	18.83	0-2	0
		12	6	18.81	18.89	18.90	0-2	0
		12	11	18.74	18.78	18.86	0-2	0
		25	0	18.89	18.97	18.93	0-2	0
	64QAM	1	0	18.54	18.52	18.53	0-2	0
		1	12	18.54	18.63	18.55	0-2	0
		1	24	18.43	18.58	18.52	0-2	0
		12	0	18.77	18.75	18.81	0-3	0
		12	6	18.84	18.91	18.92	0-3	0
		12	11	18.81	18.88	18.91	0-3	0
		25	0	18.83	18.96	18.86	0-3	0
	256QAM	1	0	18.57	18.60	18.70	0-5	0.5
		1	12	18.71	18.84	18.85	0-5	0.5
		1	24	18.61	18.67	18.65	0-5	0.5
		12	0	18.86	18.94	18.96	0-5	0.5
		12	6	19.03	19.05	19.07	0-5	0.5
		12	11	18.98	19.05	19.03	0-5	0.5
		25	0	18.85	18.91	18.90	0-5	0.5

LTE Band 38 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37800 Ch. 2575 MHz	38000 Ch. 2595 MHz	38200 Ch. 2615 MHz		
10 MHz	QPSK	1	0	18.48	18.86	18.81	0	0
		1	24	18.71	18.76	18.82	0	0
		1	49	18.47	18.78	18.80	0	0
		25	0	18.77	18.78	18.80	0-1	0
		25	12	18.91	18.92	18.88	0-1	0
		25	24	18.77	18.87	18.91	0-1	0
		50	0	18.78	18.87	18.84	0-1	0
	16QAM	1	0	18.63	18.99	19.04	0-1	0
		1	24	18.96	18.97	19.05	0-1	0
		1	49	18.66	19.05	19.03	0-1	0
		25	0	18.75	18.82	18.84	0-2	0
		25	12	18.93	18.97	18.90	0-2	0
		25	24	18.78	18.88	18.90	0-2	0
		50	0	18.85	18.89	18.81	0-2	0
	64QAM	1	0	18.36	18.54	18.60	0-2	0
		1	24	18.53	18.71	18.60	0-2	0
		1	49	18.24	18.70	18.57	0-2	0
		25	0	18.78	18.79	18.86	0-3	0
		25	12	18.90	19.00	18.94	0-3	0
		25	24	18.77	18.90	18.87	0-3	0
		50	0	18.87	18.97	18.91	0-3	0
	256QAM	1	0	18.45	18.41	18.37	0-5	0.5
		1	24	18.67	18.76	18.79	0-5	0.5
		1	49	18.48	18.50	18.45	0-5	0.5
		25	0	18.80	18.84	18.85	0-5	0.5
		25	12	18.92	19.02	18.98	0-5	0.5
		25	24	18.84	19.00	18.92	0-5	0.5
		50	0	18.91	19.01	18.87	0-5	0.5

LTE Band 38 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37825 Ch. 2577.5 MHz	38000 Ch. 2595 MHz	38175 Ch. 2612.5 MHz		
15 MHz	QPSK	1	0	18.72	18.79	18.80	0	0
		1	36	18.73	18.79	18.82	0	0
		1	74	18.68	18.81	18.84	0	0
		36	0	18.90	18.83	18.83	0-1	0
		36	18	18.88	18.88	18.88	0-1	0
		36	39	18.82	18.89	18.83	0-1	0
		75	0	18.76	18.87	18.77	0-1	0
	16QAM	1	0	18.95	19.04	19.00	0-1	0
		1	36	18.84	18.92	19.00	0-1	0
		1	74	18.89	19.02	19.01	0-1	0
		36	0	18.83	18.73	18.81	0-2	0
		36	18	18.78	18.82	18.88	0-2	0
		36	39	18.73	18.81	18.89	0-2	0
		75	0	18.82	18.93	18.83	0-2	0
	64QAM	1	0	18.58	18.53	18.58	0-2	0
		1	36	18.52	18.61	18.66	0-2	0
		1	74	18.48	18.71	18.63	0-2	0
		36	0	18.90	18.82	18.86	0-3	0
		36	18	18.93	18.93	18.97	0-3	0
		36	39	18.78	18.96	18.96	0-3	0
		75	0	18.90	19.00	18.85	0-3	0
	256QAM	1	0	18.54	18.58	18.58	0-5	0.5
		1	36	18.72	18.81	18.84	0-5	0.5
		1	74	18.54	18.61	18.55	0-5	0.5
		36	0	18.90	18.81	18.83	0-5	0.5
		36	18	18.92	18.98	18.90	0-5	0.5
		36	39	18.81	18.95	18.97	0-5	0.5
		75	0	18.88	18.89	18.81	0-5	0.5

LTE Band 38_ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 2580 MHz	38000 Ch. 2595 MHz	38150 2610 MHz		
20 MHz	QPSK	1	0	18.80	18.80	18.80	0	0
		1	49	18.67	18.77	18.79	0	0
		1	99	18.72	18.79	18.76	0	0
		50	0	18.68	18.78	18.78	0-1	0
		50	25	18.87	18.90	18.83	0-1	0
		50	49	18.80	18.83	18.86	0-1	0
		100	0	18.77	18.89	18.74	0-1	0
	16QAM	1	0	19.00	18.97	19.00	0-1	0
		1	49	18.91	18.92	18.95	0-1	0
		1	99	18.88	19.00	18.99	0-1	0
		50	0	18.76	18.81	18.83	0-2	0
		50	25	18.93	18.98	18.88	0-2	0
		50	49	18.76	18.83	18.93	0-2	0
		100	0	18.82	18.90	18.76	0-2	0
	64QAM	1	0	18.65	18.63	18.61	0-2	0
		1	49	18.55	18.62	18.61	0-2	0
		1	99	18.54	18.70	18.68	0-2	0
		50	0	18.82	18.87	18.89	0-3	0
		50	25	19.00	19.06	18.97	0-3	0
		50	49	18.85	18.99	18.94	0-3	0
		100	0	18.85	18.86	18.83	0-3	0
	256QAM	1	0	18.34	18.49	18.43	0-5	0.5
		1	49	18.77	18.80	18.84	0-5	0.5
		1	99	18.34	18.49	18.47	0-5	0.5
		50	0	18.79	18.89	18.88	0-5	0.5
		50	25	18.96	19.06	19.02	0-5	0.5
		50	49	18.85	18.94	18.94	0-5	0.5
		100	0	18.87	18.95	18.82	0-5	0.5

[LTE Band 41 Conducted Power, DSI = 1, 4] - Power Class 3

LTE Band 41 _ 5 MHz Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
5 MHz	QPSK	1	0	22.03	21.51	21.57	21.59	21.62	0	0
		1	12	21.97	21.51	21.65	21.65	21.65	0	0
		1	24	21.95	21.47	21.59	21.56	21.60	0	0
		12	0	22.07	21.67	21.67	21.56	21.63	0-1	0
		12	6	22.06	21.60	21.65	21.68	21.75	0-1	0
		12	11	22.01	21.58	21.66	21.66	21.73	0-1	0
		25	0	22.05	21.59	21.59	21.62	21.62	0-1	0
	16QAM	1	0	22.39	21.88	21.98	21.99	21.86	0-1	0
		1	12	22.36	21.94	22.10	22.05	22.00	0-1	0
		1	24	22.30	21.78	21.94	21.88	21.94	0-1	0
		12	0	22.10	21.67	21.61	21.67	21.55	0-2	0
		12	6	22.15	21.69	21.67	21.82	21.71	0-2	0
		12	11	22.09	21.57	21.72	21.65	21.67	0-2	0
		25	0	22.08	21.60	21.66	21.62	21.70	0-2	0
	64QAM	1	0	22.00	21.47	21.52	21.49	21.58	0-2	0
		1	12	22.05	21.57	21.66	21.56	21.60	0-2	0
		1	24	21.90	21.45	21.58	21.61	21.58	0-2	0
		12	0	22.01	21.59	21.67	21.63	21.55	0-3	0
		12	6	22.08	21.64	21.71	21.74	21.65	0-3	0
		12	11	22.02	21.61	21.68	21.67	21.70	0-3	0
		25	0	22.05	21.60	21.64	21.61	21.58	0-3	0
	256QAM	1	0	19.31	18.91	18.96	18.89	18.85	0-5	2
		1	12	19.39	18.90	19.14	19.01	18.97	0-5	2
		1	24	19.17	18.94	18.98	18.93	18.90	0-5	2
		12	0	19.57	19.29	19.29	19.17	19.19	0-5	2
		12	6	19.62	19.28	19.35	19.25	19.17	0-5	2
		12	11	19.59	19.27	19.37	19.31	19.23	0-5	2
		25	0	19.54	19.20	19.27	19.16	19.05	0-5	2

LTE Band 41 _ 10 MHz Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	22.02	21.37	21.45	21.43	21.47	0	0
		1	24	21.91	21.55	21.63	21.55	21.66	0	0
		1	49	21.90	21.18	21.42	21.31	21.54	0	0
		25	0	22.10	21.56	21.61	21.60	21.64	0-1	0
		25	12	22.13	21.69	21.69	21.62	21.74	0-1	0
		25	24	21.96	21.53	21.65	21.63	21.71	0-1	0
		50	0	22.04	21.55	21.60	21.58	21.64	0-1	0
	16QAM	1	0	22.35	21.73	21.75	21.73	21.76	0-1	0
		1	24	22.36	21.88	22.01	21.93	22.04	0-1	0
		1	49	22.29	21.54	21.71	21.66	21.69	0-1	0
		25	0	22.12	21.66	21.67	21.64	21.64	0-2	0
		25	12	22.13	21.66	21.69	21.65	21.75	0-2	0
		25	24	21.98	21.58	21.72	21.67	21.67	0-2	0
		50	0	22.01	21.68	21.69	21.63	21.64	0-2	0
	64QAM	1	0	22.08	21.32	21.23	21.31	21.36	0-2	0
		1	24	22.04	21.56	21.66	21.62	21.68	0-2	0
		1	49	21.85	21.20	21.33	21.33	21.39	0-2	0
		25	0	22.02	21.64	21.58	21.64	21.60	0-3	0
		25	12	22.03	21.64	21.73	21.66	21.70	0-3	0
		25	24	21.97	21.57	21.62	21.61	21.68	0-3	0
		50	0	22.07	21.64	21.64	21.66	21.66	0-3	0
	256QAM	1	0	19.09	18.80	18.82	18.82	18.66	0-5	2
		1	24	19.34	19.03	19.12	19.09	18.95	0-5	2
		1	49	18.95	18.79	18.93	18.66	18.87	0-5	2
		25	0	19.53	19.16	19.26	19.11	19.03	0-5	2
		25	12	19.55	19.28	19.28	19.21	19.13	0-5	2
		25	24	19.43	19.08	19.26	19.17	19.10	0-5	2
		50	0	19.52	19.21	19.17	19.14	19.13	0-5	2

LTE Band 41 _ 15 MHz Bandwidth- Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	21.98	21.39	21.39	21.57	21.31	0	0
		1	36	21.95	21.53	21.68	21.58	21.65	0	0
		1	74	21.87	21.20	21.53	21.29	21.68	0	0
		36	0	21.99	21.48	21.63	21.64	21.56	0-1	0
		36	18	22.02	21.57	21.63	21.60	21.63	0-1	0
		36	39	21.90	21.45	21.69	21.61	21.69	0-1	0
		75	0	22.00	21.58	21.56	21.54	21.59	0-1	0
	16QAM	1	0	22.29	21.58	21.71	21.76	21.70	0-1	0
		1	36	22.14	21.72	21.82	21.85	21.94	0-1	0
		1	74	22.12	21.39	21.70	21.55	21.76	0-1	0
		36	0	21.96	21.43	21.59	21.63	21.51	0-2	0
		36	18	21.95	21.53	21.63	21.59	21.63	0-2	0
		36	39	21.85	21.44	21.63	21.53	21.70	0-2	0
		75	0	22.04	21.49	21.66	21.60	21.60	0-2	0
	64QAM	1	0	22.04	21.31	21.35	21.48	21.34	0-2	0
		1	36	21.93	21.44	21.65	21.60	21.62	0-2	0
		1	74	21.85	21.17	21.50	21.28	21.53	0-2	0
		36	0	21.98	21.50	21.57	21.68	21.61	0-3	0
		36	18	22.05	21.56	21.65	21.70	21.66	0-3	0
		36	39	21.95	21.45	21.67	21.59	21.78	0-3	0
		75	0	22.04	21.57	21.61	21.61	21.65	0-3	0
	256QAM	1	0	19.21	18.89	18.98	18.89	18.70	0-5	2
		1	36	19.31	19.00	19.17	19.00	19.03	0-5	2
		1	74	19.12	18.71	18.96	18.69	18.97	0-5	2
		36	0	19.44	19.09	19.17	19.13	18.97	0-5	2
		36	18	19.56	19.22	19.23	19.08	19.12	0-5	2
		36	39	19.41	19.02	19.33	19.06	19.16	0-5	2
		75	0	19.44	19.08	19.17	19.12	19.10	0-5	2

LTE Band 41 _ 20 MHz Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
20 MHz	QPSK	1	0	22.03	21.61	21.31	21.43	21.14	0	0
		1	49	22.02	21.51	21.68	21.63	21.67	0	0
		1	99	21.79	21.36	21.31	21.08	21.58	0	0
		50	0	21.96	21.45	21.59	21.62	21.54	0-1	0
		50	25	22.08	21.56	21.69	21.61	21.67	0-1	0
		50	49	21.88	21.39	21.64	21.48	21.71	0-1	0
		100	0	21.93	21.44	21.55	21.55	21.55	0-1	0
	16QAM	1	0	22.25	21.84	21.52	21.70	21.46	0-1	0
		1	49	22.17	21.73	21.85	21.88	21.91	0-1	0
		1	99	22.12	21.62	21.51	21.36	21.65	0-1	0
		50	0	22.00	21.47	21.61	21.61	21.56	0-2	0
		50	25	22.02	21.58	21.68	21.70	21.63	0-2	0
		50	49	21.89	21.44	21.71	21.53	21.73	0-2	0
		100	0	22.02	21.47	21.63	21.56	21.67	0-2	0
	64QAM	1	0	22.09	21.58	21.22	21.41	21.18	0-2	0
		1	49	21.90	21.44	21.61	21.57	21.60	0-2	0
		1	99	21.87	21.36	21.26	21.03	21.50	0-2	0
		50	0	22.06	21.48	21.59	21.64	21.58	0-3	0
		50	25	22.16	21.62	21.69	21.65	21.70	0-3	0
		50	49	21.93	21.46	21.70	21.63	21.79	0-3	0
		100	0	22.00	21.50	21.59	21.57	21.65	0-3	0
	256QAM	1	0	19.10	18.73	18.81	18.81	18.52	0-5	2
		1	49	19.25	18.96	19.10	19.00	19.03	0-5	2
		1	99	18.89	18.51	18.74	18.51	18.97	0-5	2
		50	0	19.49	19.13	19.16	19.15	18.99	0-5	2
		50	25	19.55	19.18	19.28	19.18	19.15	0-5	2
		50	49	19.40	19.07	19.26	19.10	19.27	0-5	2
		100	0	19.47	19.05	19.18	19.02	19.01	0-5	2

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

[LTE Band 41 Conducted Power, DSI = 1, 4] - Power Class 2

LTE Band 41 _ 5 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
5 MHz	QPSK	1	0	22.06	21.53	21.64	21.60	21.64	0	0
		1	12	22.01	21.56	21.68	21.67	21.71	0	0
		1	24	21.97	21.47	21.62	21.59	21.67	0	0
		12	0	22.09	21.67	21.69	21.64	21.70	0-1	0
		12	6	22.13	21.67	21.72	21.73	21.75	0-1	0
		12	11	22.08	21.62	21.69	21.67	21.75	0-1	0
		25	0	22.10	21.65	21.67	21.65	21.70	0-1	0
	16QAM	1	0	22.40	21.90	22.05	22.00	21.94	0-1	0
		1	12	22.43	21.99	22.11	22.08	22.03	0-1	0
		1	24	22.37	21.84	22.00	21.93	21.98	0-1	0
		12	0	22.12	21.67	21.68	21.69	21.59	0-2	0
		12	6	22.17	21.74	21.69	21.83	21.72	0-2	0
		12	11	22.10	21.64	21.73	21.72	21.73	0-2	0
		25	0	22.15	21.66	21.74	21.68	21.72	0-2	0
	64QAM	1	0	22.03	21.52	21.55	21.53	21.61	0-2	0
		1	12	22.11	21.58	21.67	21.62	21.66	0-2	0
		1	24	21.94	21.52	21.60	21.61	21.59	0-2	0
		12	0	22.03	21.64	21.70	21.64	21.60	0-3	0
		12	6	22.12	21.70	21.73	21.76	21.69	0-3	0
		12	11	22.03	21.62	21.72	21.69	21.74	0-3	0
		25	0	22.07	21.64	21.67	21.65	21.63	0-3	0
	256QAM	1	0	21.81	20.81	20.89	20.87	20.87	0-5	1
		1	12	21.79	20.85	20.97	20.95	20.94	0-5	1
		1	24	21.67	20.84	20.93	20.87	20.89	0-5	1
		12	0	21.92	21.02	21.01	20.97	21.02	0-5	1
		12	6	21.93	20.98	21.06	21.10	21.05	0-5	1
		12	11	21.89	20.96	21.08	21.02	21.09	0-5	1
		25	0	21.84	20.91	20.92	20.91	20.94	0-5	1

LTE Band 41 _ 10 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	22.09	21.39	21.53	21.49	21.55	0	0
		1	24	21.99	21.62	21.68	21.61	21.73	0	0
		1	49	21.96	21.23	21.47	21.37	21.60	0	0
		25	0	22.16	21.63	21.63	21.65	21.68	0-1	0
		25	12	22.18	21.70	21.75	21.70	21.76	0-1	0
		25	24	22.01	21.58	21.69	21.68	21.74	0-1	0
		50	0	22.05	21.59	21.65	21.60	21.68	0-1	0
	16QAM	1	0	22.42	21.73	21.82	21.79	21.81	0-1	0
		1	24	22.37	21.93	22.08	21.98	22.09	0-1	0
		1	49	22.33	21.61	21.75	21.72	21.74	0-1	0
		25	0	22.17	21.68	21.71	21.68	21.66	0-2	0
		25	12	22.14	21.73	21.76	21.72	21.76	0-2	0
		25	24	22.02	21.61	21.76	21.68	21.74	0-2	0
		50	0	22.08	21.70	21.70	21.66	21.67	0-2	0
	64QAM	1	0	22.11	21.35	21.31	21.38	21.43	0-2	0
		1	24	22.08	21.62	21.70	21.69	21.69	0-2	0
		1	49	21.92	21.24	21.41	21.35	21.42	0-2	0
		25	0	22.05	21.66	21.65	21.65	21.66	0-3	0
		25	12	22.07	21.71	21.74	21.72	21.75	0-3	0
		25	24	22.01	21.60	21.70	21.68	21.73	0-3	0
		50	0	22.08	21.69	21.71	21.67	21.73	0-3	0
	256QAM	1	0	21.59	20.57	20.68	20.64	20.70	0-5	1
		1	24	21.79	20.83	20.94	20.94	20.92	0-5	1
		1	49	21.41	20.50	20.70	20.63	20.71	0-5	1
		25	0	21.86	20.93	20.93	20.94	20.94	0-5	1
		25	12	21.95	20.96	21.00	20.97	20.97	0-5	1
		25	24	21.70	20.87	20.98	20.94	20.97	0-5	1
		50	0	21.86	20.93	20.92	20.92	20.93	0-5	1

LTE Band 41 _ 15 MHz Bandwidth- Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	22.05	21.46	21.47	21.57	21.39	0	0
		1	36	21.97	21.55	21.70	21.66	21.67	0	0
		1	74	21.92	21.21	21.53	21.29	21.70	0	0
		36	0	22.05	21.54	21.64	21.68	21.58	0-1	0
		36	18	22.10	21.62	21.68	21.65	21.69	0-1	0
		36	39	21.93	21.47	21.72	21.61	21.75	0-1	0
		75	0	22.05	21.58	21.62	21.57	21.63	0-1	0
	16QAM	1	0	22.31	21.61	21.73	21.84	21.78	0-1	0
		1	36	22.19	21.75	21.84	21.91	21.97	0-1	0
		1	74	22.18	21.46	21.76	21.62	21.82	0-1	0
		36	0	22.01	21.47	21.62	21.66	21.56	0-2	0
		36	18	22.02	21.57	21.67	21.60	21.66	0-2	0
		36	39	21.90	21.44	21.70	21.57	21.72	0-2	0
		75	0	22.06	21.54	21.69	21.60	21.66	0-2	0
	64QAM	1	0	22.08	21.36	21.41	21.53	21.39	0-2	0
		1	36	21.98	21.50	21.69	21.61	21.66	0-2	0
		1	74	21.87	21.22	21.52	21.32	21.58	0-2	0
		36	0	22.05	21.55	21.64	21.68	21.64	0-3	0
		36	18	22.13	21.61	21.68	21.70	21.70	0-3	0
		36	39	21.98	21.51	21.72	21.61	21.81	0-3	0
		75	0	22.11	21.59	21.66	21.64	21.68	0-3	0
	256QAM	1	0	21.65	20.63	20.72	20.83	20.61	0-5	1
		1	36	21.75	20.80	20.95	20.93	20.93	0-5	1
		1	74	21.52	20.48	20.77	20.57	20.89	0-5	1
		36	0	21.76	20.73	20.85	20.88	20.81	0-5	1
		36	18	21.85	20.87	20.94	20.91	20.97	0-5	1
		36	39	21.69	20.71	20.96	20.81	21.00	0-5	1
		75	0	21.78	20.79	20.86	20.87	20.89	0-5	1

LTE Band 41 _ 20 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
20 MHz	QPSK	1	0	22.09	21.65	21.36	21.50	21.19	0	0
		1	49	22.06	21.58	21.72	21.69	21.69	0	0
		1	99	21.86	21.39	21.36	21.12	21.65	0	0
		50	0	22.01	21.52	21.61	21.63	21.55	0-1	0
		50	25	22.10	21.60	21.71	21.64	21.67	0-1	0
		50	49	21.93	21.44	21.68	21.55	21.75	0-1	0
		100	0	21.99	21.51	21.59	21.55	21.61	0-1	0
	16QAM	1	0	22.28	21.92	21.54	21.71	21.54	0-1	0
		1	49	22.21	21.77	21.87	21.91	21.93	0-1	0
		1	99	22.12	21.69	21.54	21.36	21.68	0-1	0
		50	0	22.00	21.49	21.64	21.68	21.57	0-2	0
		50	25	22.09	21.60	21.74	21.72	21.70	0-2	0
		50	49	21.92	21.45	21.71	21.61	21.76	0-2	0
		100	0	22.04	21.53	21.68	21.63	21.69	0-2	0
	64QAM	1	0	22.12	21.61	21.29	21.42	21.23	0-2	0
		1	49	21.97	21.50	21.63	21.62	21.64	0-2	0
		1	99	21.87	21.38	21.32	21.11	21.52	0-2	0
		50	0	22.08	21.56	21.67	21.70	21.61	0-3	0
		50	25	22.17	21.70	21.76	21.71	21.74	0-3	0
		50	49	21.99	21.49	21.75	21.65	21.81	0-3	0
		100	0	22.06	21.51	21.63	21.59	21.66	0-3	0
	256QAM	1	0	21.53	20.57	20.60	20.75	20.46	0-5	1
		1	49	21.79	20.78	20.91	20.90	20.89	0-5	1
		1	99	21.35	20.28	20.67	20.41	20.86	0-5	1
		50	0	21.81	20.77	20.89	20.92	20.83	0-5	1
		50	25	21.89	20.86	20.98	20.95	20.98	0-5	1
		50	49	21.70	20.75	20.98	20.85	21.02	0-5	1
		100	0	21.74	20.78	20.85	20.83	20.84	0-5	1

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

[LTE Band 66 Conducted Power, DSI = 1, 4]

LTE Band 66 _ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979Ch. 1710.7 MHz	132322 Ch. 1745 MHz	132665 Ch. 1779.3 MHz		
1.4 MHz	QPSK	1	0	19.82	19.40	19.71	0	0
		1	3	19.84	19.47	19.68	0	0
		1	5	19.67	19.40	19.69	0	0
		3	0	19.79	19.39	19.70	0	0
		3	1	19.89	19.47	19.73	0	0
		3	3	19.69	19.33	19.68	0	0
		6	0	19.85	19.44	19.71	0-1	0
	16QAM	1	0	20.08	19.68	20.07	0-1	0
		1	3	20.11	19.85	20.07	0-1	0
		1	5	20.10	19.55	19.97	0-1	0
		3	0	20.00	19.63	19.86	0-1	0
		3	1	20.00	19.73	19.83	0-1	0
		3	3	19.95	19.61	19.76	0-1	0
		6	0	19.89	19.57	19.73	0-2	0
	64QAM	1	0	20.03	19.61	19.95	0-2	0
		1	3	19.99	19.75	19.97	0-2	0
		1	5	19.92	19.52	19.79	0-2	0
		3	0	19.91	19.44	19.79	0-2	0
		3	1	19.96	19.59	19.79	0-2	0
		3	3	19.85	19.57	19.84	0-2	0
		6	0	19.83	19.50	19.46	0-3	0
	256QAM	1	0	18.76	19.10	19.29	0-5	1.5
		1	3	18.90	19.08	19.32	0-5	1.5
		1	5	18.89	19.02	19.21	0-5	1.5
		3	0	18.88	18.96	19.17	0-5	1.5
		3	1	18.99	19.18	19.46	0-5	1.5
		3	3	18.80	19.04	19.41	0-5	1.5
		6	0	18.92	19.00	19.32	0-5	1.5

LTE Band 66 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131987 Ch. 1711.5 MHz	132322 Ch. 1745 MHz	132657 Ch. 1778.5 MHz		
3 MHz	QPSK	1	0	19.82	19.47	19.74	0	0
		1	7	19.75	19.32	19.71	0	0
		1	14	19.71	19.40	19.60	0	0
		8	0	19.96	19.54	19.80	0-1	0
		8	3	19.91	19.51	19.82	0-1	0
		8	7	19.89	19.46	19.72	0-1	0
		15	0	19.83	19.52	19.79	0-1	0
	16QAM	1	0	20.23	19.76	20.06	0-1	0
		1	7	20.16	19.74	20.05	0-1	0
		1	14	20.17	19.71	19.93	0-1	0
		8	0	20.10	19.64	19.97	0-2	0
		8	3	20.07	19.70	19.89	0-2	0
		8	7	19.96	19.59	19.84	0-2	0
		15	0	19.88	19.60	19.76	0-2	0
	64QAM	1	0	20.11	19.75	20.02	0-2	0
		1	7	20.00	19.59	19.95	0-2	0
		1	14	20.00	19.65	19.90	0-2	0
		8	0	19.93	19.62	19.62	0-3	0
		8	3	19.95	19.61	19.67	0-3	0
		8	7	19.85	19.45	19.65	0-3	0
		15	0	19.89	19.52	19.59	0-3	0
	256QAM	1	0	18.95	19.17	19.38	0-5	1.5
		1	7	18.92	19.31	19.25	0-5	1.5
		1	14	18.75	19.06	19.29	0-5	1.5
		8	0	18.94	19.13	19.39	0-5	1.5
		8	3	18.93	19.13	19.40	0-5	1.5
		8	7	18.84	19.00	19.25	0-5	1.5
		15	0	18.86	19.09	19.35	0-5	1.5

LTE Band 66 _ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131997 Ch. 1712.5 MHz	132322Ch. 1745 MHz	132647 Ch. 1777.5 MHz		
5 MHz	QPSK	1	0	19.80	19.52	19.72	0	0
		1	12	19.77	19.50	19.71	0	0
		1	24	19.65	19.65	19.61	0	0
		12	0	19.82	19.48	19.87	0-1	0
		12	6	19.92	19.58	19.85	0-1	0
		12	11	19.92	19.50	19.76	0-1	0
		25	0	19.85	19.53	19.72	0-1	0
	16QAM	1	0	20.09	19.76	19.97	0-1	0
		1	12	20.14	19.81	20.13	0-1	0
		1	24	19.99	19.66	19.87	0-1	0
		12	0	19.95	19.65	19.87	0-2	0
		12	6	19.96	19.68	19.91	0-2	0
		12	11	19.92	19.56	19.84	0-2	0
		25	0	19.92	19.57	19.75	0-2	0
	64QAM	1	0	19.99	19.68	20.02	0-2	0
		1	12	19.95	19.65	20.02	0-2	0
		1	24	19.99	19.60	19.89	0-2	0
		12	0	20.02	19.62	19.78	0-3	0
		12	6	19.92	19.57	19.74	0-3	0
		12	11	19.73	19.53	19.71	0-3	0
		25	0	19.83	19.54	19.65	0-3	0
	256QAM	1	0	18.87	19.27	19.36	0-5	1.5
		1	12	18.96	19.21	19.32	0-5	1.5
		1	24	18.96	19.04	19.25	0-5	1.5
		12	0	18.79	19.11	19.32	0-5	1.5
		12	6	18.99	19.10	19.24	0-5	1.5
		12	11	18.87	19.05	19.31	0-5	1.5
		25	0	18.86	19.00	19.29	0-5	1.5

LTE Band 66 _ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132022 Ch. 1715 MHz	132322 Ch. 1745 MHz	132622 Ch. 1775 MHz		
10 MHz	QPSK	1	0	19.48	19.24	19.41	0	0
		1	24	19.78	19.37	19.52	0	0
		1	49	19.67	19.20	19.60	0	0
		25	0	19.86	19.51	19.68	0-1	0
		25	12	19.87	19.54	19.72	0-1	0
		25	24	19.81	19.47	19.83	0-1	0
		50	0	19.83	19.48	19.70	0-1	0
	16QAM	1	0	20.04	19.55	19.70	0-1	0
		1	24	20.38	19.85	20.25	0-1	0
		1	49	20.02	19.81	20.18	0-1	0
		25	0	19.90	19.49	19.70	0-2	0
		25	12	19.86	19.63	19.82	0-2	0
		25	24	19.83	19.47	19.71	0-2	0
		50	0	19.88	19.47	19.60	0-2	0
	64QAM	1	0	19.73	19.38	19.75	0-2	0
		1	24	20.01	19.62	19.95	0-2	0
		1	49	19.78	19.61	19.77	0-2	0
		25	0	19.78	19.57	19.69	0-3	0
		25	12	19.94	19.55	19.77	0-3	0
		25	24	19.80	19.48	19.66	0-3	0
		50	0	19.81	19.52	19.77	0-3	0
	256QAM	1	0	18.51	18.74	19.07	0-5	1.5
		1	24	18.87	19.15	19.37	0-5	1.5
		1	49	18.63	18.86	19.23	0-5	1.5
		25	0	18.77	19.01	19.20	0-5	1.5
		25	12	18.84	19.07	19.27	0-5	1.5
		25	24	18.86	19.09	19.26	0-5	1.5
		50	0	18.80	19.04	19.21	0-5	1.5

LTE Band 66 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132047 Ch. 1717.5 MHz	132322 Ch. 1745 MHz	132597 Ch. 1772.5 MHz		
15 MHz	QPSK	1	0	19.60	19.23	19.55	0	0
		1	36	19.64	19.40	19.67	0	0
		1	74	19.67	19.34	19.65	0	0
		36	0	19.90	19.58	19.70	0-1	0
		36	18	19.90	19.52	19.75	0-1	0
		36	39	19.74	19.55	19.75	0-1	0
		75	0	19.77	19.45	19.71	0-1	0
	16QAM	1	0	20.03	19.76	19.98	0-1	0
		1	36	20.03	19.85	20.10	0-1	0
		1	74	19.84	19.81	20.01	0-1	0
		36	0	19.86	19.56	19.76	0-2	0
		36	18	19.94	19.56	19.72	0-2	0
		36	39	19.76	19.57	19.84	0-2	0
		75	0	19.73	19.55	19.75	0-2	0
	64QAM	1	0	19.91	19.68	19.77	0-2	0
		1	36	19.96	19.70	19.89	0-2	0
		1	74	19.71	19.69	19.88	0-2	0
		36	0	19.93	19.60	19.72	0-3	0
		36	18	19.93	19.56	19.78	0-3	0
		36	39	19.79	19.57	19.79	0-3	0
		75	0	19.77	19.57	19.73	0-3	0
	256QAM	1	0	18.82	18.84	19.13	0-5	1.5
		1	36	18.90	19.09	19.48	0-5	1.5
		1	74	18.79	19.06	19.30	0-5	1.5
		36	0	18.83	19.01	19.21	0-5	1.5
		36	18	18.91	19.11	19.31	0-5	1.5
		36	39	18.65	19.05	19.24	0-5	1.5
		75	0	18.77	19.03	19.26	0-5	1.5

LTE Band 66 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 MHz	132322 Ch. 1745 MHz	132572 Ch. 1770 MHz		
20 MHz	QPSK	1	0	19.46	19.20	19.54	0	0
		1	49	19.41	19.50	19.62	0	0
		1	99	19.68	19.27	19.60	0	0
		50	0	19.85	19.52	19.64	0-1	0
		50	25	19.75	19.53	19.65	0-1	0
		50	49	19.63	19.54	19.73	0-1	0
		100	0	19.67	19.45	19.63	0-1	0
	16QAM	1	0	19.85	19.64	19.98	0-1	0
		1	49	20.21	19.79	20.00	0-1	0
		1	99	19.86	19.64	19.96	0-1	0
		50	0	19.77	19.50	19.61	0-2	0
		50	25	19.78	19.63	19.78	0-2	0
		50	49	19.68	19.43	19.78	0-2	0
		100	0	19.70	19.54	19.67	0-2	0
	64QAM	1	0	19.60	19.45	19.76	0-2	0
		1	49	19.96	19.70	19.92	0-2	0
		1	99	19.54	19.53	19.93	0-2	0
		50	0	19.81	19.44	19.67	0-3	0
		50	25	19.72	19.60	19.75	0-3	0
		50	49	19.71	19.49	19.85	0-3	0
		100	0	19.72	19.49	19.65	0-3	0
	256QAM	1	0	18.71	18.93	18.92	0-5	1.5
		1	49	18.98	19.13	19.42	0-5	1.5
		1	99	18.62	18.95	19.21	0-5	1.5
		50	0	18.77	19.03	19.13	0-5	1.5
		50	25	18.85	19.06	19.20	0-5	1.5
		50	49	18.69	19.02	19.20	0-5	1.5
		100	0	18.74	19.06	19.22	0-5	1.5

11.4.4 LTE Reduced Conducted Power (Receiver ON)

[LTE Band 48 Conducted Power, DSI= 2]

LTE Band 48 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Receiver On Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55265 Ch. 3552.5 MHz	55748 Ch. 3600.8 MHz	6232 Ch. 3649.2 MHz	56715 Ch. 3697.5 MHz		
5 MHz	QPSK	1	0	16.33	16.19	16.13	15.91	0	0
		1	12	16.42	16.33	16.29	16.06	0	0
		1	24	16.41	16.28	16.24	16.04	0	0
		12	0	16.49	16.37	16.32	16.07	0-1	0
		12	6	16.60	16.47	16.44	16.18	0-1	0
		12	11	16.56	16.43	16.40	16.20	0-1	0
		25	0	16.56	16.42	16.36	16.15	0-1	0
	16QAM	1	0	16.50	16.35	16.27	16.02	0-1	0
		1	12	16.60	16.42	16.40	16.20	0-1	0
		1	24	16.57	16.39	16.34	16.14	0-1	0
		12	0	16.47	16.30	16.22	16.07	0-2	0
		12	6	16.56	16.40	16.37	16.19	0-2	0
		12	11	16.56	16.36	16.33	16.17	0-2	0
		25	0	16.60	16.42	16.36	16.18	0-2	0
	64QAM	1	0	16.17	15.90	15.91	15.77	0-2	0
		1	12	16.22	16.06	16.03	15.99	0-2	0
		1	24	16.25	16.02	15.94	15.87	0-2	0
		12	0	16.37	16.27	16.21	16.11	0-3	0
		12	6	16.52	16.41	16.35	16.22	0-3	0
		12	11	16.50	16.36	16.32	16.23	0-3	0
		25	0	16.47	16.34	16.30	16.12	0-3	0
	256QAM	1	0	16.25	16.06	16.05	15.82	0-5	0
		1	12	16.44	16.28	16.24	16.07	0-5	0
		1	24	16.30	16.17	16.08	15.97	0-5	0
		12	0	16.61	16.47	16.40	16.20	0-5	0
		12	6	16.67	16.57	16.49	16.31	0-5	0
		12	11	16.69	16.53	16.49	16.30	0-5	0
		25	0	16.59	16.42	16.39	16.20	0-5	0

LTE Band 48 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Receiver On Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55290Ch. 3555 MHz	55757 Ch. 3601.7 MHz	56223 Ch. 3648.3 MHz	56690 Ch. 3695 MHz		
10 MHz	QPSK	1	0	16.16	16.01	15.95	15.87	0	0
		1	24	16.45	16.31	16.36	16.24	0	0
		1	49	16.26	16.13	16.12	16.12	0	0
		25	0	16.48	16.28	16.30	16.22	0-1	0
		25	12	16.63	16.45	16.43	16.37	0-1	0
		25	24	16.54	16.40	16.39	16.38	0-1	0
		50	0	16.53	16.37	16.37	16.31	0-1	0
	16QAM	1	0	16.29	16.24	16.14	16.10	0-1	0
		1	24	16.67	16.52	16.49	16.46	0-1	0
		1	49	16.46	16.30	16.32	16.27	0-1	0
		25	0	16.50	16.27	16.26	16.25	0-2	0
		25	12	16.62	16.48	16.45	16.41	0-2	0
		25	24	16.58	16.43	16.41	16.32	0-2	0
		50	0	16.59	16.39	16.35	16.33	0-2	0
	64QAM	1	0	15.99	15.78	15.75	15.86	0-2	0
		1	24	16.32	16.15	16.06	16.26	0-2	0
		1	49	16.10	15.94	15.85	16.11	0-2	0
		25	0	16.47	16.24	16.27	16.19	0-3	0
		25	12	16.62	16.44	16.44	16.39	0-3	0
		25	24	16.54	16.37	16.39	16.37	0-3	0
		50	0	16.54	16.41	16.38	16.27	0-3	0
	256QAM	1	0	16.09	15.90	15.92	15.84	0-5	5
		1	24	16.39	16.28	16.27	16.15	0-5	0
		1	49	16.27	16.06	15.98	16.07	0-5	0
		25	0	16.49	16.29	16.31	16.25	0-5	0
		25	12	16.64	16.50	16.46	16.42	0-5	0
		25	24	16.57	16.42	16.43	16.37	0-5	0
		50	0	16.59	16.44	16.40	16.36	0-5	0

LTE Band 48 _ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Receiver On Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55315Ch. 3557.5 MHz	55765 Ch. 3602.5 MHz	56215 Ch. 3647.5 MHz	56665 Ch. 3692.5 MHz		
15 MHz	QPSK	1	0	16.17	16.22	16.08	15.92	0	0
		1	36	16.39	16.22	16.23	16.06	0	0
		1	74	16.29	15.99	16.07	15.95	0	0
		36	0	16.50	16.37	16.30	16.13	0-1	0
		36	18	16.56	16.42	16.39	16.23	0-1	0
		36	39	16.48	16.26	16.37	16.18	0-1	0
		75	0	16.49	16.35	16.34	16.16	0-1	0
	16QAM	1	0	16.42	16.40	16.22	16.14	0-1	0
		1	36	16.57	16.35	16.41	16.26	0-1	0
		1	74	16.50	16.13	16.24	16.21	0-1	0
		36	0	16.50	16.27	16.25	16.13	0-2	0
		36	18	16.56	16.34	16.37	16.21	0-2	0
		36	39	16.48	16.24	16.30	16.15	0-2	0
		75	0	16.55	16.34	16.35	16.21	0-2	0
	64QAM	1	0	15.98	15.97	15.82	15.94	0-2	0
		1	36	16.21	15.98	16.09	15.97	0-2	0
		1	74	16.09	15.79	15.83	15.97	0-2	0
		36	0	16.50	16.35	16.32	16.15	0-3	0
		36	18	16.61	16.41	16.38	16.20	0-3	0
		36	39	16.49	16.30	16.37	16.17	0-3	0
		75	0	16.52	16.37	16.37	16.19	0-3	0
	256QAM	1	0	16.13	16.17	16.06	15.90	0-5	5
		1	36	16.40	16.24	16.24	16.02	0-5	0
		1	74	16.25	15.99	16.06	15.94	0-5	0
		36	0	16.51	16.39	16.35	16.18	0-5	0
		36	18	16.60	16.50	16.47	16.28	0-5	0
		36	39	16.51	16.35	16.45	16.27	0-5	0
		75	0	16.51	16.41	16.34	16.21	0-5	0

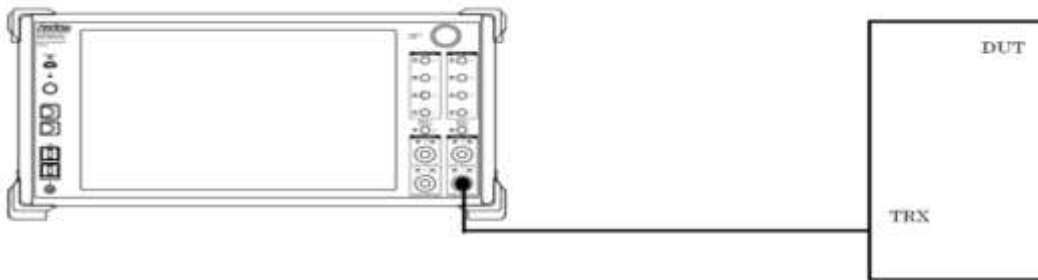
LTE Band 48 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Receiver On Power [dBm]				MPR Allowed Per 3GPP [dB]	MPR [dB]
				55340Ch. 3560.0 MHz	55773 Ch. 3603.3 MHz	56207 Ch. 3646.7 MHz	56640 Ch. 3690.0 MHz		
20 MHz	QPSK	1	0	16.10	16.13	15.95	15.77	0	0
		1	49	16.17	16.21	16.19	16.04	0	0
		1	99	16.45	15.79	15.92	15.84	0	0
		50	0	16.42	16.30	16.27	16.12	0-1	0
		50	25	16.57	16.41	16.39	16.21	0-1	0
		50	49	16.48	16.27	16.31	16.13	0-1	0
		100	0	16.49	16.32	16.30	16.12	0-1	0
	16QAM	1	0	16.31	16.32	16.08	15.98	0-1	0
		1	49	16.59	16.35	16.40	16.24	0-1	0
		1	99	16.35	15.96	16.10	16.03	0-1	0
		50	0	16.48	16.30	16.26	16.17	0-2	0
		50	25	16.64	16.43	16.41	16.29	0-2	0
		50	49	16.53	16.22	16.32	16.22	0-2	0
		100	0	16.55	16.35	16.33	16.19	0-2	0
	64QAM	1	0	15.92	15.86	15.66	15.72	0-2	0
		1	49	16.22	16.02	16.04	16.01	0-2	0
		1	99	15.92	15.63	15.67	15.80	0-2	0
		50	0	16.44	16.40	16.29	16.09	0-3	0
		50	25	16.65	16.47	16.45	16.22	0-3	0
		50	49	16.51	16.32	16.37	16.16	0-3	0
		100	0	16.48	16.32	16.32	16.20	0-3	0
	256QAM	1	0	16.06	16.05	15.88	15.78	0-5	5
		1	49	16.39	16.20	16.25	16.04	0-5	0
		1	99	16.09	15.78	15.90	15.84	0-5	0
		50	0	16.44	16.40	16.35	16.22	0-5	0
		50	25	16.64	16.47	16.47	16.35	0-5	0
		50	49	16.52	16.34	16.43	16.24	0-5	0
		100	0	16.47	16.38	16.34	16.19	0-5	0

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.

11.4.5 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.

MT8821C
2018/05/03 13:39
RF Output : On
DL 20Cs
UL 20Cs Cont.

Phone2 L1E
30.7054005

Phone1 L1E
30.7054005

DL Channel 40140 ch
Operation Band 41

TPC Pattern AB + 3dB
Channel Bandwidth 20 MHz

Input Level 30.0 dBm
Output Level 30.0 dBm

Authentication Key K [LxC] AUTHENT_KEY
This sets the UE authentication key (Authentication Key with 12 bits and hexadecimal nullfill).

UE Power : -15.8 dBm

Common
Physical Channel
Call Processing
TX Measurement
RX Measurement
Fundamental Measurement
Test Parameter
Band Definition
External Loss
System Config

Mobile Station Identity
Authentication / Integrity
SBA Model Number User
Authentication On
Authentication Algorithm XCH
Authentication Key K 00112233-44556677-8899AABB-CCDDEEFF
AMF 0000
OPc 00000000-00000000-00000000-00000000
Integrity Protection Snow 3G
RMC
Power Control
BCH / PCCH
RACH / PUCCH
SRS

SequenceMonitor
Idle
Detach
Registration
Idle/Regist
UE Origination
NW Origination
Connected
Handover
UE Release
NW Release

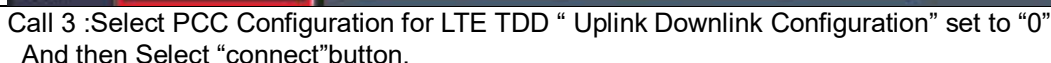
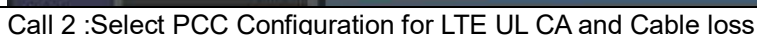
UE Report
IMSI(DEC) 001010123456789
IMEI 355888090000740
IMEI (Check Digit) 355888090000745
UE Category 10
UE CategoryDL 10
UE CategoryUL 13
PDN Type IPv4v6

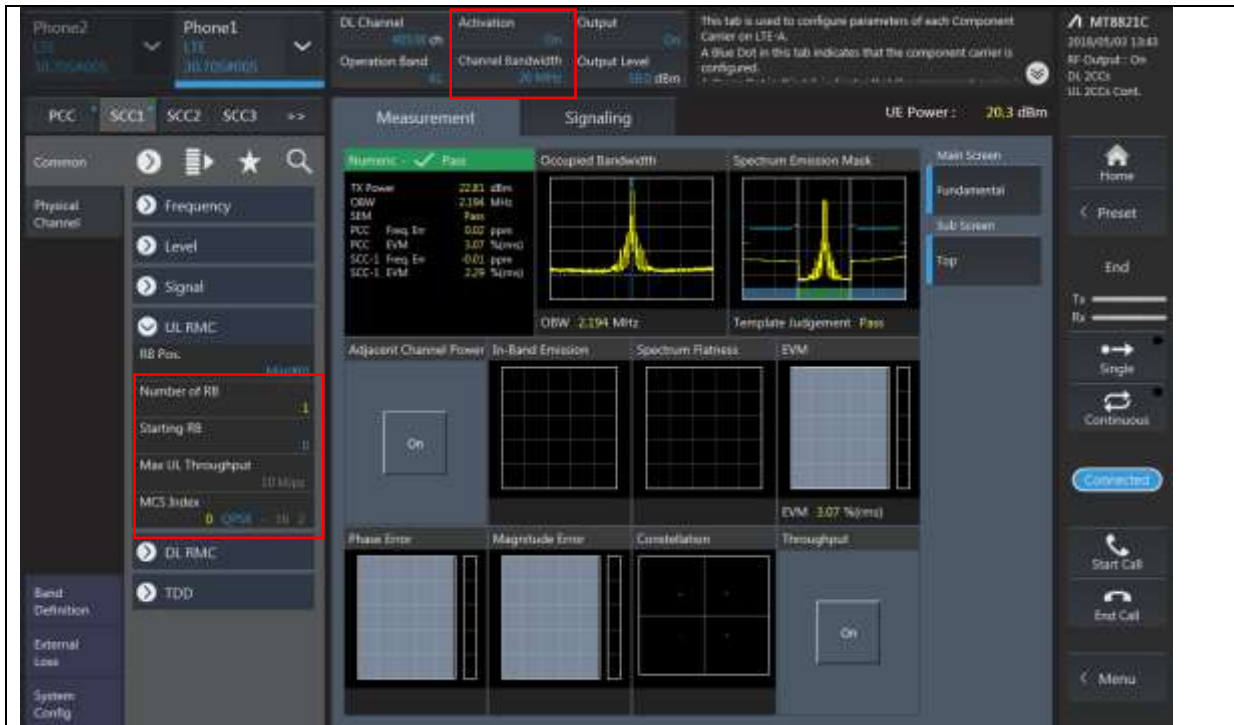
Function
Measurement Report Off
Measurement Report Once
Trace Clear
UE Capability Information

Signaling Trace
U-S Message Description Time at RRC
-> ULInformationTransfer IDENTITY RESPONSE 00:27:01.089 (00:00.015)
-<- UE CapabilityEnquiry 00:27:01.089 (00:00.000)
-> UE CapabilityInformation 00:27:01.243 (00:00.154)
-> ULInformationTransfer AUTHENTICATION REQUEST 00:27:01.244 (00:00.001)
-<- ULInformationTransfer AUTHENTICATION RESPONSE 00:27:01.283 (00:00.039)
-> ULInformationTransfer SECURITY MODE COMMAND 00:27:01.291 (00:00.010)
-<- ULInformationTransfer SECURITY MODE COMPLETE 00:27:01.393 (00:00.106)
-> ULInformationTransfer ACTIVATE TEST MODE 00:27:01.409 (00:00.010)
-<- ULInformationTransfer ACTIVATE TEST MODE COMPLETE 00:27:01.424 (00:00.015)
-> SecurityModeCommand 00:27:01.424 (00:00.000)
-<- SecurityModeComplete 00:27:01.579 (00:00.155)
-> RRCConnReconfiguration ATTACH ACCEPT 00:27:01.594 (00:00.015)
-<- RRCConnReconfigurationComplete 00:27:01.618 (00:00.024)
-> ULInformationTransfer ATTACH COMPLETE 00:27:01.639 (00:00.021)
-<- RRCConnectionRelease 00:27:01.738 (00:00.100)

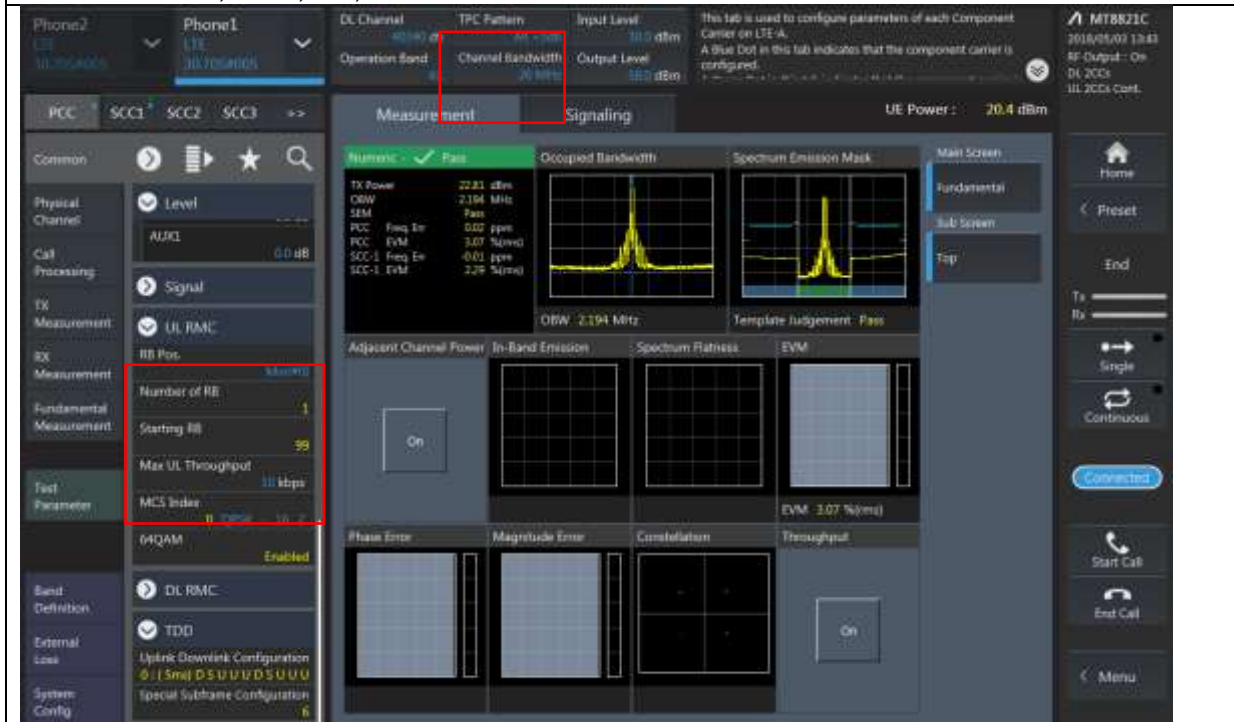
Home
Preset
Ts
Rx
Single
Continuous
Idle(Regist)
Start Call
End Call
Menu

Call 1 :Select PCC Configuration for Authentication key to Register





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.

Uplink Carrier aggregation Conducted Powers

Up link CA	PCC						SCC						Tx. Power [dBm]	
	Band width [MHz]	Ch.	Frequency [MHz]	Mode	RB	RB Offset	Band width [MHz]	Channel	Frequency [MHz]	Mode	RB	RB Offset	LTE Single Carrier Tx	LTE Tx Power with UL CA Enabled
5B Max	10	20525	836.5	QPSK	1	49	5	20597	843.7	QPSK	1	0	24.04	24.14
66B Max	15	132322	1745	QPSK	1	0	5	132229	1735.7	QPSK	1	24	24.75	24.65
66B Hotspot	15	132597	1772.5	QPSK	1	0	5	132504	1763.2	QPSK	1	24	19.39	19.28
66B Grip	15	132047	1717.5	QPSK	1	74	5	132140	1726.8	QPSK	1	0	19.81	19.85
66C Max	20	132572	1770	QPSK	1	0	20	132374	1750.2	QPSK	1	99	24.79	24.62
66C Hotspot	20	132572	1770	QPSK	1	0	20	132374	1750.2	QPSK	1	99	19.13	19.07
66C Grip	20	132072	1720	QPSK	1	99	20	132270	1739.8	QPSK	1	0	19.68	19.56
41C (PC3) Max	20	40620	2593	QPSK	1	99	20	40818	2612.8	QPSK	1	0	24.78	24.60
41C (PC3) Hotspot	20	39750	2506	QPSK	1	99	20	39948	2525.8	QPSK	1	0	21.01	20.99
41C (PC3) Grip	20	39750	2506	QPSK	1	99	20	39948	2525.8	QPSK	1	0	21.79	21.76
41C (PC2) Max	20	40185	2549.5	QPSK	1	0	20	39987	2529.7	QPSK	1	99	25.89	25.94
41C (PC2) Hotspot	20	39750	2506	QPSK	1	99	20	39948	2525.8	QPSK	1	0	21.88	21.85
41C (PC2) Grip	20	39750	2506	QPSK	1	99	20	39948	2525.8	QPSK	1	0	21.86	21.84
48C Max	20	55340	3560	QPSK	1	99	20	55538	3579.8	QPSK	1	0	24.33	24.33
48C Hotspot	20	56207	3646.7	QPSK	50	49	20	56405	3666.5	QPSK	50	0	19.38	19.40
48C RCV	20	55340	3560	QPSK	50	49	20	55538	3579.8	QPSK	50	0	16.57	16.45

11.5 NR Maximum Output Power

11.5.1 NR Band Maximum Conducted Power

DSI = 0, 2 PLimit Calculations – NR Body-Worn, Phablet Max, Head SAR

[NR Band n2 Conducted Power, DSI = 0,2]

NR Band n2 _ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 MHz	1880 MHz	1907.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.18	22.85	23.08	0
				1	13	23.16	22.87	23.10	0
				1	23	23.17	22.87	23.10	0
				12	0	22.61	22.31	22.56	0.5
				12	7	23.17	22.82	23.08	0
				12	13	22.61	22.35	22.58	0.5
			QPSK	25	0	22.62	22.31	22.59	0.5
				1	1	23.18	22.87	23.09	0
				1	13	23.19	22.87	23.12	0
				1	23	23.22	22.89	23.16	0
				12	0	22.16	21.82	22.07	1
				12	7	23.17	22.88	23.14	0
				12	13	22.15	21.83	22.13	1
				25	0	22.13	21.82	21.99	1
			16QAM	1	1	22.17	21.88	22.05	1
			64QAM	1	1	20.74	20.52	20.74	2.5
			256QAM	1	1	19.21	19.13	18.92	4.5
		CP	QPSK	1	1	21.84	21.80	21.25	1.5

NR Band n2 _ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 MHz	1880 MHz	1905 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.27	22.83	22.97	0
				1	26	23.18	22.78	23.08	0
				1	50	23.16	22.77	23.07	0
				25	0	22.71	22.33	22.46	0.5
				25	14	23.19	22.81	23.09	0
				25	27	22.74	22.33	22.67	0.5
			QPSK	50	0	22.72	22.31	22.66	0.5
				1	1	23.26	22.86	23.02	0
				1	26	23.25	22.83	23.14	0
				1	50	23.20	22.84	23.13	0
				25	0	22.28	21.83	22.03	1
				25	14	23.24	22.84	23.11	0
				25	27	22.25	21.85	22.17	1
				50	0	22.26	21.81	22.14	1
			16QAM	1	1	22.34	21.87	22.08	1
			64QAM	1	1	21.01	20.55	20.73	2.5
			256QAM	1	1	19.28	19.41	18.89	4.5
		CP	QPSK	1	1	21.89	21.89	21.49	1.5

NR Band n2 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 MHz	1880 MHz	1902.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.22	22.82	22.87	0
				1	40	23.13	22.78	22.94	0
				1	77	23.06	22.94	23.08	0
				36	0	22.70	22.36	22.45	0.5
				36	22	23.20	22.90	23.00	0
				36	43	22.63	22.38	22.55	0.5
				75	0	22.68	22.37	22.48	0.5
			QPSK	1	1	23.26	22.94	22.91	0
				1	40	23.15	22.83	22.96	0
				1	77	23.15	22.95	23.10	0
				36	0	22.21	21.86	21.99	1
				36	22	23.19	22.88	23.00	0
				36	43	22.18	21.85	22.06	1
				75	0	22.20	21.90	21.96	1
			16QAM	1	1	22.29	21.89	21.97	1
			64QAM	1	1	21.04	20.60	20.66	2.5
			256QAM	1	1	19.28	19.43	18.87	4.5
		CP	QPSK	1	1	21.94	21.68	21.28	1.5

NR Band n2 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 MHz	1880 MHz	1900 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.19	22.86	22.83	0
				1	53	23.04	22.82	22.98	0
				1	104	22.90	22.88	23.04	0
				50	0	22.62	22.38	22.43	0.5
				50	28	23.11	22.84	23.04	0
				50	56	22.57	22.38	22.52	0.5
				100	0	22.59	22.35	22.49	0.5
			QPSK	1	1	23.22	22.94	22.83	0
				1	53	23.10	22.85	23.00	0
				1	104	22.98	22.87	22.99	0
				50	0	22.17	21.90	21.92	1
				50	28	23.14	22.83	23.00	0
				50	56	22.07	21.83	22.00	1
				100	0	22.15	21.91	22.06	1
			16QAM	1	1	22.26	21.93	21.88	1
			64QAM	1	1	20.95	20.66	20.73	2.5
			256QAM	1	1	19.32	19.40	18.95	4.5
		CP	QPSK	1	1	21.95	21.55	21.32	1.5

[NR Band n5 Conducted Power, DSI = 0, 1, 2, 3, 4]

NR Band n5_ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						165300	167300	169300	
						826.5 MHz	836.5 MHz	846.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	24.28	24.30	24.46	0
				1	13	24.31	24.21	24.47	0
				1	23	24.11	24.17	24.36	0
				12	0	23.90	23.74	23.95	0.5
				12	7	24.31	24.17	24.41	0
				12	13	23.70	23.62	23.82	0.5
				25	0	23.89	23.76	23.91	0.5
			QPSK	1	1	24.20	24.33	24.42	0
				1	13	24.13	24.28	24.48	0
				1	23	24.03	24.16	24.36	0
				12	0	23.38	23.25	23.43	1
				12	7	24.18	24.18	24.34	0
				12	13	23.30	23.15	23.30	1
				25	0	23.38	23.23	23.45	1
			16QAM	1	1	23.43	23.15	23.32	1
			64QAM	1	1	22.62	22.12	22.02	2.5
			256QAM	1	1	19.30	19.36	19.44	4.5
		CP	QPSK	1	1	22.76	22.82	22.89	1.5

NR Band n5_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							167300		
							836.5 MHz		
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		24.25		0
				1	26		24.24		0
				1	50		24.22		0
				25	0		23.77		0.5
				25	14		24.22		0
				25	27		23.71		0.5
				50	0		23.76		0.5
			QPSK	1	1		24.27		0
				1	26		24.20		0
				1	50		24.26		0
				25	0		23.29		1
				25	14		24.22		0
				25	27		23.17		1
				50	0		23.31		1
			16QAM	1	1		23.17		1
			64QAM	1	1		22.01		2.5
			256QAM	1	1		19.10		4.5
		CP	QPSK	1	1		22.75		1.5

NR Band n5_ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							167300		
							836.5 MHz		
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		24.28		0
				1	40		24.18		0
				1	77		24.30		0
				36	0		23.81		0.5
				36	22		24.30		0
				36	43		23.84		0.5
				75	0		23.04		0.5
			QPSK	1	1		24.41		0
				1	40		24.36		0
				1	77		23.92		0
				36	0		23.81		1
				36	22		24.34		0
				36	43		23.38		1
				75	0		23.49		1
			16QAM	1	1		23.63		1
			64QAM	1	1		22.56		2.5
			256QAM	1	1		19.54		4.5
		CP	QPSK	1	1		22.78		1.5

NR Band n5_ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							167300		
							836.5 MHz		
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		24.32		0
				1	53		24.22		0
				1	104		24.34		0
				50	0		23.85		0.5
				50	28		24.34		0
				50	56		23.87		0.5
			QPSK	100	0		23.84		0.5
				1	1		24.43		0
				1	53		24.32		0
				1	104		24.45		0
				50	0		23.36		1
				50	28		24.31		0
				50	56		23.34		1
				100	0		23.34		1
			16QAM	1	1		23.24		1
			64QAM	1	1		22.06		2.5
			256QAM	1	1		19.36		4.5
		CP	QPSK	1	1		22.85		1.5

[NR Band n12 Conducted Power, DSI = 0, 1, 2, 3, 4]

NR Band n12_ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						140300	141500	142700	
						701.5 MHz	707.5 MHz	713.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.98	24.22	24.26	0
				1	13	24.06	24.26	24.34	0
				1	23	23.98	24.18	24.25	0
				12	0	23.53	23.64	23.73	0.5
				12	7	24.00	24.19	24.31	0
				12	13	23.46	23.71	23.74	0.5
			QPSK	25	0	23.55	23.78	23.80	0.5
				1	1	23.99	24.21	24.26	0
				1	13	24.05	24.26	24.33	0
				1	23	23.95	24.24	24.28	0
				12	0	23.04	23.16	23.28	1
				12	7	23.93	24.19	24.28	0
				12	13	22.91	23.18	23.23	1
				25	0	22.98	23.25	23.35	1
			16QAM	1	1	22.91	23.13	23.28	1
			64QAM	1	1	21.65	21.93	21.97	2.5
			256QAM	1	1	19.37	19.47	19.51	4.5
		CP	QPSK	1	1	22.53	22.77	22.79	1.5

NR Band n12_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							141500		
							707.5 MHz		
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		24.01		0
				1	26		24.31		0
				1	50		24.23		0
				25	0		23.80		0.5
				25	14		24.20		0
				25	27		23.91		0.5
			QPSK	50	0		23.80		0.5
				1	1		24.10		0
				1	26		24.33		0
				1	50		24.35		0
				25	0		23.20		1
				25	14		24.30		0
				25	27		23.29		1
				50	0		23.38		1
			16QAM	1	1		22.95		1
			64QAM	1	1		21.79		2.5
			256QAM	1	1		19.38		4.5
		CP	QPSK	1	1		22.57		1.5

NR Band n12_ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							141500		
							707.5 MHz		
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		24.12		0
				1	40		24.32		0
				1	77		24.33		0
				36	0		23.71		0.5
				36	22		24.42		0
				36	43		23.86		0.5
				75	0		23.89		0.5
			QPSK	1	1		24.47		0
				1	40		24.36		0
				1	77		24.23		0
				36	0		23.25		1
				36	22		24.33		0
				36	43		23.35		1
				75	0		23.36		1
			16QAM	1	1		23.07		1
			64QAM	1	1		21.88		2.5
			256QAM	1	1		19.39		4.5
		CP	QPSK	1	1		22.75		1.5

[NR Band n25 Conducted Power, DSI=0, 2]

NR Band n25 _ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						370500	376500	382500	
						1852.5 MHz	1882.5 MHz	1912.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.25	22.87	23.09	0
				1	13	23.26	22.90	23.16	0
				1	23	23.24	22.91	23.16	0
				12	0	22.73	22.36	22.59	0.5
				12	7	23.30	22.93	23.18	0
				12	13	22.79	22.42	22.71	0.5
				25	0	22.75	22.38	22.65	0.5
			QPSK	1	1	23.35	22.91	23.15	0
				1	13	23.34	22.96	23.23	0
				1	23	23.34	22.96	23.19	0
				12	0	22.23	21.88	22.13	1
				12	7	23.32	22.94	23.17	0
				12	13	22.29	21.97	22.20	1
				25	0	21.77	21.89	22.12	1
			16QAM	1	1	22.54	21.56	22.05	1
			64QAM	1	1	20.57	20.01	20.64	2.5
			256QAM	1	1	18.33	18.02	18.03	4.5
		CP	QPSK	1	1	21.92	21.50	21.72	1.5

NR Band n25 _ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371000	376500	382000	
						1855 MHz	1882.5 MHz	1910 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.37	22.88	23.02	0
				1	26	23.31	22.87	23.16	0
				1	50	23.22	22.95	23.14	0
				25	0	22.87	22.41	22.66	0.5
				25	14	23.34	22.90	23.20	0
				25	27	22.82	22.43	22.75	0.5
				50	0	22.84	22.43	22.70	0.5
			QPSK	1	1	23.33	22.93	23.10	0
				1	26	23.37	22.90	23.21	0
				1	50	23.29	22.98	22.81	0
				25	0	22.36	21.95	22.16	1
				25	14	23.56	22.91	23.20	0
				25	27	22.48	21.93	22.21	1
				50	0	22.46	21.89	22.20	1
			16QAM	1	1	21.82	22.02	22.18	1
			64QAM	1	1	20.39	20.77	20.93	2.5
			256QAM	1	1	18.36	18.05	18.02	4.5
		CP	QPSK	1	1	22.06	21.57	21.71	1.5

NR Band n25 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371500	376500	381500	
						1857.5 MHz	1882.5 MHz	1907.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.39	22.98	23.04	0
				1	40	23.25	22.85	23.09	0
				1	77	23.21	22.95	23.22	0
				36	0	22.89	22.48	22.68	0.5
				36	22	23.33	22.95	23.20	0
				36	43	22.74	22.42	22.72	0.5
				75	0	22.83	22.42	22.68	0.5
			QPSK	1	1	23.45	22.99	23.11	0
				1	40	23.32	22.94	22.88	0
				1	77	23.22	23.02	23.20	0
				36	0	22.38	21.98	22.15	1
				36	22	23.33	22.97	23.17	0
				36	43	22.23	21.90	22.19	1
				75	0	22.35	21.95	22.14	1
			16QAM	1	1	22.53	22.07	22.16	1
			64QAM	1	1	21.31	20.96	21.14	2.5
			256QAM	1	1	18.40	18.06	18.12	4.5
		CP	QPSK	1	1	22.11	21.70	21.86	1.5

NR Band n25 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376500	381000	
						1860 MHz	1882.5 MHz	1905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.40	23.04	23.29	0
				1	53	23.19	22.84	23.19	0
				1	104	23.04	22.88	23.13	0
				50	0	22.83	22.46	22.66	0.5
				50	28	23.22	22.92	23.24	0
				50	56	22.68	22.53	22.06	0.5
				100	0	22.76	22.44	22.50	0.5
			QPSK	1	1	22.68	23.03	23.14	0
				1	53	23.24	22.93	23.15	0
				1	104	22.73	22.92	22.96	0
				50	0	22.33	21.98	22.19	1
				50	28	23.22	22.91	23.24	0
				50	56	22.18	21.96	22.10	1
				100	0	22.28	21.97	22.15	1
			16QAM	1	1	22.50	22.13	22.21	1
			64QAM	1	1	21.24	20.97	21.08	2.5
			256QAM	1	1	18.35	18.13	18.08	4.5
		CP	QPSK	1	1	22.06	21.70	21.84	1.5

NR Band n25 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						373000		380000	
						1865 MHz		1900 MHz	
30 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.65		23.22	0
				1	80	23.24		23.06	0
				1	158	23.25		23.37	0
				80	0	22.99		22.69	0.5
				80	40	23.40		23.28	0
				80	80	22.81		22.86	0.5
				160	0	22.89		22.87	0.5
			QPSK	1	1	23.69		23.27	0
				1	80	23.35		23.18	0
				1	158	23.31		23.24	0
				80	0	22.52		22.19	1
				80	40	23.34		23.25	0
				80	80	22.28		22.36	1
				160	0	22.38		22.28	1
			16QAM	1	1	22.71		22.35	1
			64QAM	1	1	21.35		20.82	2.5
			256QAM	1	1	18.62		18.80	4.5
		CP	QPSK	1	1	22.34		21.88	1.5

NR Band n25 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							376500		
							1882.5 MHz		
40 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		23.28		0
				1	108		22.84		0
				1	214		23.22		0
				108	0		22.55		0.5
				108	54		23.01		0
				108	108		22.70		0.5
			QPSK	216	0		22.61		0.5
				1	1		23.37		0
				1	108		23.42		0
				1	214		23.19		0
				108	0		22.10		1
				108	54		23.01		0
				108	108		22.18		1
				216	0		22.20		1
			16QAM	1	1		22.49		1
			64QAM	1	1		21.21		2.5
			256QAM	1	1		18.31		4.5
		CP	QPSK	1	1		22.04		1.5

[NR Band n30 Conducted Power, DSI = 0, 2]

NR Band n30_ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							462000		
							2310 MHz		
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		22.92		0
				1	13		23.02		0
				1	23		23.03		0
				12	0		22.55		0.5
				12	7		23.03		0
				12	13		22.57		0.5
			QPSK	25	0		22.60		0.5
				1	1		23.04		0
				1	13		23.13		0
				1	23		23.15		0
				12	0		22.04		1
				12	7		23.06		0
				12	13		22.11		1
				25	0		22.05		1
			16QAM	1	1		21.91		1
			64QAM	1	1		20.78		2.5
			256QAM	1	1		18.49		4.5
		CP	QPSK	1	1		21.49		1.5

NR Band n30_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							462000		
							2310 MHz		
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		22.88		0
				1	26		23.00		0
				1	50		22.98		0
				25	0		22.49		0.5
				25	14		23.03		0
				25	27		22.53		0.5
			QPSK	50	0		22.54		0.5
				1	1		22.91		0
				1	26		23.09		0
				1	50		23.01		0
				25	0		22.05		1
				25	14		23.03		0
				25	27		22.07		1
				50	0		22.08		1
			16QAM	1	1		21.79		1
			64QAM	1	1		20.70		2.5
			256QAM	1	1		18.04		4.5
		CP	QPSK	1	1		21.49		1.5

[NR Band n41 Conducted Power, DSI=0,1,2,3,4 (Power Class 2&3)]

NR Band n41 _20 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						501204	509898	518598	527298	535998	
						2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz	
20 Mhz	30	DFT-s	pi/2 BPSK	1	1	18.36	18.33	18.24	18.00	18.27	0
				1	26	18.25	18.12	18.04	17.86	18.44	0
				1	49	18.37	18.19	18.10	18.00	18.79	0
				25	0	18.40	18.28	18.18	18.04	18.37	0
				25	13	18.37	18.20	18.11	17.98	18.56	0
				25	26	18.44	18.33	18.10	18.02	18.73	0
				50	0	18.36	18.26	18.15	17.98	18.62	0
			QPSK	1	1	18.39	18.26	18.20	17.91	18.27	0
				1	26	18.25	18.07	17.98	17.85	18.42	0
				1	49	18.31	18.16	18.01	17.92	18.77	0
				25	0	18.44	18.34	18.22	18.06	18.44	0
				25	13	18.39	18.24	18.12	17.97	18.55	0
				25	26	18.45	18.31	18.07	18.01	18.71	0
				50	0	18.40	18.23	18.12	18.00	18.60	0
			16QAM	1	1	18.45	18.39	18.21	18.04	18.36	0
			64QAM	1	1	18.00	17.89	17.83	17.53	17.92	0
			256QAM	1	1	17.98	17.96	17.94	17.74	17.92	0
		CP	QPSK	1	1	18.40	18.29	18.18	17.96	18.24	0

NR Band n41 _30 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						502200	510402	518598	526800	534996	
						2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz	
30 Mhz	30	DFT-s	pi/2 BPSK	1	1	18.56	18.37	18.29	18.14	18.30	0
				1	39	18.43	18.24	18.06	18.03	18.50	0
				1	76	18.51	18.31	18.25	18.15	18.88	0
				36	0	18.53	18.34	18.24	18.13	18.41	0
				36	21	18.42	18.25	18.10	18.09	18.54	0
				36	42	18.58	18.36	18.16	18.16	18.78	0
				75	0	18.53	18.30	18.16	18.13	18.57	0
			QPSK	1	1	18.48	18.32	18.19	18.08	18.24	0
				1	39	18.42	18.18	18.01	18.00	18.49	0
				1	76	18.44	18.26	18.19	18.05	18.93	0
				36	0	18.58	18.37	18.27	18.12	18.42	0
				36	21	18.47	18.29	18.11	18.09	18.58	0
				36	42	18.52	18.36	18.19	18.16	18.79	0
				75	0	18.53	18.31	18.16	18.11	18.52	0
			16QAM	1	1	18.60	18.41	18.24	18.18	18.41	0
			64QAM	1	1	18.11	17.90	17.87	17.69	17.90	0
			256QAM	1	1	18.18	18.13	17.90	17.81	17.96	0
		CP	QPSK	1	1	18.48	18.28	18.19	18.12	18.26	0

NR Band n41 _40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						503202	513468		523734	534000	
						2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz	
40 MHz	30	DFT-s	pi/2 BPSK	1	1	18.61	18.40		18.22	18.24	0
				1	53	18.39	18.19		18.02	18.34	0
				1	104	18.49	18.34		18.14	18.92	0
				50	0	18.55	18.33		18.16	18.34	0
				50	28	18.50	18.24		18.09	18.45	0
				50	56	18.47	18.33		18.13	18.79	0
				100	0	18.46	18.32		18.13	18.52	0
			QPSK	1	1	18.55	18.33		18.20	18.22	0
				1	53	18.37	18.15		17.98	18.30	0
				1	104	18.44	18.26		18.10	19.00	0
				50	0	18.59	18.38		18.17	18.31	0
				50	28	18.57	18.25		18.12	18.45	0
				50	56	18.51	18.31		18.10	18.81	0
				100	0	18.49	18.27		18.13	18.55	0
			16QAM	1	1	18.66	18.46		18.29	18.33	0
			64QAM	1	1	18.13	17.97		17.69	17.87	0
			256QAM	1	1	18.21	18.19		17.86	17.92	0
		CP	QPSK	1	1	18.50	18.32		18.16	18.21	0

NR Band n41 _50 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						504204		518598		532998	
						2521.02 MHz		2592.99 MHz		2664.99 MHz	
50 MHz	30	DFT-s	pi/2 BPSK	1	1	18.68		18.38		18.23	0
				1	67	18.54		18.20		18.25	0
				1	131	18.47		18.16		18.88	0
				64	0	18.65		18.32		18.20	0
				64	35	18.59		18.23		18.29	0
				64	69	18.55		18.13		18.68	0
				128	0	18.59		18.26		18.37	0
			QPSK	1	1	18.62		18.36		18.22	0
				1	67	18.49		18.16		18.15	0
				1	131	18.38		18.09		18.97	0
				64	0	18.66		18.31		18.23	0
				64	35	18.59		18.26		18.31	0
				64	69	18.56		18.12		18.69	0
				128	0	18.58		18.30		18.40	0
			16QAM	1	1	18.75		18.46		18.33	0
			64QAM	1	1	18.20		17.94		17.79	0
			256QAM	1	1	18.25		18.06		17.91	0
		CP	QPSK	1	1	18.59		18.31		18.15	0

NR Band n41_60 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						505200		518598		531996	
						2526 MHz		2592.99 MHz		2659.98 MHz	
60 MHz	30	DFT-s	pi/2 BPSK	1	1	18.50		18.36		17.96	0
				1	81	18.37		18.21		18.13	0
				1	160	18.40		18.06		18.86	0
				81	0	18.49		18.34		18.04	0
				81	41	18.46		18.27		18.19	0
				81	81	18.41		18.18		18.45	0
				162	0	18.46		18.33		18.31	0
			QPSK	1	1	18.55		18.31		17.90	0
				1	81	18.35		18.17		18.03	0
				1	160	18.42		18.01		18.83	0
				81	0	18.49		18.35		18.07	0
				81	41	18.41		18.28		18.22	0
				81	81	18.39		18.22		18.48	0
				162	0	18.46		18.30		18.30	0
			16QAM	1	1	18.34		18.44		18.06	0
			64QAM	1	1	18.05		17.92		17.53	0
			256QAM	1	1	18.02		18.03		17.65	0
		CP	QPSK	1	1	18.43		18.33		17.87	0

NR Band n41_80 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]	
						507204					529998
						2536.02 MHz					2649.99 MHz
80 MHz	30	DFT-s	pi/2 BPSK	1	1	18.68				18.28	0
				1	109	18.42				18.14	0
				1	215	18.45				18.97	0
				108	0	18.48				18.20	0
				108	55	18.46				18.25	0
				108	109	18.40				18.50	0
				216	0	18.51				18.31	0
			QPSK	1	1	18.65				18.25	0
				1	109	18.34				18.09	0
				1	215	18.37				18.94	0
				108	0	18.54				18.18	0
				108	55	18.47				18.24	0
				108	109	18.42				18.45	0
				216	0	18.50				18.38	0
			16QAM	1	1	18.72				18.33	0
			64QAM	1	1	18.25				17.82	0
			256QAM	1	1	18.32				17.94	0
		CP	QPSK	1	1	18.59				18.21	0

NR Band n41_90 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]	
						508200					528996
						2541 MHz					2644.98 MHz
90 MHz	30	DFT-s	pi/2 BPSK	1	1	18.78				18.40	0
				1	123	18.46				18.16	0
				1	243	18.33				18.98	0
				120	0	18.70				18.31	0
				120	63	18.48				18.24	0
				120	125	18.46				18.46	0
				243	0	18.51				18.37	0
			QPSK	1	1	18.71				18.34	0
				1	123	18.43				18.11	0
				1	243	18.22				18.89	0
				120	0	18.70				18.28	0
				120	63	18.51				18.24	0
				120	125	18.44				18.48	0
				243	0	18.57				18.35	0
			16QAM	1	1	18.77				18.44	0
			64QAM	1	1	18.36				18.01	0
			256QAM	1	1	18.43				18.21	0
		CP	QPSK	1	1	18.66				18.31	0

NR Band n41_100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
								518598		
								2592.99 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1			18.51		0
				1	137			18.29		0
				1	271			18.05		0
				135	0			18.41		0
				135	69			18.29		0
				135	138			18.24		0
				270	0			18.29		0
			QPSK	1	1			18.00		0
				1	137			18.28		0
				1	271			18.47		0
				135	0			18.45		0
				135	69			18.53		0
				135	138			18.28		0
				270	0			18.33		0
			16QAM	1	1			18.56		0
			64QAM	1	1			18.03		0
			256QAM	1	1			18.18		0
		CP	QPSK	1	1			18.49		0

[NR Band n66 Conducted Power, DSI=0, 2]

NR Band n66 _5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						342500	349000	355500	
						1712.5 MHz	1745 MHz	1777.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.66	23.50	23.51	0
				1	13	23.67	23.56	23.54	0
				1	23	23.63	23.52	23.43	0
				12	0	23.22	23.04	23.00	0.5
				12	7	23.66	23.56	23.50	0
				12	13	23.17	23.00	23.03	0.5
			QPSK	25	0	23.17	22.99	23.02	0.5
				1	1	23.72	23.60	23.56	0
				1	13	23.72	23.55	23.51	0
				1	23	23.71	23.52	23.50	0
				12	0	22.70	22.53	22.51	1
				12	7	23.72	23.58	23.53	0
				12	13	22.69	22.50	22.48	1
				25	0	22.64	22.54	22.50	1
			16QAM	1	1	22.69	22.56	22.51	1
			64QAM	1	1	21.30	21.20	21.08	2.5
			256QAM	1	1	18.58	18.06	18.37	4.5
		CP	QPSK	1	1	22.28	22.18	22.07	1.5

NR Band n66 _10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343000	349000	355000	
						1715 MHz	1745 MHz	1775 MHz	
10 MHz	15	DFT-s	pi/2 BPSK	1	1	23.71	23.51	23.53	0
				1	26	23.73	23.53	23.53	0
				1	50	23.71	23.52	23.48	0
				25	0	23.27	23.05	23.06	0.5
				25	14	23.77	23.53	23.54	0
				25	27	23.27	23.00	23.05	0.5
			QPSK	50	0	23.29	23.04	23.06	0.5
				1	1	23.83	23.56	23.57	0
				1	26	23.84	23.52	23.58	0
				1	50	23.74	23.50	23.57	0
				25	0	22.82	22.49	22.57	1
				25	14	23.83	23.59	23.58	0
				25	27	22.73	22.53	22.52	1
				50	0	22.77	22.48	22.49	1
			16QAM	1	1	22.89	22.63	22.64	1
			64QAM	1	1	21.46	21.21	21.23	2.5
			256QAM	1	1	18.69	18.44	18.51	4.5
		CP	QPSK	1	1	22.35	22.22	22.17	1.5

NR Band n66 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343500	349000	354500	
						1717.5 MHz	1745 MHz	1772.5 MHz	
15 MHz	15	DFT-s	pi/2 BPSK	1	1	23.74	23.47	23.32	0
				1	40	23.65	23.40	23.32	0
				1	77	23.70	23.49	23.44	0
				36	0	23.26	23.00	22.91	0.5
				36	22	23.73	23.50	23.44	0
				36	43	23.20	23.01	22.94	0.5
				75	0	23.27	23.03	22.96	0.5
			QPSK	1	1	23.83	23.60	23.44	0
				1	40	23.68	23.48	23.45	0
				1	77	23.69	23.51	23.53	0
				36	0	22.70	22.56	22.47	1
				36	22	23.71	23.49	23.47	0
				36	43	22.70	22.48	22.41	1
				75	0	22.70	22.52	22.49	1
			16QAM	1	1	22.80	22.55	22.44	1
			64QAM	1	1	21.44	21.19	21.11	2.5
			256QAM	1	1	18.65	18.48	18.30	4.5
		CP	QPSK	1	1	22.35	22.17	22.06	1.5

NR Band n66 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						344000	349000	354000	
						1720 MHz	1745 MHz	1770 MHz	
20 MHz	15	DFT-s	pi/2 BPSK	1	1	23.71	23.52	23.46	0
				1	53	23.58	23.41	23.33	0
				1	104	23.59	23.48	23.46	0
				50	0	23.18	23.02	22.98	0.5
				50	28	23.64	23.51	23.41	0
				50	56	23.18	22.99	23.02	0.5
				100	0	23.19	23.01	22.93	0.5
			QPSK	1	1	23.75	23.66	23.53	0
				1	53	23.82	23.46	23.39	0
				1	104	23.67	23.54	23.54	0
				50	0	22.69	22.53	22.48	1
				50	28	23.65	23.57	23.42	0
				50	56	22.65	22.49	22.45	1
				100	0	22.66	22.53	22.49	1
			16QAM	1	1	22.78	22.63	22.51	1
			64QAM	1	1	21.38	21.29	21.20	2.5
			256QAM	1	1	18.63	18.51	18.40	4.5
		CP	QPSK	1	1	22.17	22.23	22.14	1.5

NR Band n66 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
30 MHz	15	DFT-s	pi/2 BPSK	1	1		1745 MHz		
				1	80		23.48		0
				1	158		23.37		0
				80	0		23.41		0
				80	40		23.01		0.5
				80	80		23.46		0
			QPSK	160	0		22.92		0.5
				1	1		22.95		0.5
				1	80		23.64		0
				1	158		23.40		0
				80	0		23.48		0
				80	40		22.49		1
				80	80		23.52		0
				160	0		22.44		1
			16QAM	1	1		22.49		1
				1	1		22.57		1
				1	1		21.24		2.5
			256QAM	1	1		18.49		4.5
				1	1		22.20		1.5
		CP	QPSK	1	1				

NR Band n66 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
40 MHz	15	DFT-s	pi/2 BPSK	1	1		1745 MHz		
				1	108		23.47		0
				1	214		23.36		0
				108	0		23.33		0
				108	54		22.95		0.5
				108	108		23.44		0
			QPSK	108	108		22.88		0.5
				216	0		22.90		0.5
				1	1		23.61		0
				1	108		23.33		0
				1	214		23.41		0
				108	0		22.47		1
				108	54		23.48		0
				108	108		22.41		1
				216	0		22.45		1
			16QAM	1	1		22.56		1
				1	1		21.22		2.5
				1	1		18.45		4.5
		CP	QPSK	1	1		22.18		1.5

[NR Band n71 Conducted Power, DSI=0, 1, 2, 3, 4]

NR Band n71 _ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						133100	136100	139100	
						665.5 MHz	680.5 MHz	695.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	24.44	24.29	24.08	0
				1	13	24.22	24.17	23.98	0
				1	23	24.25	24.08	23.86	0
				12	0	23.88	23.69	23.53	0.5
				12	7	24.31	24.14	23.93	0
				12	13	23.72	23.60	23.37	0.5
				25	0	23.79	23.60	23.42	0.5
			QPSK	1	1	24.39	24.25	24.01	0
				1	13	24.34	24.15	23.95	0
				1	23	24.22	24.06	23.54	0
				12	0	23.41	23.24	23.01	1
				12	7	24.29	24.07	23.79	0
				12	13	23.24	23.08	22.77	1
				25	0	23.37	23.15	22.91	1
			16QAM	1	1	23.30	23.24	23.16	1
			64QAM	1	1	22.08	22.03	22.23	2.5
			256QAM	1	1	19.68	19.51	19.39	4.5
		CP	QPSK	1	1	22.92	22.83	22.59	1.5

NR Band n71 _ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						133600	136100	138600	
						668 MHz	680.5 MHz	693 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	24.33	23.90	23.90	0
				1	26	24.21	24.62	23.66	0
				1	50	24.16	24.13	23.79	0
				25	0	23.76	23.52	23.38	0.5
				25	14	24.23	24.66	23.81	0
				25	27	23.79	23.67	23.39	0.5
				50	0	23.70	24.15	23.36	0.5
			QPSK	1	1	24.34	24.08	23.91	0
				1	26	24.19	24.54	23.79	0
				1	50	24.24	24.10	23.80	0
				25	0	23.36	23.16	22.88	1
				25	14	24.27	24.55	23.83	0
				25	27	23.32	23.18	22.86	1
				50	0	23.31	23.67	23.19	1
			16QAM	1	1	23.28	23.10	23.05	1
			64QAM	1	1	22.05	22.35	21.65	2.5
			256QAM	1	1	19.55	19.35	19.14	4.5
		CP	QPSK	1	1	22.62	22.69	22.39	1.5

NR Band n71 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							136100		
							680.5 MHz		
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		24.34		0
				1	40		24.12		0
				1	77		23.96		0
				36	0		23.79		0.5
				36	22		24.15		0
				36	43		23.59		0.5
			QPSK	75	0		23.69		0.5
				1	1		24.43		0
				1	40		24.18		0
				1	77		24.02		0
				36	0		23.30		1
				36	22		24.21		0
				36	43		23.12		1
				75	0		23.24		1
			16QAM	1	1		23.27		1
			64QAM	1	1		22.21		2.5
			256QAM	1	1		19.56		4.5
		CP	QPSK	1	1		22.94		1.5

NR Band n71 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							136100		
							680.5 MHz		
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		24.21		0
				1	53		24.12		0
				1	104		23.94		0
				50	0		23.81		0.5
				50	28		24.18		0
				50	56		23.61		0.5
			QPSK	100	0		23.68		0.5
				1	1		24.37		0
				1	53		24.18		0
				1	104		24.01		0
				50	0		23.32		1
				50	28		24.26		0
				50	56		23.11		1
				100	0		23.26		1
			16QAM	1	1		23.18		1
			64QAM	1	1		21.99		2.5
			256QAM	1	1		19.56		4.5
		CP	QPSK	1	1		22.72		1.5

NR Band n71 at 20 MHz Bandwidth does not support three non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

[NR Band n77 Conducted Power, DSI = 0, 1, 3, 4] – Power Class 2 & 3

NR Band n77_ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647334	650800	654266	657734	661200	664666	
						3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz	
20 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.12	17.35	16.94	16.68	17.58	17.55	0
				1	26	16.98	17.15	16.78	16.75	17.67	17.40	0
				1	49	17.09	17.15	16.82	17.02	17.96	17.46	0
				25	0	17.08	17.25	16.93	16.70	17.63	17.52	0
				25	13	17.02	17.17	16.76	16.73	17.69	17.38	0
				25	26	17.13	17.23	16.82	16.87	17.81	17.44	0
				50	0	17.05	17.20	16.77	16.75	17.71	17.40	0
			QPSK	1	1	17.12	17.28	16.89	16.56	17.56	17.48	0
				1	26	16.98	17.14	16.71	16.67	17.62	17.29	0
				1	49	17.08	17.09	16.77	17.01	17.91	17.38	0
				25	0	17.14	17.29	16.96	16.71	17.63	17.51	0
				25	13	17.06	17.25	16.81	16.75	17.69	17.40	0
				25	26	17.17	17.25	16.80	16.88	17.84	17.44	0
				50	0	17.01	17.24	16.78	16.68	17.63	17.36	0
			16QAM	1	1	17.14	17.19	16.72	16.86	17.77	17.41	0
			64QAM	1	1	16.77	16.97	16.49	16.20	17.18	17.12	0
			256QAM	1	1	16.84	17.06	16.66	16.44	17.35	17.31	0
		CP	QPSK	1	1	17.29	17.43	16.97	16.71	17.67	17.59	0

NR Band n77_ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647666	651000	654334	657666	661000	664334	
						3714.99 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3965.01 MHz	
30 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.08	17.23	16.89	16.70	17.42	17.73	0
				1	39	17.03	17.15	16.84	16.84	17.55	17.48	0
				1	76	17.31	17.17	16.94	17.17	17.93	17.46	0
				36	0	17.04	17.25	16.85	16.80	17.55	17.68	0
				36	21	17.13	17.15	16.86	16.87	17.55	17.48	0
				36	42	17.26	17.19	16.83	17.06	17.77	17.54	0
				75	0	17.17	17.20	16.90	16.86	17.59	17.53	0
			QPSK	1	1	17.03	17.16	16.84	16.61	17.37	17.68	0
				1	39	17.00	17.06	16.74	16.75	17.50	17.40	0
				1	76	17.24	17.14	16.85	17.12	17.88	17.39	0
				36	0	17.07	17.29	16.83	16.77	17.56	17.71	0
				36	21	17.13	17.18	16.87	16.86	17.61	17.55	0
				36	42	17.23	17.23	16.88	17.08	17.75	17.58	0
				75	0	17.08	17.12	16.85	16.83	17.53	17.51	0
			16QAM	1	1	17.18	17.22	16.82	17.03	17.71	17.54	0
			64QAM	1	1	16.65	16.79	16.45	16.23	17.07	17.32	0
			256QAM	1	1	16.80	17.03	16.65	16.48	17.24	17.52	0
		CP	QPSK	1	1	17.09	17.25	16.91	16.71	17.48	17.79	0

NR Band n77_40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						648000	651200	654400	657600	660800	664000	
						3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz	
40 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.20	17.35	17.00	16.86	17.47	17.64	0
				1	53	17.16	17.15	16.86	16.83	17.61	17.59	0
				1	104	17.45	17.16	16.84	17.17	17.99	17.56	0
				50	0	17.18	17.32	16.81	16.76	17.57	17.62	0
				50	28	17.26	17.19	16.89	16.88	17.67	17.47	0
				50	56	17.37	17.13	16.88	17.09	17.80	17.59	0
				100	0	17.30	17.20	16.89	16.91	17.67	17.56	0
			QPSK	1	1	17.15	17.30	16.91	16.76	17.38	17.55	0
				1	53	17.11	17.08	16.80	16.75	17.58	17.46	0
				1	104	17.36	17.11	16.75	17.11	17.93	17.49	0
				50	0	17.21	17.34	16.85	16.81	17.60	17.66	0
				50	28	17.35	17.05	16.68	17.08	17.93	17.45	0
				50	56	17.16	17.27	16.82	16.75	17.57	17.64	0
				100	0	17.29	17.23	16.89	16.90	17.69	17.52	0
			16QAM	1	1	17.30	17.47	17.02	16.90	17.49	17.68	0
			64QAM	1	1	16.80	17.00	16.58	16.42	17.06	17.20	0
			256QAM	1	1	16.98	17.19	16.76	16.63	17.23	17.46	0
		CP	QPSK	1	1	17.22	17.41	16.95	16.88	17.43	17.67	0

NR Band n77_50 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						648334	652166	656000		659834	663666	
						3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz	
50 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.95	17.20	16.61		16.81	17.59	0
				1	67	17.05	16.99	16.63		17.32	17.49	0
				1	131	17.22	16.77	16.78		17.78	17.33	0
				64	0	16.98	17.18	16.76		17.13	17.60	0
				64	35	17.10	17.02	16.68		17.35	17.58	0
				64	69	17.17	16.92	16.67		17.59	17.48	0
				128	0	17.11	17.05	16.63		17.37	17.54	0
			QPSK	1	1	16.87	17.13	16.52		16.70	17.51	0
				1	67	17.03	16.91	16.53		17.21	17.44	0
				1	131	17.15	16.70	16.71		17.71	17.28	0
				64	0	17.04	17.19	16.71		17.13	17.61	0
				64	35	17.07	16.65	16.70		17.64	17.21	0
				64	69	16.99	17.14	16.66		17.08	17.59	0
				128	0	17.12	17.04	16.63		17.32	17.58	0
			16QAM	1	1	16.98	17.27	16.64		16.85	17.67	0
			64QAM	1	1	16.52	16.78	16.18		16.36	17.16	0
			256QAM	1	1	16.77	17.00	16.42		16.62	17.18	0
		CP	QPSK	1	1	16.97	17.14	16.62		16.82	17.56	0

NR Band n77_60 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						648668	653556			658444	663332	
						3730.02	3803.34			3876.66	3949.98	
60 Mhz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.14	17.14			16.58	17.13	0
				1	81	17.25	17.01			17.15	17.67	0
				1	160	17.31	16.75			17.60	17.79	0
				81	0	17.08	17.13			16.88	17.48	0
				81	41	17.24	17.00			17.16	17.65	0
				81	81	17.32	16.91			17.40	17.78	0
				162	0	17.28	17.02			17.11	17.63	0
			QPSK	1	1	17.10	17.08			16.47	17.08	0
				1	81	17.20	16.96			17.05	17.66	0
				1	160	17.26	16.70			17.50	17.77	0
				81	0	17.15	17.14			16.87	17.53	0
				81	41	17.21	16.62			17.43	17.71	0
				81	81	17.08	17.11			16.85	17.52	0
				162	0	17.28	17.01			17.12	17.69	0
			16QAM	1	1	17.23	17.24			16.59	17.25	0
			64QAM	1	1	16.76	16.75			16.11	16.77	0
			256QAM	1	1	16.81	16.83			16.28	16.87	0
		CP	QPSK	1	1	17.17	17.17			16.59	17.17	0

NR Band n77_70 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649000	654336			658334	663000	
						3750	3804.99			3875.01	3945	
70 Mhz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.22	17.11			16.63	17.15	0
				1	95	17.27	17.06			17.22	17.70	0
				1	187	17.38	16.69			17.50	17.81	0
				90	0	17.08	17.19			16.80	17.47	0
				90	50	17.32	17.00			17.13	17.73	0
				90	99	17.42	16.81			17.50	17.73	0
				180	0	17.19	16.92			17.11	17.56	0
			QPSK	1	1	17.08	17.17			16.55	16.98	0
				1	95	17.21	17.01			17.07	17.59	0
				1	187	17.27	16.77			17.53	17.86	0
				90	0	17.20	17.24			16.88	17.54	0
				90	50	17.28	16.66			17.51	17.79	0
				90	99	17.07	17.21			16.89	17.49	0
				180	0	17.27	16.99			17.22	17.63	0
			16QAM	1	1	17.28	17.22			16.62	17.26	0
			64QAM	1	1	16.80	16.82			16.09	16.79	0
			256QAM	1	1	16.84	16.78			16.22	16.90	0
		CP	QPSK	1	1	17.08	17.17			16.58	17.21	0

NR Band n77_ 80 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649334		656000		662666		
						3740.01 MHz		3840 MHz		3939.99 MHz		
80 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.20		17.01		16.88		0
				1	109	17.31		16.84		17.51		0
				1	215	17.19		17.08		17.69		0
				108	0	17.20		16.88		17.17		0
				108	55	17.32		16.81		17.55		0
				108	109	17.37		16.96		17.76		0
				216	0	17.24		16.91		17.44		0
			QPSK	1	1	17.19		16.91		16.82		0
				1	109	17.29		16.71		17.50		0
				1	215	17.11		16.99		17.64		0
				108	0	17.05		16.98		17.63		0
				108	55	16.99		16.46		17.13		0
				108	109	17.40		16.96		17.81		0
				216	0	17.24		16.91		17.48		0
			16QAM	1	1	17.30		17.04		17.02		0
			64QAM	1	1	16.82		16.55		16.56		0
			256QAM	1	1	16.98		16.77		16.66		0
		CP	QPSK	1	1	17.24		17.01		16.90		0

NR Band n77_ 90 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						649668		656000		662332	
						3745.02 MHz		3840 MHz		3934.98 MHz	
90 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.19		16.98		16.77	0
				1	123	17.22		16.83		17.46	0
				1	243	17.38		17.25		17.57	0
				120	0	17.12		16.84		17.10	0
				120	63	17.25		16.82		17.47	0
				120	125	17.37		16.97		17.68	0
				243	0	17.20		16.93		17.47	0
			QPSK	1	1	17.08		16.89		16.75	0
				1	123	17.18		16.76		17.42	0
				1	243	17.16		17.04		17.38	0
				120	0	17.12		17.01		17.32	0
				120	63	16.88		16.48		17.17	0
				120	125	17.34		16.96		17.71	0
				243	0	17.19		16.93		17.50	0
			16QAM	1	1	17.21		17.02		16.89	0
			64QAM	1	1	16.75		16.56		16.41	0
			256QAM	1	1	16.92		16.77		16.60	0
		CP	QPSK	1	1	17.11		16.99		16.77	0

NR Band n77_ 100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						650000				662000	
						3750 MHz				3930 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.21				16.56	0
				1	137	17.37				17.40	0
				1	271	17.28				17.73	0
				135	0	17.15				16.90	0
				135	69	17.29				17.33	0
				135	138	17.27				17.65	0
				270	0	17.18				17.33	0
			QPSK	1	1	17.13				17.68	0
				1	137	17.29				17.31	0
				1	271	17.18				17.65	0
				135	0	17.19				16.90	0
				135	69	17.16				17.60	0
				135	138	17.12				16.84	0
				270	0	17.19				17.32	0
			16QAM	1	1	17.26				16.64	0
			64QAM	1	1	16.77				16.15	0
			256QAM	1	1	16.98				16.41	0
		CP	QPSK	1	1	16.56				17.16	0

[NR Band n77 DOD Conducted Power, DSI = 0, 1, 3, 4] – Power Class 2 & 3

NR Band n77_20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630668	633334	636000	
						3460.02 MHz	3500.01 MHz	3540 MHz	
20MHz	30	DFT-s	pi/2 BPSK	1	1	17.07	17.38	17.86	0
				1	26	17.11	17.46	17.80	0
				1	49	17.20	17.59	17.99	0
				25	0	17.01	17.49	17.86	0
				25	13	17.15	17.51	17.83	0
				25	26	17.18	17.58	17.97	0
				50	0	17.18	17.55	17.88	0
			QPSK	1	1	17.00	17.33	17.83	0
				1	26	17.02	17.41	17.75	0
				1	49	17.13	17.53	17.88	0
				25	0	17.06	17.51	17.90	0
				25	13	17.15	17.53	17.86	0
				25	26	17.21	17.60	17.95	0
				50	0	17.17	17.49	17.96	0
			16QAM	1	1	17.11	17.40	17.91	0
			64QAM	1	1	16.67	16.99	17.39	0
			256QAM	1	1	16.74	17.09	17.60	0
		CP	QPSK	1	1	17.05	17.35	17.80	0

NR Band n77_30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						631000	633334	635666	
						3465 MHz	3500.01 MHz	3534.99 MHz	
30MHz	30	DFT-s	pi/2 BPSK	1	1	17.02	17.40	17.88	0
				1	39	16.99	17.45	17.88	0
				1	76	17.32	17.76	17.92	0
				36	0	17.01	17.43	17.89	0
				36	21	17.04	17.48	17.90	0
				36	42	17.26	17.72	17.96	0
				75	0	17.08	17.53	17.95	0
			QPSK	1	1	16.93	17.33	17.80	0
				1	39	16.95	17.40	17.83	0
				1	76	16.87	17.67	17.91	0
				36	0	16.89	17.46	17.93	0
				36	21	17.06	17.52	17.93	0
				36	42	17.24	17.73	17.98	0
				75	0	17.06	17.09	17.36	0
			16QAM	1	1	17.01	17.02	17.38	0
			64QAM	1	1	16.61	16.97	17.47	0
			256QAM	1	1	16.73	17.12	17.61	0
		CP	QPSK	1	1	16.94	17.35	17.81	0

NR Band n77_40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						631334		635332	
						3470.01 MHz		3529.98 MHz	
40MHz	30	DFT-s	pi/2 BPSK	1	1	17.09		17.61	0
				1	53	17.24		17.77	0
				1	104	17.58		17.97	0
				50	0	17.11		17.75	0
				50	28	17.28		17.82	0
				50	56	17.41		17.89	0
				100	0	17.19		17.85	0
			QPSK	1	1	17.02		17.55	0
				1	53	17.18		17.73	0
				1	104	17.55		17.94	0
				50	0	17.14		17.79	0
				50	28	17.23		17.80	0
				50	56	17.16		17.72	0
				100	0	17.23		17.87	0
			16QAM	1	1	17.19		17.71	0
			64QAM	1	1	16.70		17.24	0
			256QAM	1	1	16.79		17.37	0
		CP	QPSK	1	1	17.04		17.57	0

NR Band n77_50 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						631668		635000	
						3475.02 MHz		3525 MHz	
50MHz	30	DFT-s	pi/2 BPSK	1	1	16.75		17.22	0
				1	67	17.03		17.55	0
				1	131	17.43		17.85	0
				64	0	16.92		17.44	0
				64	35	17.09		17.62	0
				64	69	17.32		17.69	0
				128	0	17.08		17.61	0
			QPSK	1	1	16.65		17.21	0
				1	67	16.93		17.46	0
				1	131	17.35		17.75	0
				64	0	16.94		17.46	0
				64	35	16.92		17.50	0
				64	69	17.05		17.45	0
				128	0	17.08		17.62	0
			16QAM	1	1	16.80		17.30	0
			64QAM	1	1	16.28		16.85	0
			256QAM	1	1	16.46		16.97	0
		CP	QPSK	1	1	16.71		17.19	0

NR Band n77_60 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
60MHz	30	DFT-s	pi/2 BPSK	1	1		17.18		0
				1	81		17.56		0
				1	160		17.79		0
				81	0		17.35		0
				81	41		17.57		0
				81	81		17.78		0
				162	0		17.59		0
			QPSK	1	1		17.12		0
				1	81		17.51		0
				1	160		17.70		0
				81	0		17.38		0
				81	41		17.49		0
				81	81		17.61		0
				162	0		17.59		0
			16QAM	1	1		17.29		0
			64QAM	1	1		16.80		0
			256QAM	1	1		16.89		0
		CP	QPSK	1	1		17.14		0

NR Band n77_70 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
70MHz	30	DFT-s	pi/2 BPSK	1	1		17.06		0
				1	95		17.57		0
				1	187		17.75		0
				90	0		17.29		0
				90	50		17.58		0
				90	99		17.79		0
				180	0		17.56		0
			QPSK	1	1		17.03		0
				1	95		17.55		0
				1	187		17.25		0
				90	0		17.37		0
				90	50		17.10		0
				90	99		17.79		0
				180	0		17.59		0
			16QAM	1	1		16.93		0
			64QAM	1	1		16.59		0
			256QAM	1	1		16.76		0
		CP	QPSK	1	1		17.01		0

NR Band n77_80 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
80MHz	30	DFT-s	pi/2 BPSK	1	1		17.04		0
				1	109		17.55		0
				1	215		17.82		0
				108	0		17.26		0
				108	55		17.56		0
				108	109		17.77		0
				216	0		17.55		0
			QPSK	1	1		16.98		0
				1	109		17.46		0
				1	215		17.34		0
				108	0		17.47		0
				108	55		17.16		0
				108	109		17.81		0
				216	0		17.56		0
			16QAM	1	1		17.16		0
			64QAM	1	1		16.65		0
			256QAM	1	1		16.76		0
		CP	QPSK	1	1		17.00		0

NR Band n77_90 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
90MHz	30	DFT-s	pi/2 BPSK	1	1		17.03		0
				1	123		17.59		0
				1	243		17.84		0
				120	0		17.28		0
				120	63		17.56		0
				120	125		17.80		0
				243	0		17.54		0
			QPSK	1	1		16.95		0
				1	123		17.49		0
				1	243		17.43		0
				120	0		17.35		0
				120	63		17.16		0
				120	125		17.82		0
				243	0		17.58		0
			16QAM	1	1		17.16		0
			64QAM	1	1		16.64		0
			256QAM	1	1		16.74		0
		CP	QPSK	1	1		16.96		0

NR Band n77_100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
100MHz	30	DFT-s	pi/2 BPSK	1	1		16.89		0
				1	137		17.57		0
				1	271		17.87		0
				135	0		17.25		0
				135	69		17.54		0
				135	138		17.76		0
				270	0		17.52		0
			QPSK	1	1		17.83		0
				1	137		17.51		0
				1	271		17.35		0
				135	0		17.29		0
				135	69		17.54		0
				135	138		17.16		0
				270	0		17.34		0
			16QAM	1	1		16.99		0
			64QAM	1	1		16.52		0
			256QAM	1	1		16.59		0
		CP	QPSK	1	1		16.87		0

11.5.2 NR Band Reduced Conducted Power (Hotspot activated DSI=3)

DSI = 3 PLimit Calculations - 5G Hotspot SAR

[NR Band n2 Conducted Power, DSI = 3]

NR Band n2_ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 MHz	1880 MHz	1907.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.73	18.91	18.47	0
				1	13	18.80	18.90	18.43	0
				1	23	18.81	18.92	18.38	0
				12	0	18.67	18.87	18.40	0
				12	7	18.75	19.01	18.39	0
				12	13	18.75	18.74	18.37	0
			QPSK	25	0	18.70	18.74	18.37	0
				1	1	18.68	19.04	18.48	0
				1	13	18.77	19.04	18.46	0
				1	23	18.81	18.88	18.38	0
				12	0	18.68	19.07	18.39	0
				12	7	18.74	18.71	18.39	0
				12	13	18.77	18.94	18.36	0
				25	0	18.72	18.94	18.39	0
			16QAM	1	1	18.71	19.14	18.44	0
			64QAM	1	1	18.87	19.39	18.60	0
			256QAM	1	1	18.06	18.17	17.72	0
		CP	QPSK	1	1	18.74	18.73	18.27	0

NR Band n2_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 MHz	1880 MHz	1905 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.70	18.91	18.53	0
				1	26	18.84	18.89	19.12	0
				1	50	18.87	18.82	18.20	0
				25	0	18.76	18.80	18.51	0
				25	14	18.85	19.02	18.70	0
				25	27	18.89	18.66	18.47	0
			QPSK	50	0	18.83	19.05	18.58	0
				1	1	18.66	19.08	18.52	0
				1	26	19.29	19.17	18.67	0
				1	50	19.10	18.73	18.01	0
				25	0	19.08	19.22	18.86	0
				25	14	19.31	18.87	18.51	0
				25	27	19.38	18.91	18.62	0
				50	0	19.22	19.23	18.84	0
			16QAM	1	1	18.70	19.15	18.56	0
			64QAM	1	1	18.84	19.25	18.65	0
			256QAM	1	1	18.20	18.27	17.88	0
		CP	QPSK	1	1	18.83	18.80	18.35	0

NR Band n2 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 MHz	1880 MHz	1902.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.76	19.00	18.71	0
				1	40	18.90	18.98	18.58	0
				1	77	19.08	18.90	18.43	0
				36	0	18.43	18.95	18.67	0
				36	22	18.66	18.99	18.56	0
				36	43	18.92	18.93	18.43	0
				75	0	18.65	19.01	18.56	0
			QPSK	1	1	18.49	19.05	18.65	0
				1	40	18.93	18.98	18.54	0
				1	77	19.24	18.89	18.43	0
				36	0	18.56	19.00	18.62	0
				36	22	18.48	18.99	18.56	0
				36	43	18.99	18.90	18.43	0
				75	0	18.86	18.99	18.60	0
			16QAM	1	1	18.46	18.98	18.71	0
			64QAM	1	1	18.67	19.14	18.90	0
			256QAM	1	1	18.21	18.37	17.85	0
		CP	QPSK	1	1	18.90	18.92	18.35	0

NR Band n2 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 MHz	1880 MHz	1900 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.72	19.03	18.86	0
				1	53	18.99	18.96	18.68	0
				1	104	19.01	18.87	18.42	0
				50	0	18.80	18.99	18.65	0
				50	28	19.03	18.95	18.63	0
				50	56	19.10	18.92	18.51	0
				100	0	18.99	18.93	18.66	0
			QPSK	1	1	18.75	19.06	18.78	0
				1	53	19.05	18.94	18.62	0
				1	104	19.07	18.82	18.40	0
				50	0	18.82	18.97	18.68	0
				50	28	19.04	18.97	18.63	0
				50	56	19.11	18.87	18.49	0
				100	0	19.01	18.99	18.69	0
			16QAM	1	1	18.79	18.97	18.82	0
			64QAM	1	1	19.05	19.16	19.15	0
			256QAM	1	1	18.17	18.33	18.01	0
		CP	QPSK	1	1	18.83	18.93	18.47	0

[NR Band n25 Conducted Power, DSI = 3]

NR Band n25 _ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376500	382500	
						1852.5 MHz	1882.5 MHz	1912.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.04	17.62	17.80	0
				1	13	18.02	17.63	17.85	0
				1	23	17.99	17.65	17.86	0
				12	0	17.96	17.54	17.76	0
				12	7	18.01	17.64	17.85	0
				12	13	18.06	17.63	17.89	0
			QPSK	25	0	17.97	17.60	17.84	0
				1	1	18.04	17.65	17.81	0
				1	13	18.05	17.68	17.89	0
				1	23	18.06	17.68	17.94	0
				12	0	17.97	17.62	18.47	0
				12	7	18.08	17.66	18.53	0
				12	13	18.03	17.63	18.17	0
				25	0	17.98	17.62	18.11	0
			16QAM	1	1	17.98	17.63	18.31	0
			64QAM	1	1	18.24	17.77	18.38	0
			256QAM	1	1	17.45	17.04	17.22	0
		CP	QPSK	1	1	18.03	17.68	17.81	0

NR Band n25 _ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376500	382000	
						1855 MHz	1882.5 MHz	1910 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.08	17.63	17.75	0
				1	26	18.04	17.57	17.82	0
				1	50	17.98	17.66	17.82	0
				25	0	18.04	17.61	17.82	0
				25	14	18.04	17.60	17.87	0
				25	27	18.06	17.63	17.90	0
			QPSK	50	0	18.08	17.63	17.90	0
				1	1	18.15	17.68	17.77	0
				1	26	18.06	17.63	17.89	0
				1	50	17.98	17.71	17.86	0
				25	0	18.06	17.61	17.86	0
				25	14	18.07	17.63	17.89	0
				25	27	18.06	17.59	17.88	0
				50	0	18.03	17.60	17.84	0
			16QAM	1	1	18.20	17.73	17.80	0
			64QAM	1	1	18.39	17.85	17.97	0
			256QAM	1	1	17.56	17.11	17.23	0
		CP	QPSK	1	1	18.22	17.67	17.81	0

NR Band n25 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376500	381500	
						1857.5 MHz	1882.5 MHz	1907.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.14	17.73	17.83	0
				1	40	17.94	17.56	17.86	0
				1	77	17.91	17.64	17.91	0
				36	0	18.08	17.71	17.87	0
				36	22	18.04	17.65	17.97	0
				36	43	17.95	17.61	17.98	0
				75	0	18.02	17.66	17.90	0
			QPSK	1	1	18.16	17.73	17.91	0
				1	40	18.05	17.65	17.94	0
				1	77	17.95	17.72	17.94	0
				36	0	18.08	17.70	17.90	0
				36	22	18.03	17.66	17.98	0
				36	43	17.93	17.57	17.94	0
				75	0	18.06	17.63	17.84	0
			16QAM	1	1	18.13	17.75	17.87	0
			64QAM	1	1	18.44	18.07	18.22	0
			256QAM	1	1	17.60	17.15	17.29	0
		CP	QPSK	1	1	18.24	17.78	17.97	0

NR Band n25 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376500	381000	
						1860 MHz	1882.5 MHz	1905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.12	17.80	17.83	0
				1	53	17.91	17.59	17.82	0
				1	104	17.74	17.59	17.88	0
				50	0	18.01	17.69	17.82	0
				50	28	17.96	17.65	17.87	0
				50	56	17.88	17.71	18.01	0
				100	0	17.95	17.67	17.90	0
			QPSK	1	1	18.14	17.80	17.90	0
				1	53	17.95	17.66	17.89	0
				1	104	17.80	17.63	17.88	0
				50	0	18.04	17.73	17.82	0
				50	28	17.93	17.63	17.86	0
				50	56	17.86	17.67	17.93	0
				100	0	17.97	17.68	17.92	0
			16QAM	1	1	18.15	17.86	17.97	0
			64QAM	1	1	18.43	18.11	18.21	0
			256QAM	1	1	17.55	17.17	17.27	0
		CP	QPSK	1	1	18.18	17.80	17.93	0

NR Band n25 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						373000		380000	
						1865 MHz		1900 MHz	
30 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.32		17.93	0
				1	80	17.92		17.75	0
				1	158	17.93		18.04	0
				80	0	18.13		17.83	0
				80	40	18.03		17.92	0
				80	80	17.97		18.08	0
				160	0	18.07		18.00	0
			QPSK	1	1	18.42		17.99	0
				1	80	18.02		17.89	0
				1	158	18.00		18.08	0
				80	0	18.18		17.92	0
				80	40	18.05		17.94	0
				80	80	17.97		17.96	0
				160	0	18.08		18.02	0
			16QAM	1	1	18.45		18.04	0
			64QAM	1	1	18.68		18.29	0
			256QAM	1	1	17.80		17.35	0
		CP	QPSK	1	1	18.47		17.99	0

NR Band n25 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							376500		
							1882.5 MHz		
40 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		18.11		0
				1	108		17.62		0
				1	214		18.01		0
				108	0		17.85		0
				108	54		17.89		0
				108	108		17.93		0
				216	0		17.88		0
			QPSK	1	1		18.14		0
				1	108		17.73		0
				1	214		18.09		0
				108	0		17.91		0
				108	54		17.87		0
				108	108		17.90		0
				216	0		17.91		0
			16QAM	1	1		18.16		0
			64QAM	1	1		18.45		0
			256QAM	1	1		17.44		0
		CP	QPSK	1	1		18.13		0

[NR Band n30 Conducted Power, DSI = 3]

NR Band n30_ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							462000		
							2310 MHz		
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		17.22		0
				1	13		17.24		0
				1	23		17.30		0
				12	0		17.26		0
				12	7		17.24		0
				12	13		17.30		0
				25	0		17.26		0
			QPSK	1	1		17.27		0
				1	13		17.26		0
				1	23		17.29		0
				12	0		17.27		0
				12	7		17.34		0
				12	13		17.33		0
				25	0		17.34		0
			16QAM	1	1		17.33		0
			64QAM	1	1		17.40		0
			256QAM	1	1		16.77		0
		CP	QPSK	1	1		17.37		0

NR Band n30_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							462000		
							2310 MHz		
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		17.25		0
				1	26		17.20		0
				1	50		17.26		0
				25	0		17.19		0
				25	14		17.25		0
				25	27		17.24		0
				50	0		17.21		0
			QPSK	1	1		17.29		0
				1	26		17.28		0
				1	50		17.25		0
				25	0		17.27		0
				25	14		17.29		0
				25	27		17.32		0
				50	0		17.25		0
			16QAM	1	1		17.31		0
			64QAM	1	1		17.46		0
			256QAM	1	1		16.77		0
		CP	QPSK	1	1		17.46		0

[NR Band n66 Conducted Power, DSI = 3]

NR Band n66 _5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						342500	349000	355500	
						1712.5 MHz	1745 MHz	1777.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	19.21	19.24	19.09	0
				1	13	19.20	19.11	18.99	0
				1	23	19.15	19.07	18.95	0
				12	0	19.11	19.18	19.03	0
				12	7	19.15	19.15	19.02	0
				12	13	19.13	19.05	18.93	0
				25	0	19.14	19.11	18.98	0
			QPSK	1	1	19.21	19.25	19.08	0
				1	13	19.19	19.16	19.04	0
				1	23	19.11	19.03	18.98	0
				12	0	19.15	19.19	19.03	0
				12	7	19.18	19.12	19.04	0
				12	13	19.15	19.06	18.95	0
				25	0	19.09	19.13	18.95	0
			16QAM	1	1	19.20	19.22	19.07	0
			64QAM	1	1	19.28	19.36	19.19	0
			256QAM	1	1	18.54	18.68	18.61	0.5
		CP	QPSK	1	1	19.24	18.85	19.20	0

NR Band n66 _ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						343000	349000	355000	
						1715 MHz	1745 MHz	1775 MHz	
10 MHz	15	DFT-s	pi/2 BPSK	1	1	19.18	19.22	19.16	0
				1	26	19.18	19.36	19.08	0
				1	50	19.12	18.77	18.91	0
				25	0	19.16	19.61	19.17	0
				25	14	19.16	19.75	19.09	0
				25	27	19.19	19.51	19.02	0
				50	0	19.19	19.57	19.14	0
			QPSK	1	1	19.18	19.56	19.18	0
				1	26	19.21	19.75	19.10	0
				1	50	19.14	19.18	18.94	0
				25	0	19.24	19.58	19.19	0
				25	14	19.21	19.57	19.08	0
				25	27	19.15	19.43	19.04	0
				50	0	19.16	19.51	19.09	0
			16QAM	1	1	19.27	19.27	19.29	0
			64QAM	1	1	19.39	19.30	19.36	0
			256QAM	1	1	18.55	18.68	18.66	0.5
		CP	QPSK	1	1	19.04	19.05	19.18	0

NR Band n66 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						343500	349000	354500	
						1717.5 MHz	1745 MHz	1772.5 MHz	
15 MHz	15	DFT-s	pi/2 BPSK	1	1	19.20	19.36	19.38	0
				1	40	19.05	19.06	19.07	0
				1	77	19.08	18.65	18.94	0
				36	0	19.22	19.64	19.25	0
				36	22	19.14	19.42	19.07	0
				36	43	19.16	19.56	19.00	0
				75	0	19.18	19.56	19.11	0
			QPSK	1	1	19.23	19.75	19.40	0
				1	40	19.11	19.55	19.10	0
				1	77	19.13	19.09	18.98	0
				36	0	19.20	19.46	19.25	0
				36	22	19.17	19.37	19.05	0
				36	43	19.14	19.34	19.00	0
				75	0	19.19	19.44	19.07	0
			16QAM	1	1	19.24	19.45	19.44	0
			64QAM	1	1	19.44	19.42	19.70	0
			256QAM	1	1	18.58	18.88	18.84	0.5
		CP	QPSK	1	1	19.02	19.10	19.19	0

NR Band n66 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						344000	349000	354000	
						1720 MHz	1745 MHz	1770 MHz	
20 MHz	15	DFT-s	pi/2 BPSK	1	1	19.16	19.58	19.63	0
				1	53	19.02	19.10	19.11	0
				1	104	18.99	18.82	18.92	0
				50	0	19.12	19.38	19.36	0
				50	28	19.13	19.19	19.20	0
				50	56	19.10	18.98	19.11	0
				100	0	19.09	19.17	19.25	0
			QPSK	1	1	19.26	19.57	19.63	0
				1	53	19.07	19.16	19.14	0
				1	104	18.97	18.85	18.97	0
				50	0	19.16	19.41	19.35	0
				50	28	19.14	19.19	19.21	0
				50	56	19.09	18.95	19.09	0
				100	0	19.13	19.21	19.26	0
			16QAM	1	1	19.26	19.69	19.67	0
			64QAM	1	1	19.40	19.94	19.92	0
			256QAM	1	1	18.59	18.98	19.06	0.5
		CP	QPSK	1	1	19.04	19.22	19.13	0

NR Band n66 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							349000		
							1745 MHz		
30 MHz	15	DFT-s	pi/2 BPSK	1	1		19.54		0
				1	80		19.03		0
				1	158		18.79		0
				80	0		19.34		0
				80	40		19.14		0
				80	80		18.96		0
				160	0		19.11		0
			QPSK	1	1		19.50		0
				1	80		19.16		0
				1	158		18.80		0
				80	0		19.34		0
				80	40		19.15		0
				80	80		18.93		0
				160	0		19.16		0
			16QAM	1	1		19.68		0
			64QAM	1	1		19.87		0
			256QAM	1	1		18.96		0
		CP	QPSK	1	1		19.21		0

NR Band n66 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							349000		
							1745 MHz		
40 MHz	15	DFT-s	pi/2 BPSK	1	1		19.51		0
				1	108		18.96		0
				1	214		18.73		0
				108	0		19.28		0
				108	54		19.07		0
				108	108		18.93		0
				216	0		19.05		0
			QPSK	1	1		19.45		0
				1	108		19.12		0
				1	214		18.78		0
				108	0		19.33		0
				108	54		19.14		0
				108	108		18.89		0
				216	0		19.10		0
			16QAM	1	1		19.64		0
			64QAM	1	1		19.79		0
			256QAM	1	1		18.96		0
		CP	QPSK	1	1		19.16		0

11.5.3 NR Band Reduced Conducted Power (Grip-sensor on, EARJACK DSI=1,4)

DSI = 1, 4 PLimit Calculations - 5G Phablet Reduced SAR

[NR Band n2 Conducted Power, DSI = 1, 4]

NR Band n2_ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 MHz	1880 MHz	1907.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.70	18.85	18.44	0
				1	13	18.67	18.86	18.43	0
				1	23	18.84	18.87	18.36	0
				12	0	18.70	18.78	18.38	0
				12	7	18.74	18.84	18.36	0
				12	13	18.80	18.81	18.33	0
			QPSK	25	0	18.74	18.81	18.35	0
				1	1	18.70	18.82	18.41	0
				1	13	18.77	18.88	18.41	0
				1	23	18.85	18.88	18.37	0
				12	0	18.67	18.84	18.38	0
				12	7	18.75	18.86	18.36	0
				12	13	18.80	18.83	18.34	0
				25	0	18.70	18.82	18.36	0
			16QAM	1	1	18.73	18.89	18.49	0
			64QAM	1	1	18.90	19.01	18.60	0
			256QAM	1	1	18.11	18.25	17.82	0
		CP	QPSK	1	1	18.81	18.78	18.30	0

NR Band n2_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 MHz	1880 MHz	1905 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.67	18.85	18.54	0
				1	26	19.23	18.86	18.52	0
				1	50	19.06	18.76	18.33	0
				25	0	18.66	18.88	18.67	0
				25	14	18.99	18.84	18.77	0
				25	27	19.14	18.84	18.55	0
			QPSK	50	0	19.27	18.87	18.63	0
				1	1	18.79	18.89	18.72	0
				1	26	19.41	18.88	18.98	0
				1	50	19.18	18.80	18.21	0
				25	0	19.09	18.87	18.92	0
				25	14	19.33	18.83	18.69	0
				25	27	19.30	18.83	18.73	0
				50	0	19.20	18.89	18.91	0
			16QAM	1	1	18.73	18.88	18.63	0
			64QAM	1	1	18.74	19.10	18.71	0
			256QAM	1	1	18.14	18.29	17.93	0
		CP	QPSK	1	1	18.87	18.85	18.25	0

NR Band n2 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 MHz	1880 MHz	1902.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.76	18.80	18.61	0
				1	40	18.89	18.30	18.51	0
				1	77	19.04	17.80	18.39	0
				36	0	18.87	18.62	18.57	0
				36	22	19.04	18.43	18.49	0
				36	43	19.08	18.06	18.38	0
				75	0	19.01	18.31	18.49	0
			QPSK	1	1	18.83	18.79	18.61	0
				1	40	18.94	18.38	18.50	0
				1	77	19.14	17.91	18.41	0
				36	0	18.81	18.63	18.55	0
				36	22	19.06	18.28	18.51	0
				36	43	19.05	18.14	18.37	0
				75	0	19.04	18.25	18.46	0
			16QAM	1	1	18.87	18.79	18.63	0
			64QAM	1	1	19.16	18.99	18.86	0
			256QAM	1	1	18.15	18.40	17.98	0
		CP	QPSK	1	1	18.90	18.89	18.34	0

NR Band n2 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 MHz	1880 MHz	1900 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.73	18.97	18.78	0
				1	53	18.98	18.89	18.67	0
				1	104	18.98	18.81	18.35	0
				50	0	18.82	18.94	18.60	0
				50	28	18.99	18.87	18.60	0
				50	56	19.05	18.80	18.46	0
				100	0	19.00	18.89	18.60	0
			QPSK	1	1	18.74	19.01	18.71	0
				1	53	19.08	18.90	18.58	0
				1	104	19.04	18.77	18.37	0
				50	0	18.81	18.97	18.57	0
				50	28	19.01	18.91	18.56	0
				50	56	19.09	18.81	18.45	0
				100	0	19.00	18.95	18.58	0
			16QAM	1	1	18.77	18.90	18.77	0
			64QAM	1	1	19.10	19.14	19.09	0
			256QAM	1	1	18.13	18.36	18.06	0
		CP	QPSK	1	1	18.82	18.93	18.46	0

[NR Band n25 Conducted Power, DSI = 1,4]

NR Band n25 _ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376500	382500	
						1852.5 MHz	1882.5 MHz	1912.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.04	17.62	17.80	0
				1	13	18.02	17.63	17.85	0
				1	23	17.99	17.65	17.86	0
				12	0	17.96	17.54	17.76	0
				12	7	18.01	17.64	17.85	0
				12	13	18.06	17.63	17.89	0
			QPSK	25	0	17.97	17.60	17.84	0
				1	1	18.04	17.65	17.81	0
				1	13	18.05	17.68	17.89	0
				1	23	18.06	17.68	17.94	0
				12	0	17.97	17.62	18.47	0
				12	7	18.08	17.66	18.53	0
				12	13	18.03	17.63	18.17	0
				25	0	17.98	17.62	18.11	0
			16QAM	1	1	17.98	17.63	18.31	0
			64QAM	1	1	18.24	17.77	18.38	0
			256QAM	1	1	17.44	17.12	17.21	0
		CP	QPSK	1	1	18.03	17.68	17.81	0

NR Band n25 _ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376500	382000	
						1855 MHz	1882.5 MHz	1910 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.08	17.63	17.75	0
				1	26	18.04	17.57	17.82	0
				1	50	17.98	17.66	17.82	0
				25	0	18.04	17.61	17.82	0
				25	14	18.04	17.60	17.87	0
				25	27	18.06	17.63	17.90	0
			QPSK	50	0	18.08	17.63	17.90	0
				1	1	18.15	17.68	17.77	0
				1	26	18.06	17.63	17.89	0
				1	50	17.98	17.71	17.86	0
				25	0	18.06	17.61	17.86	0
				25	14	18.07	17.63	17.89	0
				25	27	18.06	17.59	17.88	0
				50	0	18.03	17.60	17.84	0
			16QAM	1	1	18.20	17.73	17.80	0
			64QAM	1	1	18.39	17.85	17.97	0
			256QAM	1	1	17.57	17.09	17.21	0
		CP	QPSK	1	1	18.22	17.67	17.81	0

NR Band n25 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376500	381500	
						1857.5 MHz	1882.5 MHz	1907.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.14	17.73	17.83	0
				1	40	17.94	17.56	17.86	0
				1	77	17.91	17.64	17.91	0
				36	0	18.08	17.71	17.87	0
				36	22	18.04	17.65	17.97	0
				36	43	17.95	17.61	17.98	0
				75	0	18.02	17.66	17.90	0
			QPSK	1	1	18.16	17.73	17.91	0
				1	40	18.05	17.65	17.94	0
				1	77	17.95	17.72	17.94	0
				36	0	18.08	17.70	17.90	0
				36	22	18.03	17.66	17.98	0
				36	43	17.93	17.57	17.94	0
				75	0	18.06	17.63	17.84	0
			16QAM	1	1	18.13	17.75	17.87	0
			64QAM	1	1	18.44	18.07	18.22	0
			256QAM	1	1	17.55	17.09	17.28	0
		CP	QPSK	1	1	18.24	17.78	17.97	0

NR Band n25 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376500	381000	
						1860 MHz	1882.5 MHz	1905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.12	17.80	17.83	0
				1	53	17.91	17.59	17.82	0
				1	104	17.74	17.59	17.88	0
				50	0	18.01	17.69	17.82	0
				50	28	17.96	17.65	17.87	0
				50	56	17.88	17.71	18.01	0
				100	0	17.95	17.67	17.90	0
			QPSK	1	1	18.14	17.80	17.90	0
				1	53	17.95	17.66	17.89	0
				1	104	17.80	17.63	17.88	0
				50	0	18.04	17.73	17.82	0
				50	28	17.93	17.63	17.86	0
				50	56	17.86	17.67	17.93	0
				100	0	17.97	17.68	17.92	0
			16QAM	1	1	18.15	17.86	17.97	0
			64QAM	1	1	18.43	18.11	18.21	0
			256QAM	1	1	17.52	17.14	17.20	0
		CP	QPSK	1	1	18.18	17.80	17.93	0

NR Band n25 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						373000		380000	
						1865 MHz		1900 MHz	
30 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.32		17.93	0
				1	80	17.92		17.75	0
				1	158	17.93		18.04	0
				80	0	18.13		17.83	0
				80	40	18.03		17.92	0
				80	80	17.97		18.08	0
				160	0	18.07		18.00	0
			QPSK	1	1	18.42		17.99	0
				1	80	18.02		17.89	0
				1	158	18.00		18.08	0
				80	0	18.18		17.92	0
				80	40	18.05		17.94	0
				80	80	17.97		17.96	0
				160	0	18.08		18.02	0
			16QAM	1	1	18.45		18.04	0
			64QAM	1	1	18.68		18.29	0
			256QAM	1	1	17.73		17.30	0
		CP	QPSK	1	1	18.47		17.99	0

NR Band n25 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							376500		
							1882.5 MHz		
40 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		18.11		0
				1	108		17.62		0
				1	214		18.01		0
				108	0		17.85		0
				108	54		17.89		0
				108	108		17.93		0
				216	0		17.88		0
			QPSK	1	1		18.14		0
				1	108		17.73		0
				1	214		18.09		0
				108	0		17.91		0
				108	54		17.87		0
				108	108		17.90		0
				216	0		17.91		0
			16QAM	1	1		18.16		0
			64QAM	1	1		18.45		0
			256QAM	1	1		17.40		0
		CP	QPSK	1	1		18.13		0

[NR Band n30 Conducted Power, DSI = 1, 4]

NR Band n30_ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							462000		
							2310 MHz		
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		17.20		0
				1	13		17.18		0
				1	23		17.29		0
				12	0		17.26		0
				12	7		17.21		0
				12	13		17.24		0
				25	0		17.22		0
			QPSK	1	1		17.20		0
				1	13		17.26		0
				1	23		17.25		0
				12	0		17.22		0
				12	7		17.30		0
				12	13		17.26		0
				25	0		17.27		0
			16QAM	1	1		17.27		0
			64QAM	1	1		17.32		0
			256QAM	1	1		16.72		1
		CP	QPSK	1	1		17.29		0

NR Band n30_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							462000		
							2310 MHz		
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		17.24		0
				1	26		17.18		0
				1	50		17.24		0
				25	0		17.19		0
				25	14		17.23		0
				25	27		17.20		0
				50	0		17.14		0
			QPSK	1	1		17.28		0
				1	26		17.23		0
				1	50		17.22		0
				25	0		17.22		0
				25	14		17.22		0
				25	27		17.26		0
				50	0		17.22		0
			16QAM	1	1		17.23		0
			64QAM	1	1		17.40		0
			256QAM	1	1		16.69		1
		CP	QPSK	1	1		17.41		0

[NR Band n66 Conducted Power, DSI = 1, 4]

NR Band n66 _5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						342500	349000	355500	
						1712.5 MHz	1745 MHz	1777.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	19.20	19.19	19.05	0
				1	13	19.19	19.10	18.96	0
				1	23	19.15	19.04	18.90	0
				12	0	19.03	19.15	19.01	0
				12	7	19.11	19.14	18.98	0
				12	13	19.10	18.99	18.85	0
			QPSK	25	0	19.12	19.08	18.91	0
				1	1	19.18	19.22	19.02	0
				1	13	19.16	19.15	18.98	0
				1	23	19.11	18.96	18.94	0
				12	0	19.13	19.14	18.98	0
				12	7	19.10	19.12	19.03	0
				12	13	19.07	19.06	18.95	0
				25	0	19.03	19.05	18.87	0
			16QAM	1	1	19.17	19.21	19.02	0
			64QAM	1	1	19.24	19.34	19.17	0
			256QAM	1	1	18.49	18.65	18.54	0.5
		CP	QPSK	1	1	19.20	18.80	19.12	0

NR Band n66 _10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						343000	349000	355000	
						1715 MHz	1745 MHz	1775 MHz	
10 MHz	15	DFT-s	pi/2 BPSK	1	1	19.16	19.16	19.14	0
				1	26	19.18	19.34	19.02	0
				1	50	19.06	18.72	18.86	0
				25	0	19.10	19.56	19.14	0
				25	14	19.10	19.71	19.04	0
				25	27	19.18	19.45	19.01	0
			QPSK	50	0	19.12	19.55	19.08	0
				1	1	19.17	19.53	19.15	0
				1	26	19.16	19.71	19.06	0
				1	50	19.13	19.10	18.91	0
				25	0	19.19	19.52	19.13	0
				25	14	19.20	19.54	19.03	0
				25	27	19.11	19.42	18.98	0
				50	0	19.14	19.49	19.07	0
			16QAM	1	1	19.21	19.27	19.29	0
			64QAM	1	1	19.39	19.27	19.29	0
			256QAM	1	1	18.49	18.65	18.61	0.5
		CP	QPSK	1	1	18.98	18.98	19.11	0

NR Band n66 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						343500	349000	354500	
						1717.5 MHz	1745 MHz	1772.5 MHz	
15 MHz	15	DFT-s	pi/2 BPSK	1	1	19.16	19.35	19.32	0
				1	40	19.02	19.00	19.00	0
				1	77	19.03	18.57	18.91	0
				36	0	19.16	19.64	19.22	0
				36	22	19.11	19.39	19.02	0
				36	43	19.12	19.53	18.98	0
				75	0	19.16	19.51	19.04	0
			QPSK	1	1	19.20	19.69	19.37	0
				1	40	19.10	19.53	19.06	0
				1	77	19.08	19.09	18.93	0
				36	0	19.17	19.43	19.23	0
				36	22	19.10	19.36	19.03	0
				36	43	19.06	19.29	18.99	0
				75	0	19.13	19.41	19.00	0
			16QAM	1	1	19.17	19.44	19.37	0
			64QAM	1	1	19.37	19.42	19.62	0
			256QAM	1	1	18.51	18.86	18.78	0.5
		CP	QPSK	1	1	18.96	19.09	19.14	0

NR Band n66 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						344000	349000	354000	
						1720 MHz	1745 MHz	1770 MHz	
20 MHz	15	DFT-s	pi/2 BPSK	1	1	19.14	19.52	19.62	0
				1	53	18.98	19.07	19.03	0
				1	104	18.98	18.80	18.85	0
				50	0	19.08	19.37	19.32	0
				50	28	19.09	19.12	19.18	0
				50	56	19.08	18.91	19.05	0
				100	0	19.03	19.16	19.18	0
			QPSK	1	1	19.23	19.49	19.58	0
				1	53	19.01	19.09	19.13	0
				1	104	18.94	18.83	18.91	0
				50	0	19.08	19.39	19.29	0
				50	28	19.07	19.15	19.18	0
				50	56	19.04	18.91	19.06	0
				100	0	19.06	19.14	19.20	0
			16QAM	1	1	19.24	19.63	19.63	0
			64QAM	1	1	19.39	19.88	19.91	0
			256QAM	1	1	18.58	18.91	19.03	0.5
		CP	QPSK	1	1	18.97	19.18	19.12	0

NR Band n66 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							349000		
30 MHz	15	DFT-s	pi/2 BPSK	1	1		1745 MHz		
				1	80		19.48		0
				1	158		19.06		0
				80	0		18.73		0
				80	40		19.32		0
				80	80		19.11		0
			QPSK	160	0		18.85		0
				1	1		19.13		0
				1	80		19.45		0
				1	158		19.04		0
				80	0		18.78		0
				80	40		19.35		0
				80	80		19.14		0
				80	80		18.86		0
				160	0		19.13		0
			16QAM	1	1		19.58		0
			64QAM	1	1		19.82		0
			256QAM	1	1		18.90		0
		CP	QPSK	1	1		19.17		0

NR Band n66 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							349000		
40 MHz	15	DFT-s	pi/2 BPSK	1	1		1745 MHz		
				1	108		19.40		0
				1	214		19.00		0
				108	0		18.69		0
				108	54		19.26		0
				108	108		19.09		0
			QPSK	108	108		18.77		0
				216	0		19.11		0
				1	1		19.44		0
				1	108		19.04		0
				1	214		18.73		0
				108	0		19.30		0
				108	54		19.12		0
				108	108		18.81		0
				216	0		19.10		0
			16QAM	1	1		19.51		0
			64QAM	1	1		19.79		0
			256QAM	1	1		18.90		0
		CP	QPSK	1	1		19.12		0

11.5.4 NR Band Conducted Power (Receiver ON)

[NR Band n77 Conducted Power, DSI = 2] – Power Class 2 & 3

NR Band n77_ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)						MPR [dB]
						647334	650800	654266	657734	661200	664666	
						3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz	
20 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	14.08	14.20	13.77	13.45	14.41	14.83	0
				1	26	13.89	13.99	13.58	13.53	14.43	14.69	0
				1	49	14.00	13.93	13.65	13.87	14.72	14.76	0
				25	0	14.00	14.06	13.74	13.47	14.37	14.79	0
				25	13	13.93	14.03	13.60	13.58	14.48	14.67	0
				25	26	14.03	14.03	13.59	13.73	14.60	14.73	0
				50	0	13.96	14.04	13.61	13.60	14.46	14.74	0
			QPSK	1	1	13.99	14.10	13.67	13.38	14.30	14.79	0
				1	26	13.84	13.90	13.48	13.45	14.39	14.60	0
				1	49	13.94	13.91	13.57	13.84	14.69	14.70	0
				25	0	14.00	14.11	13.74	13.50	14.44	14.81	0
				25	13	13.94	14.03	13.62	13.59	14.46	14.73	0
				25	26	14.00	14.05	13.62	13.70	14.63	14.73	0
				50	0	13.92	13.98	13.61	13.62	14.57	14.70	0
			16QAM	1	1	13.88	13.97	13.55	13.56	14.55	14.66	0
			64QAM	1	1	13.64	13.76	13.30	13.05	13.94	14.43	0
			256QAM	1	1	13.85	14.00	13.55	13.27	14.23	14.71	0
		CP	QPSK	1	1	14.16	14.31	13.85	13.57	14.54	14.97	0

NR Band n77_ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)						MPR [dB]
						647666	651000	654334	657666	661000	664334	
						3714.99 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3965.01 MHz	
30 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	13.88	14.08	13.67	13.47	14.21	14.97	0
				1	39	13.85	13.89	13.59	13.58	14.33	14.67	0
				1	76	14.14	13.98	13.67	13.93	14.68	14.68	0
				36	0	13.88	14.05	13.59	13.53	14.32	14.89	0
				36	21	13.90	13.95	13.61	13.60	14.35	14.72	0
				36	42	14.04	13.98	13.64	13.82	14.52	14.81	0
				75	0	13.97	13.96	13.64	13.65	14.38	14.79	0
			QPSK	1	1	13.82	13.98	13.60	13.38	14.17	14.90	0
				1	39	13.78	13.84	13.50	13.51	14.25	14.64	0
				1	76	14.01	13.88	13.59	13.90	14.63	14.59	0
				36	0	13.88	14.08	13.60	13.56	14.34	14.94	0
				36	21	13.94	13.94	13.64	13.63	14.34	14.74	0
				36	42	14.05	14.01	13.59	13.86	14.52	14.80	0
				75	0	14.05	13.98	13.55	13.83	14.51	14.74	0
			16QAM	1	1	14.05	13.96	13.55	13.80	14.47	14.70	0
			64QAM	1	1	13.47	13.62	13.24	13.04	13.79	14.58	0
			256QAM	1	1	13.71	13.88	13.50	13.31	14.11	14.88	0
		CP	QPSK	1	1	13.95	14.15	13.74	13.58	14.38	14.98	0

NR Band n77_40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)						MPR [dB]
						648000	651200	654400	657600	660800	664000	
						3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz	
40 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	14.01	14.15	13.75	13.62	14.20	14.92	0
				1	53	13.93	13.93	13.59	13.60	14.38	14.82	0
				1	104	14.22	13.94	13.57	13.92	14.72	14.79	0
				50	0	14.01	14.06	13.60	13.54	14.35	14.91	0
				50	28	14.05	13.94	13.62	13.60	14.39	14.75	0
				50	56	14.10	13.91	13.63	13.86	14.56	14.87	0
				100	0	14.07	14.02	13.69	13.67	14.45	14.81	0
			QPSK	1	1	13.94	14.08	13.63	13.51	14.14	14.80	0
				1	53	13.89	13.86	13.52	13.48	14.31	14.73	0
				1	104	14.16	13.83	13.50	13.83	14.68	14.68	0
				50	0	14.02	14.06	13.59	13.56	14.33	14.93	0
				50	28	13.94	14.03	13.57	13.54	14.28	14.93	0
				50	56	13.94	14.03	13.57	13.54	14.28	14.93	0
				100	0	14.05	13.97	13.65	13.64	14.42	14.81	0
			16QAM	1	1	14.06	14.23	13.80	13.66	14.25	14.93	0
			64QAM	1	1	13.62	13.70	13.29	13.19	13.78	14.50	0
			256QAM	1	1	13.84	14.01	13.59	13.48	14.11	14.79	0
		CP	QPSK	1	1	14.09	14.27	13.86	13.71	14.33	14.97	0

NR Band n77_50 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)						MPR [dB]
						648334	652166	656000		659834	663666	
						3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz	
50 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	13.76	13.94	13.34		13.54	14.86	0
				1	67	13.86	13.70	13.34		14.02	14.78	0
				1	131	14.01	13.52	13.56		14.53	14.54	0
				64	0	13.84	13.90	13.47		13.88	14.84	0
				64	35	13.89	13.80	13.41		14.07	14.84	0
				64	69	13.97	13.64	13.42		14.30	14.73	0
				128	0	13.86	13.75	13.38		14.06	14.77	0
			QPSK	1	1	13.64	13.89	13.27		13.44	14.73	0
				1	67	13.72	13.58	13.22		13.94	14.67	0
				1	131	13.91	13.42	13.44		14.42	14.45	0
				64	0	13.81	13.93	13.45		13.89	14.82	0
				64	35	13.94	14.03	13.57		14.28	14.93	0
				64	69	13.91	13.97	13.50		14.26	14.91	0
				128	0	13.88	13.78	13.38		14.08	14.81	0
			16QAM	1	1	13.80	14.00	13.35		13.58	14.89	0
			64QAM	1	1	13.28	13.53	13.91		13.07	14.41	0
			256QAM	1	1	13.59	13.81	13.24		13.41	14.75	0
		CP	QPSK	1	1	13.84	14.09	13.46		13.65	14.95	0

NR Band n77_60 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)						MPR [dB]
						648668	653556			658444	663332	
						3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz	
60 Mhz	30	DFT-s OFDM	pi/2 BPSK	1	1	13.92	13.87			13.27	14.34	0
				1	81	13.99	13.72			13.82	14.92	0
				1	160	14.06	13.47			14.30	14.97	0
				81	0	13.88	13.79			13.54	14.70	0
				81	41	14.04	13.73			13.85	14.82	0
				81	81	14.05	13.60			14.08	14.96	0
			QPSK	162	0	14.02	13.71			13.82	14.84	0
				1	1	13.87	13.80			13.15	14.22	0
				1	81	13.90	13.60			13.73	14.83	0
				1	160	13.96	13.37			14.19	14.87	0
				81	0	13.90	13.85			13.57	14.71	0
				81	41	13.83	13.80			13.50	14.65	0
				81	81	13.77	13.77			13.47	14.62	0
				162	0	13.99	13.73			13.83	14.82	0
			16QAM	1	1	13.99	13.96			13.31	14.40	0
			64QAM	1	1	13.50	13.43			13.81	13.90	0
			256QAM	1	1	13.82	13.80			13.18	14.32	0
		CP	QPSK	1	1	14.04	14.05			13.40	14.53	0

NR Band n77_70 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649000	654336			658334	663000	
						3750 MHz	3804.99 MHz			3875.01 MHz	3945 MHz	
70 Mhz	30	DFT-s OFDM	pi/2 BPSK	1	1	13.96	13.88			13.37	14.27	0
				1	95	13.95	13.82			13.86	14.92	0
				1	187	13.99	13.48			14.33	14.88	0
				90	0	13.91	13.81			13.48	14.80	0
				90	50	14.12	13.78			13.81	14.84	0
				90	99	13.97	13.52			13.99	14.93	0
			QPSK	180	0	14.09	13.65			13.73	14.77	0
				1	1	13.92	13.71			13.21	14.25	0
				1	95	13.82	13.56			13.77	14.83	0
				1	187	13.86	13.42			14.28	14.85	0
				90	0	13.81	13.90			13.61	14.62	0
				90	50	13.88	13.76			13.45	14.58	0
				90	99	13.80	13.87			13.38	14.71	0
				180	0	14.04	13.66			13.77	14.77	0
			16QAM	1	1	14.03	13.99			13.26	14.40	0
			64QAM	1	1	13.59	13.41			13.91	13.98	0
			256QAM	1	1	13.78	13.72			13.24	14.23	0
		CP	QPSK	1	1	14.08	13.98			13.38	14.57	0

NR Band n77_ 80 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)						MPR [dB]
						649334 3740.01 MHz		656000 3840 MHz		662666 3939.99 MHz		
80 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	13.94		13.70		14.05		0
				1	109	14.07		13.50		14.68		0
				1	215	13.90		13.74		14.82		0
				108	0	13.92		13.52		14.39		0
				108	55	14.02		13.49		14.73		0
				108	109	14.06		13.62		14.96		0
				216	0	13.95		13.59		14.58		0
			QPSK	1	1	13.88		13.58		13.97		0
				1	109	13.97		13.39		14.62		0
				1	215	13.71		13.66		14.73		0
				108	0	13.67		13.65		14.66		0
				108	55	13.68		13.16		14.28		0
				108	109	14.06		13.65		14.94		0
				216	0	13.94		13.59		14.62		0
			16QAM	1	1	14.04		13.76		14.15		0
			64QAM	1	1	13.56		13.29		13.63		0
			256QAM	1	1	13.86		13.59		14.06		0
		CP	QPSK	1	1	14.10		13.82		14.28		0

NR Band n77_ 90 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)					MPR [dB]
						649668		656000		662332	
						3745.02 MHz		3840 MHz		3934.98 MHz	
90 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	13.90		13.65		14.04	0
				1	123	13.94		13.45		14.71	0
				1	243	14.06		13.87		14.81	0
				120	0	13.84		13.54		14.34	0
				120	63	13.96		13.48		14.70	0
				120	125	14.08		13.64		14.94	0
			QPSK	243	0	13.91		13.59		14.73	0
				1	1	13.83		13.61		13.96	0
				1	123	13.89		13.40		14.64	0
				1	243	13.97		13.71		14.68	0
				120	0	13.90		13.70		14.66	0
				120	63	13.62		13.25		14.41	0
				120	125	14.07		13.61		14.94	0
				243	0	13.91		13.60		14.69	0
			16QAM	1	1	13.97		13.66		14.12	0
			64QAM	1	1	13.51		13.21		13.64	0
			256QAM	1	1	13.79		13.59		14.02	0
		CP	QPSK	1	1	14.03		13.84		14.22	0

NR Band n77_ 100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)					MPR [dB]
						650000				662000	
						3750 MHz				3930 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	13.94				13.82	0
				1	137	14.09				14.68	0
				1	271	13.97				14.98	0
				135	0	13.87				14.14	0
				135	69	13.97				14.54	0
				135	138	13.98				14.86	0
			QPSK	270	0	13.87				14.54	0
				1	1	13.85				13.73	0
				1	137	13.99				14.59	0
				1	271	13.84				14.89	0
				135	0	13.85				14.12	0
				135	69	13.92				14.17	0
				135	138	13.82				14.04	0
				270	0	13.90				14.57	0
			16QAM	1	1	13.97				13.90	0
			64QAM	1	1	13.50				13.39	0
			256QAM	1	1	13.83				13.78	0
		CP	QPSK	1	1	14.01				14.05	0

[NR Band n77 DOD Conducted Power, DSI = 2] – Power Class 2 & 3

NR Band n77_20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)			MPR [dB]
						630668	633334	636000	
						3460.02 MHz	3500.01 MHz	3540 MHz	
20MHz	30	DFT-s	pi/2 BPSK	1	1	14.07	14.35	14.79	0
				1	26	14.11	14.43	14.74	0
				1	49	14.21	14.56	14.92	0
				25	0	14.06	14.47	14.77	0
				25	13	14.11	14.48	14.77	0
				25	26	14.18	14.53	14.90	0
				50	0	14.14	14.47	14.79	0
			QPSK	1	1	14.02	14.32	14.78	0
				1	26	14.06	14.37	14.70	0
				1	49	14.15	14.50	14.87	0
				25	0	14.06	14.48	14.85	0
				25	13	14.14	14.49	14.79	0
				25	26	14.20	14.56	14.93	0
				50	0	14.09	14.44	14.84	0
			16QAM	1	1	14.07	14.39	14.90	0
			64QAM	1	1	13.64	13.95	14.38	0
			256QAM	1	1	13.75	14.07	14.58	0
		CP	QPSK	1	1	14.00	14.28	14.76	0

NR Band n77_30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)			MPR [dB]
						631000	633334	635666	
						3465 MHz	3500.01 MHz	3534.99 MHz	
30MHz	30	DFT-s	pi/2 BPSK	1	1	13.94	14.36	14.83	0
				1	39	13.99	14.42	14.83	0
				1	76	14.29	14.73	14.95	0
				36	0	13.97	14.39	14.84	0
				36	21	14.03	14.46	14.90	0
				36	42	14.21	14.68	14.95	0
				75	0	14.05	14.48	14.91	0
			QPSK	1	1	13.89	14.31	14.78	0
				1	39	13.93	14.36	14.78	0
				1	76	14.21	14.67	14.97	0
				36	0	13.98	14.44	14.90	0
				36	21	14.04	14.45	14.90	0
				36	42	14.24	14.65	14.99	0
				75	0	14.04	14.48	14.92	0
			16QAM	1	1	14.03	14.25	14.91	0
			64QAM	1	1	13.53	13.87	14.42	0
			256QAM	1	1	13.68	14.09	14.55	0
		CP	QPSK	1	1	13.89	14.27	14.75	0

NR Band n77_40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)			MPR [dB]
						631334		635332	
						3470.01 MHz		3529.98 MHz	
40MHz	30	DFT-s	pi/2 BPSK	1	1	14.04		14.56	0
				1	53	14.20		14.74	0
				1	104	14.57		14.94	0
				50	0	14.04		14.74	0
				50	28	14.24		14.80	0
				50	56	14.37		14.92	0
				100	0	14.17		14.82	0
			QPSK	1	1	13.97		14.51	0
				1	53	14.14		14.67	0
				1	104	14.51		14.92	0
				50	0	14.12		14.77	0
				50	28	14.27		14.80	0
				50	56	14.11		14.92	0
				100	0	14.20		14.67	0
			16QAM	1	1	14.17		14.02	0
			64QAM	1	1	13.68		14.21	0
			256QAM	1	1	13.80		14.28	0
		CP	QPSK	1	1	13.97		14.57	0

NR Band n77_50 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)			MPR [dB]
						631668		635000	
						3475.02 MHz		3525 MHz	
50MHz	30	DFT-s	pi/2 BPSK	1	1	13.67		14.18	0
				1	67	13.98		14.54	0
				1	131	14.39		14.81	0
				64	0	13.89		14.40	0
				64	35	14.08		14.60	0
				64	69	14.28		14.67	0
				128	0	14.05		14.57	0
			QPSK	1	1	13.64		14.10	0
				1	67	13.97		14.46	0
				1	131	14.31		14.75	0
				64	0	13.90		14.44	0
				64	35	14.08		14.62	0
				64	69	14.29		14.68	0
				128	0	14.10		14.52	0
			16QAM	1	1	14.07		14.65	0
			64QAM	1	1	13.95		13.81	0
			256QAM	1	1	13.89		13.92	0
		CP	QPSK	1	1	13.93		14.05	0

NR Band n77_60 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
60MHz	30	DFT-s	pi/2 BPSK	1	1		14.15		0
				1	81		14.55		0
				1	160		14.77		0
				81	0		14.30		0
				81	41		14.57		0
				81	81		14.76		0
				162	0		14.52		0
			QPSK	1	1		14.07		0
				1	81		14.45		0
				1	160		14.71		0
				81	0		14.34		0
				81	41		14.56		0
				81	81		14.79		0
				162	0		14.61		0
			16QAM	1	1		14.34		0
			64QAM	1	1		13.78		0
			256QAM	1	1		13.87		0
		CP	QPSK	1	1		14.04		0

NR Band n77_70 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
70MHz	30	DFT-s	pi/2 BPSK	1	1		13.98		0
				1	95		14.53		0
				1	187		14.70		0
				90	0		14.25		0
				90	50		14.54		0
				90	99		14.74		0
				180	0		14.50		0
			QPSK	1	1		14.00		0
				1	95		14.54		0
				1	187		14.71		0
				90	0		14.30		0
				90	50		14.57		0
				90	99		14.79		0
				180	0		14.79		0
			16QAM	1	1		13.58		0
			64QAM	1	1		13.68		0
			256QAM	1	1		13.71		0
		CP	QPSK	1	1		13.92		0

NR Band n77_80 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
80MHz	30	DFT-s	pi/2 BPSK	1	1		13.98		0
				1	109		14.50		0
				1	215		14.79		0
				108	0		14.23		0
				108	55		14.52		0
				108	109		14.75		0
				216	0		14.52		0
			QPSK	1	1		13.97		0
				1	109		14.47		0
				1	215		14.71		0
				108	0		14.30		0
				108	55		14.55		0
				108	109		14.76		0
				216	0		14.42		0
			16QAM	1	1		14.00		0
			64QAM	1	1		13.64		0
			256QAM	1	1		13.71		0
		CP	QPSK	1	1		13.96		0

NR Band n77_90 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
90MHz	30	DFT-s	pi/2 BPSK	1	1		14.01		0
				1	123		14.54		0
				1	243		14.85		0
				120	0		14.25		0
				120	63		14.50		0
				120	125		14.75		0
				243	0		14.53		0
			QPSK	1	1		13.93		0
				1	123		14.44		0
				1	243		14.78		0
				120	0		14.30		0
				120	63		14.31		0
				120	125		13.27		0
				243	0		14.53		0
			16QAM	1	1		14.11		0
			64QAM	1	1		13.62		0
			256QAM	1	1		13.71		0
		CP	QPSK	1	1		13.94		0

NR Band n77_100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Receiver On Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
100MHz	30	DFT-s	pi/2 BPSK	1	1		13.81		0
				1	137		14.51		0
				1	271		14.84		0
				135	0		14.20		0
				135	69		14.50		0
				135	138		14.73		0
				270	0		14.46		0
			QPSK	1	1		13.80		0
				1	137		14.43		0
				1	271		14.76		0
				135	0		14.27		0
				135	69		14.78		0
				135	138		14.53		0
				270	0		14.50		0
			16QAM	1	1		14.27		0
			64QAM	1	1		13.94		0
			256QAM	1	1		13.62		0
		CP	QPSK	1	1		14.27		0

[NR Band n77 SRS Conducted Power, DSI = 2]

NR Band n77_ SRS #2 Antenna E

Bandwidth	Receiver On Power (dBm)						MPR [dB]
	650000		656000		662000		
	3750 MHz		3840 MHz		3930 MHz		
100 MHz	12.15				12.46		0

NR Band n77_ SRS #2 Antenna M

Bandwidth	Receiver On Power (dBm)						MPR [dB]
	650000		656000		662000		
	3750 MHz		3840 MHz		3930 MHz		
100 MHz	12.21				12.07		0

NR Band n77_ SRS #2 Antenna D

Bandwidth	Receiver On Power (dBm)						MPR [dB]
	650000		656000		662000		
	3750 MHz		3840 MHz		3930 MHz		
100 MHz	11.31				11.34		0

[NR Band n77 DoD SRS Conducted Power, DSI = 2]

NR Band n77_ SRS #2 Antenna E

Bandwidth	Max. Average Power (dBm)				MPR [dB]
		633334			
		3500.01 MHz			
100 MHz		12.04			0

NR Band n77_ SRS #2 Antenna M

Bandwidth	Max. Average Power (dBm)				MPR [dB]
		633334			
		3500.01 MHz			
100 MHz		11.93			0

NR Band n77_ SRS #2 Antenna D

Bandwidth	Max. Average Power (dBm)				MPR [dB]
		633334			
		3500.01 MHz			
100 MHz		11.29			0

11.6 WIFI Conducted Power measurement method

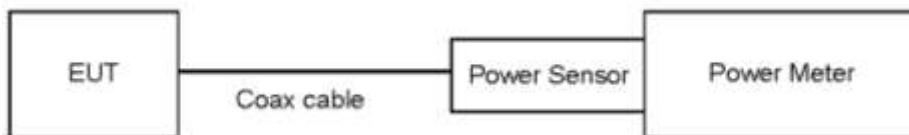
Un-Licensed bands (DTS Band)

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



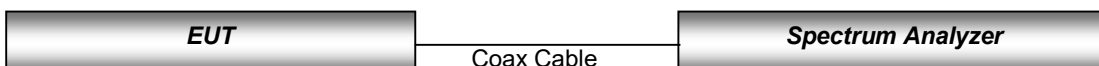
Un-Licensed bands(NII Band)

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



11.6.1 IEEE 802.11 (2.4 GHz) Maximum Conducted Power

Mode	Frequency [MHz]	Channel	IEEE 802.11 (2.4 GHz) Average RF Conducted Power [dBm]		
			Ant.1	Ant.2	MIMO
802.11b	2 412	1	19.04	18.31	21.70
	2 437	6	18.91	18.36	21.65
	2 462	11	18.76	18.27	21.53
802.11g	2 412	1	16.93	15.83	19.42
	2 437	6	16.84	16.23	19.55
	2 462	11	16.68	15.52	19.14
802.11n (HT20)	2 412	1	15.89	14.92	18.44
	2 437	6	16.52	15.68	19.13
	2 462	11	15.06	14.09	17.61
802.11ax (HT20)	2 412	1	16.02	15.03	18.56
	2 437	6	16.37	16.01	19.20
	2 462	11	15.60	14.84	18.25

11.6.2 IEEE 802.11 (2.4 GHz) Reduced Conducted Power (RSDB, mmWave active/Sub6 active)

Mode	Frequency [MHz]	Channel	IEEE 802.11 (2.4 GHz) Average RF Conducted Power [dBm]		
			Ant.1	Ant.2	MIMO
802.11b	2 412	1	13.90	13.47	16.70
	2 437	6	13.77	13.82	16.81
	2 462	11	13.63	12.54	16.13
802.11g	2 412	1	13.93	13.19	16.58
	2 437	6	13.65	13.69	16.68
	2 462	11	13.79	12.96	16.40
802.11n (HT20)	2 412	1	13.56	12.97	16.28
	2 437	6	13.27	13.31	16.30
	2 462	11	13.51	12.64	16.10
802.11ax (HT20)	2 412	1	13.89	12.98	16.47
	2 437	6	13.74	13.55	16.65
	2 462	11	13.90	12.70	16.35

11.6.3 IEEE 802.11 (2.4 GHz) Reduced Conducted Power (Receiver ON/mmWave /5G SUB 6 active)

Mode	Frequency [MHz]	Channel	IEEE 802.11 (2.4 GHz) Average RF Conducted Power [dBm]		
			Ant.1	Ant.2	MIMO
802.11b	2 412	1	13.90	11.94	15.36
	2 437	6	13.77	12.89	15.82
	2 462	11	13.63	11.09	14.92
802.11g	2 412	1	13.93	12.17	15.53
	2 437	6	13.65	12.78	15.74
	2 462	11	13.79	11.97	15.40
802.11n (HT20)	2 412	1	13.56	11.87	15.21
	2 437	6	13.27	12.46	15.40
	2 462	11	13.51	11.65	15.09
802.11ax (HT20)	2 412	1	13.89	11.93	15.37
	2 437	6	13.74	12.62	15.74
	2 462	11	13.90	11.75	15.28

11.6.4 IEEE 802.11 (2.4 GHz) Reduced Conducted Power (Receiver ON & RSDB , mmWave active & Receiver ON & RSDB)

Mode	Frequency [MHz]	Channel	IEEE 802.11 (2.4 GHz) Average RF Conducted Power [dBm]		
			Ant.1	Ant.2	MIMO
802.11b	2 412	1	10.91	9.65	13.34
	2 437	6	10.10	9.62	12.88
	2 462	11	10.51	9.03	12.85
802.11g	2 412	1	10.78	10.65	13.72
	2 437	6	10.72	10.38	13.56
	2 462	11	10.03	9.33	12.70
802.11n (HT20)	2 412	1	10.82	10.36	13.60
	2 437	6	10.68	10.74	13.72
	2 462	11	10.84	9.82	13.37
802.11ax (HT20)	2 412	1	10.87	10.44	13.67
	2 437	6	10.90	10.98	13.95
	2 462	11	10.93	9.88	13.45

11.6.5 IEEE 802.11 (5 GHz) Maximum Conducted Power

Mode	Frequency [MHz]	Channel	IEEE 802.11 (5 GHz) Average RF Conducted Power [dBm]		
			Ant. 1	Ant. 2	MIMO
802.11a (20 MHz BW)	5 180	36	17.46	17.08	20.29
	5 200	40	17.42	16.99	20.22
	5 220	44	17.50	17.53	20.52
	5 240	48	17.66	17.54	20.61
	5 260	52	17.74	17.62	20.69
	5 280	56	17.48	17.08	20.29
	5 300	60	17.61	17.32	20.48
	5 320	64	17.89	17.65	20.78
	5 500	100	17.84	16.95	20.43
	5 600	120	17.48	17.04	20.28
	5 620	124	17.78	16.99	20.41
	5 720	144	17.57	16.97	20.29
	5 745	149	17.86	16.96	20.44
	5 785	157	17.89	16.91	20.44
	5 825	165	17.92	17.16	20.57

11.6.6 IEEE 802.11 (5 GHz) Reduced Conducted Power

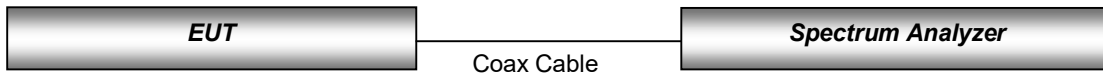
(Receiver ON, RSDB, mmWave active & Receiver ON & RSDB)

Mode	Frequency [MHz]	Channel	IEEE 802.11 (5 GHz) Reduced Average Conducted Power [dBm]		
			Ant. 1	Ant. 2	MIMO
802.11ac (80 MHz BW)	5 210	42	10.57	10.21	13.40
	5 290	58	10.38	9.40	12.93
	5 530	106	9.75	9.02	12.41
	5 610	122	10.23	9.49	12.88
	5 690	138	10.17	9.24	12.74
	5 775	155	10.20	10.30	13.26

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



11.7 Bluetooth Maximum Conducted Power

The Burst averaged-conducted power

Mode		Channel	Bluetooth Power [dBm]
DH5	2402	0	12.75
	2411	9	14.48
	2441	39	15.48
	2473	71	14.32
	2480	78	14.60
2-DH5	2402	0	7.95
	2441	39	11.10
	2480	78	10.19
3-DH5	2402	0	7.96
	2441	39	11.09
	2480	78	10.19

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 DH5 mode.



Duty Cycle

$$= (\text{BT-On time} / \text{BT-Full time}) = (2.880 / 3.750) = 0.768 \text{ (DH5)}$$

Duty factor= 1/Duty cycle : 1.302

12. System Verification

12.1 Tissue Verification

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

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
04/13/2022	20.9	750H	705	0.874	43.220	0.889	42.174	-1.69	2.48
			710	0.879	43.145	0.890	42.148	-1.24	2.37
			750	0.880	42.551	0.893	41.940	-1.46	1.46
04/12/2022	19.8	750H	705	0.914	43.236	0.889	42.174	2.81	2.52
			710	0.919	43.159	0.890	42.148	3.26	2.40
			750	0.880	42.567	0.893	41.940	-1.46	1.49
04/14/2022	20.1	750H	750	0.884	42.516	0.893	41.940	-1.01	1.37
			785	0.916	42.002	0.896	41.758	2.23	0.58
04/15/2022	19.9	750H	750	0.885	42.623	0.893	41.940	-0.90	1.63
			785	0.917	42.108	0.896	41.758	2.34	0.84
04/15/2022	21.9	835H	820	0.916	42.181	0.899	41.577	1.89	1.45
			835	0.934	41.946	0.900	41.500	3.78	1.07
			850	0.950	41.719	0.916	41.500	3.71	0.53
04/18/2022	21.1	835H	820	0.911	41.961	0.899	41.577	1.33	0.92
			835	0.929	41.726	0.900	41.500	3.22	0.54
			850	0.944	41.502	0.916	41.500	3.06	0.00
04/14/2022	19.9	835H	820	0.907	41.815	0.899	41.577	0.89	0.57
			835	0.926	41.576	0.900	41.500	2.89	0.18
			850	0.941	41.349	0.916	41.500	2.73	-0.36
04/13/2022	19.6	835H	820	0.908	41.830	0.899	41.577	1.00	0.61
			835	0.926	41.604	0.900	41.500	2.89	0.25
			850	0.941	41.378	0.916	41.500	2.73	-0.29
04/18/2022	19.4	835H	820	0.909	41.830	0.899	41.577	1.11	0.61
			835	0.927	41.597	0.900	41.500	3.00	0.23
			850	0.942	41.370	0.916	41.500	2.84	-0.31
04/13/2022	19.1	1800H	1710	1.327	41.711	1.348	40.144	-1.56	3.90
			1750	1.367	41.560	1.371	40.080	-0.29	3.69
			1800	1.422	41.339	1.400	40.000	1.57	3.35
04/19/2022	20.4	1800H	1710	1.325	41.706	1.348	40.144	-1.71	3.89
			1750	1.366	41.549	1.371	40.080	-0.36	3.67
			1800	1.422	41.319	1.400	40.000	1.57	3.30
04/25/2022	20.0	1900H	1850	1.385	41.069	1.400	40.000	-1.07	2.67
			1900	1.399	40.887	1.400	40.000	-0.07	2.22
			1910	1.407	40.857	1.400	40.000	0.50	2.14
04/14/2022	20.4	1900H	1850	1.375	40.893	1.400	40.000	-1.79	2.23
			1900	1.417	40.705	1.400	40.000	1.21	1.76
			1910	1.425	40.676	1.400	40.000	1.79	1.69
04/12/2022	19.7	1900H	1850	1.376	41.061	1.400	40.000	-1.71	2.65
			1900	1.428	40.874	1.400	40.000	2.00	2.19
			1910	1.435	40.843	1.400	40.000	2.50	2.11

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
04/21/2022	22.0	1900H	1850	1.365	40.761	1.400	40.000	-2.50	1.90
			1900	1.417	40.576	1.400	40.000	1.21	1.44
			1910	1.425	40.542	1.400	40.000	1.79	1.36
04/19/2022	21.1	2300H	2300	1.716	39.932	1.667	39.470	2.94	1.17
			2310	1.721	39.910	1.676	39.452	2.68	1.16
			2350	1.751	39.818	1.711	39.380	2.34	1.11
			2360	1.758	39.797	1.720	39.362	2.21	1.11
			2300	1.710	39.900	1.667	39.470	2.58	1.09
04/15/2022	20.6	2300H	2310	1.720	39.894	1.676	39.452	2.63	1.12
			2350	1.751	39.829	1.711	39.380	2.34	1.14
			2360	1.759	39.810	1.720	39.362	2.27	1.14
04/18/2022	20.5	2300H	2300	1.710	39.900	1.667	39.470	2.58	1.09
			2310	1.720	39.897	1.676	39.452	2.63	1.13
			2350	1.751	39.805	1.711	39.380	2.34	1.08
			2360	1.758	39.785	1.720	39.362	2.21	1.07
05/03/2022	21.6	2450H	2400	1.793	39.193	1.756	39.290	2.11	-0.25
			2450	1.830	39.200	1.800	39.200	1.67	0.00
			2500	1.875	39.318	1.855	39.140	1.08	0.45
05/04/2022	21.1	2450H	2400	1.787	39.268	1.756	39.290	1.77	-0.06
			2450	1.827	39.304	1.800	39.200	1.50	0.27
			2500	1.870	39.373	1.855	39.140	0.81	0.60
04/22/2022	19.8	2450H	2400	1.793	39.204	1.756	39.290	2.11	-0.22
			2450	1.834	39.244	1.800	39.200	1.89	0.11
			2500	1.875	39.324	1.855	39.140	1.08	0.47
04/14/2022	22.3	2600H	2500	1.793	39.131	1.855	39.140	-3.34	-0.02
			2550	1.843	38.936	1.909	39.070	-3.46	-0.34
			2600	1.890	38.700	1.964	39.010	-3.77	-0.79
04/15/2022	23.7	2600H	2500	1.795	39.192	1.855	39.140	-3.23	0.13
			2600	1.890	38.800	1.964	39.010	-3.77	-0.54
			2690	1.973	38.323	2.062	38.894	-4.32	-1.47
04/21/2022	21.3	2600H	2500	1.862	38.415	1.855	39.140	0.38	-1.85
			2600	1.960	38.000	1.964	39.010	-0.20	-2.59
			2690	2.043	37.551	2.062	38.894	-0.92	-3.45
04/19/2022	19.2	3500H-3700H	3500	2.921	37.008	2.913	37.930	0.27	-2.43
			3550	2.959	36.972	2.964	37.870	-0.17	-2.37
			3650	3.034	36.918	3.066	37.760	-1.04	-2.23
			3700	3.069	36.819	3.118	37.770	-1.57	-2.52
05/09/2022	21.1	5180H-5825H	5180	4.558	37.178	4.635	36.010	-1.66	3.24
			5250	4.658	37.009	4.706	35.930	-1.02	3.00
			5280	4.700	36.980	4.737	35.894	-0.78	3.03
			5320	4.764	37.009	4.778	35.846	-0.29	3.24
			5500	4.891	36.803	4.963	35.640	-1.45	3.26
			5600	4.934	36.467	5.065	35.530	-2.59	2.64
			5750	5.199	36.210	5.219	35.360	-2.59	2.64
			5800	5.178	36.163	5.270	35.300	-1.75	2.44
05/04/2022	20.0	5180H-5320H	5825	5.174	36.128	5.296	35.270	-2.30	2.43
			5180	4.554	35.757	4.635	36.010	-1.75	-0.70
			5250	4.662	35.514	4.706	35.930	-0.93	-1.16
			5280	4.704	35.465	4.737	35.894	-0.70	-1.20
05/09/2022	20.9	5500H-5600H	5320	4.784	35.512	4.778	35.846	0.13	-0.93
			5500	5.022	36.375	4.963	35.640	1.19	2.06
			5600	5.061	36.060	5.065	35.530	-0.08	1.49
05/10/2022	20.0	5750H-5825H	5750	5.288	35.447	5.219	35.360	1.32	0.25
			5800	5.272	35.513	5.270	35.300	0.04	0.60
			5825	5.251	35.517	5.296	35.270	-0.85	0.70

* ULCA

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
05/03/2022	19.6	835H	820	0.906	41.408	0.899	41.577	0.78	-0.41
			835	0.924	41.175	0.900	41.500	2.67	-0.78
			850	0.939	40.949	0.916	41.500	2.51	-1.33
05/04/2022	19.5	1800H	1710	1.345	41.234	1.348	40.144	-0.22	2.72
			1750	1.391	41.056	1.371	40.080	1.46	2.44
			1800	1.450	40.805	1.400	40.000	3.57	2.01
2022/05/13	20.8	2600H	2500	1.890	38.535	1.855	39.140	1.89	-1.55
			2550	1.940	38.339	1.909	39.070	1.62	-1.87
			2600	1.989	38.096	1.964	39.010	1.27	-2.34
2022/05/13	20.8	3500H-3700H	3500	2.914	37.641	2.913	37.930	0.03	-0.76
			3550	2.950	37.564	2.964	37.870	-0.47	-0.81
			3650	3.033	37.456	3.066	37.760	-1.08	-0.81
			3700	3.075	37.373	3.118	37.770	-1.38	-1.05

* 5G NR Band

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
04/20/2022	22.0	750H	705	0.862	43.305	0.889	42.174	-3.04	2.68
			710	0.867	43.225	0.890	42.148	-2.58	2.56
			750	0.906	42.609	0.893	41.940	1.46	1.60
04/21/2022	21.8	750H	705	0.862	43.272	0.889	42.174	-3.04	2.60
			710	0.868	43.198	0.890	42.148	-2.47	2.49
			750	0.910	42.616	0.893	41.940	1.90	1.61
04/19/2022	21.8	835H	820	0.907	41.676	0.899	41.577	0.89	0.24
			835	0.925	41.442	0.900	41.500	2.78	-0.14
			850	0.940	41.219	0.916	41.500	2.62	-0.68
04/22/2022	20.8	1800H	1710	1.325	41.725	1.348	40.144	-1.71	3.94
			1750	1.368	41.573	1.371	40.080	-0.22	3.73
			1800	1.423	41.341	1.400	40.000	1.64	3.35
04/28/2022	19.1	1900H	1850	1.367	41.001	1.400	40.000	-2.36	2.50
			1900	1.417	40.819	1.400	40.000	1.21	2.05
			1910	1.427	40.788	1.400	40.000	1.93	1.97
04/26/2022	20.1	2300H	2300	1.713	39.927	1.667	39.470	2.76	1.16
			2310	1.719	39.904	1.676	39.452	2.57	1.15
			2350	1.751	39.810	1.711	39.380	2.34	1.09
			2360	1.758	39.789	1.720	39.362	2.21	1.08
04/25/2022	20.0	2600H	2500	1.794	39.186	1.855	39.140	-3.29	0.12
			2600	1.890	38.750	1.964	39.010	-3.77	-0.67
			2690	1.969	38.309	2.062	38.894	-4.51	-1.50
04/28/2022	18.7	3500H	3400	2.859	37.366	2.810	38.040	1.74	-1.77
			3500	2.928	37.154	2.913	37.930	0.51	-2.05
			3550	2.965	37.074	2.964	37.870	0.03	-2.10
04/29/2022	22.8	3500H	3400	2.859	36.648	2.810	38.040	1.74	-3.66
			3500	2.927	36.441	2.913	37.930	0.48	-3.93
			3550	2.963	36.355	2.964	37.870	-0.03	-4.00
05/02/2022	19.8	3500H	3400	2.863	36.706	2.810	38.040	1.89	-3.51
			3500	2.931	36.481	2.913	37.930	0.62	-3.82
			3550	2.968	36.394	2.964	37.870	0.13	-3.90
05/03/2022	19.8	3500H	3400	2.863	36.707	2.810	38.040	1.89	-3.50
			3500	2.931	36.479	2.913	37.930	0.62	-3.83
			3550	2.968	36.390	2.964	37.870	0.13	-3.91
04/21/2022	19.6	3700H~3970	3700	3.060	36.833	3.118	37.700	-1.86	-2.30
			3750	3.103	36.636	3.169	37.640	-2.08	-2.67
			3800	3.212	36.709	3.220	37.590	-0.25	-2.34
			3900	3.325	36.597	3.233	37.470	2.85	-2.33
			3970	3.281	36.317	3.394	37.390	-3.33	-2.87
04/29/2022	22.8	3700H~3970	3700	3.047	36.283	3.118	37.700	-2.28	-3.76
			3750	3.089	36.129	3.169	37.640	-2.52	-4.01
			3800	3.196	36.248	3.220	37.590	-0.75	-3.57
			3900	3.296	36.184	3.233	37.470	1.95	-3.43
			3970	3.248	35.857	3.394	37.390	-4.30	-4.10
05/02/2022	19.8	3700H~3970	3700	3.047	36.303	3.118	37.700	-2.28	-3.71
			3750	3.090	36.147	3.169	37.640	-2.49	-3.97
			3800	3.196	36.267	3.220	37.590	-0.75	-3.52
			3900	3.297	36.204	3.233	37.470	1.98	-3.38
			3970	3.249	35.877	3.394	37.390	-4.27	-4.05
05/03/2022	19.8	3700H~3970	3700	3.048	36.416	3.118	37.700	-2.25	-3.41
			3750	3.090	36.261	3.169	37.640	-2.49	-3.66
			3800	3.197	36.381	3.220	37.590	-0.71	-3.22
			3900	3.297	36.319	3.233	37.470	1.98	-3.07
			3970	3.249	35.992	3.394	37.390	-4.27	-3.74

* Extremity SAR

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
04/18/2022	20.3	1800H	1710	1.307	41.265	1.348	40.144	-3.04	2.79
			1750	1.351	41.092	1.371	40.080	-1.46	2.52
			1800	1.410	40.834	1.400	40.000	0.71	2.09
04/20/2022	19.1	1800H	1710	1.310	41.262	1.348	40.144	-2.82	2.78
			1750	1.354	41.086	1.371	40.080	-1.24	2.51
			1800	1.410	40.837	1.400	40.000	0.71	2.09
04/25/2022	19.4	1800H	1710	1.296	41.057	1.348	40.144	-3.86	2.27
			1750	1.340	40.863	1.371	40.080	-2.26	1.95
			1800	1.399	40.599	1.400	40.000	-0.07	1.50
04/27/2022	18.6	1900H	1850	1.377	40.462	1.400	40.000	-1.64	1.16
			1900	1.432	40.234	1.400	40.000	2.29	0.59
			1910	1.440	40.190	1.400	40.000	2.86	0.47
04/15/2022	19.5	1900H	1850	1.363	40.881	1.400	40.000	-2.64	2.20
			1900	1.416	40.695	1.400	40.000	1.14	1.74
			1910	1.423	40.664	1.400	40.000	1.64	1.66
04/22/2022	21.7	1900H	1850	1.364	41.057	1.400	40.000	-2.57	2.64
			1900	1.413	40.872	1.400	40.000	0.93	2.18
			1910	1.423	40.840	1.400	40.000	1.64	2.10
04/29/2022	20.8	1900H	1850	1.366	41.487	1.400	40.000	-2.43	3.72
			1900	1.418	41.308	1.400	40.000	1.29	3.27
			1910	1.426	41.278	1.400	40.000	1.86	3.20
04/20/2022	22.0	2300H	2300	1.710	39.900	1.667	39.470	2.58	1.09
			2310	1.720	39.893	1.676	39.452	2.63	1.12
			2350	1.752	39.798	1.711	39.380	2.40	1.06
			2360	1.759	39.777	1.720	39.362	2.27	1.05
04/27/2022	21.9	2300H	2300	1.710	39.900	1.667	39.470	2.58	1.09
			2310	1.720	39.898	1.676	39.452	2.63	1.13
			2350	1.751	39.812	1.711	39.380	2.34	1.10
			2360	1.758	39.793	1.720	39.362	2.21	1.09
04/19/2022	23.3	25.2	2500	1.863	38.213	1.855	39.140	0.43	-2.37
			2600	1.960	37.800	1.964	39.010	-0.20	-3.10
			2690	2.046	37.346	2.062	38.894	-0.78	-3.98
04/21/2022	21.3	2600H	2500	1.862	38.415	1.855	39.140	0.38	-1.85
			2600	1.960	38.000	1.964	39.010	-0.20	-2.59
			2690	2.043	37.551	2.062	38.894	-0.92	-3.45
04/26/2022	21.4	2600H	2500	1.880	38.613	1.855	39.140	1.35	-1.35
			2600	1.980	38.200	1.964	39.010	0.81	-2.08
			2690	2.059	37.743	2.062	38.894	-0.15	-2.96
04/29/2022	19.0	3500H	3400	2.859	37.366	2.810	38.040	1.74	-1.77
			3500	2.927	36.941	2.913	37.930	0.48	-2.61
			3550	2.965	37.074	2.964	37.870	0.03	-2.10
04/25/2022	18.9	3700H~3970	3700	3.094	36.644	3.118	37.700	-0.77	-2.80
			3750	3.136	36.491	3.169	37.640	-1.04	-3.05
			3800	3.243	36.621	3.220	37.590	0.71	-2.58
			3900	3.343	36.546	3.233	37.470	3.40	-2.47
			3970	3.294	36.188	3.394	37.390	-2.95	-3.21

12.2 System Verification

Input Power: 50 mW

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR _{1g} (SPEAG) [W/kg]	50mW Measured SAR _{1g} [W/kg]	1 W Normalized SAR _{1g} [W/kg]	Deviation [%]	Limit [%]
750	04/13/2022	7681	1014	Head	22.1	20.9	8.55	0.420	8.40	- 1.75	± 10
750	04/12/2022	7681		Head	19.9	19.8	8.55	0.421	8.42	- 1.52	± 10
750	04/14/2022	7681		Head	20.1	20.1	8.55	0.421	8.42	- 1.52	± 10
750	04/15/2022	7681		Head	19.9	19.9	8.55	0.423	8.46	- 1.05	± 10
835	04/15/2022	3972	4d165	Head	22.0	21.9	9.68	0.503	10.06	+ 3.93	± 10
835	04/18/2022	3972		Head	21.2	21.1	9.68	0.515	10.3	+ 6.40	± 10
835	04/14/2022	7309		Head	20.0	19.9	9.68	0.486	9.72	+ 0.41	± 10
835	04/13/2022	7309		Head	19.8	19.6	9.68	0.487	9.74	+ 0.62	± 10
835	04/18/2022	7681		Head	19.5	19.4	9.68	0.489	9.78	+ 1.03	± 10
1 800	04/13/2022	7622	2d015	Head	19.2	19.1	38.8	1.84	36.8	- 5.15	± 10
1 800	04/19/2022	7622		Head	20.5	20.4	38.8	1.84	36.8	- 5.15	± 10
1 900	04/25/2022	7622	5d032	Head	20.1	20.0	40.0	1.93	38.6	- 3.50	± 10
1 900	04/14/2022	7622		Head	20.5	20.4	40.0	1.96	39.2	- 2.00	± 10
1 900	04/12/2022	7622		Head	19.7	19.7	40.0	1.98	39.6	- 1.00	± 10
1 900	04/21/2022	7622		Head	22.2	22.0	40.0	1.96	39.2	- 2.00	± 10
2 300	04/19/2022	3076	1010	Head	21.3	21.1	49.5	2.54	50.8	+ 2.63	± 10
2 300	04/15/2022	3968		Head	20.7	20.6	49.5	2.60	52.0	+ 5.05	± 10
2 300	04/18/2022	3968		Head	20.7	20.5	49.5	2.58	51.6	+ 4.24	± 10
2 450	05/03/2022	3903	965	Head	21.9	21.6	53.3	2.86	57.2	+ 7.32	± 10
2 450	05/04/2022	7679		Head	21.3	21.1	53.3	2.51	50.2	- 5.82	± 10
2 450	04/22/2022	7702		Head	19.8	19.8	53.3	2.67	53.4	+ 0.19	± 10
2 600	04/14/2022	3903	1106	Head	22.4	22.3	56.3	2.92	58.4	+ 3.73	± 10
2 600	04/15/2022	3903		Head	23.8	23.7	56.3	2.91	58.2	+ 3.37	± 10
2 600	04/21/2022	3903		Head	21.4	21.3	56.3	3.01	60.2	+ 6.93	± 10
3 500	04/19/2022	7655	1132	Head	19.3	19.2	65.2	2.97	59.4	- 8.90	± 10
3 700	04/19/2022	7655	1105	Head	19.3	19.2	66.6	3.33	66.6	+ 0.00	± 10
5 250	05/09/2022	7702	1107	Head	21.2	21.1	80.6	3.96	79.2	- 1.74	± 10
5 600	05/09/2022	7702		Head	21.2	21.1	84.2	4.35	87.0	+ 3.33	± 10
5 750	05/09/2022	7702		Head	21.2	21.1	80.9	3.73	74.6	- 7.79	± 10
5 250	05/04/2022	7622	1107	Head	20.1	20.0	80.6	3.99	79.8	- 0.99	± 10
5 600	05/09/2022	7622		Head	21.0	20.9	84.2	4.38	87.6	+ 4.04	± 10
5 750	05/10/2022	7622		Head	20.1	20.0	80.9	4.00	80.0	- 1.11	± 10

* ULCA

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR _{1g} (SPEAG) [W/kg]	50mW Measured SAR _{1g} [W/kg]	1 W Normalized SAR _{1g} [W/kg]	Deviation [%]	Limit [%]
835	05/03/2022	7681	4d165	Head	19.7	19.6	9.68	0.471	9.42	- 2.69	± 10
1 800	05/04/2022	7681	2d015	Head	19.7	19.5	38.8	1.97	39.4	+ 1.55	± 10
2 600	05/13/2022	7681	1106	Head	20.9	20.8	56.3	2.7	54.0	- 4.09	± 10
3 500	05/13/2022	7681	1132	Head	20.9	20.8	65.2	3.09	61.8	- 5.21	± 10
3 700	05/13/2022	7681	1105	Head	20.9	20.8	66.6	3.21	64.2	- 3.60	± 10

*** 5G NR Band**

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR _{1g} (SPEAG) [W/kg]	50mW Measured SAR _{1g} [W/kg]	1 W Normalized SAR _{1g} [W/kg]	Deviation [%]	Limit [%]
750	04/20/2022	3972	1014	Head	22.1	22.0	8.55	0.447	8.94	+ 4.56	± 10
750	04/21/2022	3972	1014	Head	22.0	21.8	8.55	0.446	8.92	+ 4.33	± 10
835	04/19/2022	3972	4d165	Head	21.9	21.8	9.68	0.499	9.98	+ 3.10	± 10
1 800	04/22/2022	7622	2d015	Head	21.0	20.8	38.8	1.84	36.8	- 5.15	± 10
1 900	04/28/2022	7622	5d032	Head	19.2	19.1	40.0	1.96	39.2	- 2.00	± 10
2 300	04/26/2022	7702	1010	Head	20.2	20.1	49.5	2.47	49.4	- 0.20	± 10
2 600	04/25/2022	7702	1106	Head	20.1	20.0	56.3	2.70	54.0	- 4.09	± 10
3 500	04/28/2022	7702	1132	Head	18.7	18.7	65.2	3.05	61.0	- 6.44	± 10
3 500	04/29/2022	7622	1132	Head	22.8	22.8	65.2	3.36	67.2	+ 3.07	± 10
3 500	05/02/2022	7622	1132	Head	19.9	19.8	65.2	3.38	67.6	+ 3.68	± 10
3 500	05/03/2022	7622	1132	Head	20.0	19.8	65.2	3.37	67.4	+ 3.37	± 10
3 700	04/21/2022	7702	1105	Head	19.6	19.6	66.6	3.32	66.4	- 0.30	± 10
3 700	04/29/2022	7622	1105	Head	22.8	22.8	66.6	3.29	65.8	- 1.20	± 10
3 700	05/02/2022	7622	1105	Head	19.9	19.8	66.6	3.27	65.4	- 1.80	± 10
3 700	05/03/2022	7622	1105	Head	20.0	19.8	66.6	3.27	65.4	- 1.80	± 10
3 900	04/21/2022	7702	1019	Head	19.6	19.6	70.4	3.50	70.0	- 0.57	± 10
3 900	04/29/2022	7622	1019	Head	22.8	22.8	70.4	3.48	69.6	- 1.14	± 10
3 900	05/02/2022	7622	1019	Head	19.9	19.8	70.4	3.47	69.4	- 1.42	± 10
3 900	05/03/2022	7622	1019	Head	20.0	19.8	70.4	3.46	69.2	- 1.70	± 10