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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: Nov. 01, 2023 Test Report No.: HCT-SR-2309-FC006-R3 Test Site: HCT CO., LTD.
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FCC ID:

A3LSMA256U

Equipment Type:	Mobile Phone
Application Type	Certification
FCC Rule Part(s):	CFR §2.1093
Model Name:	SM-A256U
Additional Model Name:	SM-A256U1/DS, SM-S256VL
Date of Test:	May. 30, 2023 ~ Sep. 21, 2023

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

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REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	Sep. 26, 2023	Initial Release
1	Oct. 05, 2023	Revised Sec 4.2, 4.4.1, Sec 16, Page 180, 284, 293, 303
2	Oct. 26, 2023	Revised Sec 8.9, Appendix H Sec 1.1
3	Nov. 01, 2023	Revised Sec 4.6

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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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)
- April 2018 TCBC Workshop Notes (LTE DL CA SAR Test Exclusion)
- November 2019 TCBC Workshop Notes (SPLSR Hotspot Combination)
- April 2022 TCBC Workshop Notes (Sum-Peak Location Separation Ratio)

2. Test Location

2.1 Test Laboratory

Company Name	HCT Co., Ltd.
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Telephone	031-645-6300
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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-A256U
Additional Model Name	SM-A256U1/DS, SM-S256VL
Equipment Type	Mobile Phone
FCC ID	A3LSMA256U
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
GSM/GPRS/EDGE 850	824.2 MHz ~ 848.8 MHz	PCE	0.44	0.70	0.30	N/A
GSM/GPRS/EDGE 1900	1 850.2 MHz ~ 1 909.8 MHz	PCE	0.18	0.24	0.33	N/A
UMTS Band 5	826.4 MHz ~ 846.6 MHz	PCE	0.36	0.39	1.01	N/A
UMTS Band 4	1 712.4 MHz ~ 1 752.6 MHz	PCE	0.31	0.42	0.35	N/A
UMTS Band 2	1 852.4 MHz ~ 1 907.6 MHz	PCE	0.39	0.45	0.39	N/A
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	0.38	0.48	0.89	N/A
LTE Band 7	2 502.5 MHz ~ 2 567.5 MHz	PCE	0.38	0.64	0.57	N/A
LTE Band 12	699.7 MHz ~ 715.3 MHz	PCE	0.16	0.30	0.39	N/A
LTE Band 13	779.5 MHz ~ 784.5 MHz	PCE	0.23	0.39	0.55	N/A
LTE Band 14	790.5 MHz ~ 795.5 MHz	PCE	0.22	0.30	0.53	N/A
LTE Band 25(PCS)	1 850.7 MHz ~ 1 914.3 MHz	PCE	0.30	0.45	0.54	N/A
LTE Band 26(Cell)	814.7 MHz ~ 848.3 MHz	PCE	0.37	0.45	0.81	N/A
LTE Band 30	2 307.5 MHz ~ 2 312.5 MHz	PCE	0.25	0.31	0.36	N/A
LTE TDD Band 38	2 572.5 MHz ~ 2 617.5 MHz	PCE	N/A	N/A	N/A	N/A
LTE TDD Band 41	2 498.5 MHz ~ 2 687.5 MHz	PCE	0.39	0.43	0.42	N/A
LTE TDD Band 48	3 552.5 MHz ~ 3 697.5 MHz	PCE	0.58	0.19	0.52	N/A
LTE Band 66 (AWS)	1 710.7 MHz ~ 1 779.3 MHz	PCE	0.43	0.39	0.60	N/A
LTE Band 71	665.5 MHz ~ 695.5 MHz	PCE	0.17	0.23	0.37	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	0.38	0.54	1.09	N/A
NR Band n25	1 852.5 MHz ~ 1 912.5 MHz	PCE	0.33	0.42	0.59	N/A
NR Band n30	2 307.5 MHz ~ 2 312.5 MHz	PCE	0.28	0.28	0.41	N/A
NR Band n41	2 506.02 MHz ~ 2 679.99 MHz	PCE	0.53	0.83	0.76	N/A
NR Band n48	3 555 MHz ~ 3 694.98 MHz	PCE	0.43	0.54	0.97	N/A
NR Band n66	1 712.5 MHz ~ 1 777.5 MHz	PCE	0.27	0.37	0.55	N/A
NR Band n70	1 695 MHz ~ 1 710 MHz	PCE	0.21	0.33	0.52	N/A
NR Band n71	665.5 MHz ~ 695.5 MHz	PCE	0.27	0.41	0.68	N/A
NR Band n77	3 705 MHz ~ 3 975 MHz	PCE	0.67	0.16	0.37	N/A
NR Band n77(DoD)	3 455.04 MHz ~ 3 544.98 MHz	PCE	0.47	<0.1	0.16	N/A
802.11b	2 412 MHz ~ 2 472 MHz	DTS	0.23	0.37	0.59	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	0.38	0.48	N/A	1.22
U-NII-2C	5 500 MHz ~ 5 720 MHz	NII	0.54	0.59	N/A	0.94
U-NII-3	5 745 MHz ~ 5 825 MHz	NII	0.47	0.35	0.58	N/A
Bluetooth	2 402 MHz ~ 2 480 MHz	DSS	0.13	<0.1	0.11	N/A
NFC	13.56 MHz	DXX	N/A	N/A	N/A	<0.1
Simultaneous SAR per KDB 690783 D01v01r03			1.59	1.22	1.45	1.22
Date(s) of Tests:	May. 30, 2023 ~ Sep. 21, 2023					

4. Device Under Test Description

4.1 DUT specification

Device Wireless specification overview		
Band & Mode	Operating Mode	Tx Frequency
GSM850	Voice / Data	824.2 MHz ~ 848.8 MHz
GSM1900	Voice / Data	1 850.2 MHz ~ 1 909.8 MHz
UMTS Band 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 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 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 n48	Voice / Data	3 555 MHz ~ 3 694.98 MHz
NR Band n66	Voice / Data	1 712.5 MHz ~ 1 777.5 MHz
NR Band n70	Voice / Data	1 695 MHz ~ 1 710 MHz
NR Band n71	Voice / Data	665.5 MHz ~ 695.5 MHz
NR Band n77	Voice / Data	3 705 MHz ~ 3 975 MHz
NR Band n77 (DoD)	Voice / Data	3 455.04 MHz ~ 3 544.98 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 ~ 2 472 MHz
Bluetooth / LE 5.3	Data	2 402 MHz ~ 2 480 MHz
NFC	Data	13.56 MHz

Device Description		
H/W	REV1.0	
S/W	A256U.001	
Device Serial Numbers	Mode	Serial Number
	GSM850 / UMTS B5 / LTE 5 / LTE 12 / LTE 13 / LTE 14 LTE 26 / LTE 71 / NR n5 / NR n70 / NFC	WEJ1191M,WEJ1168M
	GSM1900 / UMTS B2 / UMTS B4 / LTE B2 / LTE B7 LTE B25 / LTE B30 / LTE B 41 / LTE B66 / NR n25 NR n30 / NR n66 / NR n77	WEJ1188M,WEJ1189M
	LTE B48 / NR n41 / NR n48 / NR n77	WI41509M
	2.4GHz WLAN / 5GHz WLAN / Bluetooth	WF22507M,WF22511M
	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 DUT is equipped with an LSI chipset to which the Samsung S.LSI proprietary TAS (Time Average SAR) algorithm is applied.

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

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

WLAN/BT mode are not controlled by The Samsung S.LSI proprietary TAS (Time Average SAR) algorithm.

The Samsung S.LSI TAS algorithm allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit NV settings and maximum tune up output power Pmax configured for this DUT for various transmit conditions (Radio SAR indicator RSI).

Note that the device uncertainty for sub-6GHz WWAN is 1.0dB for this DUT.

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

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

Plim values in green indicate Plimit < Pmax			Plim values in grey indicate Plim > Pmax				Pmax	UL:DL Ratio
Plimit corresponding to 1 W/kg (1g) 2.5W/kg(10g) SAR_Design_target							Maximum Tune-up Output Power (Frame Averaged Power) [dBm]	
SAR Exposure Position			Body-worn	Head (RCV ON)	Hotspot (Hotspot on)	Phablet (Grip On) /Earjack		
Averaging volume			1g	1g	1g	10g		
seperation Distance			15 mm	0 mm	10 mm	0 mm		
Mode	Band	Antenna	RSI=0	RSI=4	RSI=3	RSI=1,2		
GSM/GPRS/EDGE	850	MAIN 1	27.4	29.4	20.7	20.7	24.7	37.5%
GSM/GPRS/EDGE	1900	MAIN 2	28.7	30.2	19.0	19.0	22.0	50.0%
UMTS	2	MAIN 2	27.4	28.0	20.5	20.5	24.0	100%
UMTS	4	MAIN 2	27.7	29.0	20.5	20.5	24.0	100%
UMTS	5	MAIN 1	29.6	29.9	24.9	27.2	24.5	100%
LTE FDD	2	MAIN 3	21.0	21.0	21.0	21.0	24.5	100%
LTE FDD	5	MAIN 1	28.5	29.5	26.7	28.6	24.5	100%
LTE FDD	7	MAIN 2	26.4	28.7	21.0	21.0	23.5	100%
LTE FDD	12	MAIN 1	30.7	32.8	31.3	28.4	24.5	100%
LTE FDD	13	MAIN 1	28.5	30.8	29.5	30.1	23.5	100%
LTE FDD	14	MAIN 1	29.7	31.0	28.1	30.6	23.5	100%
LTE FDD	25(2)	MAIN 2	28.4	30.2	21.5	21.5	24.0	100%
LTE FDD	26	MAIN 1	28.9	29.9	27.0	29.1	24.5	100%
LTE FDD	30	MAIN 2	29.1	30.0	21.0	21.0	23.0	100%
LTE TDD PC3	41(38)	MAIN 2	28.2	28.6	17.5	17.5	22.5	63.3%
LTE TDD PC3	41 ULCA	MAIN 2	27.8	28.5	17.5	17.5	21.5	63.3%
LTE TDD PC2	41	MAIN 2	27.7	28.9	17.9	17.9	22.4	43.3%
LTE TDD PC3	48	SUB 3	20.0	16.0	20.0	20.0	20.0	63.3%
LTE TDD PC3	48 ULCA	SUB 3	20.0	16.0	20.0	20.0	20.0	63.3%
LTE FDD	66(4)	MAIN 2	29.0	30.3	21.5	21.5	24.0	100%
LTE FDD	66(4)	MAIN 3	21.0	21.0	21.0	21.0	24.5	100%
LTE FDD	71	MAIN 1	30.9	32.3	28.4	28.9	23.5	100%
NR FDD	5	MAIN 1	28.7	29.8	26.3	28.1	24.5	100%
NR FDD	25(2)	MAIN 2	28.7	29.8	20.5	20.5	23.5	100%
NR FDD	30	MAIN 2	29.6	29.6	21.0	21.0	23.0	100%
NR TDD PC3	41	MAIN 2	26.2	26.2	21.0	21.0	23.0	100%
NR TDD PC2	41	MAIN 2	26.9	28.3	21.0	21.0	25.5	100%
NR TDD SRS 0	48	SUB 3	22.0	13.5	22.0	22.0	22.5	100%
NR TDD SRS 1	48	MAIN 2	13.0	13.0	13.0	13.0	18.5	100%
NR TDD SRS 2	48	SUB 2	13.0	13.0	13.0	13.0	18.5	100%
NR TDD SRS 3	48	SUB 5	13.0	13.0	13.0	13.0	18.5	100%
NR FDD	66	MAIN 2	29.4	30.8	21.0	21.0	23.5	100%
NR FDD	70	MAIN 2	30.8	31.8	21.5	21.5	24.0	100%
NR FDD	71	MAIN 1	29.8	31.7	28.3	29.1	24.0	100%
NR TDD SRS 0 PC3	77	SUB 3	18.0	16.0	18.0	18.0	23.0	100%
NR TDD SRS 1	77	MAIN 2	13.5	13.5	13.5	13.5	21.5	100%
NR TDD SRS 2	77	SUB 2	12.5	12.5	12.5	12.5	20.5	100%
NR TDD SRS 3	77	SUB 5	12.5	12.5	12.5	12.5	20.0	100%
NR TDD SRS 0 PC2	77	SUB 3	18.0	16.0	18.0	18.0	25.5	100%
NR TDD SRS 1	77	MAIN 2	13.5	13.5	13.5	13.5	21.5	100%
NR TDD SRS 2	77	SUB 2	12.5	12.5	12.5	12.5	20.5	100%
NR TDD SRS 3	77	SUB 5	12.5	12.5	12.5	12.5	20.0	100%
NR TDD SRS 0 PC3	77 DoD	SUB 3	18.0	16.0	18.0	18.0	23.0	100%
NR TDD SRS 1	77 DoD	MAIN 2	13.5	13.5	13.5	13.5	21.5	100%
NR TDD SRS 2	77 DoD	SUB 2	12.5	12.5	12.5	12.5	20.5	100%
NR TDD SRS 3	77 DoD	SUB 5	12.5	12.5	12.5	12.5	20.0	100%
NR TDD SRS 0 PC2	77 DoD	SUB 3	18.0	16.0	18.0	18.0	25.5	100%
NR TDD SRS 1	77 DoD	MAIN 2	13.5	13.5	13.5	13.5	21.5	100%
NR TDD SRS 2	77 DoD	SUB 2	12.5	12.5	12.5	12.5	20.5	100%
NR TDD SRS 3	77 DoD	SUB 5	12.5	12.5	12.5	12.5	20.0	100%

Note

1. Radio SAR indicator (RSI) in the table above means the SAR test configuration of each mobile communication technology.
2. WLAN/BT mode are not controlled by The Samsung S.LSI proprietary TAS (Time Average SAR) algorithm.
3. Plimit and Tune up output power Pmax in above table correspond to average power level after accounting for duty cycle in the case of TDD Modulation schemes (LTE TDD)
4. Maximum tune up output Power Pmax is used to configure DUT during RF tune up procedure. The maximum allowed output power is equal to Tune up power +1 dB device design uncertainty.
5. SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB Publication447498 D01v06

4.3 Power Reduction for SAR

This device utilizes power reduction mechanisms for some wireless modes and bands for SAR compliance under hotspot conditions and under some conditions when the device is being used in close proximity to the user's hand. All hotspot SAR evaluations for this device were performed at the maximum allowed output power when Hotspot is enabled. FCC KDB Publication 616217 D04v01r02 Sec.6 was used as a guideline for selection SAR test distances for device when being used in phablet use conditions.

This device uses an independent fixed level power reduction mechanism for some wireless modes during held-to-ear scenarios. Per FCC Guidance, the held-to-ear exposure conditions were evaluated at reduced power according to the head SAR Positions described in IEEE 1528-2013. Detailed descriptions of the power reduction mechanism are included in the operational description.

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

4.4 Nominal and Maximum Output Power Specifications

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

4.4.1 PCE Output Power

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

RSI (0) : FREE

RSI (1) : Reduced-Ear Phone

RSI (2) : Reduced-Capacitive Sensor ON

RSI (3) : Reduced-Hotspot Mode ON

RSI (4) : Reduced-RCV ON

GSM

Mode/Band	Antenna	RSI (Radio SAR indicator)	Voice	Burst Average GMSK					Burst Average EDGE 8-PSK			
			(in dBm)	(in dBm)					(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	Main 1	Pmax,0,4	32.5	32.5	30.5	29.0	27.5	26.5	25.0	23.0	22.0	
		1,2,3	28.5	28.5	26.5	25.0	23.5	26.5	25.0	23.0	22.0	
GSM/GPRS/EDGE 1900	Main 2	Pmax,0,4	29.7	29.7	28.0	26.0	25.0	25.3	24.0	22.2	21.2	
		1,2,3	26.5	26.5	25.0	23.0	22.0	25.3	24.0	22.2	21.2	

UMTS

Mode/Band	Antenna	RSI (Radio SAR indicator)	Modulated Average (dBm)			
			3GPP Rel99	HSDPA	HSUPA	DC-HSDPA
				3GPP Cat.24	3GPP Cat.6	3GPP Cat.24
UMTS B2	Main 2	Pmax,0,4	24.0	23.0	23.0	23.0
		1,2,3	20.5	20.5	18.5	20.5
UMTS B4	Main 2	Pmax,0,4	24.0	23.0	23.0	23.0
		1,2,3	20.5	20.0	18.5	20.0
UMTS B5	Main 1	Pmax,0,1,2,3,4	24.5	23.5	23.5	23.5

LTE

Mode / Band	Antenna	Pmax (in dBm) Max. Modulated Average	Plimit (in dBm) Burst Average Power				
			RSI=0	RSI=1	RSI=2	RSI=3	RSI=4
			Free	Ear jack ON	Capactive Sensor	Hotspot ON	RCV ON
LTE B2	Main 2	24.0	24.0	21.5	21.5	21.5	24.0
LTE B2	Main 3	24.5	21.0	21.0	21.0	21.0	21.0
LTE B4	Main 2	24.0	24.0	21.5	21.5	21.5	24.0
LTE B5	Main 1	24.5	24.5	24.5	24.5	24.5	24.5
LTE B7	Main 2	23.5	23.5	21.0	21.0	21.0	23.5
LTE B12	Main 1	24.5	24.5	24.5	24.5	24.5	24.5
LTE B13	Main 1	23.5	23.5	23.5	23.5	23.5	23.5
LTE B14	Main 1	23.5	23.5	23.5	23.5	23.5	23.5
LTE B25	Main 2	24.0	24.0	21.5	21.5	21.5	24.0
LTE B26	Main 1	24.5	24.5	24.5	24.5	24.5	24.5
LTE B30	Main 2	23.0	23.0	21.0	21.0	21.0	23.0
LTE TDD B38	Main 2	23.5	23.5	19.5	19.5	19.5	23.5
LTE TDD B41(PC2)	Main 2	26.0	26.0	21.5	21.5	21.5	26.0
LTE TDD B41(PC3)	Main 2	24.5	24.5	19.5	19.5	19.5	24.5
LTE TDD B41 ULCA(PC3)	Main 2	23.5	23.5	19.5	19.5	19.5	23.5
LTE TDD B48	Sub 3	22.0	20.0	20.0	20.0	20.0	16.0
LTE TDD B48 ULCA	Sub 3	22.0	20.0	20.0	20.0	20.0	16.0
LTE B66	Main 2	24.0	24.0	21.5	21.5	21.5	24.0
LTE B66	Main 3	24.5	21.0	21.0	21.0	21.0	21.0
LTE B71	Main 1	23.5	23.5	23.5	23.5	23.5	23.5

5G NR SUB 6

Mode / Band	Antenna	Pmax (in dBm) Max. Modulated Average	Plimit (in dBm) Burst Average Power				
			RSI=0	RSI=1	RSI=2	RSI=3	RSI=4
			Free	Ear jack ON	Capactive Sensor	Hotspot ON	RCV ON
NR n2	Main 2	23.5	23.5	20.5	20.5	20.5	23.5
NR n5	Main 1	24.5	24.5	24.5	24.5	24.5	24.5
NR n25	Main 2	23.5	23.5	20.5	20.5	20.5	23.5
NR n30	Main 2	23.0	23.0	21.0	21.0	21.0	23.0
NR n41 (PC2).	Main 2	25.5	25.5	21.0	21.0	21.0	25.5
NR n41 (PC3)	Main 2	23.0	23.0	21.0	21.0	21.0	23.0
NR n48 SRS0	Sub3	22.5	22.0	22.0	22.0	22.0	13.5
NR n48 SRS1	Main 2	18.5	13.0	13.0	13.0	13.0	13.0
NR n48 SRS2	Sub 2	18.5	13.0	13.0	13.0	13.0	13.0
NR n48 SRS3	Sub 5	18.5	13.0	13.0	13.0	13.0	13.0
NR n66	Main 2	23.5	23.5	21.0	21.0	21.0	23.5
NR n70	Main 2	24.0	24.0	21.5	21.5	21.5	24.0
NR n71	Main 1	24.0	24.0	24.0	24.0	24.0	24.0
NR n77 SRS0(PC2)	Sub 3	25.5	18.0	18.0	18.0	18.0	16.0
NR n77 SRS0(PC3)	Sub 3	23.0	18.0	18.0	18.0	18.0	16.0
NR n77 SRS1(PC2)	Main 2	21.5	13.5	13.5	13.5	13.5	13.5
NR n77 SRS1(PC3)	Main 2	21.5	13.5	13.5	13.5	13.5	13.5
NR n77 SRS2(PC2)	Sub 2	20.5	12.5	12.5	12.5	12.5	12.5
NR n77 SRS2(PC3)	Sub 2	20.5	12.5	12.5	12.5	12.5	12.5
NR n77 SRS3(PC2)	Sub 5	20.0	12.5	12.5	12.5	12.5	12.5
NR n77 SRS3(PC3)	Sub 5	20.0	12.5	12.5	12.5	12.5	12.5
NR DoD n77 SRS0(PC2)	Sub 3	25.5	18.0	18.0	18.0	18.0	16.0
NR DoD n77 SRS0(PC3)	Sub 3	23.0	18.0	18.0	18.0	18.0	16.0
NR DoD n77 SRS1(PC2)	Main 2	21.5	13.5	13.5	13.5	13.5	13.5
NR DoD n77 SRS1(PC3)	Main 2	21.5	13.5	13.5	13.5	13.5	13.5
NR DoD n77 SRS2(PC2)	Sub 2	20.5	12.5	12.5	12.5	12.5	12.5
NR DoD n77 SRS2(PC3)	Sub 2	20.5	12.5	12.5	12.5	12.5	12.5
NR DoD n77 SRS3(PC2)	Sub 5	20.0	12.5	12.5	12.5	12.5	12.5
NR DoD n77 SRS3(PC3)	Sub 5	20.0	12.5	12.5	12.5	12.5	12.5

In order to satisfy the limitations of the duty factor of the 5G NR TDD band, these were tested with duty factor 100% as n41/n48 and n77 band were applied to all SAR test configurations (Head/Bodyworn/Hotspot) in FTM mode.

4.4.2 Maximum 2.4 GHz, 5 GHz WIFI output power

Mode	Band	IEEE 802.11 (in dBm)								
		a		b	g		n		ac	
		Data Rate	Power	Power	Data Rate	Power	Data Rate	Power	Data Rate	Power
2.4GHz	2.45GHz			20	6M ~ 18M	19	MCS0 ~ MCS3	19		
					24M ~ 36M	18	MCS4 ~ MCS5	18		
					48M ~ 54M	17	MCS6 ~ MCS7	17		
5 GHz (20 MHz)	5200 MHz	6M ~ 18M	18			MCS0 ~ MCS3	18	MCS0 ~ MCS3	18	
		24M ~ 36M	17			MCS4 ~ MCS5	17	MCS4 ~ MCS5	17	
		48M ~ 54M	16			MCS6 ~ MCS7	16	MCS6 ~ MCS8	16	
	5300 MHz	6M ~ 18M	18			MCS0 ~ MCS3	18	MCS0 ~ MCS3	18	
		24M ~ 36M	17			MCS4 ~ MCS5	17	MCS4 ~ MCS5	17	
		48M ~ 54M	16			MCS6 ~ MCS7	16	MCS6 ~ MCS8	16	
	5500 MHz	6M ~ 18M	18			MCS0 ~ MCS3	18	MCS0 ~ MCS3	18	
		24M ~ 36M	17			MCS4 ~ MCS5	17	MCS4 ~ MCS5	17	
		48M ~ 54M	16			MCS6 ~ MCS7	16	MCS6 ~ MCS8	16	
	5800 MHz	6M ~ 18M	18			MCS0 ~ MCS3	18	MCS0 ~ MCS3	18	
		24M ~ 36M	17			MCS4 ~ MCS5	17	MCS4 ~ MCS5	17	
		48M ~ 54M	16			MCS6 ~ MCS7	16	MCS6 ~ MCS8	16	
5 GHz (40 MHz)	5200 MHz					MCS0 ~ MCS4	15	MCS0 ~ MCS4	15	
						MCS5 ~ MCS7	14	MCS5 ~ MCS9	14	
	5300 MHz					MCS0 ~ MCS4	15	MCS0 ~ MCS4	15	
						MCS5 ~ MCS7	14	MCS5 ~ MCS9	14	
	5500 MHz					MCS0 ~ MCS4	15	MCS0 ~ MCS4	15	
						MCS5 ~ MCS7	14	MCS5 ~ MCS9	14	
5800 MHz					MCS0 ~ MCS4	15	MCS0 ~ MCS4	14		
					MCS5 ~ MCS7	14	MCS5 ~ MCS9	14		
5 GHz (80 MHz)	5210 MHz					MCS0 ~ MCS4		MCS0 ~ MCS4	14	
						MCS5 ~ MCS9		MCS5 ~ MCS9	13	
	5290 MHz					MCS0 ~ MCS4		MCS0 ~ MCS4	14 (58ch : 13)	
						MCS5 ~ MCS9		MCS5 ~ MCS9	13 (58ch : 13)	
	5500 MHz					MCS0 ~ MCS4		MCS0 ~ MCS4	14 (106ch : 12)	
						MCS5 ~ MCS9		MCS5 ~ MCS9	13 (106ch : 12)	
5800 MHz					MCS0 ~ MCS4		MCS0 ~ MCS4	14		
					MCS5 ~ MCS9		MCS5 ~ MCS9	13		

(Tolerance target: Upper +1.0dB)

4.4.3 Reduced 2.4 GHz, 5 GHz WIFI output power – Receiver & Grip Active

Mode	Band	IEEE 802.11 (in dBm)								
		a		b	g		n		ac	
		Data Rate	Power	Power	Data Rate	Power	Data Rate	Power	Data Rate	Power
2.4GHz	2.45GHz			13	6M ~ 18M	13	MCS0 ~ MCS3	13		
					24M ~ 36M	13	MCS4 ~ MCS5	13		
					48M ~ 54M	13	MCS6 ~ MCS7	13		
5 GHz (20 MHz)	5200 MHz	6M ~ 18M	12			MCS0 ~ MCS3	12	MCS0 ~ MCS3	12	
		24M ~ 36M	12			MCS4 ~ MCS5	12	MCS4 ~ MCS5	12	
		48M ~ 54M	12			MCS6 ~ MCS7	12	MCS6 ~ MCS8	12	
	5300 MHz	6M ~ 18M	12			MCS0 ~ MCS3	12	MCS0 ~ MCS3	12	
		24M ~ 36M	12			MCS4 ~ MCS5	12	MCS4 ~ MCS5	12	
		48M ~ 54M	12			MCS6 ~ MCS7	12	MCS6 ~ MCS8	12	
	5500 MHz	6M ~ 18M	12			MCS0 ~ MCS3	12	MCS0 ~ MCS3	12	
		24M ~ 36M	12			MCS4 ~ MCS5	12	MCS4 ~ MCS5	12	
		48M ~ 54M	12			MCS6 ~ MCS7	12	MCS6 ~ MCS8	12	
	5800 MHz	6M ~ 18M	12			MCS0 ~ MCS3	12	MCS0 ~ MCS3	12	
		24M ~ 36M	12			MCS4 ~ MCS5	12	MCS4 ~ MCS5	12	
		48M ~ 54M	12			MCS6 ~ MCS7	12	MCS6 ~ MCS8	12	
5 GHz (40 MHz)	5200 MHz					MCS0 ~ MCS4	12	MCS0 ~ MCS4	12	
						MCS5 ~ MCS7	12	MCS5 ~ MCS9	12	
	5300 MHz					MCS0 ~ MCS4	12	MCS0 ~ MCS4	12	
						MCS5 ~ MCS7	12	MCS5 ~ MCS9	12	
	5500 MHz					MCS0 ~ MCS4	12	MCS0 ~ MCS4	12	
						MCS5 ~ MCS7	12	MCS5 ~ MCS9	12	
5800 MHz					MCS0 ~ MCS4	12	MCS0 ~ MCS4	12		
					MCS5 ~ MCS7	12	MCS5 ~ MCS9	12		
5 GHz (80 MHz)	5210 MHz					MCS0 ~ MCS4	12	MCS0 ~ MCS4	12	
						MCS5 ~ MCS9	12	MCS5 ~ MCS9	12	
	5290 MHz					MCS0 ~ MCS4	12	MCS0 ~ MCS4	12	
						MCS5 ~ MCS9	12	MCS5 ~ MCS9	12	
	5500 MHz					MCS0 ~ MCS4	12	MCS0 ~ MCS4	12	
						MCS5 ~ MCS9	12	MCS5 ~ MCS9	12	
5800 MHz					MCS0 ~ MCS4	12	MCS0 ~ MCS4	12		
					MCS5 ~ MCS9	12	MCS5 ~ MCS9	12		

(Tolerance target: Upper +1.0dB)

4.4.4 Maximum Bluetooth Power

Mode / Band		Modulated Average (dBm)
Bluetooth-BR	Maximum	13.0
	Nominal	12.0
Bluetooth-EDR	Maximum	9.0
	Nominal	8.0
Bluetooth-LE 2Mbps	Maximum	8.0
	Nominal	7.0
Bluetooth-LE 1Mbps	Maximum	7.0
	Nominal	6.0

4.5 LTE & NR 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 41 2 498.5 MHz ~ 2 687.5 MHz	
	LTE TDD Band 48 3 552.5 MHz ~ 3 697.5 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 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 n48 3 555 MHz ~ 3 694.98 MHz	
	NR Band n66 (AWS) 1 712.5 MHz ~ 1 777.5 MHz	
	NR Band n70 1 695 MHz ~ 1 710 MHz	
	NR Band n71 665.5 MHz ~ 695.5 MHz	
	NR Band n77 3 705 MHz ~ 3 975 MHz	
	NR Band n77 (DoD) 3 455.04 MHz ~ 3 544.98 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 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, 25 MHz, 30 MHz, 40 MHz		
NR Band n5 (Cell) 5 MHz, 10 MHz, 15 MHz, 20 MHz		
NR Band n25 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz		
NR Band n30 5 MHz, 10 MHz		
NR Band n41 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz		
NR Band n48 10 MHz, 15 MHz, 20 MHz, 40 MHz		
NR Band n66(AWS) 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz		
NR Band n70 5 MHz, 10 MHz, 15 MHz		
NR Band n71 5 MHz, 10 MHz, 15 MHz, 20 MHz		
NR Band n77 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz		
NR Band n77 (DoD) 10 MHz, 15 MHz, 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)

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			680.5 (133297)			
LTE TDD Band 41	5 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)	
	10 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)	
	15 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)	
	20 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)	
LTE TDD Band 48	5 MHz	3 552.5 (55265)		3 600.8 (55748)		3 649.2 (56232)	
	10 MHz	3 555 (55290)		3 601.7 (55757)		3 648.3 (56223)	
	15 MHz	3 557.5 (55315)		3 602.5 (55765)		3 647.5 (56215)	
	20 MHz	3 560 (55340)		3 603.3 (55773)		3 646.7 (56207)	
UE Category		LTE Rel. 15, DL: Category 18, 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. Detailed 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 15. It supports carrier aggregation, downlink MIMO. All other uplink communications are identical to the release 8 specifications. The following LTE Release 15 Features are not supported: Relay, Hetnet, Enhanced eICI, 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)	
	25 MHz			1880 (376000)			
	30 MHz			1880 (376000)			
	40 MHz			1880 (376000)			
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 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)	
	25 MHz			1882.5(376500)			
	30 MHz			1882.5(376500)			
	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)		1745 (349000)		1777.5 (355500)	
	10 MHz	1715 (343000)		1745 (349000)		1775 (355000)	
	15 MHz	1717.5 (343500)		1745 (349000)		1772.5 (354500)	
	20 MHz	1720 (344000)		1745 (349000)		1770 (354000)	
	25 MHz			1745 (349000)			
	30 MHz			1745 (349000)			
	40 MHz			1745 (349000)			
NR Band n70	5 MHz	1697.5 (339500)		1702.5 (340500)		1707.5 (341500)	
	10 MHz	1700 (340000)		1702.5 (340500)		1705 (341000)	
	15 MHz			1702.5 (340500)			
NR Band n41	10 MHz	2501.01 (500202)	2547 (509400)	2592.99 (518598)	2639.01 (527802)	2685 (537000)	
	15 MHz	2503.5 (500700)	2548.26 (509652)	2592.99 (518598)	2637.75 (527550)	2682.51 (536502)	
	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)	
	70 MHz	2531.01 (506202)				2655 (531000)	
	80 MHz	2536.02 (507204)				2649.99 (529998)	
	90 MHz	2541 (508200)				2644.98 (528996)	
	100 MHz			2592.99 (518598)			

Ch. No.& Freq.(MHz)		Low / Low-Mid		Mid		Mid-High / High	
NR Band n48	10 MHz	3555(637000)		3601.68(640112)	3648.33(643222)	3694.98(646332)	
	15 MHz	3557.52(637168)		3602.49(640166)	3647.49(643166)	3692.49(646166)	
	20 MHz	3560.01(637334)		3603.33(640222)	3546.68(643112)	3690(646000)	
	40 MHz	3570(638000)		3624.99(641666)		3679.98(645332)	
NR Band n77	10 MHz	3705 (647000)	3759 (650600)	3813 (654200)	3867 (657800)	3921 (661400)	3975 (665000)
	15 MHz	3707.52 (647168)	3760.5 (650700)	3813.51 (654234)	3866.49 (657766)	3919.5 (661300)	3972.48 (664832)
	20 MHz	3710.01(647334)	3762 (650800)	3813.99(654266)	3866.01 (657734)	3918 (661200)	3969.99 (664666)
	25 MHz	3712.5(647500)	3763.5(650900)	3814.5(654300)	3865.5(657700)	3916.5(661100)	3967.5(664500)
	30 MHz	3715.02(647668)	3765 (651000)	3815.01(654334)	3864.99 (657666)	3915 (661000)	3964.98 (664232)
	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)		
NR Band n77 (DoD)	10 MHz	3455.01(630334)		3500.01(633334)		3544.98(636332)	
	15 MHz	3457.5(630500)		3500.01(633334)		3542.49(636166)	
	20 MHz	3460.02(630668)		3500.01(633334)		3540(636000)	
	25 MHz	3462.51(630834)		3500.01(633334)		3537.48(635832)	
	30 MHz	3465(631000)		3500.01(633334)		3534.99(635666)	
	40 MHz	3470.01(631334)				3529.98(635332)	
	50 MHz	3475.02(631668)				3475.02(631668)	
	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/n25/n30/n66/n70/n71 SCS				15 kHz			
NR Band n41/n48/n77 SCS				30 kHz			
A-MPR disabled for SAR Testing.				Yes			
5G NR UL/DL FR1				CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM DFT-s-OFDM: π/2-BPSK(UL Only), QPSK, 16QAM, 64QAM, 256QAM			
Non-Standalone & Standalone are supported. NR Band n30/70 are Supported only Standalone Mode More detailed specifications of the 5G NR bands are contained in the Technical description document.							

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
GSM/GPRS/EDGE 850	Main #1	Yes	Yes	Yes	Yes	Yes	No
GSM/GPRS/EDGE 1900	Main #2	Yes	Yes	Yes	No	Yes	No
UMTS Band 5	Main #1	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 4	Main #2	Yes	Yes	Yes	No	Yes	No
UMTS Band 2	Main #2	Yes	Yes	Yes	No	Yes	No
LTE Band 2 (PCS)	Main #2	Yes	Yes	Yes	No	Yes	No
LTE Band 2 (PCS)	Main #3	Yes	Yes	Yes	No	No	No
LTE Band 4 (AWS)	Main #2	Yes	Yes	Yes	No	Yes	No
LTE Band 5 (Cell)	Main #1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 7	Main #2	Yes	Yes	Yes	No	Yes	No
LTE Band 12	Main #1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 13	Main #1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 14	Main #1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 25 (PCS)	Main #2	Yes	Yes	Yes	No	Yes	No
LTE Band 26 (Cell)	Main #1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 30	Main #2	Yes	Yes	Yes	No	Yes	No
LTE TDD Band 38	Main #2	Yes	Yes	Yes	No	Yes	No
LTE TDD Band 41	Main #2	Yes	Yes	Yes	No	Yes	No
LTE TDD Band 48	Sub #3	Yes	Yes	Yes	No	No	Yes
LTE Band 66 (AWS)	Main #2	Yes	Yes	Yes	No	Yes	No
LTE Band 66 (AWS)	Main #3	Yes	Yes	Yes	No	No	No
LTE Band 71	Main #1	Yes	Yes	Yes	Yes	Yes	No
NR Band n2	Main #2	Yes	Yes	Yes	No	Yes	No
NR Band n5	Main #1	Yes	Yes	Yes	Yes	Yes	No
NR Band n25	Main #2	Yes	Yes	Yes	No	Yes	No
NR Band n30	Main #2	Yes	Yes	Yes	No	Yes	No
NR Band n41	Main #2	Yes	Yes	Yes	No	Yes	No
NR Band n48 SRS0	Sub #3	Yes	Yes	Yes	No	No	Yes
NR Band n48 SRS1	Main #2	Yes	Yes	Yes	No	Yes	No
NR Band n48 SRS2	Sub #2	Yes	Yes	Yes	No	No	Yes
NR Band n48 SRS3	Sub #5	Yes	Yes	No	No	No	Yes
NR Band n66	Main #2	Yes	Yes	Yes	No	Yes	No
NR Band n70	Main #2	Yes	Yes	Yes	No	Yes	No
NR Band n71	Main #1	Yes	Yes	Yes	Yes	Yes	No
NR Band n77 SRS0	Sub #3	Yes	Yes	Yes	No	No	Yes
NR Band n77 SRS1	Main #2	Yes	Yes	Yes	No	Yes	No
NR Band n77 SRS2	Sub #2	Yes	Yes	Yes	No	No	Yes
NR Band n77 SRS3	Sub #5	Yes	Yes	No	No	No	Yes
2.4 GHz/5 GHz WLAN /Bluetooth	Sub #5	Yes	Yes	Yes	No	No	Yes
NFC	NFC	Yes	Yes	Yes	No	No	Yes

Particular EUT edges were not required to be evaluated for Bluetooth Tethering and Hotspot SAR if the edges were > 25 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	
GSM voice + 2.4GHz Bluetooth	Yes^	Yes	N/A	Yes^
GSM voice + 2.4GHz WI-FI	Yes	Yes	N/A	Yes
GSM voice + 5GHz WI-FI	Yes	Yes	N/A	Yes
GSM voice + 2.4GHz Bluetooth + 5GHz WI-FI	Yes^	Yes	N/A	Yes^
GPRS/EDGE Data + 2.4GHz Bluetooth	Yes^*	Yes*	Yes^	Yes^*
GPRS/EDGE Data + 2.4GHz WI-FI	Yes*	Yes*	Yes	Yes*
GPRS/EDGE Data + 5GHz WI-FI	Yes*	Yes*	Yes	Yes*
GPRS/EDGE Data + 2.4GHz Bluetooth+ 5GHz WI-FI	Yes^*	Yes*	Yes^	Yes^*
UMTS + 2.4GHz Bluetooth	Yes^	Yes	Yes^	Yes^
UMTS + 2.4GHz WI-FI	Yes	Yes	Yes	Yes
UMTS + 5GHz WI-FI	Yes	Yes	Yes	Yes
UMTS + 2.4GHz Bluetooth + 5GHz WI-FI	Yes^	Yes	Yes^	Yes^
LTE + 5G NR	Yes	Yes	Yes	Yes
LTE + 2.4GHz Bluetooth	Yes^	Yes	Yes^	Yes^
LTE + 2.4GHz Bluetooth + 5G NR	Yes^	Yes	Yes^	Yes^
LTE + 2.4GHz WI-FI	Yes	Yes	Yes	Yes
LTE + 2.4GHz WI-FI + 5G NR	Yes*	Yes	Yes	Yes
LTE + 5GHz WI-FI	Yes	Yes	Yes	Yes
LTE + 5GHz WI-FI + 5G NR	Yes*	Yes	Yes	Yes
LTE + 2.4GHz Bluetooth + 5GHz WI-FI	Yes^*	Yes	Yes^	Yes^
LTE + 2.4GHz Bluetooth + 5GHz WI-FI + 5G NR	Yes^*	Yes	Yes^	Yes^
5G NR + 2.4GHz Bluetooth	Yes^	Yes	Yes^	Yes^
5G NR + 2.4GHz WI-FI	Yes	Yes	Yes	Yes
5G NR + 5GHz WI-FI	Yes	Yes	Yes	Yes
5G NR + 2.4GHz Bluetooth + 5GHz WI-FI	Yes^*	Yes	Yes^	Yes^

Note:

- Bluetooth cannot transmit simultaneously with 2.4GHz WLAN
- 5GHz WLAN can transmit simultaneously with Bluetooth
- 2.4 GHz and 5 GHz WLAN cannot transmit simultaneously.
- UMTS +WLAN scenario also represents the UMTS Voice/DATA + WLAN hotspot scenario.
- VoIP is supported in GPRS/EDGE.
- The highest reported SAR for each exposure condition is used for SAR summation purpose.
- Wi-Fi Hotspot is supported for 2.4 GHz/ UNII-3 of 5 GHz WLAN.
- This device supports Bluetooth tethering. ^ Bluetooth Tethering is considered.
- * Pre-installed VOIP applications are considered
- 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.
- This device supports VoLTE/VoWiFi
- NFC was evaluated for phablet based on expected usage conditions.

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 802.11ac with the following features:

- a) Up to 80 MHz Bandwidth only for 5 GHz
- b) Up to 20 MHz Bandwidth only for 2.4 GHz
- c) 1Tx antenna output
- d) Up to 256 QAM is supported
- e) TDWR and Band gap channels are supported for 5 GHz

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is greater than 160mm and less than 200mm. Phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. 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.

4.9.2 Licensed Transmitter(s)

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

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

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

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

This device supports 5G NR/LTE capabilities with overlapping transmission frequency ranges. When the supported frequency range of LTE Band falls completely within an 5G NR/LTE Band with a larger transmission frequency range, both 5G NR/LTE bands have the same target power or the band with the larger transmission frequency range has a higher target power and both 5G NR/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.

5G NR capabilities with overlapping transmission frequency ranges were applied to n2 and n25 of this model.

This device support both Power class 2 (PC2) and Power Class 3 (PC3) for LTE B41. Per May 2017 TCB workshop Notes, SAR test were performed with Power Class 3(given the specific UL/DL Limitations for Power Class 2)..

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

This device supports LTE Carrier Aggregation (CA) for LTE band 41/48 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 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.

In order to satisfy the limitations of the duty factor of the 5G NR TDD band, these were tested as n41/n48/n77 band to which duty factor 100% were applied to all SAR test configurations (Head/Body worn/Hotspot/Phablet SAR) in FTM Mode.

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.

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

The Reported SAR for WLAN and Bluetooth

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

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 (r). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body.

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

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.

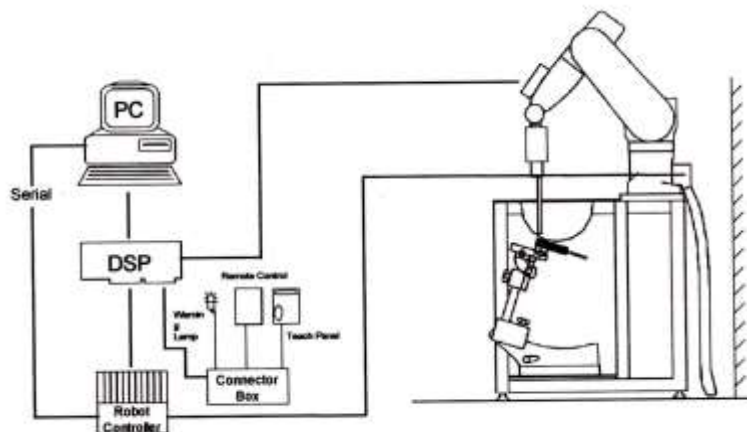


Figure 2. HCT SAR Lab. Test Measurement Set-up

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.

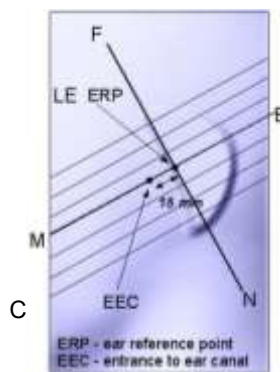
Area scan and zoom scan resolution setting follow KDB 865664 D01v01r04 quoted below.

		≤ 3 GHz	> 3 GHz	
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5 ± 1 mm	$\delta \cdot \ln(2) \pm 0.5$ 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: $\Delta x_{Area}, \Delta y_{Area}$		≤ 2 GHz: ≤ 15 mm 2-3 GHz: ≤ 12 mm	3-4 GHz: ≤ 12 mm 4-6 GHz: ≤ 10 mm	
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \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: $\Delta x_{zoom}, \Delta y_{zoom}$		≤ 2 GHz: ≤ 8 mm 2-3 GHz: ≤ 5 mm*	3-4 GHz: ≤ 5 mm* 4-6 GHz: ≤ 4 mm*	
Maximum zoom scan Spatial resolution normal to phantom surface	uniform grid: $\Delta z_{zoom}(n)$	≤ 5 mm	3-4 GHz: ≤ 4 mm 4-5 GHz: ≤ 3 mm 5-6 GHz: ≤ 2 mm	
	graded grid	$\Delta z_{zoom}(1)$: between 1 st two Points closest to phantom surface	≤ 4 mm	3-4 GHz: ≤ 3 mm 4-5 GHz: ≤ 2.5 mm 5-6 GHz: ≤ 2 mm
		$\Delta z_{zoom}(n>1)$: between subsequent Points	$\leq 1.5 \cdot \Delta z_{zoom}(n-1)$	
Minimum zoom scan volume	x, y, z	≥ 30 mm	3-4 GHz: ≥ 28 mm 4-5 GHz: ≥ 25 mm 5-6 GHz: ≥ 22 mm	
<p>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.</p> <p>* When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</p>				

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

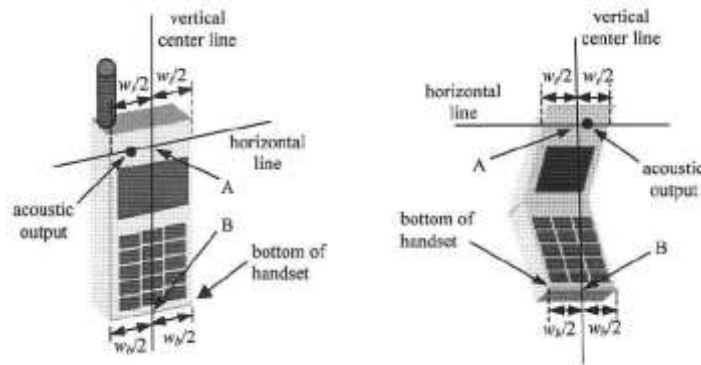


Figure 6-3. Handset vertical and horizontal reference lines

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.

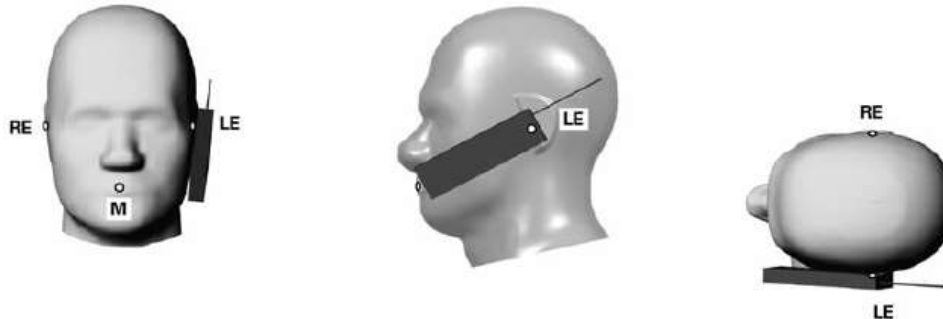


Figure 8.4 Cheek/ Touch position of the wireless device

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 \geq 9cmx5 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 \leq 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
GSM850 / GSM1900 / UMTS B2/B4 LTE B2/B4/B7/B25/B30/B38/B41/B66 NR n2/n25/n30/n41/n66/n70	Rear	17	N/A	N/A	16
	Front	3	N/A	N/A	2
	Bottom	13	N/A	N/A	12
WLAN 5GHz	Rear	7	N/A	N/A	6
	Top	5	N/A	N/A	4

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 mad fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

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

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 UMTS

10.3.1 Output Power Verification

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

10.3.2 Body SAR measurements

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

10.3.3 SAR Measurements with Rel. 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using and FRC with H-SET 1 in Sub-test and a 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to release 6 HSPA test procedures. 8.4.5 SAR Measurement with Rel.6 HSUPA The 3G SAR test Reduction Procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, Using H-Set 1 and QPSK for FRC and a 12.2kbps RMC configured in Test Loop Mode 1 and Power Control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

10.3.4 SAR Measurements with Rel. 6 HSUPA

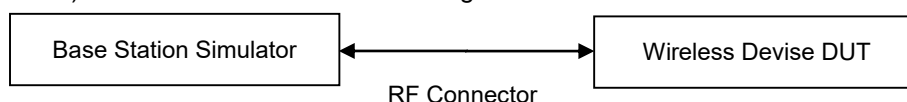
The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control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

10.3.5 DC-HSDPA

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

DC-HSDPA Configurations

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



10.4 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 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).

10.4.1 Spectrum Plots for RB Configurations

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

10.4.2 MPR

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

10.4.3 A-MPR

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

10.4.4 Required RB Size and RB offsets for SAR testing

According to FCC KDB 941225 D05v02r05

- a. Per sec 4.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
 - i. The required channel and offset combination with the highest maximum output power is required for SAR.
 - ii. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
 - iii. When the reported SAR for a required test channel is > 1.45 W/kg, SAR is required for all RB offset configurations for that channel.
- b. Per Sec 4.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Sec 4.2.1.
- c. Per Sec. 4.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocation is less than the highest maximum output power of the 1 RB and 50% RB allocations and the reported SAR for the 1 RB and 50% RB allocations is < 0.8 W/kg.
- d. Per Sec. 4.2.4 and 4.3, SAR test for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configurations determined by Sec. 4.2.1 through 4.2.3 is less than or equal to 1/2 dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is < 1.45 W/kg.

10.4.5 Downlink Carrier Aggregation

Conducted power measurements with LTE Carrier aggregation (CA) downlink only active are made in accordance to KDB publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. For every supported combination of downlink only carrier aggregation, additional conducted output Powers are measured with downlink carrier aggregation active for the configuration with highest measured maximum conducted power with the downlink carrier aggregation inactive measured among the channel bandwidth, modulation and RB combinations in each frequency band. Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the

average output power with downlink only carrier aggregation active is not more than 0.25dB higher than the average output power with downlink only carrier aggregation inactive.

10.4.6 LTE(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.

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

Example for calculated Duty Cycle for Uplink-Downlink Configuration 0:

$$\text{Calculated Duty Cycle} = (5120 \times (1/(15000 \times 2048)) \times 2 + 0.006)/0.01 = 63.33 \%$$

Where

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

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 · Ts	2192 · Ts	2560 · Ts	7680 · Ts	2192 · Ts	2560 · Ts
1	19760 · Ts			20480 · Ts		
2	21952 · Ts			23040 · Ts		
3	24144 · Ts			25600 · Ts		
4	26336 · Ts			7680 · Ts		
5	6592 · Ts	4384 · Ts	5120 · Ts	20480 · Ts	4384 · Ts	5120 · Ts
6	19760 · Ts			23040 · Ts		
7	21952 · Ts			12800 · Ts		
8	24144 · Ts			-		
9	13168 · Ts	-	-	-	-	-

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

HPUE (PC2)

Calculated Duty Cycle for Uplink-Downlink Configuration 1:

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

10.4.7 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 W-CDMA Phone-1 LTE
 <Fundamental Measurement> Output Main Continuous

Reference Signal not found UE Power : -21.5 dBm

Power Measurement (Meas. Count : 11/ 20)
 Avg. Max. Min. Limit
 TX Power ***** dBm 20.3 to 25.7 dBm
 Channel Power ***** dBm

Modulation Analysis View (Meas. Count : 1/ 1)

Common Parameter
 Test Parameter TX1 - Max. Power(QPSK/1 RB)

Call Processing On Scenario Normal

Frequency
 Frame Structure TDD
 Channel Bandwidth FDD Hz TDD 20
 UL Channel & Frequency 40620 CH = 2593.000000 MHz
 DL Channel & Frequency 40620 CH = 2593.000000 MHz
 Operation Band 41
 Frequency Separation (0)MHz

Level
 Input Level 30.0 dBm

2018/01/08 11:01 Idle(Regist) Phone-2 W-CDMA Phone-1 LTE
 <Fundamental Measurement> Output Main Continuous

Reference Signal not found UE Power : -21.5 dBm

Power Measurement (Meas. Count : 11/ 20)
 Avg. Max. Min. Limit
 TX Power ***** dBm 20.3 to 25.7 dBm
 Channel Power ***** 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

10.4.8 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/48C and the single carrier LTE B41/48. LTE Band 41 Uplink carrier aggregation and single carrier are operating with Power class 3/2.

This device support intra-band contiguous UL CA: LTE CA_41C, CA_48C 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.

The measured power results of single carrier LTEB41/48 and intra-band contiguous up-link LTE CA_41C/48C satisfy Maximum output power and Tune-up tolerances.

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

Because the maximum output for UL CA of LTE B41/48 is \leq standalone LTE mode (without CA), SAR for LTE B41/48 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 SAR Testing with 802.11 Transmitters

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

10.5.1 General Device Setup

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

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

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

For devices that operate in both U-NII-1 and U-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.

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

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

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

10.5.4 Initial Test Position Procedure

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

10.5.5 2.4 GHz SAR test Requirements

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

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

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

10.5.6 OFDM Transmission Mode and SAR Test Channel Selection

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

10.5.7 Initial Test Configuration Procedure

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

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

10.5.8 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency band and aggregated band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position on procedure. When the highest reported SAR (for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is ≤ 1.2 W/kg for 1g SAR and ≤ 3.0 W/kg for 10g SAR, no additional SAR tests for the subsequent test configurations are required.

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

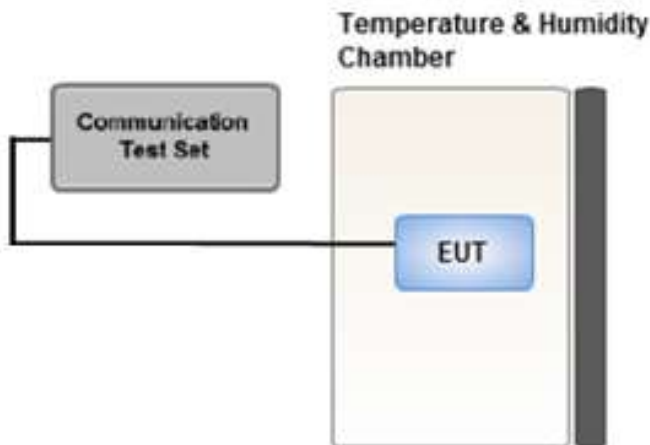
According to ANSI C63.26-2015 Section 5.2.1 when measuring the maximum RF output power from such devices, control over the EUT must be provided either through special test software (provided by manufacturer specifically for compliance testing, but not accessible by an end user) or through use of a base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

11.1.1 GSM Maximum Conducted Output Power(Pmax, RSI=0,4)

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	33.5	33.5	31.5	30.0	28.5	27.5	26.0	24.0	23.0	
Nominal	32.5	32.5	30.5	29.0	27.5	26.5	25.0	23.0	22.0	
GSM 850	128	32.57	32.73	30.21	28.68	27.30	26.84	24.61	23.05	21.92
	190	32.68	32.76	30.09	28.59	27.40	26.84	24.55	23.07	21.65
	251	33.09	33.29	30.53	29.11	27.81	27.15	24.96	23.48	21.76
Maximum	30.7	30.7	29.0	27.0	26.0	26.3	25.0	23.2	22.2	
Nominal	29.7	29.7	28.0	26.0	25.0	25.3	24.0	22.2	21.2	
GSM 1900	512	30.29	30.38	27.21	26.40	25.44	25.81	23.62	22.48	21.01
	661	30.04	30.19	27.09	26.24	25.37	25.68	23.48	22.23	20.87
	810	29.92	30.07	27.04	26.20	25.30	25.40	23.17	22.25	20.79

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	25.48	25.74	25.49	18.47	19.98	19.74	19.99	
Nominal	23.47	23.47	24.48	24.74	24.49	17.47	18.98	18.74	18.99	
GSM 850	128	23.54	23.70	24.19	24.42	24.29	17.81	18.59	18.79	18.91
	190	23.65	23.73	24.07	24.33	24.39	17.81	18.53	18.81	18.64
	251	24.06	24.26	24.51	24.85	24.80	18.12	18.94	19.22	18.75
Maximum	21.67	21.67	22.98	22.74	22.99	17.27	18.98	18.94	19.19	
Nominal	20.67	20.67	21.98	21.74	21.99	16.27	17.98	17.94	18.19	
GSM 1900	512	21.26	21.35	21.19	22.14	22.43	16.78	17.60	18.22	18.00
	661	21.01	21.16	21.07	21.98	22.36	16.65	17.46	17.97	17.86
	810	20.89	21.04	21.02	21.94	22.29	16.37	17.15	17.99	17.78

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



11.1.2 GSM Reduced Conducted Output Power (RSI=1,2,3)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		29.5	29.5	27.5	26.0	24.5	27.5	26.0	24.0	23.0
Nominal		28.5	28.5	26.5	25.0	23.5	26.5	25.0	23.0	22.0
GSM 850	128	28.70	29.11	26.06	24.25	22.29	26.79	24.56	23.01	21.83
	190	28.56	28.94	26.07	24.08	22.29	26.65	24.43	22.93	21.49
	251	28.99	29.31	26.47	24.09	22.79	27.01	24.84	23.41	21.62
Maximum		27.5	27.5	26.0	24.0	23.0	26.3	25.0	23.2	22.2
Nominal		26.5	26.5	25.0	23.0	22.0	25.3	24.0	22.2	21.2
GSM 1900	512	27.10	27.45	25.08	22.95	21.66	25.72	23.50	22.45	20.94
	661	27.03	27.48	25.25	22.98	21.73	25.57	23.33	22.18	20.78
	810	26.98	27.41	24.91	22.73	21.45	25.37	23.04	22.13	20.62

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		20.47	20.47	21.48	21.74	21.49	18.47	19.98	19.74	19.99
Nominal		19.47	19.47	20.48	20.74	20.49	17.47	18.98	18.74	18.99
GSM 850	128	19.67	20.08	20.04	19.99	19.28	17.76	18.54	18.75	18.82
	190	19.53	19.91	20.05	19.82	19.28	17.62	18.41	18.67	18.48
	251	19.96	20.28	20.45	19.83	19.78	17.98	18.82	19.15	18.61
Maximum		18.47	18.47	19.98	19.74	19.99	17.27	18.98	18.94	19.19
Nominal		17.47	17.47	18.98	18.74	18.99	16.27	17.98	17.94	18.19
GSM 1900	512	18.07	18.42	19.06	18.69	18.65	16.69	17.48	18.19	17.93
	661	18.00	18.45	19.23	18.72	18.72	16.54	17.31	17.92	17.77
	810	17.95	18.38	18.89	18.47	18.44	16.34	17.02	17.87	17.61

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/GPRS VOIP: Head SAR , Body worn SAR

GPRS/EDGE Multi-slots 12 : Hotspot SAR with GPRS/EDGE

Multi-slot Class 12 with CS 1 (GMSK)



11.2 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.

11.2.1 UMTS Maximum Conducted Output Power

UMTS Band 5 Maximum Conducted Output Power (Pmax, RSI=0,1,2,3,4)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 5 [dBm]			3GPP MPR
		Subtest	DL 4357 UL 4132	DL 4408 UL 4183	DL 4458 UL 4233	
99	UMTS	12.2 kbps RMC	24.98	24.81	24.99	-
99		12.2 kbps AMR	24.97	24.82	24.99	-
2	HSDPA	Subtest 1	22.45	22.29	22.36	0
5		Subtest 2	22.45	22.38	22.37	0
5		Subtest 3	21.88	21.81	21.91	0.5
5		Subtest 4	21.89	21.86	21.91	0.5
6	HSUPA	Subtest 1	22.15	22.09	22.28	0
6		Subtest 2	20.14	20.11	20.16	2
6		Subtest 3	21.42	21.27	21.32	1
6		Subtest 4	20.39	20.30	20.29	2
6		Subtest 5	22.43	22.30	22.28	0
8	DC-HSDPA	Subtest 1	22.53	22.53	22.55	0
8		Subtest 2	22.45	22.49	22.46	0
8		Subtest 3	21.57	21.69	21.57	0.5
8		Subtest 4	21.62	21.60	21.67	0.5

UMTS Average Conducted output powers

UMTS Band 4 Maximum Conducted Output Power(Pmax, RSI=0,4)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 4 [dBm]			3GPP MPR
		Subtest	DL 1537 UL 1312	DL 1637 UL 1412	DL 1738 UL 1513	
99	UMTS	12.2 kbps RMC	24.18	24.06	24.38	-
99		12.2 kbps AMR	24.16	24.03	24.38	-
5	HSDPA	Subtest 1	22.15	21.97	22.36	0
5		Subtest 2	22.15	21.95	22.39	0
5		Subtest 3	21.20	21.05	21.44	0.5
5		Subtest 4	21.72	21.53	21.88	0.5
6	HSUPA	Subtest 1	22.19	21.99	22.41	0
6		Subtest 2	20.18	19.97	20.35	2
6		Subtest 3	21.20	21.00	21.42	1
6		Subtest 4	20.15	19.96	20.34	2
6		Subtest 5	22.13	21.90	22.32	0
8	DC-HSDPA	Subtest 1	21.97	22.24	21.94	0
8		Subtest 2	22.12	22.06	22.01	0
8		Subtest 3	21.11	21.08	21.10	0.5
8		Subtest 4	21.42	21.44	21.44	0.5

UMTS Average Conducted output powers

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

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	DL 9662 UL 9262	DL 9800 UL 9400	DL 9938 UL 9538	
99	UMTS	12.2 kbps RMC	24.33	24.14	24.22	-
99		12.2 kbps AMR	24.30	24.08	24.19	-
5	HSDPA	Subtest 1	22.28	22.07	22.13	0
5		Subtest 2	22.25	22.00	22.05	0
5		Subtest 3	21.21	21.26	21.27	0.5
5		Subtest 4	21.70	21.51	21.57	0.5
6	HSUPA	Subtest 1	22.24	22.02	22.07	0
6		Subtest 2	20.24	20.02	20.01	2
6		Subtest 3	21.23	21.05	21.07	1
6		Subtest 4	20.24	20.00	20.07	2
6		Subtest 5	22.18	22.00	22.02	0
8	DC-HSDPA	Subtest 1	21.99	22.03	22.02	0
8		Subtest 2	21.98	22.05	21.95	0
8		Subtest 3	21.18	21.05	21.15	0.5
8		Subtest 4	21.46	21.34	21.51	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.



11.2.2 UMTS Reduced Conducted Output Power(RSI=1,2,3)

UMTS Band 4 Conducted Power

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 4 [dBm]			3GPP MPR
		Subtest	DL 1537 UL 1312	DL 1637 UL 1412	DL 1738 UL 1513	
99	UMTS	12.2 kbps RMC	21.24	21.06	21.49	-
99		12.2 kbps AMR	21.23	21.05	21.48	-
5	HSDPA	Subtest 1	20.16	19.97	20.31	0
5		Subtest 2	20.15	19.97	20.32	0
5		Subtest 3	20.17	19.96	20.31	0
5		Subtest 4	20.14	19.94	20.33	0
6	HSUPA	Subtest 1	18.14	17.95	18.36	0
6		Subtest 2	18.14	17.94	18.33	0
6		Subtest 3	18.13	17.94	18.33	0
6		Subtest 4	18.12	17.93	18.33	0
6		Subtest 5	19.12	18.92	19.28	0
8	DC-HSDPA	Subtest 1	20.41	20.24	20.36	0
8		Subtest 2	20.38	20.25	20.31	0
8		Subtest 3	20.42	20.21	20.29	0
8		Subtest 4	20.35	20.26	20.41	0

UMTS Average Conducted output powers

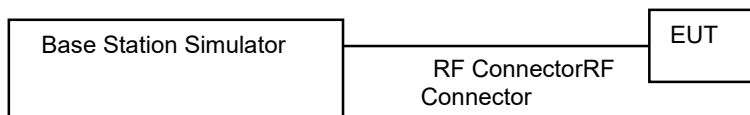
UMTS Band 2 Conducted Power

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	DL 9662 UL 9262	DL 9800 UL 9400	DL 9938 UL 9538	
99	UMTS	12.2 kbps RMC	21.35	21.17	21.23	-
99		12.2 kbps AMR	21.34	21.15	21.18	-
5	HSDPA	Subtest 1	20.26	20.09	20.17	0
5		Subtest 2	20.28	20.00	20.14	0
5		Subtest 3	20.25	20.00	20.15	0
5		Subtest 4	20.25	20.03	20.11	0
6	HSUPA	Subtest 1	18.27	18.02	18.07	0
6		Subtest 2	18.25	18.02	18.07	0
6		Subtest 3	18.22	18.00	18.05	0
6		Subtest 4	18.23	18.01	18.04	0
6		Subtest 5	19.22	18.97	19.04	0
8	DC-HSDPA	Subtest 1	20.64	20.54	20.45	0
8		Subtest 2	20.64	20.54	20.44	0
8		Subtest 3	20.69	20.53	20.37	0
8		Subtest 4	20.66	20.52	20.37	0

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 LTE Maximum Output Power

LTE B4/B5/B12/B13/B14/B26/B30/B38/B71 does not support three non-overlapping channels at each supported max bandwidth. Per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

11.3.1 LTE Maximum Conducted Power

LTE Band 2_Main #2 Ant.Conducted Power(Pmax, RSI=0,4)

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	23.95	23.94	23.97	0	0
		1	3	23.86	23.90	23.87	0	0
		1	5	23.98	23.99	23.94	0	0
		3	0	23.97	24.02	23.98	0	0
		3	1	24.03	24.07	24.00	0	0
		3	3	23.98	24.01	23.97	0	0
	16QAM	6	0	23.01	23.08	23.00	0-1	1
		1	0	23.24	23.13	23.14	0-1	1
		1	3	23.17	23.14	23.19	0-1	1
		1	5	23.13	23.24	23.19	0-1	1
		3	0	23.04	23.06	23.05	0-1	1
		3	1	23.10	23.11	23.08	0-1	1
	64QAM	3	3	23.07	23.00	23.01	0-1	1
		6	0	22.03	22.10	21.98	0-2	2
		1	0	22.15	22.13	22.05	0-2	2
		1	3	22.06	22.04	21.93	0-2	2
		1	5	22.09	22.13	22.07	0-2	2
		3	0	22.01	22.05	21.96	0-2	2
	256QAM	3	1	22.11	22.15	22.04	0-2	2
		3	3	22.08	22.08	22.07	0-2	2
		6	0	21.03	21.09	21.01	0-3	3
		1	0	19.21	19.08	19.20	0-5	5
		1	3	19.22	19.06	19.13	0-5	5
		1	5	19.18	19.24	19.10	0-5	5
		3	0	19.06	19.17	19.07	0-5	5
		3	1	19.08	19.11	19.11	0-5	5
		3	3	19.13	19.09	19.04	0-5	5
6		0	19.04	19.06	18.96	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	23.94	24.08	24.05	0	0
		1	7	23.89	24.08	24.01	0	0
		1	14	23.97	24.04	23.94	0	0
		8	0	23.09	23.12	23.04	0-1	1
		8	3	23.12	23.18	23.08	0-1	1
		8	7	23.10	23.12	23.07	0-1	1
		15	0	23.13	23.17	23.12	0-1	1
	16QAM	1	0	23.23	23.25	23.15	0-1	1
		1	7	23.24	23.18	22.98	0-1	1
		1	14	23.28	23.31	23.18	0-1	1
		8	0	22.18	22.15	22.03	0-2	2
		8	3	22.15	22.13	22.09	0-2	2
		8	7	22.15	22.16	22.08	0-2	2
		15	0	22.10	22.12	22.06	0-2	2
	64QAM	1	0	22.23	22.18	22.08	0-2	2
		1	7	22.15	22.26	22.16	0-2	2
		1	14	22.13	22.24	22.12	0-2	2
		8	0	21.04	21.08	21.04	0-3	3
		8	3	21.04	21.09	21.01	0-3	3
		8	7	21.13	21.12	20.99	0-3	3
		15	0	21.12	21.11	21.07	0-3	3
	256QAM	1	0	19.26	19.21	19.25	0-5	5
		1	7	19.22	19.28	19.22	0-5	5
		1	14	19.29	19.31	19.24	0-5	5
		8	0	19.17	19.20	19.08	0-5	5
		8	3	19.17	19.16	19.11	0-5	5
		8	7	19.17	19.19	19.07	0-5	5
		15	0	19.13	19.14	19.04	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	23.94	24.01	23.93	0	0
		1	12	23.89	24.08	24.01	0	0
		1	24	24.01	24.09	24.01	0	0
		12	0	23.13	23.12	23.08	0-1	1
		12	6	23.10	23.12	23.09	0-1	1
		12	11	23.12	23.10	23.07	0-1	1
	16QAM	25	0	23.16	23.23	23.17	0-1	1
		1	0	23.26	23.24	23.15	0-1	1
		1	12	23.18	23.19	23.20	0-1	1
		1	24	23.29	23.28	23.22	0-1	1
		12	0	22.13	22.16	22.07	0-2	2
		12	6	22.09	22.11	22.07	0-2	2
	64QAM	12	11	22.14	22.12	22.05	0-2	2
		25	0	22.18	22.18	22.11	0-2	2
		1	0	22.13	22.25	22.19	0-2	2
		1	12	22.09	22.10	22.09	0-2	2
		1	24	22.26	22.31	22.15	0-2	2
		12	0	21.11	21.15	21.06	0-3	3
	256QAM	12	6	21.12	21.13	21.02	0-3	3
		12	11	21.13	21.16	21.06	0-3	3
		25	0	21.10	21.14	21.09	0-3	3
		1	0	19.34	19.28	19.22	0-5	5
		1	12	19.27	19.25	19.25	0-5	5
		1	24	19.33	19.33	19.21	0-5	5
		12	0	19.14	19.15	19.08	0-5	5
		12	6	19.17	19.11	19.09	0-5	5
		12	11	19.17	19.17	19.08	0-5	5
		25	0	19.12	19.10	19.07	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	23.98	24.05	24.03	0	0
		1	24	23.94	24.04	24.01	0	0
		1	49	24.00	24.06	24.00	0	0
		25	0	23.17	23.19	23.13	0-1	1
		25	12	23.20	23.23	23.16	0-1	1
		25	24	23.22	23.25	23.22	0-1	1
	16QAM	50	0	23.24	23.28	23.24	0-1	1
		1	0	23.05	23.22	23.14	0-1	1
		1	24	23.22	23.28	23.19	0-1	1
		1	49	23.23	23.20	23.12	0-1	1
		25	0	22.16	22.20	22.11	0-2	2
		25	12	22.13	22.17	22.14	0-2	2
	64QAM	25	24	22.15	22.21	22.14	0-2	2
		50	0	22.19	22.20	22.17	0-2	2
		1	0	22.16	22.17	22.13	0-2	2
		1	24	22.24	22.20	22.15	0-2	2
		1	49	22.17	22.22	22.22	0-2	2
		25	0	21.09	21.11	21.08	0-3	3
	256QAM	25	12	21.11	21.15	21.09	0-3	3
		25	24	21.14	21.13	21.07	0-3	3
		50	0	21.14	21.21	21.13	0-3	3
		1	0	19.21	19.21	19.20	0-5	5
		1	24	19.14	19.26	19.21	0-5	5
		1	49	19.24	19.29	19.15	0-5	5
	25	0	19.09	19.14	19.08	0-5	5	
	25	12	19.13	19.12	19.08	0-5	5	
	25	24	19.10	19.14	19.08	0-5	5	
	50	0	19.15	19.15	19.09	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	23.92	23.99	23.93	0	0
		1	36	23.99	24.08	24.04	0	0
		1	74	23.94	24.07	24.03	0	0
		36	0	23.05	23.18	23.13	0-1	1
		36	18	23.09	23.20	23.15	0-1	1
		36	39	23.13	23.19	23.14	0-1	1
		75	0	23.16	23.18	23.17	0-1	1
	16QAM	1	0	23.20	23.14	23.13	0-1	1
		1	36	23.16	23.12	23.09	0-1	1
		1	74	23.22	23.21	23.18	0-1	1
		36	0	22.09	22.13	22.10	0-2	2
		36	18	22.07	22.16	22.13	0-2	2
		36	39	22.11	22.14	22.10	0-2	2
		75	0	22.06	22.13	22.12	0-2	2
	64QAM	1	0	22.20	22.21	22.12	0-2	2
		1	36	22.03	22.22	22.16	0-2	2
		1	74	22.15	22.25	22.13	0-2	2
		36	0	21.11	21.13	21.12	0-3	3
		36	18	21.10	21.14	21.11	0-3	3
		36	39	21.08	21.15	21.13	0-3	3
		75	0	21.03	21.13	21.05	0-3	3
	256QAM	1	0	19.11	19.17	19.16	0-5	5
		1	36	19.15	19.27	19.16	0-5	5
		1	74	19.08	19.25	19.22	0-5	5
		36	0	19.08	19.15	19.14	0-5	5
		36	18	19.10	19.16	19.14	0-5	5
		36	39	19.14	19.19	19.15	0-5	5
		75	0	19.02	19.09	19.07	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	23.82	23.94	23.93	0	0
		1	49	23.93	24.02	24.00	0	0
		1	99	23.92	24.01	23.95	0	0
		50	0	23.12	23.26	23.18	0-1	1
		50	25	23.18	23.27	23.23	0-1	1
		50	49	23.17	23.28	23.23	0-1	1
	16QAM	100	0	23.09	23.20	23.16	0-1	1
		1	0	23.05	23.13	22.97	0-1	1
		1	49	23.15	23.23	23.20	0-1	1
		1	99	23.05	23.23	23.11	0-1	1
		50	0	22.10	22.17	22.13	0-2	2
		50	25	22.16	22.22	22.19	0-2	2
	64QAM	50	49	22.12	22.21	22.16	0-2	2
		100	0	22.06	22.16	22.11	0-2	2
		1	0	22.01	22.09	22.08	0-2	2
		1	49	22.03	22.14	22.15	0-2	2
		1	99	22.04	22.17	22.07	0-2	2
		50	0	21.10	21.18	21.12	0-3	3
	256QAM	50	25	21.16	21.18	21.13	0-3	3
		50	49	21.09	21.19	21.11	0-3	3
		100	0	21.07	21.16	21.09	0-3	3
		1	0	19.19	19.13	19.13	0-5	5
		1	49	19.16	19.29	19.14	0-5	5
		1	99	19.15	19.18	19.26	0-5	5
	50	0	19.05	19.08	19.11	0-5	5	
	50	25	19.07	19.17	19.17	0-5	5	
	50	49	19.08	19.15	19.10	0-5	5	
	100	0	19.05	19.11	19.11	0-5	5	

LTE Band 4 _Main #2 Ant. Conducted Power(Pmax, RSI=0,4)

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	23.82	23.83	24.18	0	0	
		1	3	23.78	23.75	24.09	0	0	
		1	5	23.84	23.84	24.18	0	0	
		3	0	23.86	23.88	24.22	0	0	
		3	1	23.79	23.90	24.20	0	0	
		3	3	23.80	23.87	24.19	0	0	
	16QAM	6	0	22.93	22.88	23.27	0-1	1	
		1	0	23.11	23.08	23.33	0-1	1	
		1	3	23.03	22.90	23.29	0-1	1	
		1	5	23.04	22.97	23.30	0-1	1	
		3	0	22.92	22.94	23.24	0-1	1	
		3	1	22.96	22.99	23.28	0-1	1	
	64QAM	3	3	22.94	22.95	23.26	0-1	1	
		6	0	21.95	21.98	22.25	0-2	2	
		1	0	21.95	22.02	22.36	0-2	2	
		1	3	22.09	21.93	22.39	0-2	2	
		1	5	22.06	22.04	22.41	0-2	2	
		3	0	21.94	21.94	22.27	0-2	2	
	256QAM	3	1	22.05	21.98	22.35	0-2	2	
		3	3	21.98	21.92	22.35	0-2	2	
		6	0	20.93	20.96	21.22	0-3	3	
		1	0	19.08	19.02	19.37	0-5	5	
		1	3	18.96	18.92	19.30	0-5	5	
		1	5	19.04	19.05	19.34	0-5	5	
		256QAM	3	0	18.88	18.91	19.22	0-5	5
			3	1	18.85	18.94	19.29	0-5	5
			3	3	18.93	18.90	19.25	0-5	5
			6	0	18.93	18.88	19.23	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	23.80	23.89	24.24	0	0
		1	7	23.70	23.88	24.28	0	0
		1	14	23.85	23.90	24.20	0	0
		8	0	22.91	22.96	23.26	0-1	1
		8	3	22.97	22.97	23.30	0-1	1
		8	7	23.03	22.99	23.33	0-1	1
		15	0	23.06	23.01	23.33	0-1	1
	16QAM	1	0	23.03	23.03	23.34	0-1	1
		1	7	23.08	23.09	23.45	0-1	1
		1	14	23.06	23.15	23.43	0-1	1
		8	0	21.96	21.97	22.30	0-2	2
		8	3	22.06	21.98	22.34	0-2	2
		8	7	22.03	22.03	22.37	0-2	2
		15	0	22.04	21.98	22.31	0-2	2
	64QAM	1	0	22.06	21.97	22.36	0-2	2
		1	7	22.06	22.06	22.47	0-2	2
		1	14	22.09	22.11	22.48	0-2	2
		8	0	20.94	20.92	21.26	0-3	3
		8	3	20.96	20.95	21.34	0-3	3
		8	7	20.99	20.92	21.32	0-3	3
		15	0	21.02	20.98	21.29	0-3	3
	256QAM	1	0	19.07	19.01	19.32	0-5	5
		1	7	19.00	18.94	19.30	0-5	5
		1	14	19.04	19.12	19.30	0-5	5
		8	0	19.00	18.94	19.25	0-5	5
		8	3	18.96	18.98	19.31	0-5	5
		8	7	18.94	18.95	19.26	0-5	5
		15	0	18.95	18.90	19.24	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	23.86	23.87	24.19	0	0	
		1	12	23.76	23.93	24.24	0	0	
		1	24	23.89	23.94	24.31	0	0	
		12	0	22.99	23.00	23.31	0-1	1	
		12	6	22.97	22.99	23.37	0-1	1	
		12	11	23.03	23.04	23.35	0-1	1	
	16QAM	25	0	23.03	23.09	23.38	0-1	1	
		1	0	23.12	23.15	23.49	0-1	1	
		1	12	22.99	23.07	23.51	0-1	1	
		1	24	23.24	23.06	23.37	0-1	1	
		12	0	21.99	22.01	22.38	0-2	2	
		12	6	22.01	22.01	22.38	0-2	2	
	64QAM	12	11	22.05	22.00	22.36	0-2	2	
		25	0	22.03	22.06	22.36	0-2	2	
		1	0	22.03	22.10	22.44	0-2	2	
		1	12	21.99	21.95	22.34	0-2	2	
		1	24	22.16	22.03	22.45	0-2	2	
		12	0	21.01	20.98	21.32	0-3	3	
	256QAM	12	6	20.97	20.94	21.29	0-3	3	
		12	11	21.05	21.04	21.33	0-3	3	
		25	0	21.03	21.01	21.30	0-3	3	
		1	0	18.99	19.05	19.27	0-5	5	
		1	12	18.99	19.02	19.27	0-5	5	
		1	24	19.13	19.01	19.30	0-5	5	
			12	0	18.93	18.90	19.30	0-5	5
			12	6	18.98	18.95	19.29	0-5	5
			12	11	19.01	18.93	19.29	0-5	5
			25	0	18.97	18.98	19.29	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	23.90	23.91	24.22	0	0
		1	24	23.85	23.92	24.17	0	0
		1	49	23.97	23.91	24.26	0	0
		25	0	23.06	23.10	23.36	0-1	1
		25	12	23.07	23.08	23.41	0-1	1
		25	24	23.11	23.15	23.45	0-1	1
	16QAM	1	0	23.12	23.17	23.46	0-1	1
		1	24	23.18	23.19	23.42	0-1	1
		1	49	23.08	23.05	23.50	0-1	1
		25	0	23.20	23.18	23.50	0-1	1
		25	12	22.05	22.04	22.34	0-2	2
		25	24	22.08	22.08	22.35	0-2	2
	64QAM	25	0	22.07	22.05	22.43	0-2	2
		1	0	22.06	22.06	22.38	0-2	2
		1	24	22.07	22.01	22.40	0-2	2
		1	49	22.17	22.09	22.46	0-2	2
		25	0	21.03	20.95	21.32	0-3	3
		25	12	21.04	21.01	21.33	0-3	3
	256QAM	25	24	21.08	21.05	21.33	0-3	3
		50	0	21.09	21.09	21.38	0-3	3
		1	0	18.98	18.99	19.33	0-5	5
		1	24	19.00	18.89	19.33	0-5	5
		1	49	19.14	19.05	19.39	0-5	5
		25	0	18.99	18.97	19.29	0-5	5
		25	12	19.01	18.98	19.31	0-5	5
		25	24	19.06	19.03	19.29	0-5	5
		50	0	19.02	19.04	19.33	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	23.88	23.83	24.08	0	0
		1	36	23.98	23.98	24.21	0	0
		1	74	23.99	24.03	24.23	0	0
		36	0	23.05	23.04	23.27	0-1	1
		36	18	23.07	23.06	23.33	0-1	1
		36	39	23.09	23.09	23.35	0-1	1
		75	0	23.06	23.06	23.28	0-1	1
	16QAM	1	0	23.08	23.04	23.25	0-1	1
		1	36	23.06	23.08	23.36	0-1	1
		1	74	23.34	23.09	23.49	0-1	1
		36	0	22.03	22.00	22.27	0-2	2
		36	18	22.07	22.04	22.30	0-2	2
		36	39	22.09	22.04	22.31	0-2	2
		75	0	22.07	22.00	22.26	0-2	2
	64QAM	1	0	22.09	22.01	22.31	0-2	2
		1	36	22.02	22.01	22.25	0-2	2
		1	74	22.16	22.13	22.52	0-2	2
		36	0	21.02	21.01	21.28	0-3	3
		36	18	21.08	21.05	21.30	0-3	3
		36	39	21.12	21.03	21.32	0-3	3
		75	0	21.07	21.00	21.28	0-3	3
	256QAM	1	0	18.93	18.86	19.23	0-5	5
		1	36	19.09	19.06	19.29	0-5	5
		1	74	19.09	19.15	19.33	0-5	5
		36	0	18.98	18.96	19.21	0-5	5
		36	18	19.00	18.99	19.30	0-5	5
		36	39	19.06	19.04	19.30	0-5	5
		75	0	19.02	18.94	19.21	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	23.81	0	0
		1	49	23.96	0	0
		1	99	23.91	0	0
		50	0	23.07	0-1	1
		50	25	23.15	0-1	1
		50	49	23.17	0-1	1
	16QAM	100	0	23.06	0-1	1
		1	0	23.04	0-1	1
		1	49	23.05	0-1	1
		1	99	23.11	0-1	1
		50	0	22.03	0-2	2
		50	25	22.12	0-2	2
	64QAM	50	49	22.09	0-2	2
		100	0	22.03	0-2	2
		1	0	22.01	0-2	2
		1	49	22.03	0-2	2
		1	99	22.04	0-2	2
		50	0	21.04	0-3	3
	256QAM	50	25	21.08	0-3	3
		50	49	21.09	0-3	3
		100	0	20.99	0-3	3
		1	0	18.94	0-5	5
		1	49	19.00	0-5	5
		1	99	18.95	0-5	5
	256QAM	50	0	18.99	0-5	5
		50	25	19.02	0-5	5
		50	49	19.02	0-5	5
		100	0	18.98	0-5	5

LTE Band 5_Main #1 Ant.Conducted Power(Pmax, RSI=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	24.97	24.69	24.58	0	0
		1	3	24.90	24.61	24.55	0	0
		1	5	24.97	24.72	24.63	0	0
		3	0	24.98	24.70	24.63	0	0
		3	1	24.95	24.69	24.65	0	0
		3	3	24.95	24.71	24.63	0	0
	16QAM	6	0	24.04	23.72	23.70	0-1	1
		1	0	24.19	23.94	23.94	0-1	1
		1	3	24.27	24.02	23.85	0-1	1
		1	5	24.25	23.98	23.95	0-1	1
		3	0	24.08	23.84	23.74	0-1	1
		3	1	24.11	23.86	23.84	0-1	1
	64QAM	3	3	24.07	23.87	23.80	0-1	1
		6	0	23.01	22.78	22.78	0-2	2
		1	0	23.15	22.83	22.76	0-2	2
		1	3	23.09	22.93	22.90	0-2	2
		1	5	23.13	22.89	22.95	0-2	2
		3	0	23.02	22.78	22.79	0-2	2
	256QAM	3	1	23.10	22.82	22.87	0-2	2
		3	3	23.08	22.79	22.80	0-2	2
		6	0	22.03	21.76	21.60	0-3	3
		1	0	20.02	19.72	19.63	0-5	5
		1	3	20.03	19.86	19.62	0-5	5
		1	5	20.02	19.83	19.79	0-5	5
		3	0	20.00	19.79	19.65	0-5	5
		3	1	19.97	19.75	19.66	0-5	5
		3	3	20.00	19.79	19.69	0-5	5
		6	0	19.99	19.64	19.65	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	24.94	24.75	24.76	0	0
		1	7	25.02	24.76	24.72	0	0
		1	14	24.96	24.71	24.73	0	0
		8	0	24.05	23.79	23.78	0-1	1
		8	3	24.08	23.85	23.79	0-1	1
		8	7	24.08	23.87	23.81	0-1	1
	16QAM	15	0	24.05	23.86	23.78	0-1	1
		1	0	24.26	24.05	23.91	0-1	1
		1	7	24.22	24.07	24.04	0-1	1
		1	14	24.20	24.00	23.99	0-1	1
		8	0	23.07	22.86	22.74	0-2	2
		8	3	23.07	22.88	22.79	0-2	2
	64QAM	8	7	23.11	22.87	22.84	0-2	2
		15	0	23.08	22.86	22.75	0-2	2
		1	0	23.27	23.00	22.86	0-2	2
		1	7	23.15	23.03	22.88	0-2	2
		1	14	23.08	23.02	22.87	0-2	2
		8	0	22.08	21.75	21.67	0-3	3
	256QAM	8	3	22.01	21.80	21.67	0-3	3
		8	7	22.03	21.73	21.74	0-3	3
		15	0	22.00	21.78	21.71	0-3	3
		1	0	20.08	19.80	19.81	0-5	5
		1	7	20.01	19.96	19.72	0-5	5
		1	14	20.02	19.84	19.77	0-5	5
		8	0	19.98	19.74	19.65	0-5	5
		8	3	19.97	19.75	19.71	0-5	5
		8	7	19.97	19.78	19.67	0-5	5
		15	0	19.94	19.73	19.65	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	24.98	24.71	24.65	0	0
		1	12	24.93	24.78	24.71	0	0
		1	24	24.87	24.81	24.78	0	0
		12	0	24.04	23.84	23.76	0-1	1
		12	6	24.04	23.84	23.75	0-1	1
		12	11	24.07	23.85	23.79	0-1	1
	16QAM	25	0	24.06	23.80	23.78	0-1	1
		1	0	24.29	24.13	23.93	0-1	1
		1	12	24.05	23.89	23.98	0-1	1
		1	24	24.17	24.10	23.99	0-1	1
		12	0	23.04	22.86	22.76	0-2	2
		12	6	23.01	22.87	22.81	0-2	2
	64QAM	12	11	23.02	22.91	22.75	0-2	2
		25	0	23.02	22.84	22.76	0-2	2
		1	0	23.20	22.97	22.90	0-2	2
		1	12	23.15	22.88	22.81	0-2	2
		1	24	23.10	22.92	22.88	0-2	2
		12	0	22.00	21.85	21.76	0-3	3
	256QAM	12	6	22.04	21.79	21.69	0-3	3
		12	11	22.00	21.82	21.74	0-3	3
		25	0	21.96	21.76	21.71	0-3	3
		1	0	20.06	19.93	19.82	0-5	5
		1	12	20.00	19.90	19.88	0-5	5
		1	24	20.01	19.86	19.81	0-5	5
	12	0	19.96	19.71	19.66	0-5	5	
	12	6	19.93	19.77	19.63	0-5	5	
	12	11	19.93	19.74	19.66	0-5	5	
	25	0	19.95	19.74	19.67	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	24.84	0	0
		1	24	24.82	0	0
		1	49	24.99	0	0
		25	0	23.86	0-1	1
		25	12	23.83	0-1	1
		25	24	23.87	0-1	1
		50	0	23.86	0-1	1
	16QAM	1	0	24.05	0-1	1
		1	24	23.98	0-1	1
		1	49	24.10	0-1	1
		25	0	22.85	0-2	2
		25	12	22.83	0-2	2
		25	24	22.80	0-2	2
		50	0	22.84	0-2	2
	64QAM	1	0	22.93	0-2	2
		1	24	22.99	0-2	2
		1	49	22.93	0-2	2
		25	0	21.78	0-3	3
		25	12	21.78	0-3	3
		25	24	21.74	0-3	3
		50	0	21.85	0-3	3
	256QAM	1	0	19.92	0-5	5
		1	24	19.94	0-5	5
		1	49	19.94	0-5	5
25		0	19.80	0-5	5	
25		12	19.76	0-5	5	
25		24	19.78	0-5	5	
50		0	19.77	0-5	5	

LTE Band 7_Main #2 Ant. Conducted Power(Pmax, RSI=0,4)

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	23.23	23.15	23.09	0	0
		1	12	23.08	23.21	23.16	0	0
		1	24	23.20	23.27	23.15	0	0
		12	0	22.35	22.29	22.24	0-1	1
		12	6	22.33	22.27	22.21	0-1	1
		12	11	22.31	22.32	22.22	0-1	1
		25	0	22.44	22.35	22.31	0-1	1
	16QAM	1	0	22.39	22.49	22.32	0-1	1
		1	12	22.40	22.38	22.16	0-1	1
		1	24	22.44	22.42	22.29	0-1	1
		12	0	21.26	21.29	21.18	0-2	2
		12	6	21.29	21.31	21.14	0-2	2
		12	11	21.30	21.35	21.09	0-2	2
		25	0	21.34	21.31	21.25	0-2	2
	64QAM	1	0	21.41	21.48	21.26	0-2	2
		1	12	21.40	21.46	21.29	0-2	2
		1	24	21.33	21.49	21.22	0-2	2
		12	0	20.32	20.28	20.16	0-3	3
		12	6	20.33	20.27	20.13	0-3	3
		12	11	20.27	20.27	20.12	0-3	3
		25	0	20.35	20.27	20.22	0-3	3
	256QAM	1	0	18.48	18.36	18.34	0-5	5
		1	12	18.35	18.38	18.24	0-5	5
		1	24	18.32	18.36	18.22	0-5	5
		12	0	18.26	18.31	18.22	0-5	5
		12	6	18.29	18.29	18.15	0-5	5
		12	11	18.31	18.31	18.17	0-5	5
		25	0	18.29	18.26	18.17	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	23.20	23.27	23.20	0	0
		1	24	23.18	23.19	23.12	0	0
		1	49	23.19	23.17	23.05	0	0
		25	0	22.42	22.36	22.32	0-1	1
		25	12	22.37	22.38	22.31	0-1	1
		25	24	22.42	22.38	22.32	0-1	1
		50	0	22.47	22.42	22.36	0-1	1
	16QAM	1	0	22.41	22.41	22.40	0-1	1
		1	24	22.42	22.27	22.32	0-1	1
		1	49	22.25	22.40	22.33	0-1	1
		25	0	21.36	21.30	21.29	0-2	2
		25	12	21.37	21.32	21.28	0-2	2
		25	24	21.34	21.30	21.21	0-2	2
		50	0	21.38	21.35	21.31	0-2	2
	64QAM	1	0	21.43	21.43	21.37	0-2	2
		1	24	21.29	21.38	21.27	0-2	2
		1	49	21.31	21.39	21.19	0-2	2
		25	0	20.30	20.29	20.25	0-3	3
		25	12	20.32	20.29	20.23	0-3	3
		25	24	20.32	20.29	20.18	0-3	3
		50	0	20.36	20.34	20.29	0-3	3
	256QAM	1	0	18.31	18.37	18.30	0-5	5
		1	24	18.30	18.31	18.18	0-5	5
		1	49	18.35	18.37	18.22	0-5	5
		25	0	18.29	18.28	18.23	0-5	5
		25	12	18.27	18.25	18.21	0-5	5
		25	24	18.29	18.23	18.18	0-5	5
		50	0	18.31	18.28	18.22	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	23.23	23.19	23.17	0	0
		1	36	23.06	23.26	23.16	0	0
		1	74	23.11	23.18	23.05	0	0
		36	0	22.32	22.32	22.27	0-1	1
		36	18	22.32	22.34	22.24	0-1	1
		36	39	22.33	22.34	22.21	0-1	1
		75	0	22.37	22.33	22.25	0-1	1
	16QAM	1	0	22.41	22.44	22.35	0-1	1
		1	36	22.34	22.26	22.27	0-1	1
		1	74	22.31	22.23	22.21	0-1	1
		36	0	21.28	21.33	21.24	0-2	2
		36	18	21.27	21.26	21.21	0-2	2
		36	39	21.23	21.26	21.18	0-2	2
		75	0	21.28	21.26	21.16	0-2	2
	64QAM	1	0	21.35	21.34	21.30	0-2	2
		1	36	21.25	21.42	21.27	0-2	2
		1	74	21.30	21.28	21.13	0-2	2
		36	0	20.28	20.26	20.23	0-3	3
		36	18	20.32	20.30	20.20	0-3	3
		36	39	20.24	20.24	20.16	0-3	3
		75	0	20.26	20.24	20.20	0-3	3
	256QAM	1	0	18.35	18.36	18.30	0-5	5
		1	36	18.37	18.31	18.37	0-5	5
		1	74	18.29	18.31	18.20	0-5	5
		36	0	18.29	18.32	18.24	0-5	5
		36	18	18.25	18.28	18.22	0-5	5
		36	39	18.29	18.29	18.15	0-5	5
		75	0	18.19	18.18	18.14	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	23.17	23.19	23.15	0	0
		1	49	23.11	23.17	23.08	0	0
		1	99	23.11	23.10	22.94	0	0
		50	0	22.48	22.38	22.34	0-1	1
		50	25	22.49	22.38	22.35	0-1	1
		50	49	22.47	22.34	22.25	0-1	1
		100	0	22.44	22.35	22.28	0-1	1
	16QAM	1	0	22.33	22.31	22.30	0-1	1
		1	49	22.16	22.25	22.41	0-1	1
		1	99	22.29	22.22	22.20	0-1	1
		50	0	21.39	21.30	21.29	0-2	2
		50	25	21.39	21.35	21.26	0-2	2
		50	49	21.35	21.29	21.23	0-2	2
		100	0	21.29	21.26	21.22	0-2	2
	64QAM	1	0	21.38	21.40	21.38	0-2	2
		1	49	21.25	21.40	21.22	0-2	2
		1	99	21.29	21.31	21.03	0-2	2
		50	0	20.37	20.34	20.25	0-3	3
		50	25	20.38	20.31	20.22	0-3	3
		50	49	20.32	20.27	20.18	0-3	3
		100	0	20.28	20.23	20.20	0-3	3
	256QAM	1	0	18.29	18.30	18.25	0-5	5
		1	49	18.25	18.30	18.28	0-5	5
		1	99	18.31	18.18	18.09	0-5	5
50		0	18.36	18.32	18.22	0-5	5	
50		25	18.36	18.24	18.18	0-5	5	
50		49	18.32	18.22	18.14	0-5	5	
100		0	18.25	18.21	18.15	0-5	5	

LTE Band 12_Main #1 Ant.Conducted Power(Pmax, RSI=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	24.81	24.64	24.40	0	0
		1	3	24.77	24.52	24.34	0	0
		1	5	24.82	24.57	24.48	0	0
		3	0	24.86	24.62	24.48	0	0
		3	1	24.88	24.62	24.51	0	0
		3	3	24.82	24.56	24.45	0	0
	16QAM	6	0	23.90	23.63	23.54	0-1	1
		1	0	23.90	23.82	23.65	0-1	1
		1	3	23.94	23.74	23.58	0-1	1
		1	5	24.00	23.69	23.65	0-1	1
		3	0	23.89	23.65	23.51	0-1	1
		3	1	23.84	23.67	23.58	0-1	1
	64QAM	3	3	23.90	23.58	23.54	0-1	1
		6	0	22.97	22.72	22.60	0-2	2
		1	0	23.13	22.90	22.76	0-2	2
		1	3	22.98	22.76	22.61	0-2	2
		1	5	23.02	22.80	22.70	0-2	2
		3	0	22.94	22.69	22.55	0-2	2
	256QAM	3	1	22.94	22.70	22.57	0-2	2
		3	3	22.91	22.68	22.58	0-2	2
		6	0	21.94	21.70	21.57	0-3	3
		1	0	20.14	19.89	19.59	0-5	5
		1	3	19.81	19.71	19.53	0-5	5
		1	5	20.03	19.80	19.70	0-5	5
		3	0	19.92	19.74	19.58	0-5	5
		3	1	20.00	19.75	19.64	0-5	5
		3	3	20.01	19.71	19.62	0-5	5
		6	0	19.96	19.65	19.59	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	24.78	24.67	24.55	0	0
		1	7	24.85	24.68	24.56	0	0
		1	14	24.85	24.58	24.49	0	0
		8	0	23.88	23.70	23.56	0-1	1
		8	3	23.91	23.70	23.57	0-1	1
		8	7	23.93	23.66	23.53	0-1	1
		15	0	23.93	23.71	23.62	0-1	1
	16QAM	1	0	24.02	23.90	23.77	0-1	1
		1	7	23.98	23.74	23.62	0-1	1
		1	14	24.08	23.73	23.76	0-1	1
		8	0	22.96	22.77	22.64	0-2	2
		8	3	22.91	22.78	22.63	0-2	2
		8	7	22.92	22.76	22.66	0-2	2
		15	0	22.94	22.72	22.60	0-2	2
	64QAM	1	0	23.04	22.89	22.75	0-2	2
		1	7	22.88	22.77	22.67	0-2	2
		1	14	23.01	22.78	22.69	0-2	2
		8	0	21.90	21.73	21.60	0-3	3
		8	3	21.98	21.76	21.57	0-3	3
		8	7	21.94	21.72	21.57	0-3	3
		15	0	21.93	21.79	21.61	0-3	3
	256QAM	1	0	20.05	19.88	19.75	0-5	5
		1	7	20.03	19.80	19.82	0-5	5
		1	14	20.03	19.85	19.73	0-5	5
		8	0	19.98	19.77	19.66	0-5	5
		8	3	19.97	19.76	19.59	0-5	5
		8	7	19.97	19.74	19.61	0-5	5
15		0	19.96	19.76	19.60	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	24.81	24.66	24.55	0	0
		1	12	24.85	24.66	24.55	0	0
		1	24	24.77	24.65	24.56	0	0
		12	0	23.92	23.75	23.62	0-1	1
		12	6	23.92	23.71	23.61	0-1	1
		12	11	23.88	23.73	23.63	0-1	1
		25	0	24.04	23.84	23.74	0-1	1
	16QAM	1	0	24.10	23.99	23.75	0-1	1
		1	12	23.98	23.77	23.75	0-1	1
		1	24	23.99	23.83	23.65	0-1	1
		12	0	22.98	22.77	22.67	0-2	2
		12	6	22.89	22.78	22.63	0-2	2
		12	11	22.90	22.79	22.63	0-2	2
		25	0	22.95	22.76	22.69	0-2	2
	64QAM	1	0	22.94	22.90	22.80	0-2	2
		1	12	22.95	22.68	22.66	0-2	2
		1	24	22.93	22.79	22.69	0-2	2
		12	0	21.95	21.75	21.64	0-3	3
		12	6	21.95	21.73	21.63	0-3	3
		12	11	21.93	21.79	21.61	0-3	3
		25	0	21.94	21.72	21.60	0-3	3
	256QAM	1	0	20.07	19.92	19.75	0-5	5
		1	12	20.01	19.81	19.82	0-5	5
		1	24	20.09	19.94	19.68	0-5	5
12		0	19.96	19.74	19.65	0-5	5	
12		6	19.97	19.78	19.62	0-5	5	
12		11	19.94	19.77	19.65	0-5	5	
25		0	19.89	19.72	19.63	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	24.73	0	0
		1	24	24.56	0	0
		1	49	24.60	0	0
		25	0	23.83	0-1	1
		25	12	23.80	0-1	1
		25	24	23.81	0-1	1
		50	0	23.83	0-1	1
	16QAM	1	0	23.89	0-1	1
		1	24	23.77	0-1	1
		1	49	23.84	0-1	1
		25	0	22.82	0-2	2
		25	12	22.76	0-2	2
		25	24	22.74	0-2	2
		50	0	22.78	0-2	2
	64QAM	1	0	22.89	0-2	2
		1	24	22.83	0-2	2
		1	49	22.90	0-2	2
		25	0	21.74	0-3	3
		25	12	21.71	0-3	3
		25	24	21.73	0-3	3
		50	0	21.79	0-3	3
	256QAM	1	0	19.98	0-5	5
		1	24	19.83	0-5	5
		1	49	19.87	0-5	5
		25	0	19.77	0-5	5
		25	12	19.77	0-5	5
		25	24	19.71	0-5	5
		50	0	19.74	0-5	5

LTE Band 13_Main #1 Ant.Conducted Power(Pmax, RSI=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]
				23205Ch. 779.5 MHz	23230 ch. 782 MHz	23255 ch. 784.5 MHz		
5 MHz	QPSK	1	0	23.73	23.72	23.73	0	0
		1	12	23.81	23.79	23.70	0	0
		1	24	23.74	23.78	23.72	0	0
		12	0	22.83	22.85	22.84	0-1	1
		12	6	22.82	22.83	22.81	0-1	1
		12	11	22.87	22.85	22.80	0-1	1
		25	0	22.99	22.95	22.89	0-1	1
	16QAM	1	0	22.96	23.00	23.01	0-1	1
		1	12	22.78	22.85	22.86	0-1	1
		1	24	22.91	22.97	22.80	0-1	1
		12	0	21.89	21.87	21.86	0-2	2
		12	6	21.92	21.86	21.84	0-2	2
		12	11	21.89	21.86	21.83	0-2	2
		25	0	21.89	21.83	21.83	0-2	2
	64QAM	1	0	21.97	21.93	21.92	0-2	2
		1	12	21.98	21.88	21.85	0-2	2
		1	24	21.97	21.98	21.84	0-2	2
		12	0	20.86	20.87	20.85	0-3	3
		12	6	20.86	20.87	20.87	0-3	3
		12	11	20.92	20.89	20.85	0-3	3
		25	0	20.90	20.83	20.80	0-3	3
	256QAM	1	0	19.01	18.83	18.96	0-5	5
		1	12	18.96	18.92	18.98	0-5	5
		1	24	18.96	18.95	18.83	0-5	5
		12	0	18.89	18.87	18.81	0-5	5
		12	6	18.88	18.86	18.81	0-5	5
		12	11	18.89	18.86	18.84	0-5	5
		25	0	18.86	18.83	18.80	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	23.81	0	0
		1	24	23.73	0	0
		1	49	23.73	0	0
		25	0	22.99	0-1	1
		25	12	22.92	0-1	1
		25	24	22.91	0-1	1
		50	0	22.97	0-1	1
	16QAM	1	0	22.98	0-1	1
		1	24	23.02	0-1	1
		1	49	23.05	0-1	1
		25	0	21.90	0-2	2
		25	12	21.88	0-2	2
		25	24	21.83	0-2	2
		50	0	21.88	0-2	2
	64QAM	1	0	21.95	0-2	2
		1	24	21.86	0-2	2
		1	49	21.83	0-2	2
		25	0	20.85	0-3	3
		25	12	20.84	0-3	3
		25	24	20.81	0-3	3
		50	0	20.90	0-3	3
	256QAM	1	0	19.02	0-5	5
		1	24	18.97	0-5	5
		1	49	18.97	0-5	5
		25	0	18.89	0-5	5
		25	12	18.85	0-5	5
		25	24	18.83	0-5	5
		50	0	18.86	0-5	5

LTE Band 14_Main #1 Ant.Conducted Power(Pmax, RSI=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]
				23305 Ch. 790.5 MHz	23330 Ch. 793 MHz	23355 Ch. 795.5 MHz		
5 MHz	QPSK	1	0	23.66	23.56	23.55	0	0
		1	12	23.70	23.64	23.58	0	0
		1	24	23.64	23.59	23.56	0	0
		12	0	22.77	22.67	22.65	0-1	1
		12	6	22.76	22.65	22.61	0-1	1
		12	11	22.77	22.65	22.62	0-1	1
		25	0	22.83	22.74	22.71	0-1	1
	16QAM	1	0	22.96	22.80	22.83	0-1	1
		1	12	22.84	22.75	22.77	0-1	1
		1	24	22.96	22.82	22.74	0-1	1
		12	0	21.81	21.74	21.71	0-2	2
		12	6	21.78	21.77	21.68	0-2	2
		12	11	21.79	21.73	21.69	0-2	2
		25	0	21.77	21.71	21.65	0-2	2
	64QAM	1	0	21.97	21.85	21.78	0-2	2
		1	12	21.90	21.79	21.65	0-2	2
		1	24	21.95	21.76	21.72	0-2	2
		12	0	20.82	20.73	20.71	0-3	3
		12	6	20.85	20.67	20.65	0-3	3
		12	11	20.84	20.75	20.60	0-3	3
		25	0	20.75	20.66	20.64	0-3	3
	256QAM	1	0	18.97	18.76	18.81	0-5	5
		1	12	18.88	18.80	18.73	0-5	5
		1	24	18.85	18.86	18.78	0-5	5
		12	0	18.80	18.69	18.69	0-5	5
		12	6	18.79	18.63	18.63	0-5	5
		12	11	18.78	18.68	18.64	0-5	5
25		0	18.73	18.65	18.61	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	23.57	0	0
		1	24	23.56	0	0
		1	49	23.55	0	0
		25	0	22.68	0-1	1
		25	12	22.67	0-1	1
		25	24	22.62	0-1	1
	16QAM	50	0	22.68	0-1	1
		1	0	22.85	0-1	1
		1	24	22.78	0-1	1
		1	49	22.73	0-1	1
		25	0	21.64	0-2	2
		25	12	21.67	0-2	2
	64QAM	25	24	21.64	0-2	2
		50	0	21.66	0-2	2
		1	0	21.86	0-2	2
		1	24	21.82	0-2	2
		1	49	21.70	0-2	2
		25	0	20.60	0-3	3
	256QAM	25	12	20.65	0-3	3
		25	24	20.66	0-3	3
		50	0	20.64	0-3	3
		1	0	18.84	0-5	5
		1	24	18.61	0-5	5
		1	49	18.68	0-5	5
	25	0	18.68	0-5	5	
	25	12	18.66	0-5	5	
	25	24	18.58	0-5	5	
	50	0	18.66	0-5	5	

LTE Band 25 _Main #2 Ant. Conducted Power(Pmax, RSI=0,4)

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	23.96	23.98	23.97	0	0
		1	3	23.95	23.93	23.90	0	0
		1	5	24.01	24.04	23.96	0	0
		3	0	24.00	24.04	24.02	0	0
		3	1	24.00	23.99	24.03	0	0
		3	3	23.96	23.98	23.99	0	0
	16QAM	6	0	23.10	23.08	23.03	0-1	1
		1	0	23.10	23.12	23.07	0-1	1
		1	3	23.20	23.11	23.07	0-1	1
		1	5	23.09	23.26	23.11	0-1	1
		3	0	23.12	23.11	23.09	0-1	1
		3	1	23.17	23.08	23.04	0-1	1
	64QAM	3	3	23.06	23.12	23.03	0-1	1
		6	0	22.13	22.05	21.97	0-2	2
		1	0	22.19	22.22	22.10	0-2	2
		1	3	22.08	22.16	22.05	0-2	2
		1	5	22.19	22.17	22.07	0-2	2
		3	0	22.07	22.07	21.97	0-2	2
	256QAM	3	1	22.15	22.10	22.03	0-2	2
		3	3	22.08	22.11	21.97	0-2	2
		6	0	21.06	21.01	20.99	0-3	3
		1	0	19.25	19.21	19.16	0-5	5
		1	3	19.06	19.09	19.07	0-5	5
		1	5	19.20	19.19	19.12	0-5	5
		3	0	19.08	19.09	18.99	0-5	5
		3	1	19.12	19.13	19.09	0-5	5
		3	3	19.10	19.13	19.07	0-5	5
		6	0	19.09	19.04	19.03	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	23.95	24.04	24.02	0	0
		1	7	23.89	24.08	23.98	0	0
		1	14	24.02	24.03	23.96	0	0
		8	0	23.12	23.08	23.05	0-1	1
		8	3	23.10	23.14	23.09	0-1	1
		8	7	23.14	23.14	23.07	0-1	1
		15	0	23.12	23.14	23.10	0-1	1
	16QAM	1	0	23.27	23.28	23.08	0-1	1
		1	7	23.03	23.19	23.11	0-1	1
		1	14	23.11	23.33	23.16	0-1	1
		8	0	22.14	22.12	22.04	0-2	2
		8	3	22.15	22.12	22.06	0-2	2
		8	7	22.11	22.12	22.09	0-2	2
		15	0	22.12	22.11	22.05	0-2	2
	64QAM	1	0	22.26	22.20	22.11	0-2	2
		1	7	22.12	22.10	22.00	0-2	2
		1	14	22.22	22.19	22.14	0-2	2
		8	0	21.10	21.09	20.97	0-3	3
		8	3	21.07	21.05	21.00	0-3	3
		8	7	21.14	21.12	20.97	0-3	3
		15	0	21.14	21.20	21.04	0-3	3
	256QAM	1	0	19.22	19.27	19.16	0-5	5
		1	7	19.28	19.20	19.20	0-5	5
		1	14	19.25	19.27	19.17	0-5	5
		8	0	19.15	19.12	19.08	0-5	5
		8	3	19.14	19.12	19.10	0-5	5
		8	7	19.17	19.12	19.10	0-5	5
		15	0	19.11	19.13	19.01	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	23.99	24.04	23.97	0	0
		1	12	23.90	24.10	24.02	0	0
		1	24	24.01	24.10	24.06	0	0
		12	0	23.13	23.14	23.07	0-1	1
		12	6	23.12	23.15	23.07	0-1	1
		12	11	23.12	23.14	23.10	0-1	1
	16QAM	25	0	23.20	23.23	23.26	0-1	1
		1	0	23.19	23.28	23.15	0-1	1
		1	12	23.18	23.10	23.17	0-1	1
		1	24	23.20	23.23	23.13	0-1	1
		12	0	22.12	22.16	22.06	0-2	2
		12	6	22.11	22.13	22.05	0-2	2
	64QAM	12	11	22.18	22.15	22.07	0-2	2
		25	0	22.16	22.19	22.13	0-2	2
		1	0	22.23	22.15	22.18	0-2	2
		1	12	22.08	22.20	22.11	0-2	2
		1	24	22.23	22.23	22.12	0-2	2
		12	0	21.11	21.14	21.05	0-3	3
	256QAM	12	6	21.12	21.12	21.02	0-3	3
		12	11	21.11	21.15	21.09	0-3	3
		25	0	21.11	21.16	21.09	0-3	3
		1	0	19.22	19.21	19.09	0-5	5
		1	12	19.05	19.13	19.02	0-5	5
		1	24	19.28	19.27	19.17	0-5	5
	12	0	19.13	19.12	19.09	0-5	5	
	12	6	19.15	19.15	19.11	0-5	5	
	12	11	19.13	19.16	19.09	0-5	5	
	25	0	19.08	19.16	19.06	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	23.97	24.09	24.03	0	0
		1	24	23.96	24.08	24.01	0	0
		1	49	24.06	24.05	23.99	0	0
		25	0	23.16	23.24	23.20	0-1	1
		25	12	23.19	23.27	23.23	0-1	1
		25	24	23.19	23.27	23.24	0-1	1
	16QAM	50	0	23.26	23.33	23.28	0-1	1
		1	0	23.22	23.25	23.16	0-1	1
		1	24	23.11	23.30	23.15	0-1	1
		1	49	23.23	23.26	23.12	0-1	1
		25	0	22.11	22.19	22.17	0-2	2
		25	12	22.14	22.21	22.15	0-2	2
	64QAM	25	24	22.18	22.19	22.17	0-2	2
		50	0	22.20	22.24	22.20	0-2	2
		1	0	22.09	22.20	22.17	0-2	2
		1	24	22.08	22.18	22.12	0-2	2
		1	49	22.19	22.28	22.16	0-2	2
		25	0	21.11	21.13	21.11	0-3	3
	256QAM	25	12	21.11	21.19	21.14	0-3	3
		25	24	21.15	21.17	21.10	0-3	3
		50	0	21.17	21.23	21.20	0-3	3
		1	0	19.24	19.24	19.25	0-5	5
		1	24	19.24	19.30	19.15	0-5	5
		1	49	19.29	19.32	19.12	0-5	5
	25	0	19.14	19.15	19.12	0-5	5	
	25	12	19.14	19.14	19.10	0-5	5	
	25	24	19.16	19.15	19.12	0-5	5	
	50	0	19.14	19.18	19.15	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	23.88	23.96	23.96	0	0
		1	36	23.84	24.05	24.04	0	0
		1	74	23.98	24.06	23.73	0	0
		36	0	23.05	23.18	23.12	0-1	1
		36	18	23.10	23.19	23.15	0-1	1
		36	39	23.14	23.24	23.12	0-1	1
		75	0	23.15	23.24	23.16	0-1	1
	16QAM	1	0	23.11	23.20	23.16	0-1	1
		1	36	23.14	23.14	23.09	0-1	1
		1	74	23.08	23.19	23.08	0-1	1
		36	0	22.08	22.16	22.09	0-2	2
		36	18	22.08	22.16	22.10	0-2	2
		36	39	22.10	22.14	22.09	0-2	2
		75	0	22.07	22.12	22.06	0-2	2
	64QAM	1	0	22.14	22.19	22.05	0-2	2
		1	36	22.04	22.20	22.09	0-2	2
		1	74	22.17	22.20	22.13	0-2	2
		36	0	21.09	21.14	21.08	0-3	3
		36	18	21.11	21.16	21.12	0-3	3
		36	39	21.12	21.15	21.07	0-3	3
		75	0	21.06	21.11	21.06	0-3	3
	256QAM	1	0	19.20	19.28	19.22	0-5	5
		1	36	19.06	19.24	19.22	0-5	5
		1	74	19.18	19.22	19.20	0-5	5
		36	0	19.15	19.16	19.14	0-5	5
		36	18	19.09	19.18	19.11	0-5	5
		36	39	19.15	19.20	19.11	0-5	5
		75	0	19.06	19.12	19.06	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	23.85	23.98	23.91	0	0
		1	49	23.90	24.05	23.99	0	0
		1	99	23.93	23.99	23.86	0	0
		50	0	23.18	23.26	23.19	0-1	1
		50	25	23.21	23.28	23.27	0-1	1
		50	49	23.26	23.31	23.27	0-1	1
	16QAM	100	0	23.15	23.25	23.16	0-1	1
		1	0	23.07	23.21	23.15	0-1	1
		1	49	23.01	23.16	23.13	0-1	1
		1	99	23.09	23.28	23.10	0-1	1
		50	0	22.11	22.16	22.14	0-2	2
		50	25	22.17	22.24	22.19	0-2	2
	64QAM	50	49	22.17	22.24	22.14	0-2	2
		100	0	22.10	22.17	22.13	0-2	2
		1	0	22.10	22.19	22.09	0-2	2
		1	49	22.16	22.17	22.18	0-2	2
		1	99	22.17	22.21	22.12	0-2	2
		50	0	21.12	21.22	21.13	0-3	3
	256QAM	50	25	21.16	21.23	21.16	0-3	3
		50	49	21.13	21.19	21.17	0-3	3
		100	0	21.04	21.15	21.08	0-3	3
		1	0	19.01	19.20	19.07	0-5	5
		1	49	19.13	19.27	19.10	0-5	5
		1	99	19.16	19.17	19.11	0-5	5
	50	0	19.07	19.14	19.10	0-5	5	
	50	25	19.07	19.19	19.14	0-5	5	
	50	49	19.10	19.15	19.12	0-5	5	
	100	0	19.03	19.15	19.08	0-5	5	

LTE Band 26_Main #1 Ant.Conducted Power(Pmax, RSI=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	24.72	24.66	24.52	0	0
		1	3	24.65	24.64	24.48	0	0
		1	5	24.74	24.70	24.57	0	0
		3	0	24.76	24.76	24.57	0	0
		3	1	24.78	24.74	24.55	0	0
		3	3	24.77	24.72	24.54	0	0
		6	0	23.87	23.84	23.67	0-1	1
	16QAM	1	0	24.01	23.94	23.80	0-1	1
		1	3	23.83	23.88	23.78	0-1	1
		1	5	23.94	24.01	23.78	0-1	1
		3	0	23.87	23.80	23.64	0-1	1
		3	1	23.91	23.85	23.76	0-1	1
		3	3	23.85	23.82	23.75	0-1	1
		6	0	22.90	22.83	22.66	0-2	2
	64QAM	1	0	22.96	23.02	22.75	0-2	2
		1	3	23.02	22.92	22.90	0-2	2
		1	5	23.07	22.93	22.84	0-2	2
		3	0	22.91	22.86	22.69	0-2	2
		3	1	22.96	22.91	22.76	0-2	2
		3	3	22.92	22.82	22.77	0-2	2
		6	0	21.82	21.79	21.63	0-3	3
	256QAM	1	0	19.96	19.74	19.68	0-5	5
		1	3	19.84	19.76	19.69	0-5	5
		1	5	19.92	19.83	19.69	0-5	5
		3	0	19.81	19.80	19.61	0-5	5
		3	1	19.92	19.78	19.61	0-5	5
		3	3	19.86	19.86	19.65	0-5	5
		6	0	19.81	19.74	19.59	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	24.81	24.79	24.60	0	0
		1	7	24.82	24.76	24.62	0	0
		1	14	24.83	24.74	24.57	0	0
		8	0	23.89	23.84	23.65	0-1	1
		8	3	23.91	23.83	23.73	0-1	1
		8	7	23.89	23.86	23.68	0-1	1
		15	0	23.91	23.90	23.70	0-1	1
	16QAM	1	0	23.94	23.98	23.83	0-1	1
		1	7	23.86	23.87	23.87	0-1	1
		1	14	24.02	24.01	23.95	0-1	1
		8	0	22.97	22.89	22.77	0-2	2
		8	3	23.00	22.94	22.77	0-2	2
		8	7	22.97	22.91	22.76	0-2	2
		15	0	22.97	22.90	22.72	0-2	2
	64QAM	1	0	23.15	23.04	22.78	0-2	2
		1	7	23.04	22.97	22.84	0-2	2
		1	14	23.01	22.99	22.88	0-2	2
		8	0	21.89	21.81	21.69	0-3	3
		8	3	21.94	21.83	21.69	0-3	3
		8	7	21.93	21.85	21.70	0-3	3
		15	0	21.89	21.88	21.68	0-3	3
	256QAM	1	0	19.99	20.03	19.70	0-5	5
		1	7	19.94	19.93	19.77	0-5	5
		1	14	20.00	19.84	19.68	0-5	5
8		0	19.86	19.82	19.63	0-5	5	
8		3	19.91	19.83	19.68	0-5	5	
8		7	19.93	19.83	19.67	0-5	5	
15		0	19.83	19.78	19.58	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	24.85	24.76	24.61	0	0
		1	12	24.69	24.78	24.65	0	0
		1	24	24.85	24.78	24.66	0	0
		12	0	23.96	23.88	23.67	0-1	1
		12	6	23.97	23.89	23.69	0-1	1
		12	11	23.99	23.88	23.76	0-1	1
		25	0	24.08	23.99	23.71	0-1	1
	16QAM	1	0	24.13	24.08	23.95	0-1	1
		1	12	23.91	24.02	23.89	0-1	1
		1	24	24.07	24.04	23.89	0-1	1
		12	0	23.02	22.91	22.76	0-2	2
		12	6	23.02	22.90	22.73	0-2	2
		12	11	23.05	22.95	22.81	0-2	2
		25	0	23.00	22.96	22.71	0-2	2
	64QAM	1	0	23.12	23.09	22.90	0-2	2
		1	12	23.00	22.99	22.73	0-2	2
		1	24	23.14	23.05	22.91	0-2	2
		12	0	21.98	21.90	21.70	0-3	3
		12	6	21.96	21.84	21.75	0-3	3
		12	11	21.94	21.86	21.73	0-3	3
		25	0	21.97	21.87	21.64	0-3	3
	256QAM	1	0	19.99	20.05	19.79	0-5	5
		1	12	20.00	19.97	19.75	0-5	5
		1	24	20.04	19.93	19.79	0-5	5
		12	0	19.88	19.85	19.62	0-5	5
		12	6	19.91	19.82	19.67	0-5	5
		12	11	19.91	19.84	19.68	0-5	5
25		0	19.92	19.85	19.64	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]
				26750 Ch. 820 MHz	26865 Ch. 831.5 MHz	26990 Ch. 844 MHz		
10 MHz	QPSK	1	0	25.03	24.84	24.68	0	0
		1	24	24.97	24.77	24.55	0	0
		1	49	25.00	24.78	24.60	0	0
		25	0	24.17	24.02	23.74	0-1	1
		25	12	24.12	24.00	23.71	0-1	1
		25	24	24.13	23.98	23.76	0-1	1
	16QAM	50	0	24.16	24.02	23.76	0-1	1
		1	0	24.30	24.15	24.06	0-1	1
		1	24	24.26	24.07	23.88	0-1	1
		1	49	24.27	24.10	24.00	0-1	1
		25	0	23.14	22.96	22.71	0-2	2
		25	12	23.09	22.93	22.74	0-2	2
	64QAM	25	24	23.07	22.94	22.71	0-2	2
		50	0	23.10	22.98	22.75	0-2	2
		1	0	23.24	22.99	22.84	0-2	2
		1	24	23.20	23.03	22.76	0-2	2
		1	49	23.26	23.01	22.86	0-2	2
		25	0	22.06	21.89	21.71	0-3	3
	256QAM	25	12	22.08	21.87	21.68	0-3	3
		25	24	22.05	21.87	21.70	0-3	3
		50	0	22.11	21.96	21.76	0-3	3
		1	0	20.09	19.96	19.73	0-5	5
		1	24	20.12	19.89	19.69	0-5	5
		1	49	20.12	19.91	19.72	0-5	5
	25	0	20.07	19.88	19.67	0-5	5	
	25	12	20.08	19.85	19.64	0-5	5	
	25	24	20.05	19.84	19.65	0-5	5	
	50	0	20.09	19.89	19.66	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	24.90	0	0	
		1	36	24.66	0	0	
		1	74	24.83	0	0	
		36	0	23.92	0-1	1	
		36	18	23.90	0-1	1	
		36	39	23.87	0-1	1	
		75	0	23.93	0-1	1	
	16QAM	1	0	24.05	0-1	1	
		1	36	23.90	0-1	1	
		1	74	24.03	0-1	1	
		36	0	22.91	0-2	2	
		36	18	22.85	0-2	2	
		36	39	22.88	0-2	2	
		75	0	22.88	0-2	2	
	64QAM	1	0	23.09	0-2	2	
		1	36	23.04	0-2	2	
		1	74	23.08	0-2	2	
		36	0	21.91	0-3	3	
		36	18	21.89	0-3	3	
		36	39	21.90	0-3	3	
		75	0	21.89	0-3	3	
	256QAM	1	0	20.11	0-5	5	
		1	36	19.96	0-5	5	
		1	74	19.98	0-5	5	
		36	0	19.90	0-5	5	
		36	18	19.86	0-5	5	
		36	39	19.86	0-5	5	
		75	0	19.86	0-5	5	

LTE Band 30_Main #2 Ant.Conducted Power(Pmax, RSI=0,4)

LTE Band 30_5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				27685 Ch. 2307.5 MHz	27710 Ch. 2310 MHz	27735 Ch. 2312.5 MHz		
5 MHz	QPSK	1	0	22.90	23.03	22.87	0	0
		1	12	22.94	22.85	22.48	0	0
		1	24	22.89	22.39	22.27	0	0
		12	0	22.02	22.12	22.02	0-1	1
		12	6	21.99	22.08	21.89	0-1	1
		12	11	22.00	22.10	21.81	0-1	1
		25	0	22.09	22.20	21.89	0-1	1
	16QAM	1	0	22.07	22.20	22.28	0-1	1
		1	12	21.97	22.15	22.08	0-1	1
		1	24	22.10	22.08	21.87	0-1	1
		12	0	21.02	21.10	21.14	0-2	2
		12	6	21.00	21.11	21.09	0-2	2
		12	11	21.00	21.08	21.11	0-2	2
		25	0	21.07	21.16	21.10	0-2	2
	64QAM	1	0	21.10	21.23	21.28	0-2	2
		1	12	21.08	21.14	21.13	0-2	2
		1	24	21.06	21.22	21.20	0-2	2
		12	0	20.02	20.07	20.07	0-3	3
		12	6	20.00	20.06	20.08	0-3	3
		12	11	19.97	20.04	20.07	0-3	3
		25	0	20.01	20.04	20.07	0-3	3
	256QAM	1	0	18.13	18.22	18.18	0-5	5
		1	12	18.05	18.22	18.09	0-5	5
		1	24	18.12	18.27	18.18	0-5	5
		12	0	18.02	18.11	18.08	0-5	5
		12	6	18.02	18.12	18.15	0-5	5
		12	11	18.06	18.11	18.14	0-5	5
		25	0	18.00	18.08	18.08	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	23.06	0	0	
		1	24	23.04	0	0	
		1	49	22.75	0	0	
		25	0	22.20	0-1	1	
		25	12	22.14	0-1	1	
		25	24	22.17	0-1	1	
	16QAM	50	0	22.22	0-1	1	
		1	0	22.16	0-1	1	
		1	24	22.18	0-1	1	
		1	49	22.20	0-1	1	
		25	0	21.20	0-2	2	
		25	12	21.15	0-2	2	
	64QAM	25	24	21.13	0-2	2	
		50	0	21.13	0-2	2	
		1	0	21.17	0-2	2	
		1	24	21.19	0-2	2	
		1	49	21.12	0-2	2	
		25	0	20.10	0-3	3	
	256QAM	25	12	20.07	0-3	3	
		25	24	20.09	0-3	3	
		50	0	20.14	0-3	3	
		1	0	18.25	0-5	5	
		1	24	18.15	0-5	5	
		1	49	18.25	0-5	5	
			25	0	18.13	0-5	5
			25	12	18.09	0-5	5
			25	24	18.09	0-5	5
			50	0	18.10	0-5	5

LTE TDD Band 38_Main #2 Ant.Conducted Power(Pmax, RSI=0,4)

LTE Band 38_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				3775 Ch. 2572.5 MHz	38000 Ch. 2595 MHz	38225 Ch. 2617.5 MHz		
5 MHz	QPSK	1	0	23.79	23.93	23.47	0	0
		1	12	23.87	24.00	23.45	0	0
		1	24	23.82	23.95	22.60	0	0
		12	0	22.88	23.02	22.54	0-1	1
		12	6	22.88	22.98	22.53	0-1	1
		12	11	22.86	22.98	22.53	0-1	1
		25	0	22.93	23.06	22.61	0-1	1
	16QAM	1	0	23.01	22.89	22.47	0-1	1
		1	12	22.98	22.86	22.35	0-1	1
		1	24	22.95	22.84	22.41	0-1	1
		12	0	21.81	21.92	21.48	0-2	2
		12	6	21.83	21.89	21.45	0-2	2
		12	11	21.79	21.90	21.48	0-2	2
		25	0	21.93	21.99	21.56	0-2	2
	64QAM	1	0	21.87	22.08	21.49	0-2	2
		1	12	21.81	22.06	21.36	0-2	2
		1	24	21.82	22.04	21.44	0-2	2
		12	0	20.80	20.99	20.50	0-3	3
		12	6	20.80	20.96	20.48	0-3	3
		12	11	20.79	20.96	20.49	0-3	3
		25	0	20.88	20.97	20.53	0-3	3
	256QAM	1	0	18.64	18.82	18.41	0-5	5
		1	12	18.66	18.82	18.32	0-5	5
		1	24	18.61	18.73	18.37	0-5	5
		12	0	18.92	19.01	18.59	0-5	5
		12	6	18.92	19.02	18.57	0-5	5
		12	11	18.92	19.01	18.59	0-5	5
		25	0	18.92	19.02	18.63	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	23.96	24.02	23.63	0	0
		1	24	23.83	23.90	23.51	0	0
		1	49	23.79	23.86	22.71	0	0
		25	0	23.02	23.11	22.71	0-1	1
		25	12	23.01	23.10	22.67	0-1	1
		25	24	22.98	23.07	22.66	0-1	1
	16QAM	50	0	23.02	23.13	22.70	0-1	1
		1	0	22.76	23.00	22.57	0-1	1
		1	24	22.62	22.84	22.44	0-1	1
		1	49	22.66	22.90	22.50	0-1	1
		25	0	21.96	22.07	21.66	0-2	2
		25	12	21.95	22.04	21.62	0-2	2
	64QAM	25	24	21.92	22.01	21.61	0-2	2
		50	0	21.98	22.07	21.66	0-2	2
		1	0	22.01	22.06	21.63	0-2	2
		1	24	21.84	21.96	21.50	0-2	2
		1	49	21.81	21.94	21.50	0-2	2
		25	0	20.97	21.04	20.63	0-3	3
	256QAM	25	12	20.93	21.02	20.60	0-3	3
		25	24	20.91	21.00	20.58	0-3	3
		50	0	20.98	21.10	20.69	0-3	3
		1	0	18.77	18.86	18.59	0-5	5
		1	24	18.65	18.83	18.49	0-5	5
		1	49	18.67	18.81	18.47	0-5	5
	25	0	19.01	19.12	18.71	0-5	5	
	25	12	18.98	19.08	18.67	0-5	5	
	25	24	18.95	19.04	18.65	0-5	5	
	50	0	19.01	19.13	18.73	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	23.96	24.03	23.69	0	0
		1	36	23.94	24.04	23.65	0	0
		1	74	23.84	23.91	23.56	0	0
		36	0	23.05	23.11	22.76	0-1	1
		36	18	23.00	23.07	22.72	0-1	1
		36	39	22.96	23.02	22.67	0-1	1
		75	0	23.05	23.09	22.74	0-1	1
	16QAM	1	0	22.84	22.98	22.64	0-1	1
		1	36	22.68	22.81	22.51	0-1	1
		1	74	22.68	22.82	22.44	0-1	1
		36	0	21.98	22.02	21.70	0-2	2
		36	18	21.93	21.99	21.65	0-2	2
		36	39	21.88	21.93	21.61	0-2	2
		75	0	21.95	22.05	21.70	0-2	2
	64QAM	1	0	22.07	22.06	21.80	0-2	2
		1	36	21.88	21.98	21.71	0-2	2
		1	74	21.94	21.98	21.60	0-2	2
		36	0	20.98	21.07	20.71	0-3	3
		36	18	20.93	21.01	20.65	0-3	3
		36	39	20.88	20.95	20.62	0-3	3
		75	0	20.98	21.04	20.69	0-3	3
	256QAM	1	0	18.79	18.84	18.65	0-5	5
		1	36	18.69	18.76	18.60	0-5	5
		1	74	18.63	18.67	18.47	0-5	5
		36	0	19.03	19.10	18.77	0-5	5
		36	18	18.98	19.04	18.71	0-5	5
		36	39	18.94	19.03	18.69	0-5	5
		75	0	18.95	19.04	18.70	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 ch. 2580 MHz	38000 Ch. 2595 MHz	38150 ch. 2610 MHz		
20 MHz	QPSK	1	0	24.05	24.11	23.84	0	0
		1	49	23.89	23.93	23.65	0	0
		1	99	23.79	23.83	23.55	0	0
		50	0	23.13	23.19	22.91	0-1	1
		50	25	23.05	23.13	22.85	0-1	1
		50	49	23.02	23.07	22.78	0-1	1
	16QAM	100	0	23.06	23.10	22.81	0-1	1
		1	0	22.98	23.08	22.76	0-1	1
		1	49	22.71	22.84	22.59	0-1	1
		1	99	22.68	22.76	22.50	0-1	1
		50	0	22.05	22.13	21.85	0-2	2
		50	25	21.99	22.07	21.79	0-2	2
	64QAM	50	49	21.94	22.01	21.71	0-2	2
		100	0	22.03	22.08	21.79	0-2	2
		1	0	22.14	22.21	21.91	0-2	2
		1	49	22.00	22.01	21.77	0-2	2
		1	99	21.91	21.97	21.71	0-2	2
		50	0	21.10	21.16	20.87	0-3	3
	256QAM	50	25	21.03	21.10	20.82	0-3	3
		50	49	20.98	21.04	20.75	0-3	3
		100	0	20.99	21.04	20.74	0-3	3
		1	0	18.92	18.98	18.65	0-5	5
		1	49	18.65	18.81	18.47	0-5	5
		1	99	18.65	18.72	18.39	0-5	5
	50	0	19.14	19.16	18.89	0-5	5	
	50	25	19.07	19.12	18.85	0-5	5	
	50	49	19.04	19.08	18.78	0-5	5	
	100	0	19.01	19.05	18.77	0-5	5	

LTE Band 41_Main #2 Ant.Conducted Power - Power Class 3(Pmax, RSI=0,4)

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	23.06	23.67	23.79	23.34	23.51	0	0
		1	12	23.13	23.71	23.88	23.35	23.47	0	0
		1	24	23.18	23.72	23.83	23.33	23.55	0	0
		12	0	22.15	22.76	22.96	22.42	22.60	0-1	1
		12	6	22.18	22.76	22.82	22.42	22.55	0-1	1
		12	11	22.18	22.74	22.88	22.40	22.65	0-1	1
		25	0	22.31	22.80	22.95	22.46	22.71	0-1	1
	16QAM	1	0	22.11	22.63	22.76	22.19	22.55	0-1	1
		1	12	22.09	22.56	22.62	22.07	22.35	0-1	1
		1	24	22.09	22.63	22.69	22.11	22.46	0-1	1
		12	0	21.14	21.70	21.83	21.28	21.49	0-2	2
		12	6	21.20	21.68	21.77	21.26	21.42	0-2	2
		12	11	21.18	21.67	21.78	21.31	21.48	0-2	2
		25	0	21.21	21.71	21.96	21.35	21.62	0-2	2
	64QAM	1	0	21.10	21.72	21.80	21.36	21.56	0-2	2
		1	12	21.02	21.56	21.74	21.24	21.44	0-2	2
		1	24	21.23	21.70	21.73	21.27	21.50	0-2	2
		12	0	20.10	20.70	20.92	20.38	20.58	0-3	3
		12	6	20.10	20.71	20.84	20.40	20.50	0-3	3
		12	11	20.15	20.75	20.86	20.33	20.56	0-3	3
		25	0	20.17	20.75	20.96	20.41	20.54	0-3	3
	256QAM	1	0	18.06	18.64	18.83	18.32	18.49	0-5	5
		1	12	18.05	18.48	18.87	18.13	18.35	0-5	5
		1	24	18.04	18.63	18.78	18.27	18.38	0-5	5
		12	0	18.18	18.74	18.94	18.45	18.62	0-5	5
12		6	18.20	18.76	18.94	18.38	18.56	0-5	5	
12		11	18.25	18.74	18.93	18.47	18.56	0-5	5	
25		0	18.28	18.86	18.97	18.43	18.67	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	23.15	23.74	23.96	23.40	23.65	0	0
		1	24	23.06	23.65	23.80	23.33	23.54	0	0
		1	49	23.16	23.63	23.79	23.25	23.50	0	0
		25	0	22.27	22.90	23.01	22.49	22.72	0-1	1
		25	12	22.34	22.88	23.02	22.50	22.66	0-1	1
		25	24	22.35	22.83	22.97	22.51	22.66	0-1	1
	16QAM	50	0	22.33	22.84	23.03	22.46	22.75	0-1	1
		1	0	22.06	22.73	22.76	22.26	22.40	0-1	1
		1	24	22.05	22.58	22.59	22.18	22.25	0-1	1
		1	49	22.11	22.72	22.64	22.21	22.33	0-1	1
		25	0	21.20	21.80	21.93	21.43	21.71	0-2	2
		25	12	21.25	21.77	21.90	21.46	21.64	0-2	2
	64QAM	25	24	21.27	21.84	21.97	21.42	21.57	0-2	2
		50	0	21.24	21.79	21.97	21.42	21.70	0-2	2
		1	0	21.15	21.61	21.86	21.36	21.68	0-2	2
		1	24	21.13	21.55	21.75	21.23	21.55	0-2	2
		1	49	21.20	21.64	21.83	21.24	21.57	0-2	2
		25	0	20.18	20.77	20.94	20.49	20.63	0-3	3
	256QAM	25	12	20.21	20.68	20.94	20.41	20.51	0-3	3
		25	24	20.20	20.74	20.88	20.35	20.52	0-3	3
		50	0	20.28	20.86	20.99	20.44	20.63	0-3	3
		1	0	18.09	18.61	18.62	18.20	18.48	0-5	5
		1	24	18.06	18.51	18.43	18.06	18.34	0-5	5
		1	49	18.00	18.62	18.58	18.11	18.35	0-5	5
		25	0	18.30	18.79	18.98	18.50	18.69	0-5	5
		25	12	18.26	18.80	19.01	18.43	18.64	0-5	5
		25	24	18.22	18.82	18.94	18.40	18.64	0-5	5
		50	0	18.28	18.86	19.08	18.53	18.71	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	23.16	23.75	23.93	23.42	23.56	0	0
		1	36	23.21	23.65	23.92	23.34	23.47	0	0
		1	74	23.13	23.76	23.81	23.32	23.52	0	0
		36	0	22.26	22.87	22.96	22.47	22.70	0-1	1
		36	18	22.22	22.87	22.95	22.45	22.67	0-1	1
		36	39	22.31	22.82	22.93	22.41	22.67	0-1	1
		75	0	22.28	22.86	22.96	22.46	22.67	0-1	1
	16QAM	1	0	22.03	22.61	22.80	22.39	22.58	0-1	1
		1	36	22.05	22.50	22.68	22.16	22.28	0-1	1
		1	74	22.10	22.56	22.66	22.18	22.41	0-1	1
		36	0	21.19	21.70	21.94	21.44	21.59	0-2	2
		36	18	21.21	21.73	21.85	21.35	21.60	0-2	2
		36	39	21.15	21.68	21.85	21.36	21.52	0-2	2
		75	0	21.21	21.75	21.88	21.41	21.66	0-2	2
	64QAM	1	0	21.17	21.75	21.94	21.56	21.60	0-2	2
		1	36	21.12	21.52	21.86	21.33	21.51	0-2	2
		1	74	21.16	21.73	21.79	21.38	21.54	0-2	2
		36	0	20.19	20.73	20.96	20.38	20.65	0-3	3
		36	18	20.16	20.77	20.88	20.40	20.55	0-3	3
		36	39	20.22	20.75	20.87	20.37	20.58	0-3	3
		75	0	20.20	20.82	20.97	20.48	20.62	0-3	3
	256QAM	1	0	18.08	18.70	18.80	18.19	18.49	0-5	5
		1	36	18.03	18.63	18.76	18.06	18.31	0-5	5
		1	74	18.01	18.66	18.68	18.14	18.38	0-5	5
		36	0	18.22	18.79	18.96	18.53	18.72	0-5	5
		36	18	18.24	18.81	18.92	18.45	18.61	0-5	5
		36	39	18.27	18.81	18.92	18.41	18.61	0-5	5
		75	0	18.17	18.72	18.90	18.42	18.59	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	23.19	23.73	23.97	23.49	23.66	0	0
		1	49	23.13	23.68	23.86	23.32	23.52	0	0
		1	99	23.12	23.70	23.77	23.25	23.45	0	0
		50	0	22.28	22.85	22.94	22.55	22.75	0-1	1
		50	25	22.30	22.91	22.94	22.46	22.72	0-1	1
		50	49	22.31	22.84	23.03	22.46	22.72	0-1	1
	16QAM	100	0	22.36	22.88	23.04	22.53	22.69	0-1	1
		1	0	22.06	22.61	22.79	22.34	22.53	0-1	1
		1	49	22.04	22.53	22.70	22.16	22.26	0-1	1
		1	99	22.07	22.64	22.64	22.02	22.25	0-1	1
		50	0	21.26	21.81	22.06	21.45	21.70	0-2	2
		50	25	21.31	21.84	21.94	21.44	21.70	0-2	2
	64QAM	50	49	21.22	21.76	21.96	21.35	21.61	0-2	2
		100	0	21.30	21.85	22.01	21.50	21.75	0-2	2
		1	0	21.19	21.68	21.87	21.53	21.76	0-2	2
		1	49	21.15	21.66	21.72	21.51	21.61	0-2	2
		1	99	21.21	21.69	21.75	21.42	21.54	0-2	2
		50	0	20.32	20.78	20.99	20.53	20.75	0-3	3
	256QAM	50	25	20.22	20.80	21.01	20.49	20.72	0-3	3
		50	49	20.28	20.83	20.88	20.38	20.63	0-3	3
		100	0	20.19	20.75	20.93	20.40	20.63	0-3	3
		1	0	18.05	18.60	18.82	18.17	18.39	0-5	5
		1	49	18.06	18.57	18.72	18.02	18.23	0-5	5
		1	99	18.05	18.59	18.65	18.05	18.14	0-5	5
	50	0	18.26	18.87	19.05	18.50	18.56	0-5	5	
	50	25	18.29	18.83	19.06	18.53	18.68	0-5	5	
	50	49	18.34	18.81	18.99	18.47	18.61	0-5	5	
	100	0	18.27	18.81	18.87	18.38	18.65	0-5	5	

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

LTE Band 41_Main #2 Ant.Conducted Power - Power Class 2 (Pmax, RSI=0,4)

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	24.69	25.03	25.25	24.68	24.95	0	0
		1	12	24.64	25.08	25.23	24.71	24.93	0	0
		1	24	24.62	25.06	25.20	24.66	24.82	0	0
		12	0	23.80	24.11	24.31	23.76	23.98	0-1	1
		12	6	23.69	24.16	24.28	23.74	23.96	0-1	1
		12	11	23.69	24.04	24.21	23.66	23.87	0-1	1
	16QAM	25	0	23.65	24.10	24.29	23.71	23.94	0-1	1
		1	0	24.15	24.47	24.38	24.33	24.43	0-1	1
		1	12	24.21	24.38	24.34	24.29	24.27	0-1	1
		1	24	24.15	24.42	24.39	24.24	24.36	0-1	1
		12	0	22.62	23.05	23.24	22.83	22.99	0-2	2
		12	6	22.62	22.99	23.24	22.74	22.90	0-2	2
	64QAM	12	11	22.64	22.99	23.22	22.79	22.96	0-2	2
		25	0	22.68	23.05	23.27	22.70	22.90	0-2	2
		1	0	22.67	23.35	23.43	23.14	23.26	0-2	2
		1	12	22.73	23.42	23.45	22.99	23.38	0-2	2
		1	24	22.63	23.38	23.39	23.06	23.27	0-2	2
		12	0	21.68	22.02	22.24	21.65	21.98	0-3	3
	256QAM	12	6	21.63	22.08	22.15	21.66	22.01	0-3	3
		12	11	21.58	21.99	22.16	21.60	21.90	0-3	3
		25	0	21.75	22.11	22.29	21.70	21.86	0-3	3
		1	0	20.06	20.28	20.40	20.23	20.10	0-5	5
		1	12	20.19	20.32	20.39	20.29	20.11	0-5	5
		1	24	20.15	20.22	20.29	20.20	20.08	0-5	5
		12	0	19.61	20.02	20.14	19.69	19.90	0-5	5
12		6	19.60	19.98	20.06	19.67	19.90	0-5	5	
12		11	19.58	20.00	20.12	19.65	19.88	0-5	5	
25		0	19.70	20.03	20.26	19.77	19.87	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	24.63	25.08	25.23	24.80	24.92	0	0
		1	24	24.63	25.07	25.22	24.68	24.93	0	0
		1	49	24.63	25.11	25.23	24.71	24.87	0	0
		25	0	23.68	24.13	24.35	23.77	23.95	0-1	1
		25	12	23.66	24.18	24.30	23.80	23.99	0-1	1
		25	24	23.65	24.10	24.28	23.69	23.92	0-1	1
	16QAM	50	0	23.70	24.17	24.29	23.79	24.00	0-1	1
		1	0	24.19	24.40	24.40	24.34	24.43	0-1	1
		1	24	24.18	24.34	24.45	24.27	24.34	0-1	1
		1	49	24.14	24.41	24.41	24.30	24.35	0-1	1
		25	0	22.64	23.09	23.21	22.73	22.90	0-2	2
		25	12	22.61	23.05	23.24	22.68	22.90	0-2	2
	64QAM	25	24	22.61	23.08	23.17	22.65	22.93	0-2	2
		50	0	22.70	23.13	23.22	22.74	22.96	0-2	2
		1	0	22.99	23.24	23.38	23.18	23.28	0-2	2
		1	24	22.99	23.13	23.28	23.05	23.28	0-2	2
		1	49	22.86	23.18	23.30	23.05	23.18	0-2	2
		25	0	21.67	22.04	22.27	21.83	21.90	0-3	3
	256QAM	25	12	21.64	22.07	22.26	21.76	21.90	0-3	3
		25	24	21.74	22.01	22.22	21.70	21.82	0-3	3
		50	0	21.67	22.13	22.29	21.72	21.98	0-3	3
		1	0	20.09	20.42	20.45	20.27	20.20	0-5	5
		1	24	20.12	20.38	20.32	20.17	20.09	0-5	5
		1	49	20.11	20.41	20.42	20.04	20.04	0-5	5
		25	0	19.66	20.06	20.25	19.78	19.91	0-5	5
		25	12	19.67	19.98	20.23	19.72	19.84	0-5	5
		25	24	19.68	19.96	20.20	19.68	19.89	0-5	5
		50	0	19.66	20.10	20.28	19.81	19.94	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	24.65	24.99	25.29	24.83	25.04	0	0
		1	36	24.63	25.06	25.18	24.74	24.94	0	0
		1	74	24.70	24.98	25.20	24.67	24.86	0	0
		36	0	23.60	24.06	24.26	23.77	23.89	0-1	1
		36	18	23.64	24.02	24.22	23.74	23.90	0-1	1
		36	39	23.65	23.98	24.19	23.65	23.84	0-1	1
		75	0	23.71	24.17	24.25	23.78	23.98	0-1	1
	16QAM	1	0	24.30	24.29	24.29	24.45	24.36	0-1	1
		1	36	24.28	24.46	24.39	24.31	24.31	0-1	1
		1	74	24.26	24.42	24.38	24.16	24.33	0-1	1
		36	0	22.65	23.03	23.28	22.75	22.96	0-2	2
		36	18	22.66	23.08	23.27	22.73	22.93	0-2	2
		36	39	22.60	23.03	23.25	22.68	22.91	0-2	2
		75	0	22.62	23.10	23.22	22.76	22.92	0-2	2
	64QAM	1	0	22.98	23.34	23.42	23.19	23.35	0-2	2
		1	36	22.96	23.39	23.32	22.95	23.26	0-2	2
		1	74	23.01	23.41	23.33	23.07	23.24	0-2	2
		36	0	21.64	22.00	22.29	21.76	21.95	0-3	3
		36	18	21.65	21.97	22.23	21.70	21.92	0-3	3
		36	39	21.67	21.99	22.15	21.66	21.85	0-3	3
		75	0	21.64	22.02	22.18	21.71	21.98	0-3	3
	256QAM	1	0	20.14	20.36	20.39	20.29	20.17	0-5	5
		1	36	20.20	20.36	20.35	20.29	20.22	0-5	5
		1	74	20.17	20.30	20.39	20.15	20.03	0-5	5
		36	0	19.60	19.98	20.17	19.70	19.85	0-5	5
		36	18	19.64	20.06	20.20	19.68	19.89	0-5	5
		36	39	19.63	20.07	20.10	19.63	19.81	0-5	5
		75	0	19.69	20.07	20.22	19.72	19.92	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	24.66	25.06	25.40	24.81	24.93	0	0
		1	49	24.68	25.05	25.19	24.76	24.81	0	0
		1	99	24.70	25.03	25.16	24.62	24.75	0	0
		50	0	23.78	24.10	24.38	23.86	24.10	0-1	1
		50	25	23.76	24.10	24.33	23.82	24.01	0-1	1
		50	49	23.72	24.11	24.23	23.71	23.94	0-1	1
	16QAM	100	0	23.73	24.11	24.30	23.81	24.03	0-1	1
		1	0	24.19	24.33	24.46	24.46	24.30	0-1	1
		1	49	24.25	24.29	24.27	24.35	24.38	0-1	1
		1	99	24.27	24.31	24.41	24.20	24.34	0-1	1
		50	0	22.66	23.08	23.22	22.83	22.96	0-2	2
		50	25	22.70	23.06	23.28	22.71	22.95	0-2	2
	64QAM	50	49	22.66	23.11	23.24	22.68	22.92	0-2	2
		100	0	22.69	23.05	23.26	22.67	22.88	0-2	2
		1	0	23.01	23.23	23.37	23.20	23.18	0-2	2
		1	49	22.94	23.21	23.32	23.08	23.04	0-2	2
		1	99	23.11	23.26	23.24	22.98	22.98	0-2	2
		50	0	21.74	22.13	22.33	21.83	21.97	0-3	3
	256QAM	50	25	21.66	22.17	22.36	21.78	22.02	0-3	3
		50	49	21.67	22.15	22.27	21.69	21.96	0-3	3
		100	0	21.63	22.00	22.25	21.75	21.93	0-3	3
		1	0	20.13	20.39	20.35	20.25	20.32	0-5	5
		1	49	20.10	20.42	20.40	20.15	20.22	0-5	5
		1	99	20.10	20.31	20.35	20.07	20.06	0-5	5
		50	0	19.69	20.03	20.31	19.81	20.00	0-5	5
		50	25	19.69	20.13	20.25	19.76	19.93	0-5	5
		50	49	19.74	20.06	20.23	19.74	19.88	0-5	5
		100	0	19.73	20.13	20.27	19.71	19.88	0-5	5

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

LTE Band 66_Main #2 Ant. Conducted Power(Pmax, RSI=0,4)

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	23.78	24.02	24.11	0	0
		1	3	23.78	23.97	24.14	0	0
		1	5	23.89	24.12	24.27	0	0
		3	0	23.90	24.10	24.21	0	0
		3	1	23.79	23.99	24.21	0	0
		3	3	23.82	24.03	24.23	0	0
	16QAM	6	0	22.96	23.13	23.30	0-1	1
		1	0	22.96	23.26	23.37	0-1	1
		1	3	22.98	23.13	23.39	0-1	1
		1	5	23.10	23.22	23.38	0-1	1
		3	0	22.92	23.07	23.30	0-1	1
		3	1	22.99	23.22	23.35	0-1	1
	64QAM	3	3	22.98	23.15	23.31	0-1	1
		6	0	22.04	22.15	22.35	0-2	2
		1	0	21.99	22.26	22.45	0-2	2
		1	3	22.04	22.25	22.43	0-2	2
		1	5	22.11	22.25	22.42	0-2	2
		3	0	21.93	22.09	22.28	0-2	2
	256QAM	3	1	22.00	22.24	22.29	0-2	2
		3	3	21.97	22.16	22.30	0-2	2
		6	0	20.98	21.18	21.30	0-3	3
		1	0	18.96	19.21	19.33	0-5	5
		1	3	19.01	19.13	19.18	0-5	5
		1	5	19.00	19.19	19.23	0-5	5
		3	0	18.93	19.10	19.28	0-5	5
		3	1	18.88	19.03	19.17	0-5	5
		3	3	18.95	19.14	19.31	0-5	5
		6	0	18.90	19.08	19.23	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	23.76	24.08	24.25	0	0
		1	7	23.78	24.00	24.16	0	0
		1	14	23.87	23.99	24.17	0	0
		8	0	23.01	23.20	23.30	0-1	1
		8	3	23.03	23.25	23.39	0-1	1
		8	7	23.01	23.24	23.39	0-1	1
	16QAM	15	0	22.99	23.19	23.39	0-1	1
		1	0	23.16	23.17	23.53	0-1	1
		1	7	23.00	23.23	23.44	0-1	1
		1	14	23.19	23.47	23.50	0-1	1
		8	0	21.99	22.21	22.38	0-2	2
		8	3	22.05	22.23	22.38	0-2	2
	64QAM	8	7	22.07	22.20	22.41	0-2	2
		15	0	22.00	22.16	22.40	0-2	2
		1	0	22.19	22.44	22.54	0-2	2
		1	7	22.05	22.27	22.48	0-2	2
		1	14	22.09	22.30	22.40	0-2	2
		8	0	21.02	21.20	21.30	0-3	3
	256QAM	8	3	20.98	21.26	21.38	0-3	3
		8	7	21.05	21.24	21.36	0-3	3
		15	0	21.02	21.16	21.37	0-3	3
		1	0	19.18	19.20	19.47	0-5	5
		1	7	19.20	19.37	19.40	0-5	5
		1	14	19.24	19.20	19.47	0-5	5
		8	0	18.90	19.09	19.26	0-5	5
		8	3	18.92	19.15	19.31	0-5	5
		8	7	18.92	19.11	19.32	0-5	5
		15	0	18.93	19.07	19.28	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	23.79	23.96	24.17	0	0
		1	12	23.80	23.98	24.17	0	0
		1	24	23.78	24.07	24.29	0	0
		12	0	23.04	23.18	23.42	0-1	1
		12	6	23.04	23.26	23.41	0-1	1
		12	11	23.04	23.26	23.40	0-1	1
	16QAM	25	0	23.05	23.26	23.47	0-1	1
		1	0	23.27	23.36	23.64	0-1	1
		1	12	23.10	23.32	23.51	0-1	1
		1	24	23.26	23.52	23.48	0-1	1
		12	0	22.04	22.24	22.45	0-2	2
		12	6	22.04	22.25	22.42	0-2	2
	64QAM	12	11	22.07	22.25	22.42	0-2	2
		25	0	22.04	22.24	22.44	0-2	2
		1	0	22.14	22.31	22.59	0-2	2
		1	12	22.16	22.28	22.41	0-2	2
		1	24	22.31	22.36	22.56	0-2	2
		12	0	21.02	21.14	21.38	0-3	3
	256QAM	12	6	21.07	21.20	21.42	0-3	3
		12	11	21.08	21.22	21.42	0-3	3
		25	0	21.04	21.23	21.44	0-3	3
		1	0	19.09	19.32	19.65	0-5	5
		1	12	18.87	19.23	19.49	0-5	5
		1	24	18.98	19.38	19.42	0-5	5
		12	0	18.91	19.13	19.32	0-5	5
		12	6	19.02	19.10	19.35	0-5	5
		12	11	19.00	19.18	19.39	0-5	5
25		0	18.98	19.16	19.33	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	23.87	24.06	24.25	0	0
		1	24	23.82	24.00	24.18	0	0
		1	49	24.00	24.04	24.24	0	0
		25	0	23.04	23.22	23.42	0-1	1
		25	12	23.12	23.23	23.47	0-1	1
		25	24	23.12	23.27	23.48	0-1	1
	16QAM	50	0	23.12	23.29	23.49	0-1	1
		1	0	23.08	23.31	23.53	0-1	1
		1	24	23.06	23.26	23.50	0-1	1
		1	49	23.32	23.37	23.56	0-1	1
		25	0	22.07	22.22	22.38	0-2	2
		25	12	22.08	22.21	22.40	0-2	2
	64QAM	25	24	22.12	22.20	22.41	0-2	2
		50	0	22.14	22.27	22.48	0-2	2
		1	0	22.03	22.27	22.52	0-2	2
		1	24	22.02	22.35	22.56	0-2	2
		1	49	22.18	22.46	22.51	0-2	2
		25	0	20.97	21.17	21.40	0-3	3
	256QAM	25	12	21.05	21.20	21.42	0-3	3
		25	24	21.11	21.19	21.40	0-3	3
		50	0	21.07	21.25	21.46	0-3	3
		1	0	19.13	19.35	19.47	0-5	5
		1	24	19.05	19.24	19.52	0-5	5
		1	49	19.16	19.33	19.59	0-5	5
	25	0	19.01	19.16	19.41	0-5	5	
	25	12	19.04	19.18	19.40	0-5	5	
	25	24	19.06	19.22	19.38	0-5	5	
	50	0	19.08	19.21	19.42	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	23.72	23.91	24.14	0	0
		1	36	23.85	24.02	24.21	0	0
		1	74	23.89	24.07	24.28	0	0
		36	0	23.00	23.23	23.36	0-1	1
		36	18	23.09	23.24	23.44	0-1	1
		36	39	23.11	23.26	23.43	0-1	1
	16QAM	75	0	23.11	23.24	23.45	0-1	1
		1	0	23.06	23.32	23.47	0-1	1
		1	36	23.00	23.32	23.36	0-1	1
		1	74	23.16	23.40	23.56	0-1	1
		36	0	22.06	22.17	22.40	0-2	2
		36	18	22.04	22.18	22.43	0-2	2
	64QAM	36	39	22.09	22.25	22.41	0-2	2
		75	0	22.06	22.23	22.41	0-2	2
		1	0	22.07	22.13	22.44	0-2	2
		1	36	22.15	22.32	22.40	0-2	2
		1	74	22.28	22.20	22.50	0-2	2
		36	0	21.07	21.19	21.41	0-3	3
	256QAM	36	18	21.15	21.25	21.46	0-3	3
		36	39	21.13	21.26	21.44	0-3	3
		75	0	21.05	21.19	21.39	0-3	3
		1	0	19.14	19.32	19.36	0-5	5
		1	36	18.96	19.33	19.36	0-5	5
		1	74	19.29	19.29	19.52	0-5	5
		36	0	19.02	19.14	19.33	0-5	5
		36	18	19.02	19.15	19.39	0-5	5
		36	39	19.05	19.21	19.40	0-5	5
		75	0	19.02	19.16	19.42	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	23.74	23.93	24.10	0	0
		1	49	23.84	23.99	24.19	0	0
		1	99	23.96	24.02	24.18	0	0
		50	0	23.10	23.25	23.46	0-1	1
		50	25	23.16	23.34	23.52	0-1	1
		50	49	23.22	23.31	23.51	0-1	1
	16QAM	100	0	23.10	23.25	23.45	0-1	1
		1	0	23.14	23.24	23.44	0-1	1
		1	49	23.12	23.26	23.45	0-1	1
		1	99	23.26	23.34	23.48	0-1	1
		50	0	22.10	22.21	22.44	0-2	2
		50	25	22.19	22.32	22.50	0-2	2
	64QAM	50	49	22.18	22.28	22.50	0-2	2
		100	0	22.05	22.21	22.41	0-2	2
		1	0	21.94	22.18	22.39	0-2	2
		1	49	22.15	22.28	22.54	0-2	2
		1	99	22.34	22.20	22.53	0-2	2
		50	0	21.09	21.19	21.43	0-3	3
	256QAM	50	25	21.15	21.31	21.48	0-3	3
		50	49	21.15	21.24	21.45	0-3	3
		100	0	21.05	21.17	21.39	0-3	3
		1	0	18.95	19.10	19.34	0-5	5
		1	49	19.17	19.17	19.46	0-5	5
		1	99	19.19	19.27	19.43	0-5	5
		50	0	19.02	19.15	19.35	0-5	5
		50	25	19.09	19.20	19.41	0-5	5
		50	49	19.09	19.21	19.43	0-5	5
		100	0	19.07	19.18	19.39	0-5	5

LTE Band 71_Main #1 Ant.Conducted Power(Pmax, RSI=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	133447ch. 695.5 MHz		
5 MHz	QPSK	1	0	23.70	23.99	23.97	0	0
		1	12	23.82	23.97	23.94	0	0
		1	24	23.71	24.04	23.99	0	0
		12	0	22.92	23.15	23.12	0-1	1
		12	6	22.90	23.15	23.12	0-1	1
		12	11	22.89	23.15	23.11	0-1	1
	16QAM	25	0	23.01	23.28	23.20	0-1	1
		1	0	23.03	23.30	23.17	0-1	1
		1	12	22.90	23.07	23.14	0-1	1
		1	24	22.92	23.23	23.19	0-1	1
		12	0	21.84	22.13	22.16	0-2	2
		12	6	21.81	22.07	22.11	0-2	2
	64QAM	12	11	21.83	22.09	22.11	0-2	2
		25	0	21.91	22.20	22.15	0-2	2
		1	0	21.93	22.12	22.23	0-2	2
		1	12	21.87	22.18	22.21	0-2	2
		1	24	21.90	22.20	22.20	0-2	2
		12	0	20.78	21.07	21.10	0-3	3
	256QAM	12	6	20.78	21.07	21.14	0-3	3
		12	11	20.84	21.07	21.14	0-3	3
		25	0	20.85	21.16	21.11	0-3	3
		1	0	18.98	19.22	19.19	0-5	5
		1	12	19.02	19.17	19.15	0-5	5
		1	24	19.04	19.22	19.24	0-5	5
		12	0	18.86	19.14	19.13	0-5	5
	12	6	18.91	19.12	19.15	0-5	5	
	12	11	18.86	19.15	19.12	0-5	5	
	25	0	18.89	19.14	19.11	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	133422ch. 693 Mhz		
10 MHz	QPSK	1	0	23.80	24.13	24.11	0	0
		1	24	23.77	23.95	23.96	0	0
		1	49	23.76	23.95	23.98	0	0
		25	0	23.03	23.27	23.25	0-1	1
		25	12	23.00	23.29	23.26	0-1	1
		25	24	23.02	23.27	23.20	0-1	1
	16QAM	50	0	23.03	23.32	23.25	0-1	1
		1	0	23.01	23.36	23.21	0-1	1
		1	24	22.82	23.42	23.24	0-1	1
		1	49	23.03	23.18	23.21	0-1	1
		25	0	21.94	22.25	22.22	0-2	2
		25	12	21.94	22.24	22.18	0-2	2
	64QAM	25	24	21.90	22.21	22.17	0-2	2
		50	0	21.94	22.21	22.17	0-2	2
		1	0	22.12	22.30	22.19	0-2	2
		1	24	21.96	22.18	22.27	0-2	2
		1	49	22.00	22.21	22.25	0-2	2
		25	0	20.90	21.15	21.18	0-3	3
	256QAM	25	12	20.90	21.14	21.12	0-3	3
		25	24	20.84	21.14	21.11	0-3	3
		50	0	20.90	21.20	21.16	0-3	3
		1	0	19.02	19.38	19.30	0-5	5
		1	24	18.81	19.20	19.17	0-5	5
		1	49	18.97	19.27	19.24	0-5	5
	256QAM	25	0	18.93	19.13	19.10	0-5	5
		25	12	18.90	19.11	19.13	0-5	5
		25	24	18.85	19.09	19.08	0-5	5
		50	0	18.89	19.18	19.14	0-5	5

LTE Band 71 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				133297 ch. 680.5 MHz		
15 MHz	QPSK	1	0	24.07	0	0
		1	36	23.99	0	0
		1	74	24.00	0	0
		36	0	23.23	0-1	1
		36	18	23.19	0-1	1
		36	39	23.12	0-1	1
		75	0	23.27	0-1	1
	16QAM	1	0	23.40	0-1	1
		1	36	23.21	0-1	1
		1	74	23.26	0-1	1
		36	0	22.13	0-2	2
		36	18	22.10	0-2	2
		36	39	22.02	0-2	2
	64QAM	75	0	22.11	0-2	2
		1	0	22.26	0-2	2
		1	36	22.08	0-2	2
		1	74	22.09	0-2	2
		36	0	21.10	0-3	3
		36	18	21.12	0-3	3
		36	39	21.08	0-3	3
	256QAM	75	0	21.13	0-3	3
		1	0	19.28	0-5	5
		1	36	19.14	0-5	5
		1	74	19.19	0-5	5
		36	0	19.20	0-5	5
		36	18	19.12	0-5	5
		36	39	19.08	0-5	5
		75	0	19.18	0-5	5

LTE Band 71 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP [dB]	MPR [dB]
				133297 ch. 680.5 MHz		
20 MHz	QPSK	1	0	24.08	0	0
		1	49	24.07	0	0
		1	99	23.98	0	0
		50	0	23.35	0-1	1
		50	25	23.31	0-1	1
		50	49	23.25	0-1	1
		100	0	23.26	0-1	1
	16QAM	1	0	23.46	0-1	1
		1	49	23.38	0-1	1
		1	99	23.39	0-1	1
		50	0	22.27	0-2	2
		50	25	22.22	0-2	2
		50	49	22.16	0-2	2
		100	0	22.21	0-2	2
	64QAM	1	0	22.36	0-2	2
		1	49	22.16	0-2	2
		1	99	22.18	0-2	2
		50	0	21.28	0-3	3
		50	25	21.23	0-3	3
		50	49	21.15	0-3	3
		100	0	21.13	0-3	3
	256QAM	1	0	19.38	0-5	5
		1	49	19.14	0-5	5
		1	99	19.22	0-5	5
50		0	19.24	0-5	5	
50		25	19.20	0-5	5	
50		49	19.18	0-5	5	
100		0	19.20	0-5	5	

11.3.2 LTE Reduced Conducted Power

LTE Band 2_Main #2 Ant.Conducted Power(RSI=1,2,3)

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	22.08	22.12	22.00	0	0
		1	3	22.03	22.05	22.01	0	0
		1	5	22.14	22.12	22.08	0	0
		3	0	22.16	22.12	22.08	0	0
		3	1	22.20	22.15	22.14	0	0
		3	3	22.14	22.14	22.06	0	0
		6	0	22.19	22.13	22.12	0-1	0
	16QAM	1	0	22.29	22.33	22.19	0-1	0
		1	3	22.27	22.20	22.08	0-1	0
		1	5	22.29	22.38	22.19	0-1	0
		3	0	22.23	22.21	22.16	0-1	0
		3	1	22.27	22.21	22.14	0-1	0
		3	3	22.20	22.24	22.12	0-1	0
	64QAM	6	0	22.19	22.14	22.07	0-2	0
		1	0	22.33	22.23	22.24	0-2	0
		1	3	22.17	22.13	22.16	0-2	0
		1	5	22.21	22.29	22.13	0-2	0
		3	0	22.12	22.09	22.04	0-2	0
		3	1	22.16	22.15	22.08	0-2	0
	256QAM	3	3	22.24	22.12	22.16	0-2	0
		6	0	21.72	21.69	21.69	0-3	0.5
		1	0	19.86	19.70	19.87	0-5	2.5
		1	3	19.80	19.64	19.79	0-5	2.5
		1	5	19.84	19.69	19.82	0-5	2.5
		3	0	19.77	19.80	19.67	0-5	2.5
		3	1	19.76	19.71	19.69	0-5	2.5
		3	3	19.82	19.78	19.69	0-5	2.5
6	0	19.76	19.73	19.69	0-5	2.5		

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	22.13	22.14	22.08	0	0
		1	7	22.03	22.20	22.19	0	0
		1	14	22.26	22.15	22.10	0	0
		8	0	22.22	22.22	22.18	0-1	0
		8	3	22.30	22.25	22.17	0-1	0
		8	7	22.29	22.27	22.24	0-1	0
		15	0	22.29	22.26	22.22	0-1	0
	16QAM	1	0	22.29	22.40	22.21	0-1	0
		1	7	22.38	22.19	22.15	0-1	0
		1	14	22.37	22.37	22.17	0-1	0
		8	0	22.23	22.21	22.16	0-2	0
		8	3	22.28	22.24	22.16	0-2	0
		8	7	22.32	22.25	22.19	0-2	0
		15	0	22.22	22.24	22.18	0-2	0
	64QAM	1	0	22.37	22.25	22.34	0-2	0
		1	7	22.41	22.20	22.16	0-2	0
		1	14	22.41	22.26	22.31	0-2	0
		8	0	21.76	21.66	21.67	0-3	0.5
		8	3	21.71	21.67	21.69	0-3	0.5
		8	7	21.81	21.69	21.72	0-3	0.5
		15	0	21.82	21.74	21.70	0-3	0.5
	256QAM	1	0	19.90	19.84	19.69	0-5	2.5
		1	7	19.82	19.66	19.79	0-5	2.5
		1	14	19.83	19.86	19.89	0-5	2.5
		8	0	19.86	19.79	19.74	0-5	2.5
		8	3	19.88	19.81	19.76	0-5	2.5
		8	7	19.90	19.75	19.76	0-5	2.5
		15	0	19.83	19.75	19.72	0-5	2.5

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	22.20	22.08	22.03	0	0
		1	12	22.12	22.19	22.13	0	0
		1	24	22.22	22.21	22.16	0	0
		12	0	22.30	22.25	22.21	0-1	0
		12	6	22.31	22.23	22.22	0-1	0
		12	11	22.38	22.28	22.21	0-1	0
	16QAM	25	0	22.44	22.37	22.31	0-1	0
		1	0	22.41	22.32	22.32	0-1	0
		1	12	22.37	22.24	22.18	0-1	0
		1	24	22.42	22.34	22.20	0-1	0
		12	0	22.25	22.23	22.17	0-2	0
		12	6	22.25	22.25	22.16	0-2	0
	64QAM	12	11	22.31	22.29	22.21	0-2	0
		25	0	22.37	22.31	22.25	0-2	0
		1	0	22.42	22.25	22.30	0-2	0
		1	12	22.40	22.35	22.30	0-2	0
		1	24	22.37	22.32	22.33	0-2	0
		12	0	21.82	21.77	21.73	0-3	0.5
	256QAM	12	6	21.81	21.73	21.72	0-3	0.5
		12	11	21.83	21.78	21.70	0-3	0.5
		25	0	21.85	21.78	21.72	0-3	0.5
		1	0	19.89	19.82	19.77	0-5	2.5
		1	12	19.91	19.71	19.71	0-5	2.5
		1	24	19.96	19.80	19.81	0-5	2.5
	12	0	19.82	19.76	19.70	0-5	2.5	
	12	6	19.85	19.76	19.74	0-5	2.5	
	12	11	19.88	19.79	19.73	0-5	2.5	
	25	0	19.84	19.76	19.72	0-5	2.5	

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	22.18	22.19	22.05	0	0
		1	24	22.18	22.23	22.09	0	0
		1	49	22.27	22.18	22.11	0	0
		25	0	22.38	22.34	22.26	0-1	0
		25	12	22.39	22.34	22.29	0-1	0
		25	24	22.41	22.38	22.27	0-1	0
	16QAM	50	0	22.45	22.41	22.31	0-1	0
		1	0	22.28	22.33	22.29	0-1	0
		1	24	22.35	22.27	22.12	0-1	0
		1	49	22.48	22.39	22.22	0-1	0
		25	0	22.37	22.31	22.25	0-2	0
		25	12	22.38	22.29	22.25	0-2	0
	64QAM	25	24	22.38	22.32	22.27	0-2	0
		50	0	22.40	22.33	22.30	0-2	0
		1	0	22.43	22.30	22.30	0-2	0
		1	24	22.30	22.40	22.31	0-2	0
		1	49	22.42	22.33	22.29	0-2	0
		25	0	21.81	21.77	21.69	0-3	0.5
	256QAM	25	12	21.84	21.77	21.72	0-3	0.5
		25	24	21.85	21.84	21.77	0-3	0.5
		50	0	21.92	21.86	21.77	0-3	0.5
		1	0	19.88	19.77	19.82	0-5	2.5
		1	24	19.88	19.69	19.64	0-5	2.5
		1	49	19.94	19.68	19.69	0-5	2.5
	25	0	19.88	19.79	19.73	0-5	2.5	
	25	12	19.84	19.79	19.72	0-5	2.5	
	25	24	19.86	19.81	19.71	0-5	2.5	
	50	0	19.84	19.82	19.77	0-5	2.5	

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	22.18	22.04	22.10	0	0
		1	36	22.17	22.23	22.20	0	0
		1	74	22.25	22.22	22.15	0	0
		36	0	22.33	22.29	22.26	0-1	0
		36	18	22.37	22.31	22.27	0-1	0
		36	39	22.37	22.36	22.31	0-1	0
		75	0	22.36	22.36	22.30	0-1	0
	16QAM	1	0	22.29	22.23	22.26	0-1	0
		1	36	22.34	22.38	22.20	0-1	0
		1	74	22.46	22.34	22.32	0-1	0
		36	0	22.28	22.27	22.23	0-2	0
		36	18	22.32	22.25	22.22	0-2	0
		36	39	22.34	22.29	22.25	0-2	0
		75	0	22.33	22.28	22.28	0-2	0
	64QAM	1	0	22.30	22.24	22.29	0-2	0
		1	36	22.29	22.27	22.32	0-2	0
		1	74	22.42	22.25	22.36	0-2	0
		36	0	21.82	21.80	21.75	0-3	0.5
		36	18	21.89	21.82	21.78	0-3	0.5
		36	39	21.86	21.81	21.75	0-3	0.5
		75	0	21.83	21.78	21.74	0-3	0.5
	256QAM	1	0	19.90	19.83	19.88	0-5	2.5
		1	36	19.94	19.92	19.77	0-5	2.5
		1	74	19.98	19.88	19.78	0-5	2.5
		36	0	19.87	19.83	19.76	0-5	2.5
		36	18	19.90	19.82	19.80	0-5	2.5
		36	39	19.91	19.85	19.79	0-5	2.5
75		0	19.82	19.78	19.78	0-5	2.5	

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	22.08	22.05	22.06	0	0
		1	49	22.18	22.21	22.13	0	0
		1	99	22.21	22.16	22.14	0	0
		50	0	22.35	22.37	22.35	0-1	0
		50	25	22.45	22.43	22.38	0-1	0
		50	49	22.41	22.37	22.37	0-1	0
	16QAM	100	0	22.37	22.38	22.32	0-1	0
		1	0	22.30	22.23	22.27	0-1	0
		1	49	22.43	22.28	22.29	0-1	0
		1	99	22.44	22.38	22.29	0-1	0
		50	0	22.34	22.34	22.32	0-2	0
		50	25	22.43	22.36	22.33	0-2	0
	64QAM	50	49	22.40	22.36	22.33	0-2	0
		100	0	22.33	22.31	22.30	0-2	0
		1	0	22.23	22.28	22.28	0-2	0
		1	49	22.39	22.29	22.19	0-2	0
		1	99	22.33	22.26	22.22	0-2	0
		50	0	21.86	21.84	21.81	0-3	0.5
	256QAM	50	25	21.91	21.87	21.83	0-3	0.5
		50	49	21.89	21.86	21.85	0-3	0.5
		100	0	21.81	21.77	21.77	0-3	0.5
		1	0	19.78	19.79	19.80	0-5	2.5
		1	49	19.86	19.76	19.75	0-5	2.5
		1	99	19.90	19.75	19.81	0-5	2.5
		50	0	19.82	19.80	19.82	0-5	2.5
		50	25	19.86	19.84	19.80	0-5	2.5
		50	49	19.87	19.81	19.80	0-5	2.5
		100	0	19.82	19.81	19.78	0-5	2.5

LTE Band 2_Main #3 Ant.Conducted Power(RSI=0,1,2,3,4)

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	21.72	21.57	21.52	0	0
		1	3	21.72	21.54	21.51	0	0
		1	5	21.73	21.62	21.59	0	0
		3	0	21.72	21.61	21.59	0	0
		3	1	21.79	21.54	21.50	0	0
		3	3	21.71	21.52	21.49	0	0
	16QAM	6	0	21.74	21.66	21.61	0-1	0
		1	0	21.93	21.81	21.79	0-1	0
		1	3	21.99	21.80	21.77	0-1	0
		1	5	21.90	21.84	21.76	0-1	0
		3	0	21.88	21.76	21.72	0-1	0
		3	1	21.87	21.76	21.70	0-1	0
	64QAM	3	3	21.85	21.77	21.70	0-1	0
		6	0	21.78	21.71	21.76	0-2	0
		1	0	21.90	21.87	21.79	0-2	0
		1	3	21.88	21.90	21.74	0-2	0
		1	5	21.90	21.86	21.71	0-2	0
		3	0	21.83	21.73	21.61	0-2	0
	256QAM	3	1	21.82	21.79	21.68	0-2	0
		3	3	21.82	21.75	21.58	0-2	0
		6	0	21.77	21.69	21.62	0-3	0
		1	0	19.79	19.71	19.59	0-5	1.5
		1	3	19.82	19.70	19.53	0-5	1.5
		1	5	19.86	19.64	19.59	0-5	1.5
		3	0	19.78	19.63	19.56	0-5	1.5
		3	1	19.71	19.69	19.62	0-5	1.5
		3	3	19.77	19.70	19.62	0-5	1.5
		6	0	19.76	19.67	19.55	0-5	1.5

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	21.88	21.91	21.79	0	0
		1	7	21.75	21.58	21.46	0	0
		1	14	21.82	21.59	21.49	0	0
		8	0	21.78	21.75	21.61	0-1	0
		8	3	21.85	21.75	21.65	0-1	0
		8	7	21.82	21.79	21.64	0-1	0
		15	0	21.83	21.73	21.62	0-1	0
	16QAM	1	0	21.92	21.71	21.83	0-1	0
		1	7	21.90	21.86	21.87	0-1	0
		1	14	21.99	21.83	21.95	0-1	0
		8	0	21.88	21.75	21.63	0-2	0
		8	3	21.84	21.81	21.76	0-2	0
		8	7	21.86	21.81	21.75	0-2	0
		15	0	21.83	21.71	21.66	0-2	0
	64QAM	1	0	21.95	21.98	21.81	0-2	0
		1	7	21.91	21.87	21.71	0-2	0
		1	14	21.92	21.96	21.84	0-2	0
		8	0	21.81	21.75	21.69	0-3	0
		8	3	21.80	21.68	21.64	0-3	0
		8	7	21.78	21.77	21.68	0-3	0
		15	0	21.84	21.77	21.68	0-3	0
	256QAM	1	0	19.87	19.79	19.73	0-5	1.5
		1	7	19.83	19.79	19.65	0-5	1.5
		1	14	19.97	19.68	19.76	0-5	1.5
		8	0	19.75	19.73	19.64	0-5	1.5
		8	3	19.81	19.78	19.63	0-5	1.5
		8	7	19.79	19.80	19.63	0-5	1.5
		15	0	19.77	19.69	19.64	0-5	1.5

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	21.86	21.81	21.75	0	0
		1	12	21.76	21.51	21.51	0	0
		1	24	21.77	21.70	21.56	0	0
		12	0	21.81	21.72	21.65	0-1	0
		12	6	21.82	21.74	21.66	0-1	0
		12	11	21.84	21.78	21.66	0-1	0
	16QAM	25	0	21.84	21.66	21.63	0-1	0
		1	0	21.96	21.94	21.80	0-1	0
		1	12	21.86	21.79	21.69	0-1	0
		1	24	21.97	21.82	21.60	0-1	0
		12	0	21.82	21.83	21.72	0-2	0
		12	6	21.86	21.84	21.73	0-2	0
	64QAM	12	11	21.86	21.87	21.79	0-2	0
		25	0	21.85	21.74	21.64	0-2	0
		1	0	21.95	21.80	21.72	0-2	0
		1	12	21.97	21.98	21.72	0-2	0
		1	24	21.97	21.92	21.80	0-2	0
		12	0	21.84	21.74	21.66	0-3	0
	256QAM	12	6	21.88	21.82	21.68	0-3	0
		12	11	21.88	21.84	21.72	0-3	0
		25	0	21.86	21.68	21.65	0-3	0
		1	0	19.84	19.86	19.72	0-5	1.5
		1	12	19.87	19.69	19.75	0-5	1.5
		1	24	19.91	19.81	19.72	0-5	1.5
		12	0	19.86	19.68	19.65	0-5	1.5
		12	6	19.86	19.78	19.66	0-5	1.5
		12	11	19.85	19.84	19.74	0-5	1.5
		25	0	19.78	19.72	19.62	0-5	1.5

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	21.93	21.81	21.77	0	0
		1	24	21.62	21.53	21.43	0	0
		1	49	21.84	21.67	21.56	0	0
		25	0	21.79	21.62	21.60	0-1	0
		25	12	21.84	21.65	21.62	0-1	0
		25	24	21.89	21.73	21.67	0-1	0
	16QAM	50	0	21.87	21.68	21.68	0-1	0
		1	0	21.96	21.83	21.76	0-1	0
		1	24	21.98	21.83	21.63	0-1	0
		1	49	21.97	21.93	21.79	0-1	0
		25	0	21.80	21.68	21.64	0-2	0
		25	12	21.86	21.72	21.67	0-2	0
	64QAM	25	24	21.91	21.76	21.68	0-2	0
		50	0	21.88	21.74	21.72	0-2	0
		1	0	21.84	21.72	21.76	0-2	0
		1	24	21.88	21.79	21.86	0-2	0
		1	49	21.98	21.86	21.84	0-2	0
		25	0	21.76	21.61	21.60	0-3	0
	256QAM	25	12	21.81	21.69	21.59	0-3	0
		25	24	21.87	21.73	21.64	0-3	0
		50	0	21.88	21.74	21.67	0-3	0
		1	0	19.79	19.64	19.58	0-5	1.5
		1	24	19.81	19.71	19.60	0-5	1.5
		1	49	19.87	19.86	19.71	0-5	1.5
		25	0	19.80	19.63	19.59	0-5	1.5
		25	12	19.85	19.66	19.64	0-5	1.5
		25	24	19.88	19.76	19.63	0-5	1.5
	50	0	19.84	19.71	19.66	0-5	1.5	

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	21.76	21.64	21.75	0	0
		1	36	21.75	21.56	21.43	0	0
		1	74	21.69	21.71	21.60	0	0
		36	0	21.75	21.61	21.59	0-1	0
		36	18	21.84	21.72	21.61	0-1	0
		36	39	21.82	21.79	21.63	0-1	0
		75	0	21.78	21.66	21.58	0-1	0
	16QAM	1	0	21.89	21.64	21.72	0-1	0
		1	36	21.88	21.88	21.69	0-1	0
		1	74	21.93	21.93	21.87	0-1	0
		36	0	21.74	21.62	21.63	0-2	0
		36	18	21.83	21.75	21.65	0-2	0
		36	39	21.86	21.81	21.68	0-2	0
		75	0	21.79	21.67	21.57	0-2	0
	64QAM	1	0	21.79	21.71	21.83	0-2	0
		1	36	21.88	21.83	21.68	0-2	0
		1	74	21.86	21.97	21.83	0-2	0
		36	0	21.83	21.65	21.63	0-3	0
		36	18	21.86	21.79	21.65	0-3	0
		36	39	21.86	21.83	21.67	0-3	0
		75	0	21.82	21.66	21.60	0-3	0
	256QAM	1	0	19.76	19.64	19.61	0-5	1.5
		1	36	19.81	19.67	19.55	0-5	1.5
		1	74	19.88	19.88	19.83	0-5	1.5
		36	0	19.76	19.68	19.62	0-5	1.5
		36	18	19.82	19.75	19.63	0-5	1.5
		36	39	19.86	19.84	19.68	0-5	1.5
75		0	19.74	19.69	19.56	0-5	1.5	

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	21.69	21.72	21.65	0	0	
		1	49	21.71	21.55	21.47	0	0	
		1	99	21.69	21.68	21.54	0	0	
		50	0	21.77	21.60	21.67	0-1	0	
		50	25	21.92	21.69	21.70	0-1	0	
		50	49	21.86	21.76	21.69	0-1	0	
	16QAM	100	0	21.76	21.63	21.65	0-1	0	
		1	0	21.87	21.95	21.98	0-1	0	
		1	49	21.78	21.95	21.75	0-1	0	
		1	99	21.87	21.99	21.82	0-1	0	
		50	0	21.80	21.60	21.75	0-2	0	
		50	25	21.91	21.73	21.71	0-2	0	
	64QAM	50	49	21.84	21.81	21.71	0-2	0	
		100	0	21.76	21.66	21.69	0-2	0	
		1	0	21.92	21.89	21.90	0-2	0	
		1	49	21.91	21.92	21.77	0-2	0	
		1	99	21.91	21.92	21.88	0-2	0	
		50	0	21.78	21.63	21.73	0-3	0	
	256QAM	50	25	21.89	21.76	21.72	0-3	0	
		50	49	21.90	21.82	21.76	0-3	0	
		100	0	21.76	21.61	21.67	0-3	0	
		1	0	19.94	19.72	20.06	0-5	1.5	
		1	49	19.80	19.68	19.68	0-5	1.5	
		1	99	19.81	19.86	19.75	0-5	1.5	
			50	0	19.79	19.61	19.70	0-5	1.5
			50	25	19.85	19.71	19.68	0-5	1.5
			50	49	19.86	19.79	19.69	0-5	1.5
			100	0	19.81	19.67	19.68	0-5	1.5

LTE Band 4_Main #2 Ant.Conducted Power(RSI=1,2,3)

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	21.91	21.85	22.16	0	0
		1	3	21.77	21.82	22.10	0	0
		1	5	21.97	21.89	22.21	0	0
		3	0	21.96	21.90	22.23	0	0
		3	1	21.90	21.94	22.22	0	0
		3	3	21.91	21.88	22.22	0	0
		6	0	22.01	21.96	22.26	0-1	0
	16QAM	1	0	22.15	22.09	22.34	0-1	0
		1	3	22.07	22.03	22.33	0-1	0
		1	5	22.08	21.98	22.32	0-1	0
		3	0	21.95	21.95	22.24	0-1	0
		3	1	22.04	21.99	22.26	0-1	0
		3	3	21.99	22.05	22.28	0-1	0
		6	0	22.08	21.99	22.25	0-2	0
	64QAM	1	0	22.14	22.04	22.27	0-2	0
		1	3	22.01	22.07	22.22	0-2	0
		1	5	22.06	21.99	22.33	0-2	0
		3	0	22.04	21.92	22.22	0-2	0
		3	1	21.99	22.01	22.31	0-2	0
		3	3	22.06	21.92	22.26	0-2	0
		6	0	21.53	21.45	21.74	0-3	0.5
	256QAM	1	0	19.55	19.49	19.83	0-5	2.5
		1	3	19.54	19.48	19.78	0-5	2.5
		1	5	19.64	19.60	19.90	0-5	2.5
		3	0	19.50	19.46	19.74	0-5	2.5
		3	1	19.53	19.49	19.82	0-5	2.5
		3	3	19.59	19.53	19.87	0-5	2.5
		6	0	19.57	19.48	19.75	0-5	2.5

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	21.91	21.86	22.18	0	0
		1	7	21.88	21.96	22.22	0	0
		1	14	22.05	21.93	22.23	0	0
		8	0	22.00	21.94	22.22	0-1	0
		8	3	22.02	21.99	22.27	0-1	0
		8	7	22.05	22.03	22.25	0-1	0
	16QAM	15	0	22.07	22.02	22.33	0-1	0
		1	0	22.20	22.03	22.29	0-1	0
		1	7	22.20	21.97	22.25	0-1	0
		1	14	22.13	22.11	22.34	0-1	0
		8	0	22.02	21.97	22.29	0-2	0
		8	3	22.03	22.01	22.34	0-2	0
	64QAM	8	7	22.02	21.98	22.30	0-2	0
		15	0	22.03	21.97	22.29	0-2	0
		1	0	22.14	22.06	22.36	0-2	0
		1	7	22.02	22.06	22.30	0-2	0
		1	14	22.04	22.16	22.37	0-2	0
		8	0	21.51	21.45	21.78	0-3	0.5
	256QAM	8	3	21.55	21.48	21.75	0-3	0.5
		8	7	21.56	21.50	21.77	0-3	0.5
		15	0	21.58	21.53	21.80	0-3	0.5
		1	0	19.64	19.58	19.92	0-5	2.5
		1	7	19.76	19.63	19.93	0-5	2.5
		1	14	19.70	19.53	19.91	0-5	2.5
		8	0	19.57	19.51	19.81	0-5	2.5
		8	3	19.55	19.54	19.85	0-5	2.5
		8	7	19.61	19.54	19.79	0-5	2.5
		15	0	19.56	19.47	19.77	0-5	2.5

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	21.92	21.83	22.10	0	0	
		1	12	21.87	22.01	22.19	0	0	
		1	24	21.98	21.98	22.24	0	0	
		12	0	22.06	21.98	22.28	0-1	0	
		12	6	22.04	21.98	22.28	0-1	0	
		12	11	22.06	21.98	22.28	0-1	0	
	16QAM	25	0	22.14	22.06	22.32	0-1	0	
		1	0	22.09	22.05	22.32	0-1	0	
		1	12	22.09	21.93	22.34	0-1	0	
		1	24	22.20	22.07	22.34	0-1	0	
		12	0	22.04	21.95	22.23	0-2	0	
		12	6	22.05	21.98	22.26	0-2	0	
	64QAM	12	11	22.06	22.01	22.29	0-2	0	
		25	0	22.12	22.03	22.32	0-2	0	
		1	0	22.07	22.12	22.33	0-2	0	
		1	12	22.18	22.08	22.32	0-2	0	
		1	24	22.15	22.07	22.38	0-2	0	
		12	0	21.49	21.44	21.78	0-3	0.5	
	256QAM	12	6	21.54	21.49	21.78	0-3	0.5	
		12	11	21.57	21.54	21.77	0-3	0.5	
		12	11	21.57	21.54	21.77	0-3	0.5	
		25	0	21.60	21.48	21.78	0-3	0.5	
		1	0	19.69	19.56	19.90	0-5	2.5	
		1	12	19.61	19.48	19.90	0-5	2.5	
		256QAM	1	24	19.67	19.46	19.82	0-5	2.5
			12	0	19.59	19.53	19.76	0-5	2.5
			12	6	19.57	19.46	19.76	0-5	2.5
12			11	19.64	19.53	19.75	0-5	2.5	
25			0	19.62	19.50	19.83	0-5	2.5	

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	21.94	21.85	22.09	0	0
		1	24	21.96	21.87	22.12	0	0
		1	49	22.07	21.95	22.17	0	0
		25	0	22.15	22.01	22.28	0-1	0
		25	12	22.16	22.03	22.32	0-1	0
		25	24	22.19	22.05	22.31	0-1	0
	16QAM	50	0	22.21	22.08	22.35	0-1	0
		1	0	22.16	22.06	22.30	0-1	0
		1	24	22.08	21.96	22.21	0-1	0
		1	49	22.40	22.05	22.35	0-1	0
		25	0	22.14	21.98	22.26	0-2	0
		25	12	22.12	22.00	22.25	0-2	0
	64QAM	25	24	22.17	22.03	22.26	0-2	0
		50	0	22.18	22.04	22.31	0-2	0
		1	0	22.03	22.02	22.21	0-2	0
		1	24	22.23	22.00	22.28	0-2	0
		1	49	22.30	22.08	22.38	0-2	0
		25	0	21.58	21.50	21.75	0-3	0.5
	256QAM	25	12	21.63	21.53	21.76	0-3	0.5
		25	24	21.66	21.50	21.79	0-3	0.5
		50	0	21.66	21.57	21.80	0-3	0.5
		1	0	19.70	19.48	19.75	0-5	2.5
		1	24	19.59	19.45	19.74	0-5	2.5
		1	49	19.67	19.50	19.80	0-5	2.5
	256QAM	25	0	19.58	19.53	19.76	0-5	2.5
		25	12	19.63	19.48	19.76	0-5	2.5
		25	24	19.63	19.54	19.77	0-5	2.5
		50	0	19.61	19.54	19.77	0-5	2.5

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	21.95	21.77	21.99	0	0
		1	36	21.98	21.96	22.15	0	0
		1	74	22.08	21.95	22.20	0	0
		36	0	22.15	21.99	22.20	0-1	0
		36	18	22.18	22.02	22.22	0-1	0
		36	39	22.18	22.06	22.27	0-1	0
		75	0	22.21	22.04	22.28	0-1	0
	16QAM	1	0	22.08	21.99	22.17	0-1	0
		1	36	22.21	21.99	22.28	0-1	0
		1	74	22.38	22.14	22.34	0-1	0
		36	0	22.12	21.98	22.15	0-2	0
		36	18	22.14	21.99	22.18	0-2	0
		36	39	22.17	22.05	22.21	0-2	0
		75	0	22.11	21.97	22.21	0-2	0
	64QAM	1	0	22.14	21.99	22.11	0-2	0
		1	36	22.14	21.97	22.21	0-2	0
		1	74	22.25	22.05	22.32	0-2	0
		36	0	21.63	21.52	21.66	0-3	0.5
		36	18	21.65	21.57	21.72	0-3	0.5
		36	39	21.68	21.53	21.73	0-3	0.5
		75	0	21.61	21.49	21.70	0-3	0.5
	256QAM	1	0	19.60	19.52	19.75	0-5	2.5
		1	36	19.70	19.54	19.83	0-5	2.5
		1	74	19.77	19.64	19.81	0-5	2.5
		36	0	19.64	19.54	19.71	0-5	2.5
		36	18	19.67	19.52	19.72	0-5	2.5
		36	39	19.72	19.54	19.74	0-5	2.5
75		0	19.65	19.52	19.68	0-5	2.5	

LTE Band 4 _ 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20050 Ch. 1720 MHz	20175 Ch. 1732.5 MHz	20300 Ch. 1745 MHz		
20 MHz	QPSK	1	0	21.87	21.77	21.94	0	0
		1	49	22.01	21.93	22.01	0	0
		1	99	22.09	21.94	22.08	0	0
		50	0	22.22	22.07	22.18	0-1	0
		50	25	22.22	22.13	22.23	0-1	0
		50	49	22.26	22.14	22.26	0-1	0
	16QAM	100	0	22.22	22.07	22.22	0-1	0
		1	0	22.09	21.95	22.10	0-1	0
		1	49	22.19	22.16	22.15	0-1	0
		1	99	22.36	22.16	22.16	0-1	0
		50	0	22.21	22.03	22.14	0-2	0
		50	25	22.25	22.06	22.22	0-2	0
	64QAM	50	49	22.26	22.10	22.22	0-2	0
		100	0	22.19	22.01	22.09	0-2	0
		1	0	21.98	21.92	22.12	0-2	0
		1	49	22.22	22.07	22.18	0-2	0
		1	99	22.26	22.07	22.27	0-2	0
		50	0	21.68	21.53	21.65	0-3	0.5
	256QAM	50	25	21.72	21.59	21.68	0-3	0.5
		50	49	21.75	21.60	21.72	0-3	0.5
		100	0	21.65	21.55	21.61	0-3	0.5
		1	0	19.65	19.34	19.52	0-5	2.5
		1	49	19.77	19.55	19.53	0-5	2.5
		1	99	19.76	19.64	19.70	0-5	2.5
	256QAM	50	0	19.64	19.52	19.64	0-5	2.5
		50	25	19.71	19.56	19.65	0-5	2.5
		50	49	19.74	19.56	19.68	0-5	2.5
		100	0	19.67	19.54	19.67	0-5	2.5

LTE Band 7_Main #2 Ant. Conducted Power(RSI=1,2,3)

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	21.11	21.54	21.64	0	0
		1	12	20.99	21.60	21.75	0	0
		1	24	21.09	21.65	21.69	0	0
		12	0	21.19	21.63	21.79	0-1	0
		12	6	21.18	21.66	21.76	0-1	0
		12	11	21.17	21.66	21.78	0-1	0
		25	0	21.27	21.78	21.89	0-1	0
	16QAM	1	0	21.29	21.91	21.86	0-1	0
		1	12	21.27	21.72	21.84	0-1	0
		1	24	21.29	21.77	21.85	0-1	0
		12	0	21.21	21.64	21.75	0-2	0
		12	6	21.14	21.68	21.71	0-2	0
		12	11	21.17	21.68	21.70	0-2	0
		25	0	21.24	21.71	21.84	0-2	0
	64QAM	1	0	21.27	21.87	21.95	0-2	0
		1	12	21.26	21.81	21.81	0-2	0
		1	24	21.30	21.78	21.82	0-2	0
		12	0	20.65	21.14	21.21	0-3	0.5
		12	6	20.66	21.14	21.21	0-3	0.5
		12	11	20.65	21.17	21.22	0-3	0.5
		25	0	20.71	21.19	21.29	0-3	0.5
	256QAM	1	0	18.72	19.14	19.30	0-5	2.5
		1	12	18.77	19.05	19.24	0-5	2.5
		1	24	18.58	19.23	19.31	0-5	2.5
		12	0	18.67	19.13	19.20	0-5	2.5
		12	6	18.63	19.15	19.22	0-5	2.5
		12	11	18.61	19.19	19.20	0-5	2.5
		25	0	18.71	19.16	19.27	0-5	2.5

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	21.11	21.45	21.76	0	0
		1	24	21.08	21.58	21.71	0	0
		1	49	21.12	21.58	21.68	0	0
		25	0	21.26	21.75	21.91	0-1	0
		25	12	21.25	21.72	21.91	0-1	0
		25	24	21.28	21.76	21.89	0-1	0
		50	0	21.32	21.76	21.95	0-1	0
	16QAM	1	0	21.32	21.74	21.97	0-1	0
		1	24	21.25	21.79	21.69	0-1	0
		1	49	21.15	21.66	21.82	0-1	0
		25	0	21.19	21.77	21.83	0-2	0
		25	12	21.23	21.69	21.81	0-2	0
		25	24	21.23	21.71	21.80	0-2	0
		50	0	21.26	21.73	21.89	0-2	0
	64QAM	1	0	21.31	21.80	21.91	0-2	0
		1	24	21.22	21.83	21.81	0-2	0
		1	49	21.24	21.71	21.75	0-2	0
		25	0	20.67	21.20	21.33	0-3	0.5
		25	12	20.66	21.19	21.32	0-3	0.5
		25	24	20.69	21.17	21.29	0-3	0.5
		50	0	20.70	21.23	21.36	0-3	0.5
	256QAM	1	0	18.79	19.16	19.35	0-5	2.5
		1	24	18.56	19.15	19.26	0-5	2.5
		1	49	18.71	19.18	19.20	0-5	2.5
		25	0	18.69	19.19	19.34	0-5	2.5
		25	12	18.69	19.15	19.30	0-5	2.5
		25	24	18.66	19.17	19.28	0-5	2.5
		50	0	18.74	19.20	19.32	0-5	2.5

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	21.08	21.56	21.72	0	0
		1	36	21.04	21.60	21.72	0	0
		1	74	21.02	21.58	21.67	0	0
		36	0	21.23	21.71	21.86	0-1	0
		36	18	21.22	21.71	21.84	0-1	0
		36	39	21.22	21.67	21.81	0-1	0
		75	0	21.27	21.71	21.86	0-1	0
	16QAM	1	0	21.21	21.81	21.91	0-1	0
		1	36	21.08	21.75	21.87	0-1	0
		1	74	21.13	21.74	21.73	0-1	0
		36	0	21.19	21.66	21.79	0-2	0
		36	18	21.17	21.61	21.75	0-2	0
		36	39	21.15	21.68	21.71	0-2	0
		75	0	21.20	21.69	21.80	0-2	0
	64QAM	1	0	21.31	21.75	21.96	0-2	0
		1	36	21.22	21.66	21.73	0-2	0
		1	74	21.24	21.78	21.83	0-2	0
		36	0	20.66	21.19	21.32	0-3	0.5
		36	18	20.69	21.17	21.29	0-3	0.5
		36	39	20.62	21.11	21.19	0-3	0.5
		75	0	20.63	21.17	21.26	0-3	0.5
	256QAM	1	0	18.72	19.20	19.34	0-5	2.5
		1	36	18.65	19.06	19.21	0-5	2.5
		1	74	18.67	19.07	19.18	0-5	2.5
		36	0	18.73	19.15	19.27	0-5	2.5
		36	18	18.65	19.17	19.31	0-5	2.5
		36	39	18.64	19.17	19.25	0-5	2.5
		75	0	18.61	19.13	19.25	0-5	2.5

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	21.09	21.53	21.73	0	0
		1	49	21.06	21.58	21.74	0	0
		1	99	21.09	21.49	21.61	0	0
		50	0	21.37	21.77	21.92	0-1	0
		50	25	21.41	21.78	21.95	0-1	0
		50	49	21.35	21.73	21.92	0-1	0
		100	0	21.33	21.71	21.89	0-1	0
	16QAM	1	0	21.27	21.75	21.95	0-1	0
		1	49	21.21	21.73	21.83	0-1	0
		1	99	21.14	21.68	21.71	0-1	0
		50	0	21.29	21.77	21.96	0-2	0
		50	25	21.33	21.72	21.90	0-2	0
		50	49	21.29	21.71	21.84	0-2	0
		100	0	21.24	21.69	21.85	0-2	0
	64QAM	1	0	21.34	21.83	21.89	0-2	0
		1	49	21.16	21.82	21.88	0-2	0
		1	99	21.19	21.67	21.68	0-2	0
		50	0	20.81	21.27	21.43	0-3	0.5
		50	25	20.80	21.24	21.39	0-3	0.5
		50	49	20.78	21.21	21.31	0-3	0.5
		100	0	20.70	21.15	21.31	0-3	0.5
	256QAM	1	0	18.65	19.05	19.23	0-5	2.5
		1	49	18.61	19.08	19.31	0-5	2.5
		1	99	18.66	19.09	19.21	0-5	2.5
50		0	18.76	19.19	19.39	0-5	2.5	
50		25	18.78	19.20	19.34	0-5	2.5	
50		49	18.73	19.14	19.30	0-5	2.5	
100		0	18.70	19.14	19.31	0-5	2.5	

LTE Band 25_Main #2 Ant.Conducted Power(RSI=1,2,3)

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	22.15	22.09	22.08	0	0
		1	3	22.03	22.05	22.05	0	0
		1	5	22.22	22.13	22.11	0	0
		3	0	22.22	22.15	22.15	0	0
		3	1	22.27	22.05	22.17	0	0
		3	3	22.18	22.10	22.12	0	0
	16QAM	6	0	22.28	22.20	22.21	0-1	0
		1	0	22.39	22.24	22.20	0-1	0
		1	3	22.33	22.13	22.12	0-1	0
		1	5	22.31	22.25	22.33	0-1	0
		3	0	22.26	22.20	22.17	0-1	0
		3	1	22.27	22.23	22.31	0-1	0
	64QAM	3	3	22.23	22.23	22.20	0-1	0
		6	0	22.31	22.13	22.19	0-2	0
		1	0	22.34	22.27	22.25	0-2	0
		1	3	22.24	22.15	22.20	0-2	0
		1	5	22.24	22.28	22.23	0-2	0
		3	0	22.21	22.21	22.08	0-2	0
	256QAM	3	1	22.26	22.12	22.11	0-2	0
		3	3	22.23	22.17	22.16	0-2	0
		6	0	21.77	21.65	21.69	0-3	0.5
		1	0	19.83	19.74	19.79	0-5	2.5
		1	3	19.88	19.87	19.67	0-5	2.5
		1	5	19.82	19.75	19.75	0-5	2.5
		3	0	19.79	19.67	19.74	0-5	2.5
		3	1	19.82	19.76	19.66	0-5	2.5
	3	3	19.80	19.76	19.73	0-5	2.5	
	6	0	19.79	19.75	19.74	0-5	2.5	

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	22.14	22.10	22.13	0	0
		1	7	22.14	22.18	22.15	0	0
		1	14	22.25	22.13	22.12	0	0
		8	0	22.27	22.19	22.21	0-1	0
		8	3	22.28	22.28	22.15	0-1	0
		8	7	22.32	22.25	22.23	0-1	0
		15	0	22.32	22.28	22.23	0-1	0
	16QAM	1	0	22.33	22.35	22.30	0-1	0
		1	7	22.34	22.20	22.23	0-1	0
		1	14	22.47	22.43	22.27	0-1	0
		8	0	22.27	22.24	22.20	0-2	0
		8	3	22.30	22.21	22.14	0-2	0
		8	7	22.31	22.26	22.19	0-2	0
		15	0	22.25	22.25	22.17	0-2	0
	64QAM	1	0	22.32	22.22	22.30	0-2	0
		1	7	22.26	22.37	22.30	0-2	0
		1	14	22.40	22.38	22.20	0-2	0
		8	0	21.79	21.71	21.72	0-3	0.5
		8	3	21.73	21.66	21.65	0-3	0.5
		8	7	21.73	21.65	21.69	0-3	0.5
		15	0	21.81	21.72	21.70	0-3	0.5
	256QAM	1	0	19.89	19.84	19.83	0-5	2.5
		1	7	19.90	19.76	19.81	0-5	2.5
		1	14	19.93	19.80	19.81	0-5	2.5
		8	0	19.86	19.79	19.75	0-5	2.5
		8	3	19.87	19.77	19.76	0-5	2.5
		8	7	19.81	19.74	19.77	0-5	2.5
15		0	19.84	19.73	19.76	0-5	2.5	

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	22.16	22.10	22.06	0	0
		1	12	22.13	22.19	22.15	0	0
		1	24	22.25	22.20	22.18	0	0
		12	0	22.30	22.22	22.24	0-1	0
		12	6	22.31	22.27	22.25	0-1	0
		12	11	22.37	22.26	22.26	0-1	0
		25	0	22.41	22.34	22.36	0-1	0
	16QAM	1	0	22.40	22.30	22.39	0-1	0
		1	12	22.30	22.33	22.19	0-1	0
		1	24	22.41	22.33	22.33	0-1	0
		12	0	22.28	22.21	22.21	0-2	0
		12	6	22.28	22.18	22.23	0-2	0
		12	11	22.33	22.22	22.24	0-2	0
		25	0	22.37	22.28	22.24	0-2	0
	64QAM	1	0	22.40	22.33	22.34	0-2	0
		1	12	22.16	22.18	22.20	0-2	0
		1	24	22.44	22.44	22.27	0-2	0
		12	0	21.80	21.70	21.68	0-3	0.5
		12	6	21.79	21.75	21.72	0-3	0.5
		12	11	21.86	21.73	21.71	0-3	0.5
		25	0	21.86	21.78	21.74	0-3	0.5
	256QAM	1	0	19.98	19.86	19.84	0-5	2.5
		1	12	19.92	19.74	19.84	0-5	2.5
		1	24	19.96	19.90	19.89	0-5	2.5
		12	0	19.80	19.75	19.71	0-5	2.5
		12	6	19.86	19.76	19.73	0-5	2.5
		12	11	19.85	19.81	19.75	0-5	2.5
25		0	19.81	19.79	19.78	0-5	2.5	

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	22.13	22.16	22.11	0	0
		1	24	22.18	22.18	22.14	0	0
		1	49	22.26	22.14	22.15	0	0
		25	0	22.33	22.34	22.34	0-1	0
		25	12	22.37	22.37	22.36	0-1	0
		25	24	22.38	22.35	22.36	0-1	0
		50	0	22.42	22.40	22.40	0-1	0
	16QAM	1	0	22.33	22.29	22.35	0-1	0
		1	24	22.39	22.28	22.23	0-1	0
		1	49	22.43	22.34	22.41	0-1	0
		25	0	22.32	22.29	22.32	0-2	0
		25	12	22.38	22.28	22.30	0-2	0
		25	24	22.39	22.31	22.29	0-2	0
		50	0	22.37	22.32	22.36	0-2	0
	64QAM	1	0	22.35	22.28	22.27	0-2	0
		1	24	22.24	22.30	22.16	0-2	0
		1	49	22.44	22.34	22.26	0-2	0
		25	0	21.82	21.77	21.76	0-3	0.5
		25	12	21.83	21.78	21.76	0-3	0.5
		25	24	21.86	21.80	21.79	0-3	0.5
		50	0	21.86	21.86	21.86	0-3	0.5
	256QAM	1	0	19.83	19.79	19.83	0-5	2.5
		1	24	19.98	19.75	19.84	0-5	2.5
		1	49	19.82	19.75	19.83	0-5	2.5
25		0	19.82	19.74	19.81	0-5	2.5	
25		12	19.83	19.79	19.79	0-5	2.5	
25		24	19.83	19.78	19.79	0-5	2.5	
50		0	19.90	19.82	19.80	0-5	2.5	

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	22.14	22.07	22.02	0	0
		1	36	22.18	22.21	22.17	0	0
		1	74	22.22	22.16	22.13	0	0
		36	0	22.31	22.26	22.23	0-1	0
		36	18	22.35	22.30	22.27	0-1	0
		36	39	22.34	22.32	22.27	0-1	0
		75	0	22.37	22.31	22.26	0-1	0
	16QAM	1	0	22.37	22.25	22.25	0-1	0
		1	36	22.25	22.19	22.29	0-1	0
		1	74	22.40	22.23	22.24	0-1	0
		36	0	22.25	22.23	22.20	0-2	0
		36	18	22.29	22.26	22.17	0-2	0
		36	39	22.30	22.25	22.19	0-2	0
		75	0	22.28	22.27	22.18	0-2	0
	64QAM	1	0	22.29	22.33	22.24	0-2	0
		1	36	22.28	22.36	22.17	0-2	0
		1	74	22.43	22.35	22.32	0-2	0
		36	0	21.80	21.70	21.70	0-3	0.5
		36	18	21.82	21.75	21.76	0-3	0.5
		36	39	21.83	21.72	21.71	0-3	0.5
		75	0	21.81	21.72	21.69	0-3	0.5
	256QAM	1	0	19.81	19.80	19.75	0-5	2.5
		1	36	19.94	19.59	19.70	0-5	2.5
		1	74	19.89	19.80	19.78	0-5	2.5
		36	0	19.81	19.79	19.76	0-5	2.5
		36	18	19.88	19.82	19.75	0-5	2.5
		36	39	19.91	19.77	19.75	0-5	2.5
		75	0	19.80	19.71	19.65	0-5	2.5

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	22.04	22.02	22.00	0	0
		1	49	22.17	22.14	22.05	0	0
		1	99	22.18	22.14	22.00	0	0
		50	0	22.34	22.33	22.24	0-1	0
		50	25	22.43	22.35	22.30	0-1	0
		50	49	22.42	22.40	22.29	0-1	0
		100	0	22.34	22.32	22.23	0-1	0
	16QAM	1	0	22.30	22.22	22.24	0-1	0
		1	49	22.37	22.21	22.24	0-1	0
		1	99	22.34	22.30	22.12	0-1	0
		50	0	22.31	22.29	22.23	0-2	0
		50	25	22.37	22.30	22.26	0-2	0
		50	49	22.37	22.31	22.24	0-2	0
		100	0	22.32	22.26	22.20	0-2	0
	64QAM	1	0	22.18	22.16	22.24	0-2	0
		1	49	22.35	22.19	22.24	0-2	0
		1	99	22.34	22.24	22.16	0-2	0
		50	0	21.84	21.81	21.73	0-3	0.5
		50	25	21.85	21.80	21.75	0-3	0.5
		50	49	21.89	21.81	21.73	0-3	0.5
		100	0	21.78	21.74	21.67	0-3	0.5
	256QAM	1	0	19.76	19.81	19.64	0-5	2.5
		1	49	19.93	19.79	19.61	0-5	2.5
		1	99	19.91	19.77	19.63	0-5	2.5
50		0	19.77	19.76	19.70	0-5	2.5	
50		25	19.83	19.77	19.74	0-5	2.5	
50		49	19.85	19.76	19.71	0-5	2.5	
100		0	19.79	19.75	19.69	0-5	2.5	

LTE Band 30_Main #2 Ant.Conducted Power(RSI=1,2,3)

LTE Band 30_5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				27685 Ch. 2307.5 MHz	27710 Ch. 2310 MHz	27735 Ch. 2312.5 MHz		
5 MHz	QPSK	1	0	21.53	21.57	21.61	0	0
		1	12	21.60	21.64	21.68	0	0
		1	24	21.51	21.69	21.62	0	0
		12	0	21.67	21.74	21.68	0-1	0
		12	6	21.65	21.69	21.69	0-1	0
		12	11	21.64	21.73	21.71	0-1	0
		25	0	21.73	21.81	21.78	0-1	0
	16QAM	1	0	21.87	21.91	21.90	0-1	0
		1	12	21.67	21.81	21.80	0-1	0
		1	24	21.94	21.90	21.92	0-1	0
		12	0	21.69	21.75	21.72	0-2	0
		12	6	21.66	21.72	21.77	0-2	0
		12	11	21.71	21.80	21.76	0-2	0
		25	0	21.72	21.79	21.73	0-2	0
	64QAM	1	0	21.78	21.98	21.88	0-2	0
		1	12	21.77	21.90	21.87	0-2	0
		1	24	21.81	21.86	21.84	0-2	0
		12	0	20.70	20.79	20.76	0-3	1
		12	6	20.66	20.77	20.69	0-3	1
		12	11	20.70	20.79	20.75	0-3	1
		25	0	20.70	20.75	20.72	0-3	1
	256QAM	1	0	18.80	18.84	18.75	0-5	3
		1	12	18.78	18.89	18.68	0-5	3
		1	24	18.80	18.69	18.73	0-5	3
12		0	18.63	18.72	18.69	0-5	3	
12		6	18.67	18.74	18.71	0-5	3	
12		11	18.64	18.71	18.67	0-5	3	
25		0	18.68	18.69	18.69	0-5	3	

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	21.65	0	0
		1	24	21.58	0	0
		1	49	21.64	0	0
		25	0	21.82	0-1	0
		25	12	21.80	0-1	0
		25	24	21.78	0-1	0
		50	0	21.84	0-1	0
	16QAM	1	0	21.98	0-1	0
		1	24	21.84	0-1	0
		1	49	21.88	0-1	0
		25	0	21.78	0-2	0
		25	12	21.80	0-2	0
		25	24	21.76	0-2	0
		50	0	21.81	0-2	0
	64QAM	1	0	21.90	0-2	0
		1	24	21.68	0-2	0
		1	49	21.87	0-2	0
		25	0	20.75	0-3	1
		25	12	20.77	0-3	1
		25	24	20.79	0-3	1
		50	0	20.83	0-3	1
	256QAM	1	0	18.89	0-5	3
		1	24	18.83	0-5	3
		1	49	18.85	0-5	3
		25	0	18.72	0-5	3
		25	12	18.74	0-5	3
		25	24	18.75	0-5	3
		50	0	18.74	0-5	3

LTE TDD Band 38_Main #2 Ant.Conducted Power(RSI=1,3,4)

LTE Band 38_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				3775 Ch. 2572.5 MHz	3800 Ch. 2595 MHz	38225 Ch. 2617.5 MHz		
5 MHz	QPSK	1	0	20.24	20.33	19.89	0	0
		1	12	20.07	20.41	19.92	0	0
		1	24	20.18	20.33	19.91	0	0
		12	0	20.26	20.39	19.96	0-1	0
		12	6	20.30	20.38	19.93	0-1	0
		12	11	20.28	20.38	19.95	0-1	0
		25	0	20.31	20.43	20.00	0-1	0
	16QAM	1	0	20.30	20.37	19.88	0-1	0
		1	12	20.17	20.35	19.75	0-1	0
		1	24	20.23	20.32	19.79	0-1	0
		12	0	20.22	20.37	19.92	0-2	0
		12	6	20.22	20.35	19.89	0-2	0
		12	11	20.19	20.37	19.92	0-2	0
		25	0	20.32	20.38	19.97	0-2	0
	64QAM	1	0	20.29	20.40	19.98	0-2	0
		1	12	20.12	20.38	19.96	0-2	0
		1	24	20.22	20.32	19.95	0-2	0
		12	0	19.96	20.36	19.92	0-3	0
		12	6	20.20	20.35	19.89	0-3	0
		12	11	20.22	20.35	19.90	0-3	0
		25	0	20.24	20.37	19.94	0-3	0
	256QAM	1	0	18.58	18.67	18.21	0-5	1
		1	12	18.49	18.70	18.14	0-5	1
		1	24	18.52	18.62	18.11	0-5	1
		12	0	18.72	18.83	18.38	0-5	1
		12	6	18.72	18.84	18.36	0-5	1
		12	11	18.73	18.83	18.38	0-5	1
		25	0	18.74	18.83	18.42	0-5	1

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	20.34	20.45	20.06	0	0
		1	24	20.17	20.31	19.90	0	0
		1	49	20.27	20.28	19.88	0	0
		25	0	20.37	20.49	20.09	0-1	0
		25	12	20.36	20.47	20.06	0-1	0
		25	24	20.35	20.44	20.03	0-1	0
		50	0	20.38	20.49	20.08	0-1	0
	16QAM	1	0	20.31	20.35	19.93	0-1	0
		1	24	20.14	20.22	19.77	0-1	0
		1	49	20.16	20.25	19.81	0-1	0
		25	0	20.34	20.44	20.05	0-2	0
		25	12	20.31	20.40	20.03	0-2	0
		25	24	20.28	20.40	20.00	0-2	0
		50	0	20.33	20.44	20.05	0-2	0
	64QAM	1	0	20.43	20.44	20.09	0-2	0
		1	24	20.32	20.27	19.98	0-2	0
		1	49	20.24	20.29	20.02	0-2	0
		25	0	20.33	20.42	20.03	0-3	0
		25	12	20.31	20.40	20.01	0-3	0
		25	24	20.31	20.39	19.99	0-3	0
		50	0	20.37	20.48	20.09	0-3	0
	256QAM	1	0	18.68	18.60	18.31	0-5	1
		1	24	18.61	18.54	18.21	0-5	1
		1	49	18.60	18.51	18.18	0-5	1
25		0	18.81	18.91	18.52	0-5	1	
25		12	18.75	18.88	18.47	0-5	1	
25		24	18.75	18.85	18.45	0-5	1	
50		0	18.81	18.94	18.54	0-5	1	

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	20.38	20.41	20.09	0	0
		1	36	20.10	20.38	20.10	0	0
		1	74	20.22	20.28	19.97	0	0
		36	0	20.39	20.48	20.16	0-1	0
		36	18	20.35	20.44	20.10	0-1	0
		36	39	20.32	20.39	20.05	0-1	0
		75	0	20.35	20.44	20.09	0-1	0
	16QAM	1	0	20.32	20.28	20.00	0-1	0
		1	36	20.10	20.08	19.96	0-1	0
		1	74	20.14	20.12	19.85	0-1	0
		36	0	20.35	20.42	20.08	0-2	0
		36	18	20.31	20.37	20.02	0-2	0
		36	39	20.27	20.33	20.00	0-2	0
		75	0	20.33	20.41	20.07	0-2	0
	64QAM	1	0	20.42	20.36	20.07	0-2	0
		1	36	20.30	20.18	19.96	0-2	0
		1	74	20.32	20.20	19.96	0-2	0
		36	0	20.37	20.42	20.09	0-3	0
		36	18	20.35	20.40	20.04	0-3	0
		36	39	20.27	20.34	20.00	0-3	0
		75	0	20.36	20.42	20.10	0-3	0
	256QAM	1	0	18.68	18.77	18.41	0-5	1
		1	36	18.58	18.58	18.34	0-5	1
		1	74	18.42	18.57	18.27	0-5	1
		36	0	18.82	18.87	18.55	0-5	1
		36	18	18.78	18.83	18.51	0-5	1
		36	39	18.74	18.81	18.48	0-5	1
		75	0	18.84	18.93	18.60	0-5	1

LTE Band 38 20 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				37850 ch. 2580 MHz	38000 Ch. 2595 MHz	38150 ch. 2610 MHz		
20 MHz	QPSK	1	0	20.33	20.47	20.20	0	0
		1	49	20.32	20.31	20.02	0	0
		1	99	20.17	20.46	19.92	0	0
		50	0	20.46	20.44	20.24	0-1	0
		50	25	20.40	20.48	20.18	0-1	0
		50	49	20.35	20.41	20.12	0-1	0
	16QAM	100	0	20.38	20.47	20.14	0-1	0
		1	0	20.44	20.34	20.23	0-1	0
		1	49	20.17	20.19	20.10	0-1	0
		1	99	20.18	20.09	20.01	0-1	0
		50	0	20.43	20.49	20.20	0-2	0
		50	25	20.38	20.43	20.16	0-2	0
	64QAM	50	49	20.31	20.39	20.08	0-2	0
		100	0	20.41	20.45	20.16	0-2	0
		1	0	20.47	20.48	20.20	0-2	0
		1	49	20.33	20.32	20.03	0-2	0
		1	99	20.26	20.25	19.97	0-2	0
		50	0	20.48	20.42	20.25	0-3	0
	256QAM	50	25	20.41	20.46	20.18	0-3	0
		50	49	20.37	20.42	20.14	0-3	0
		100	0	20.36	20.42	20.14	0-3	0
		1	0	18.68	18.80	18.47	0-5	1
		1	49	18.58	18.67	18.23	0-5	1
		1	99	18.43	18.62	18.20	0-5	1
	50	0	18.90	18.96	18.68	0-5	1	
	50	25	18.84	18.89	18.62	0-5	1	
	50	49	18.80	18.85	18.57	0-5	1	
	100	0	18.79	18.83	18.55	0-5	1	

LTE Band 41_Main #2 Ant.Conducted Power - Power Class 3(RSI=1,2,3)

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	18.65	19.13	19.17	18.77	18.85	0	0
		1	12	18.75	19.23	19.28	18.54	18.84	0	0
		1	24	18.68	19.16	19.17	18.67	18.88	0	0
		12	0	18.77	19.18	19.29	18.82	18.92	0-1	0
		12	6	18.69	19.18	19.26	18.76	18.91	0-1	0
		12	11	18.78	19.12	19.31	18.75	18.93	0-1	0
		25	0	18.77	19.18	19.33	18.83	18.97	0-1	0
	16QAM	1	0	18.65	19.08	19.24	18.65	18.94	0-1	0
		1	12	18.54	19.03	19.07	18.49	18.77	0-1	0
		1	24	18.65	19.05	19.15	18.67	18.95	0-1	0
		12	0	18.76	19.17	19.16	18.74	18.95	0-2	0
		12	6	18.72	19.11	19.22	18.77	18.83	0-2	0
		12	11	18.74	19.12	19.17	18.73	18.85	0-2	0
		25	0	18.81	19.14	19.25	18.80	18.97	0-2	0
	64QAM	1	0	18.70	19.06	19.20	18.66	18.94	0-2	0
		1	12	18.57	19.03	19.12	18.54	18.83	0-2	0
		1	24	18.69	19.14	19.16	18.68	18.85	0-2	0
		12	0	18.67	19.07	19.23	18.70	18.87	0-3	0
		12	6	18.68	19.09	19.23	18.75	18.77	0-3	0
		12	11	18.71	19.06	19.22	18.69	18.85	0-3	0
		25	0	18.80	19.16	19.26	18.77	18.96	0-3	0
	256QAM	1	0	18.12	18.44	18.54	18.15	18.32	0-5	0
		1	12	18.05	18.53	18.48	18.03	18.15	0-5	0
		1	24	18.05	18.40	18.46	18.07	18.19	0-5	0
		12	0	18.22	18.56	18.71	18.23	18.36	0-5	0
12		6	18.28	18.58	18.75	18.24	18.26	0-5	0	
12		11	18.23	18.60	18.68	18.22	18.36	0-5	0	
25		0	18.20	18.65	18.67	18.22	18.36	0-5	0	

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	18.71	19.20	19.28	18.78	19.00	0	0
		1	24	18.77	19.08	19.15	18.67	18.85	0	0
		1	49	18.79	19.02	19.07	18.78	18.78	0	0
		25	0	18.81	19.16	19.35	18.82	19.06	0-1	0
		25	12	18.75	19.23	19.31	18.86	18.95	0-1	0
		25	24	18.82	19.22	19.23	18.78	18.93	0-1	0
	16QAM	50	0	18.88	19.24	19.33	18.90	19.06	0-1	0
		1	0	18.72	18.97	19.14	18.82	18.96	0-1	0
		1	24	18.71	18.98	18.96	18.63	18.75	0-1	0
		1	49	18.73	19.00	19.11	18.69	18.76	0-1	0
		25	0	18.76	19.19	19.24	18.84	18.98	0-2	0
		25	12	18.80	19.16	19.27	18.81	18.99	0-2	0
	64QAM	25	24	18.78	19.17	19.21	18.74	18.90	0-2	0
		50	0	18.81	19.15	19.27	18.79	19.01	0-2	0
		1	0	18.64	19.04	19.33	18.88	19.01	0-2	0
		1	24	18.55	18.97	19.18	18.75	18.90	0-2	0
		1	49	18.69	19.08	19.15	18.63	18.90	0-2	0
		25	0	18.75	19.16	19.27	18.80	18.99	0-3	0
	256QAM	25	12	18.76	19.10	19.24	18.82	18.95	0-3	0
		25	24	18.77	19.09	19.24	18.74	18.90	0-3	0
		50	0	18.85	19.28	19.32	18.88	19.06	0-3	0
		1	0	18.02	18.38	18.51	18.21	18.28	0-5	0
		1	24	18.02	18.34	18.43	18.03	18.20	0-5	0
		1	49	18.09	18.32	18.36	18.18	18.16	0-5	0
		25	0	18.22	18.64	18.75	18.31	18.48	0-5	0
		25	12	18.21	18.58	18.76	18.24	18.38	0-5	0
		25	24	18.19	18.59	18.68	18.21	18.33	0-5	0
		50	0	18.29	18.64	18.79	18.27	18.45	0-5	0

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	18.69	19.16	19.28	18.84	18.96	0	0
		1	36	18.71	19.17	19.25	18.65	18.98	0	0
		1	74	18.79	19.05	19.15	18.67	18.80	0	0
		36	0	18.84	19.21	19.32	18.88	19.05	0-1	0
		36	18	18.77	19.23	19.34	18.79	18.95	0-1	0
		36	39	18.80	19.15	19.20	18.77	18.96	0-1	0
		75	0	18.79	19.22	19.29	18.81	18.96	0-1	0
	16QAM	1	0	18.64	19.09	19.31	18.81	18.90	0-1	0
		1	36	18.51	18.88	19.11	18.64	18.73	0-1	0
		1	74	18.71	19.03	19.04	18.55	18.60	0-1	0
		36	0	18.75	19.14	19.26	18.87	18.98	0-2	0
		36	18	18.71	19.15	19.26	18.81	18.92	0-2	0
		36	39	18.80	19.13	19.16	18.75	18.83	0-2	0
		75	0	18.78	19.14	19.32	18.79	18.92	0-2	0
	64QAM	1	0	18.77	19.17	19.27	18.87	18.98	0-2	0
		1	36	18.56	19.12	19.18	18.72	18.82	0-2	0
		1	74	18.74	19.04	19.17	18.77	18.74	0-2	0
		36	0	18.77	19.18	19.28	18.87	18.94	0-3	0
		36	18	18.78	19.18	19.20	18.82	18.93	0-3	0
		36	39	18.79	19.10	19.19	18.71	18.79	0-3	0
		75	0	18.77	19.21	19.30	18.85	18.93	0-3	0
	256QAM	1	0	18.10	18.35	18.57	18.12	18.20	0-5	0
		1	36	18.06	18.45	18.49	18.07	18.16	0-5	0
		1	74	18.15	18.37	18.38	18.08	18.09	0-5	0
		36	0	18.25	18.60	18.75	18.27	18.40	0-5	0
		36	18	18.18	18.61	18.66	18.26	18.34	0-5	0
		36	39	18.22	18.64	18.67	18.19	18.33	0-5	0
		75	0	18.18	18.60	18.69	18.16	18.33	0-5	0

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	18.69	19.23	19.31	18.80	18.99	0	0
		1	49	18.71	19.07	19.13	18.72	18.87	0	0
		1	99	18.72	19.03	19.07	18.58	18.70	0	0
		50	0	18.85	19.22	19.25	18.91	19.09	0-1	0
		50	25	18.84	19.18	19.29	18.90	19.05	0-1	0
		50	49	18.86	19.18	19.31	18.82	19.00	0-1	0
	16QAM	100	0	18.82	19.20	19.27	18.83	19.01	0-1	0
		1	0	18.59	19.13	19.17	18.67	18.84	0-1	0
		1	49	18.49	19.06	19.00	18.56	18.68	0-1	0
		1	99	18.47	18.98	18.87	18.45	18.64	0-1	0
		50	0	18.80	19.25	19.28	18.85	19.04	0-2	0
		50	25	18.84	19.19	19.31	18.84	18.97	0-2	0
	64QAM	50	49	18.82	19.18	19.26	18.75	18.91	0-2	0
		100	0	18.76	19.27	19.32	18.86	18.99	0-2	0
		1	0	18.73	19.19	19.27	18.92	18.97	0-2	0
		1	49	18.74	19.01	19.09	18.69	18.73	0-2	0
		1	99	18.75	19.04	19.09	18.59	18.69	0-2	0
		50	0	18.86	19.21	19.26	18.94	19.04	0-3	0
	256QAM	50	25	18.82	19.18	19.29	18.89	19.06	0-3	0
		50	49	18.81	19.19	19.31	18.80	18.91	0-3	0
		100	0	18.75	19.14	19.30	18.82	18.96	0-3	0
		1	0	18.14	18.47	18.64	18.24	18.39	0-5	0
		1	49	18.06	18.39	18.44	18.02	18.24	0-5	0
		1	99	18.20	18.45	18.42	18.05	18.12	0-5	0
		50	0	18.28	18.64	18.83	18.29	18.50	0-5	0
		50	25	18.34	18.66	18.77	18.32	18.43	0-5	0
		50	49	18.29	18.67	18.75	18.26	18.41	0-5	0
		100	0	18.19	18.61	18.65	18.26	18.43	0-5	0

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

LTE Band 41_Main #2 Ant.Conducted Power - Power Class 2 (RSI=1,2,3)

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	20.61	21.22	21.23	20.77	20.89	0	0
		1	12	20.57	21.05	21.05	20.50	20.82	0	0
		1	24	20.57	21.14	21.22	20.78	20.90	0	0
		12	0	20.60	21.22	21.26	20.83	21.00	0-1	0
		12	6	20.68	21.20	21.35	20.80	20.97	0-1	0
		12	11	20.62	21.19	21.25	20.79	20.95	0-1	0
	16QAM	25	0	20.66	21.11	21.21	20.80	20.86	0-1	0
		1	0	20.90	21.07	21.42	20.93	21.00	0-1	0
		1	12	20.94	21.31	21.30	20.86	21.02	0-1	0
		1	24	21.00	21.38	21.43	20.81	20.94	0-1	0
		12	0	20.61	21.23	21.30	20.78	20.99	0-2	0
		12	6	20.56	21.23	21.26	20.67	20.95	0-2	0
	64QAM	12	11	20.59	21.16	21.21	20.70	20.92	0-2	0
		25	0	20.61	21.18	21.24	20.81	20.93	0-2	0
		1	0	20.83	21.28	21.34	21.01	21.01	0-2	0
		1	12	20.81	21.33	21.40	20.78	21.02	0-2	0
		1	24	20.84	21.36	21.36	20.80	20.97	0-2	0
		12	0	20.57	21.15	21.25	20.76	20.93	0-3	0
	256QAM	12	6	20.47	21.12	21.18	20.70	20.87	0-3	0
		12	11	20.53	21.14	21.18	20.85	20.86	0-3	0
		25	0	20.49	21.05	21.23	20.80	20.83	0-3	0
		1	0	20.24	20.62	20.62	20.53	20.33	0-5	0.5
		1	12	20.18	20.62	20.49	19.53	20.35	0-5	0.5
		1	24	20.29	20.61	20.61	19.55	20.27	0-5	0.5
		12	0	20.35	20.88	20.90	19.99	20.66	0-5	0.5
12		6	20.29	20.84	20.83	20.44	20.60	0-5	0.5	
12		11	20.35	20.89	20.93	20.41	20.56	0-5	0.5	
25		0	20.32	20.88	20.92	20.50	20.60	0-5	0.5	

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	20.62	21.21	21.28	20.83	20.95	0	0
		1	24	20.56	21.07	21.20	20.71	20.85	0	0
		1	49	20.58	21.14	21.23	20.67	20.84	0	0
		25	0	20.56	21.11	21.28	20.77	20.95	0-1	0
		25	12	20.58	21.15	21.26	20.78	20.87	0-1	0
		25	24	20.58	21.15	21.25	20.73	20.89	0-1	0
	16QAM	50	0	20.68	21.18	21.36	20.80	20.97	0-1	0
		1	0	20.93	21.30	21.35	20.87	21.05	0-1	0
		1	24	20.76	20.96	21.12	20.56	20.69	0-1	0
		1	49	20.80	21.28	21.34	20.82	20.98	0-1	0
		25	0	20.51	21.15	21.26	20.69	20.94	0-2	0
		25	12	20.56	21.15	21.27	20.74	20.84	0-2	0
	64QAM	25	24	20.59	21.12	21.23	20.73	20.82	0-2	0
		50	0	20.67	21.14	21.28	20.73	20.95	0-2	0
		1	0	20.66	21.25	21.24	21.08	20.90	0-2	0
		1	24	20.97	21.16	21.23	21.02	20.84	0-2	0
		1	49	20.81	21.16	21.17	20.92	20.74	0-2	0
		25	0	20.53	21.13	21.23	20.73	20.84	0-3	0
	256QAM	25	12	20.46	21.03	21.16	20.77	20.80	0-3	0
		25	24	20.50	21.05	21.13	20.73	20.82	0-3	0
		50	0	20.69	21.20	21.30	20.79	20.98	0-3	0
		1	0	20.19	20.80	20.83	20.41	20.67	0-5	0.5
		1	24	20.21	20.50	20.71	20.66	20.58	0-5	0.5
		1	49	19.91	20.60	20.60	20.06	20.46	0-5	0.5
		25	0	20.34	20.90	20.91	20.06	20.62	0-5	0.5
		25	12	20.33	20.93	20.92	19.60	20.62	0-5	0.5
		25	24	20.29	20.94	20.82	20.31	20.59	0-5	0.5
		50	0	20.40	20.96	20.84	20.05	20.73	0-5	0.5

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	20.64	21.20	21.31	20.86	21.00	0	0
		1	36	20.40	21.09	21.08	20.49	20.86	0	0
		1	74	20.59	21.18	21.14	20.65	20.83	0	0
		36	0	20.67	21.23	21.34	20.81	21.00	0-1	0
		36	18	20.67	21.24	21.36	20.78	20.97	0-1	0
		36	39	20.64	21.20	21.27	20.78	20.99	0-1	0
		75	0	20.69	21.16	21.26	20.79	21.04	0-1	0
	16QAM	1	0	20.64	21.48	21.39	20.95	21.03	0-1	0
		1	36	20.81	21.28	21.35	20.92	20.92	0-1	0
		1	74	20.69	21.10	21.38	20.92	20.91	0-1	0
		36	0	20.63	21.18	21.28	20.77	20.97	0-2	0
		36	18	20.63	21.12	21.25	20.74	20.93	0-2	0
		36	39	20.62	21.12	21.19	20.70	20.85	0-2	0
		75	0	20.61	21.20	21.28	20.84	20.93	0-2	0
	64QAM	1	0	20.58	21.36	21.42	21.21	20.94	0-2	0
		1	36	20.40	21.43	21.45	20.83	21.00	0-2	0
		1	74	20.59	21.27	21.41	21.18	20.87	0-2	0
		36	0	20.62	21.15	21.36	20.79	21.05	0-3	0
		36	18	20.59	21.20	21.25	20.80	20.91	0-3	0
		36	39	20.61	21.13	21.25	20.74	20.94	0-3	0
		75	0	20.68	21.20	21.21	20.75	20.94	0-3	0
	256QAM	1	0	20.12	20.52	20.65	20.28	20.36	0-5	0.5
		1	36	20.12	20.73	20.53	20.31	20.29	0-5	0.5
		1	74	20.25	20.47	20.50	19.77	20.13	0-5	0.5
		36	0	20.40	20.90	20.93	20.54	20.69	0-5	0.5
		36	18	20.40	20.86	20.86	20.53	20.66	0-5	0.5
		36	39	20.37	20.91	20.93	20.51	20.63	0-5	0.5
75		0	20.31	20.84	20.92	20.52	20.62	0-5	0.5	

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	20.64	21.19	21.39	20.89	21.03	0	0
		1	49	20.53	21.08	21.15	20.72	20.83	0	0
		1	99	20.65	21.13	21.09	20.66	20.74	0	0
		50	0	20.65	21.23	21.40	20.87	21.08	0-1	0
		50	25	20.67	21.19	21.34	20.83	21.04	0-1	0
		50	49	20.72	21.17	21.26	20.74	20.88	0-1	0
	16QAM	100	0	20.66	21.15	21.30	20.89	21.05	0-1	0
		1	0	20.84	21.37	21.42	21.24	21.02	0-1	0
		1	49	20.90	20.93	20.98	20.96	20.59	0-1	0
		1	99	20.99	21.22	21.18	20.94	20.72	0-1	0
		50	0	20.61	21.21	21.39	20.85	20.96	0-2	0
		50	25	20.65	21.17	21.33	20.76	20.92	0-2	0
	64QAM	50	49	20.56	21.12	21.24	20.71	20.92	0-2	0
		100	0	20.72	21.15	21.33	20.79	21.04	0-2	0
		1	0	20.78	21.18	21.44	21.09	21.13	0-2	0
		1	49	20.63	21.03	21.34	21.16	20.97	0-2	0
		1	99	20.72	21.02	21.41	20.86	20.84	0-2	0
		50	0	20.60	21.28	21.32	20.83	21.09	0-3	0
	256QAM	50	25	20.66	21.21	21.37	20.86	20.95	0-3	0
		50	49	20.63	21.18	21.26	20.69	20.93	0-3	0
		100	0	20.64	21.13	21.26	20.80	20.95	0-3	0
		1	0	20.23	20.89	20.70	20.64	20.34	0-5	0.5
		1	49	20.22	20.83	20.66	20.19	20.12	0-5	0.5
		1	99	20.22	20.71	20.44	20.25	19.97	0-5	0.5
50		0	20.35	20.87	20.90	20.67	20.77	0-5	0.5	
50		25	20.13	20.88	20.88	20.51	20.67	0-5	0.5	
50	49	20.23	20.95	20.86	20.40	20.60	0-5	0.5		
100	0	20.22	20.86	20.87	20.76	20.68	0-5	0.5		

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

LTE Band 48_Sub #3 Ant.Conducted Power(RSI=0,1,2,3)

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	56232 Ch. 3649.2 MHz	56715 Ch. 3697.5 MHz		
5 MHz	QPSK	1	0	19.66	20.32	19.53	20.19	0	0
		1	12	19.93	20.46	19.95	20.54	0	0
		1	24	19.86	20.52	19.77	20.41	0	0
		12	0	20.00	20.63	19.92	20.58	0-1	0
		12	6	20.05	20.68	19.94	20.58	0-1	0
		12	11	20.08	20.68	19.98	20.63	0-1	0
		25	0	20.09	20.64	19.93	20.57	0-1	0
	16QAM	1	0	19.96	20.58	19.96	20.58	0-1	0
		1	12	19.83	20.50	19.85	20.60	0-1	0
		1	24	19.98	20.69	19.93	20.67	0-1	0
		12	0	19.90	20.49	19.78	20.49	0-2	0
		12	6	19.92	20.57	19.83	20.50	0-2	0
		12	11	19.92	20.54	19.77	20.53	0-2	0
		25	0	20.04	20.57	19.77	20.48	0-2	0
	64QAM	1	0	20.08	20.64	20.07	20.46	0-2	0
		1	12	19.94	20.51	20.12	20.44	0-2	0
		1	24	20.14	20.66	20.03	20.44	0-2	0
		12	0	19.90	19.47	18.73	19.45	0-3	1
		12	6	19.92	19.53	18.76	19.45	0-3	1
		12	11	19.92	19.52	18.78	19.49	0-3	1
		25	0	19.90	19.57	18.83	19.48	0-3	1
	256QAM	1	0	16.86	17.19	16.85	17.50	0-5	3
		1	12	16.77	17.08	16.87	17.55	0-5	3
		1	24	17.02	17.31	16.88	17.60	0-5	3
		12	0	16.85	17.50	16.75	17.47	0-5	3
		12	6	16.89	17.56	16.79	17.48	0-5	3
		12	11	16.90	17.55	16.80	17.49	0-5	3
		25	0	16.96	17.57	16.76	17.43	0-5	3

LTE Band 48 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced 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	19.79	20.50	19.72	20.07	0	0
		1	24	20.06	20.49	19.68	20.39	0	0
		1	49	20.10	20.52	19.74	20.50	0	0
		25	0	20.15	20.68	19.90	20.45	0-1	0
		25	12	20.15	20.69	19.96	20.54	0-1	0
		25	24	20.23	20.77	19.99	20.56	0-1	0
		50	0	20.20	20.70	19.94	20.55	0-1	0
	16QAM	1	0	20.00	20.43	19.88	20.39	0-1	0
		1	24	20.08	20.51	19.85	20.42	0-1	0
		1	49	20.20	20.60	19.95	20.55	0-1	0
		25	0	20.06	20.54	19.81	20.40	0-2	0
		25	12	20.06	20.55	19.84	20.47	0-2	0
		25	24	20.09	20.60	19.83	20.45	0-2	0
		50	0	20.13	20.61	19.86	20.44	0-2	0
	64QAM	1	0	20.00	20.70	19.74	20.32	0-2	0
		1	24	20.06	20.72	19.76	20.32	0-2	0
		1	49	20.04	20.79	19.85	20.39	0-2	0
		25	0	19.04	19.57	18.83	19.36	0-3	1
		25	12	19.04	19.58	18.85	19.44	0-3	1
		25	24	19.09	19.62	18.86	19.45	0-3	1
		50	0	19.16	19.64	18.90	19.47	0-3	1
	256QAM	1	0	16.79	17.45	16.77	17.16	0-5	3
		1	24	16.75	17.45	16.73	17.16	0-5	3
		1	49	16.91	17.55	16.81	17.21	0-5	3
		25	0	17.03	17.57	16.84	17.37	0-5	3
		25	12	17.02	17.56	16.86	17.43	0-5	3
		25	24	17.05	17.60	16.87	17.42	0-5	3
		50	0	17.08	17.56	16.84	17.40	0-5	3

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	19.83	20.35	19.66	19.88	0	0
		1	36	20.16	20.41	19.80	20.30	0	0
		1	74	20.17	20.58	19.83	20.28	0	0
		36	0	20.23	20.65	19.92	20.31	0-1	0
		36	18	20.31	20.71	19.93	20.35	0-1	0
		36	39	20.33	20.73	19.96	20.44	0-1	0
		75	0	20.29	20.72	19.98	20.39	0-1	0
	16QAM	1	0	20.13	20.61	19.90	20.35	0-1	0
		1	36	20.12	20.61	19.95	20.44	0-1	0
		1	74	20.38	20.81	20.01	20.47	0-1	0
		36	0	20.15	20.57	19.81	20.17	0-2	0
		36	18	20.20	20.61	19.82	20.22	0-2	0
		36	39	20.21	20.63	19.87	20.31	0-2	0
		75	0	20.21	20.64	19.90	20.31	0-2	0
	64QAM	1	0	20.19	20.57	19.86	20.21	0-2	0
		1	36	20.13	20.53	19.90	20.33	0-2	0
		1	74	20.33	20.67	19.91	20.44	0-2	0
		36	0	19.16	19.60	18.85	19.24	0-3	1
		36	18	19.25	19.66	18.88	19.28	0-3	1
		36	39	19.27	19.65	18.89	19.34	0-3	1
		75	0	19.22	19.64	18.89	19.29	0-3	1
	256QAM	1	0	17.06	17.65	16.83	17.05	0-5	3
		1	36	16.87	17.54	16.85	17.09	0-5	3
		1	74	17.24	17.74	16.79	17.11	0-5	3
		36	0	17.08	17.53	16.75	17.17	0-5	3
		36	18	17.13	17.58	16.79	17.19	0-5	3
		36	39	17.17	17.58	16.82	17.26	0-5	3
75		0	17.16	17.59	16.85	17.25	0-5	3	

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	19.90	20.35	19.64	19.85	0	0
		1	49	20.31	20.45	19.67	19.75	0	0
		1	99	20.43	20.52	19.75	20.25	0	0
		50	0	20.37	20.65	19.90	20.13	0-1	0
		50	25	20.43	20.71	19.96	20.24	0-1	0
		50	49	20.50	20.76	19.98	20.29	0-1	0
		100	0	20.45	20.71	19.94	20.23	0-1	0
	16QAM	1	0	20.11	20.53	19.80	19.97	0-1	0
		1	49	20.18	20.54	19.85	20.06	0-1	0
		1	99	20.39	20.65	20.04	20.18	0-1	0
		50	0	20.28	20.60	19.83	20.07	0-2	0
		50	25	20.34	20.64	19.88	20.16	0-2	0
		50	49	20.41	20.68	19.89	20.21	0-2	0
		100	0	20.40	20.65	19.88	20.14	0-2	0
	64QAM	1	0	20.08	20.50	19.76	20.01	0-2	0
		1	49	20.22	20.63	19.72	20.18	0-2	0
		1	99	20.35	20.70	19.84	20.31	0-2	0
		50	0	19.33	19.63	18.88	19.11	0-3	1
		50	25	19.38	19.65	18.92	19.18	0-3	1
		50	49	19.43	19.70	18.94	19.22	0-3	1
		100	0	19.33	19.61	18.86	19.13	0-3	1
	256QAM	1	0	17.01	17.47	16.66	16.81	0-5	3
		1	49	17.09	17.59	16.69	16.92	0-5	3
		1	99	17.20	17.61	16.81	17.07	0-5	3
		50	0	17.29	17.56	16.82	17.04	0-5	3
		50	25	17.32	17.59	16.86	17.13	0-5	3
		50	49	17.38	17.65	16.87	17.17	0-5	3
		100	0	17.29	17.58	16.79	17.08	0-5	3

LTE Band 48_Sub #3 Ant.Conducted Power(RSI=4)

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	56232 Ch. 3649.2 MHz	56715 Ch. 3697.5 MHz		
5 MHz	QPSK	1	0	15.41	15.76	15.42	15.57	0	0
		1	12	15.47	15.80	15.37	15.53	0	0
		1	24	15.57	15.91	15.54	15.71	0	0
		12	0	15.65	15.97	15.65	15.80	0-1	0
		12	6	15.69	15.98	15.63	15.81	0-1	0
		12	11	15.68	16.04	15.69	15.86	0-1	0
		25	0	15.65	15.99	15.66	15.83	0-1	0
	16QAM	1	0	15.49	15.94	15.56	15.82	0-1	0
		1	12	15.48	15.79	15.42	15.71	0-1	0
		1	24	15.51	15.95	15.54	15.90	0-1	0
		12	0	15.64	16.00	15.64	15.75	0-2	0
		12	6	15.64	16.00	15.61	15.77	0-2	0
		12	11	15.65	16.05	15.66	15.81	0-2	0
		25	0	15.69	15.98	15.65	15.84	0-2	0
	64QAM	1	0	15.65	16.12	15.77	15.89	0-2	0
		1	12	15.63	16.08	15.71	15.82	0-2	0
		1	24	15.76	16.19	15.81	15.92	0-2	0
		12	0	15.65	15.98	15.64	15.80	0-3	0
		12	6	15.68	15.97	15.63	15.80	0-3	0
		12	11	15.70	16.04	15.69	15.84	0-3	0
		25	0	15.63	16.00	15.65	15.87	0-3	0
	256QAM	1	0	15.52	15.96	15.49	15.76	0-5	0
		1	12	15.50	15.96	15.41	15.66	0-5	0
		1	24	15.57	16.01	15.54	15.80	0-5	0
		12	0	15.60	15.96	15.62	15.79	0-5	0
		12	6	15.64	15.98	15.63	15.83	0-5	0
		12	11	15.65	16.00	15.64	15.85	0-5	0
		25	0	15.70	16.02	15.69	15.90	0-5	0

LTE Band 48 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced 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	15.63	15.85	15.51	15.63	0	0
		1	24	15.55	15.81	15.43	15.58	0	0
		1	49	15.63	15.90	15.47	15.64	0	0
		25	0	15.78	16.00	15.65	15.77	0-1	0
		25	12	15.82	16.04	15.64	15.78	0-1	0
		25	24	15.82	16.07	15.68	15.83	0-1	0
		50	0	15.79	16.05	15.66	15.79	0-1	0
	16QAM	1	0	15.56	15.81	15.50	15.60	0-1	0
		1	24	15.60	15.83	15.44	15.62	0-1	0
		1	49	15.70	16.01	15.53	15.74	0-1	0
		25	0	15.73	15.96	15.62	15.75	0-2	0
		25	12	15.75	15.99	15.64	15.76	0-2	0
		25	24	15.76	16.00	15.64	15.78	0-2	0
		50	0	15.82	16.08	15.66	15.82	0-2	0
	64QAM	1	0	15.84	16.19	15.69	15.91	0-2	0
		1	24	15.84	16.26	15.69	15.86	0-2	0
		1	49	15.89	16.43	15.73	15.92	0-2	0
		25	0	15.76	15.99	15.62	15.80	0-3	0
		25	12	15.79	16.03	15.62	15.82	0-3	0
		25	24	15.81	16.04	15.64	15.86	0-3	0
		50	0	15.84	16.09	15.70	15.87	0-3	0
	256QAM	1	0	15.60	15.93	15.62	15.77	0-5	0
		1	24	15.55	15.83	15.61	15.66	0-5	0
		1	49	15.73	16.00	15.67	15.81	0-5	0
25		0	15.84	16.08	15.68	15.85	0-5	0	
25		12	15.84	16.11	15.68	15.85	0-5	0	
25		24	15.85	16.12	15.69	15.88	0-5	0	
50		0	15.86	16.12	15.71	15.87	0-5	0	

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	15.60	15.74	15.37	15.39	0	0
		1	36	15.71	15.84	15.32	15.40	0	0
		1	74	15.80	16.00	15.50	15.59	0	0
		36	0	15.85	16.01	15.60	15.65	0-1	0
		36	18	15.87	16.03	15.63	15.70	0-1	0
		36	39	15.93	16.11	15.63	15.72	0-1	0
		75	0	15.91	16.07	15.63	15.70	0-1	0
	16QAM	1	0	15.74	15.84	15.56	15.49	0-1	0
		1	36	15.73	15.83	15.42	15.46	0-1	0
		1	74	15.82	16.00	15.51	15.45	0-1	0
		36	0	15.84	16.00	15.57	15.63	0-2	0
		36	18	15.86	16.02	15.59	15.67	0-2	0
		36	39	15.90	16.09	15.61	15.70	0-2	0
		75	0	15.92	16.09	15.62	15.71	0-2	0
	64QAM	1	0	15.92	16.13	15.53	15.72	0-2	0
		1	36	15.96	16.23	15.48	15.73	0-2	0
		1	74	16.03	16.32	15.66	15.81	0-2	0
		36	0	15.87	16.04	15.62	15.68	0-3	0
		36	18	15.92	16.08	15.66	15.72	0-3	0
		36	39	15.95	16.13	15.66	15.74	0-3	0
		75	0	15.94	16.09	15.66	15.72	0-3	0
	256QAM	1	0	15.67	15.97	15.64	15.52	0-5	0
		1	36	15.74	16.04	15.56	15.51	0-5	0
		1	74	15.78	16.18	15.72	15.61	0-5	0
		36	0	15.86	16.01	15.60	15.66	0-5	0
		36	18	15.87	16.04	15.62	15.70	0-5	0
		36	39	15.93	16.11	15.64	15.75	0-5	0
		75	0	15.95	16.11	15.68	15.74	0-5	0

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	15.77	15.77	15.37	15.33	0	0
		1	49	15.79	15.87	15.39	15.37	0	0
		1	99	15.87	15.99	15.41	15.44	0	0
		50	0	15.95	16.02	15.58	15.54	0-1	0
		50	25	16.01	16.10	15.62	15.59	0-1	0
		50	49	16.03	16.14	15.62	15.61	0-1	0
		100	0	15.98	16.08	15.62	15.58	0-1	0
	16QAM	1	0	15.73	15.74	15.37	15.44	0-1	0
		1	49	15.77	15.92	15.39	15.46	0-1	0
		1	99	15.94	16.05	15.59	15.62	0-1	0
		50	0	15.94	16.01	15.57	15.54	0-2	0
		50	25	16.01	16.10	15.62	15.58	0-2	0
		50	49	16.04	16.16	15.63	15.63	0-2	0
		100	0	16.02	16.10	15.64	15.60	0-2	0
	64QAM	1	0	15.92	16.05	15.68	15.44	0-2	0
		1	49	16.01	16.19	15.71	15.47	0-2	0
		1	99	16.11	16.46	15.75	15.62	0-2	0
		50	0	16.02	16.08	15.64	15.56	0-3	0
		50	25	16.05	16.17	15.66	15.61	0-3	0
		50	49	16.08	16.19	15.67	15.64	0-3	0
		100	0	15.99	16.09	15.61	15.59	0-3	0
	256QAM	1	0	15.69	15.69	15.27	15.53	0-5	0
		1	49	15.73	15.80	15.25	15.56	0-5	0
		1	99	15.89	15.91	15.35	15.66	0-5	0
		50	0	16.01	16.10	15.64	15.58	0-5	0
		50	25	16.07	16.16	15.69	15.65	0-5	0
		50	49	16.11	16.21	15.70	15.68	0-5	0
		100	0	16.04	16.12	15.64	15.62	0-5	0

LTE Band 66_Main #2 Ant.Conducted Power(RSI=1,2,3)

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	21.89	21.94	22.09	0	0
		1	3	21.77	22.02	22.14	0	0
		1	5	21.96	22.06	22.22	0	0
		3	0	21.94	22.02	22.20	0	0
		3	1	21.95	22.06	22.23	0	0
		3	3	22.00	22.02	22.18	0	0
	16QAM	6	0	22.02	22.09	22.25	0-1	0
		1	0	22.11	22.22	22.41	0-1	0
		1	3	22.13	22.20	22.29	0-1	0
		1	5	22.09	22.25	22.38	0-1	0
		3	0	22.01	22.10	22.15	0-1	0
		3	1	21.95	22.07	22.14	0-1	0
	64QAM	3	3	21.97	22.07	22.27	0-1	0
		6	0	22.02	22.07	22.29	0-2	0
		1	0	22.14	22.22	22.33	0-2	0
		1	3	22.15	22.15	22.16	0-2	0
		1	5	22.08	22.22	22.30	0-2	0
		3	0	21.96	22.06	22.12	0-2	0
	256QAM	3	1	21.95	22.17	22.23	0-2	0
		3	3	21.93	22.12	22.23	0-2	0
		6	0	21.47	21.63	21.79	0-3	0.5
		1	0	19.68	19.54	19.79	0-5	2.5
		1	3	19.53	19.76	19.85	0-5	2.5
		1	5	19.62	19.73	19.93	0-5	2.5
		3	0	19.61	19.60	19.72	0-5	2.5
		3	1	19.45	19.68	19.72	0-5	2.5
		3	3	19.56	19.62	19.83	0-5	2.5
		6	0	19.54	19.62	19.79	0-5	2.5

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	21.85	22.00	22.12	0	0
		1	7	21.75	21.90	22.07	0	0
		1	14	22.04	21.95	22.11	0	0
		8	0	22.06	22.15	22.28	0-1	0
		8	3	22.09	22.15	22.26	0-1	0
		8	7	22.08	22.18	22.30	0-1	0
	16QAM	15	0	22.13	22.11	22.30	0-1	0
		1	0	22.13	22.31	22.48	0-1	0
		1	7	22.17	22.09	22.31	0-1	0
		1	14	22.19	22.29	22.45	0-1	0
		8	0	22.02	22.12	22.32	0-2	0
		8	3	22.12	22.12	22.28	0-2	0
	64QAM	8	7	22.08	22.08	22.30	0-2	0
		15	0	22.07	22.13	22.29	0-2	0
		1	0	22.19	22.16	22.35	0-2	0
		1	7	22.15	22.23	22.46	0-2	0
		1	14	22.17	22.15	22.48	0-2	0
		8	0	21.51	21.58	21.74	0-3	0.5
	256QAM	8	3	21.56	21.58	21.84	0-3	0.5
		8	7	21.54	21.61	21.83	0-3	0.5
		15	0	21.52	21.63	21.76	0-3	0.5
		1	0	19.78	19.75	19.86	0-5	2.5
		1	7	19.65	19.68	19.86	0-5	2.5
		1	14	19.79	19.70	19.99	0-5	2.5
		8	0	19.60	19.62	19.76	0-5	2.5
		8	3	19.59	19.66	19.86	0-5	2.5
		8	7	19.61	19.63	19.84	0-5	2.5
15		0	19.58	19.64	19.82	0-5	2.5	

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	21.89	21.83	22.03	0	0
		1	12	21.74	21.89	22.06	0	0
		1	24	21.98	22.03	22.17	0	0
		12	0	22.09	22.13	22.27	0-1	0
		12	6	22.11	22.13	22.29	0-1	0
		12	11	22.12	22.19	22.33	0-1	0
	16QAM	25	0	22.14	22.20	22.34	0-1	0
		1	0	22.25	22.38	22.48	0-1	0
		1	12	22.01	22.06	22.37	0-1	0
		1	24	22.30	22.20	22.49	0-1	0
		12	0	22.09	22.06	22.29	0-2	0
		12	6	22.09	22.08	22.26	0-2	0
	64QAM	12	11	22.09	22.15	22.30	0-2	0
		25	0	22.12	22.20	22.34	0-2	0
		1	0	22.03	22.29	22.47	0-2	0
		1	12	22.17	22.30	22.44	0-2	0
		1	24	22.25	22.34	22.45	0-2	0
		12	0	21.62	21.57	21.82	0-3	0.5
	256QAM	12	6	21.61	21.60	21.83	0-3	0.5
		12	11	21.63	21.68	21.87	0-3	0.5
		25	0	21.60	21.71	21.84	0-3	0.5
		1	0	19.65	19.79	19.95	0-5	2.5
		1	12	19.74	19.65	19.79	0-5	2.5
		1	24	19.88	19.69	19.91	0-5	2.5
	12	0	19.61	19.68	19.74	0-5	2.5	
	12	6	19.68	19.67	19.89	0-5	2.5	
	12	11	19.67	19.67	19.79	0-5	2.5	
	25	0	19.65	19.65	19.82	0-5	2.5	

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	21.91	21.98	22.05	0	0
		1	24	21.96	21.94	22.08	0	0
		1	49	22.12	22.02	22.13	0	0
		25	0	22.14	22.21	22.30	0-1	0
		25	12	22.16	22.19	22.32	0-1	0
		25	24	22.18	22.20	22.38	0-1	0
	16QAM	50	0	22.24	22.24	22.37	0-1	0
		1	0	22.29	22.15	22.42	0-1	0
		1	24	22.22	22.05	22.24	0-1	0
		1	49	22.25	22.17	22.40	0-1	0
		25	0	22.15	22.13	22.24	0-2	0
		25	12	22.14	22.18	22.33	0-2	0
	64QAM	25	24	22.20	22.19	22.29	0-2	0
		50	0	22.21	22.22	22.33	0-2	0
		1	0	22.20	22.03	22.33	0-2	0
		1	24	22.16	22.28	22.32	0-2	0
		1	49	22.22	22.24	22.31	0-2	0
		25	0	21.60	21.60	21.80	0-3	0.5
	256QAM	25	12	21.62	21.62	21.79	0-3	0.5
		25	24	21.71	21.71	21.77	0-3	0.5
		25	24	21.71	21.71	21.77	0-3	0.5
		50	0	21.72	21.74	21.87	0-3	0.5
		1	0	19.72	19.73	19.84	0-5	2.5
		1	24	19.70	19.75	19.88	0-5	2.5
		1	49	19.81	19.83	19.85	0-5	2.5
		25	0	19.64	19.67	19.76	0-5	2.5
		25	12	19.65	19.66	19.80	0-5	2.5
25		24	19.69	19.65	19.80	0-5	2.5	
25		24	19.69	19.65	19.80	0-5	2.5	
50		0	19.63	19.71	19.82	0-5	2.5	

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	21.88	21.85	22.00	0	0
		1	36	22.05	21.95	22.12	0	0
		1	74	22.04	22.07	22.17	0	0
		36	0	22.14	22.16	22.29	0-1	0
		36	18	22.24	22.13	22.29	0-1	0
		36	39	22.20	22.20	22.34	0-1	0
	16QAM	75	0	22.21	22.19	22.33	0-1	0
		1	0	22.18	22.03	22.30	0-1	0
		1	36	22.23	22.27	22.36	0-1	0
		1	74	22.37	22.19	22.45	0-1	0
		36	0	22.13	22.13	22.26	0-2	0
		36	18	22.18	22.13	22.27	0-2	0
	64QAM	36	39	22.18	22.16	22.29	0-2	0
		75	0	22.16	22.14	22.30	0-2	0
		1	0	22.24	22.20	22.39	0-2	0
		1	36	22.02	22.13	22.47	0-2	0
		1	74	22.18	22.29	22.41	0-2	0
		36	0	21.68	21.66	21.75	0-3	0.5
	256QAM	36	18	21.75	21.68	21.82	0-3	0.5
		36	39	21.72	21.70	21.86	0-3	0.5
		36	0	21.70	21.64	21.81	0-3	0.5
		75	0	21.70	21.64	21.81	0-3	0.5
		1	0	19.78	19.70	19.81	0-5	2.5
		1	36	19.73	19.79	19.63	0-5	2.5
	1	74	19.95	19.84	19.80	0-5	2.5	
	36	0	19.65	19.63	19.79	0-5	2.5	
	36	18	19.68	19.66	19.83	0-5	2.5	
	36	39	19.75	19.67	19.82	0-5	2.5	
	75	0	19.68	19.66	19.78	0-5	2.5	

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	21.82	21.85	22.05	0	0
		1	49	21.92	21.95	22.09	0	0
		1	99	22.12	21.95	22.15	0	0
		50	0	22.21	22.17	22.34	0-1	0
		50	25	22.28	22.25	22.42	0-1	0
		50	49	22.28	22.23	22.43	0-1	0
	16QAM	100	0	22.24	22.18	22.37	0-1	0
		1	0	22.10	22.25	22.35	0-1	0
		1	49	22.16	22.26	22.27	0-1	0
		1	99	22.29	22.32	22.37	0-1	0
		50	0	22.18	22.17	22.37	0-2	0
		50	25	22.24	22.21	22.39	0-2	0
	64QAM	50	49	22.30	22.23	22.40	0-2	0
		100	0	22.19	22.13	22.31	0-2	0
		1	0	22.10	22.03	22.21	0-2	0
		1	49	22.21	22.07	22.36	0-2	0
		1	99	22.23	22.20	22.43	0-2	0
		50	0	21.66	21.64	21.83	0-3	0.5
	256QAM	50	25	21.75	21.72	21.88	0-3	0.5
		50	49	21.78	21.71	21.89	0-3	0.5
		100	0	21.65	21.61	21.82	0-3	0.5
		1	0	19.61	19.66	19.86	0-5	2.5
		1	49	19.74	19.70	19.94	0-5	2.5
		1	99	19.74	19.80	19.90	0-5	2.5
	50	0	19.66	19.65	19.78	0-5	2.5	
	50	25	19.74	19.69	19.84	0-5	2.5	
	50	49	19.76	19.68	19.85	0-5	2.5	
	100	0	19.71	19.67	19.81	0-5	2.5	

LTE Band 66_Main #3 Ant.Conducted Power(RSI=0,1,2,3,4)

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	21.51	21.10	21.51	0	0
		1	3	21.51	21.05	21.48	0	0
		1	5	21.53	21.13	21.55	0	0
		3	0	21.55	21.08	21.56	0	0
		3	1	21.53	21.01	21.48	0	0
		3	3	21.54	21.04	21.47	0	0
	16QAM	6	0	21.60	21.13	21.63	0-1	0
		1	0	21.77	21.22	21.78	0-1	0
		1	3	21.80	21.28	21.71	0-1	0
		1	5	21.73	21.33	21.71	0-1	0
		3	0	21.66	21.24	21.71	0-1	0
		3	1	21.64	21.27	21.73	0-1	0
	64QAM	3	3	21.66	21.24	21.69	0-1	0
		6	0	21.64	21.14	21.65	0-2	0
		1	0	21.79	21.27	21.75	0-2	0
		1	3	21.71	21.22	21.72	0-2	0
		1	5	21.72	21.30	21.78	0-2	0
		3	0	21.64	21.21	21.61	0-2	0
	256QAM	3	1	21.67	21.23	21.69	0-2	0
		3	3	21.61	21.24	21.62	0-2	0
		6	0	21.67	21.23	21.63	0-3	0
		1	0	19.70	19.19	19.57	0-5	1.5
		1	3	19.55	19.20	19.68	0-5	1.5
		1	5	19.64	19.23	19.72	0-5	1.5
	3	0	19.65	19.17	19.61	0-5	1.5	
	3	1	19.69	19.18	19.62	0-5	1.5	
	3	3	19.70	19.16	19.64	0-5	1.5	
	6	0	19.65	19.12	19.66	0-5	1.5	

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	21.41	21.12	21.55	0	0
		1	7	21.53	21.01	21.47	0	0
		1	14	21.59	21.10	21.51	0	0
		8	0	21.63	21.18	21.62	0-1	0
		8	3	21.60	21.24	21.63	0-1	0
		8	7	21.62	21.27	21.66	0-1	0
	16QAM	15	0	21.63	21.16	21.64	0-1	0
		1	0	21.79	21.34	21.69	0-1	0
		1	7	21.70	21.21	21.73	0-1	0
		1	14	21.91	21.40	21.78	0-1	0
		8	0	21.59	21.19	21.72	0-2	0
		8	3	21.64	21.27	21.67	0-2	0
	64QAM	8	7	21.64	21.24	21.69	0-2	0
		15	0	21.60	21.27	21.63	0-2	0
		1	0	21.82	21.32	21.81	0-2	0
		1	7	21.66	21.35	21.86	0-2	0
		1	14	21.64	21.41	21.86	0-2	0
		8	0	21.65	21.15	21.59	0-3	0
	256QAM	8	3	21.63	21.17	21.64	0-3	0
		8	7	21.70	21.20	21.67	0-3	0
		15	0	21.68	21.20	21.68	0-3	0
		1	0	19.87	19.29	19.76	0-5	1.5
		1	7	19.76	19.18	19.72	0-5	1.5
		1	14	19.70	19.20	19.74	0-5	1.5
		8	0	19.71	19.18	19.66	0-5	1.5
		8	3	19.66	19.22	19.66	0-5	1.5
		8	7	19.66	19.30	19.72	0-5	1.5
		15	0	19.63	19.19	19.65	0-5	1.5

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	21.72	21.33	21.70	0	0
		1	12	21.49	21.09	21.46	0	0
		1	24	21.48	21.20	21.59	0	0
		12	0	21.55	21.23	21.57	0-1	0
		12	6	21.57	21.22	21.60	0-1	0
		12	11	21.60	21.25	21.66	0-1	0
	16QAM	25	0	21.55	21.20	21.61	0-1	0
		1	0	21.77	21.29	21.85	0-1	0
		1	12	21.65	21.30	21.76	0-1	0
		1	24	21.76	21.39	21.87	0-1	0
		12	0	21.58	21.24	21.57	0-2	0
		12	6	21.67	21.21	21.68	0-2	0
	64QAM	12	11	21.67	21.34	21.71	0-2	0
		25	0	21.58	21.19	21.62	0-2	0
		1	0	21.70	21.28	21.74	0-2	0
		1	12	21.56	21.23	21.80	0-2	0
		1	24	21.74	21.38	21.74	0-2	0
		12	0	21.69	21.19	21.61	0-3	0
	256QAM	12	6	21.64	21.26	21.65	0-3	0
		12	11	21.62	21.30	21.71	0-3	0
		25	0	21.60	21.21	21.61	0-3	0
		1	0	19.79	19.37	19.74	0-5	1.5
		1	12	19.68	19.10	19.71	0-5	1.5
		1	24	19.75	19.37	19.94	0-5	1.5
		12	0	19.66	19.24	19.63	0-5	1.5
		12	6	19.66	19.31	19.70	0-5	1.5
		12	11	19.68	19.32	19.69	0-5	1.5
	25	0	19.58	19.22	19.58	0-5	1.5	

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	21.67	21.36	21.59	0	0
		1	24	21.37	21.06	21.32	0	0
		1	49	21.50	21.25	21.49	0	0
		25	0	21.52	21.20	21.45	0-1	0
		25	12	21.47	21.20	21.50	0-1	0
		25	24	21.50	21.30	21.57	0-1	0
	16QAM	50	0	21.49	21.21	21.52	0-1	0
		1	0	21.77	21.26	21.58	0-1	0
		1	24	21.59	21.34	21.57	0-1	0
		1	49	21.80	21.53	21.72	0-1	0
		25	0	21.53	21.19	21.45	0-2	0
		25	12	21.56	21.26	21.54	0-2	0
	64QAM	25	24	21.56	21.26	21.57	0-2	0
		50	0	21.53	21.22	21.56	0-2	0
		1	0	21.68	21.32	21.67	0-2	0
		1	24	21.69	21.37	21.58	0-2	0
		1	49	21.75	21.52	21.69	0-2	0
		25	0	21.50	21.16	21.38	0-3	0
	256QAM	25	12	21.48	21.19	21.51	0-3	0
		25	24	21.54	21.30	21.57	0-3	0
		50	0	21.54	21.23	21.52	0-3	0
		1	0	19.72	19.24	19.48	0-5	1.5
		1	24	19.61	19.26	19.54	0-5	1.5
		1	49	19.71	19.48	19.74	0-5	1.5
	25	0	19.50	19.17	19.50	0-5	1.5	
	25	12	19.49	19.24	19.49	0-5	1.5	
	25	24	19.53	19.24	19.57	0-5	1.5	
	50	0	19.53	19.24	19.49	0-5	1.5	

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	21.57	21.27	21.55	0	0
		1	36	21.36	21.06	21.30	0	0
		1	74	21.53	21.34	21.47	0	0
		36	0	21.37	21.15	21.42	0-1	0
		36	18	21.43	21.23	21.41	0-1	0
		36	39	21.50	21.29	21.49	0-1	0
		75	0	21.47	21.21	21.43	0-1	0
	16QAM	1	0	21.92	21.64	21.81	0-1	0
		1	36	21.57	21.17	21.44	0-1	0
		1	74	21.93	21.55	21.62	0-1	0
		36	0	21.41	21.19	21.44	0-2	0
		36	18	21.52	21.25	21.46	0-2	0
		36	39	21.60	21.34	21.54	0-2	0
		75	0	21.47	21.21	21.44	0-2	0
	64QAM	1	0	21.90	21.57	21.87	0-2	0
		1	36	21.54	21.34	21.57	0-2	0
		1	74	21.90	21.65	21.64	0-2	0
		36	0	21.46	21.19	21.44	0-3	0
		36	18	21.47	21.23	21.51	0-3	0
		36	39	21.59	21.39	21.51	0-3	0
		75	0	21.47	21.25	21.42	0-3	0
	256QAM	1	0	19.85	19.52	19.92	0-5	1.5
		1	36	19.64	19.33	19.59	0-5	1.5
		1	74	19.79	19.65	19.72	0-5	1.5
		36	0	19.51	19.23	19.45	0-5	1.5
		36	18	19.52	19.23	19.52	0-5	1.5
		36	39	19.62	19.38	19.57	0-5	1.5
		75	0	19.45	19.25	19.44	0-5	1.5

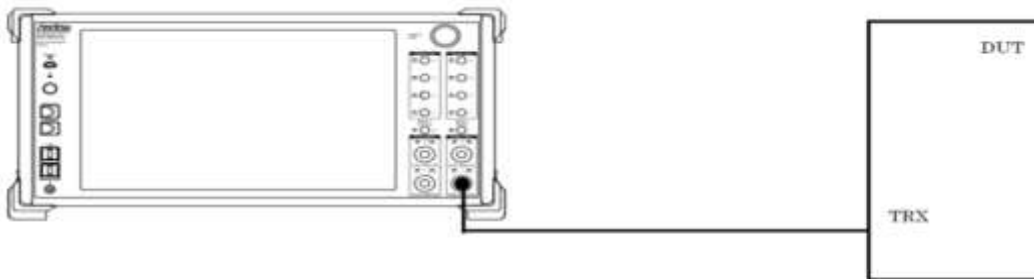
LTE Band 66 _ 20 MHz Bandwidth

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	21.44	21.49	21.32	0	0
		1	49	21.33	21.07	21.30	0	0
		1	99	21.45	21.39	21.45	0	0
		50	0	21.63	21.67	21.57	0-1	0
		50	25	21.43	21.27	21.47	0-1	0
		50	49	21.55	21.35	21.51	0-1	0
		100	0	21.44	21.25	21.45	0-1	0
	16QAM	1	0	21.69	21.54	21.94	0-1	0
		1	49	21.67	21.31	21.58	0-1	0
		1	99	21.84	21.65	21.71	0-1	0
		50	0	21.68	21.47	21.81	0-2	0
		50	25	21.49	21.24	21.51	0-2	0
		50	49	21.64	21.37	21.51	0-2	0
		100	0	21.46	21.25	21.50	0-2	0
	64QAM	1	0	21.74	21.59	21.89	0-2	0
		1	49	21.56	21.28	21.52	0-2	0
		1	99	21.90	21.81	21.65	0-2	0
		50	0	21.71	21.48	21.81	0-3	0
		50	25	21.51	21.22	21.51	0-3	0
		50	49	21.64	21.39	21.57	0-3	0
		100	0	21.46	21.21	21.48	0-3	0
	256QAM	1	0	19.53	19.53	19.82	0-5	1.5
		1	49	19.47	19.29	19.59	0-5	1.5
		1	99	19.85	19.74	19.70	0-5	1.5
		50	0	19.67	19.50	19.79	0-5	1.5
		50	25	19.46	19.24	19.49	0-5	1.5
		50	49	19.59	19.37	19.50	0-5	1.5
		100	0	19.51	19.24	19.52	0-5	1.5

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.

11.3.4 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.

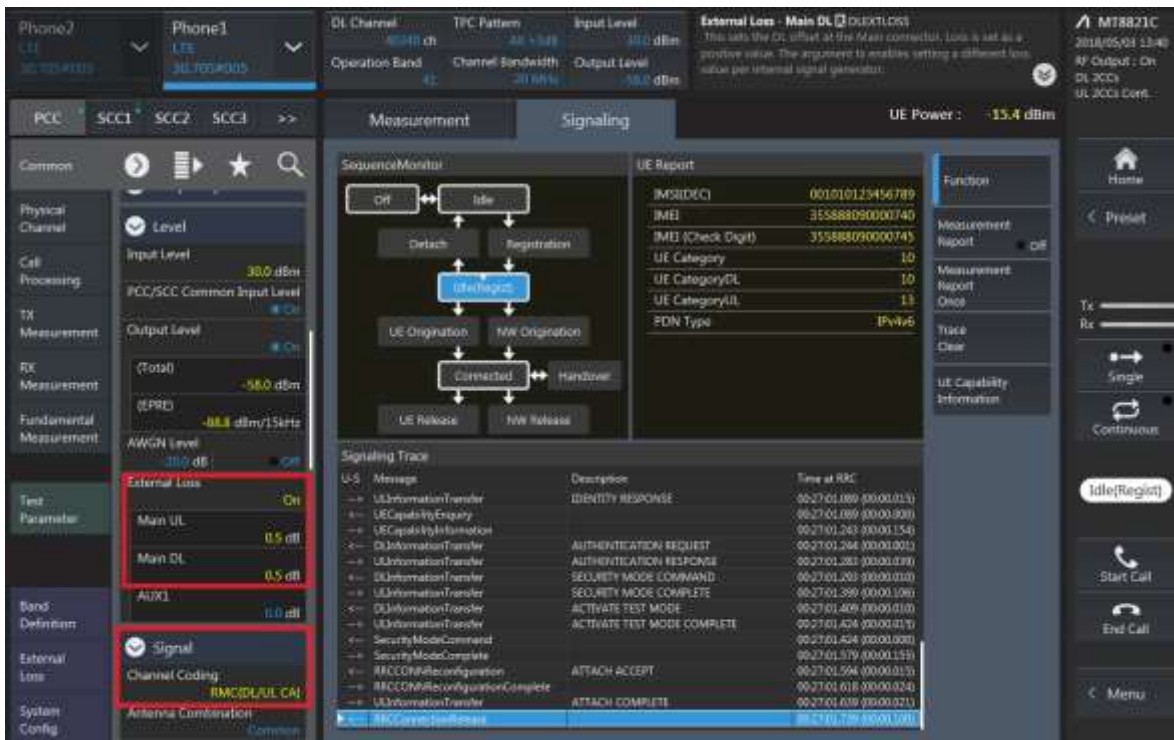
The screenshot displays the MT8821C software interface with the following details:

- Phone1 LTE:** 30.7054005
- DL Channel:** 40340 ch
- TPC Pattern:** AR + 3dB
- Input Level:** 20.0 dBm
- Operation Band:** 41
- Channel Bandwidth:** 20 MHz
- Output Level:** 58.0 dBm
- Authentication Key K1 [Lx] AUTHENT_KEY:** 00112231 44556677 8899AABB CCDDDEFF
- UE Power:** -15.8 dBm
- SequenceMonitor:** A state transition diagram showing Idle, Standby, and Connected states with transitions for Attach, Registration, UE Origination, NW Origination, Handover, UE Release, and NW Release.
- UE Report:**

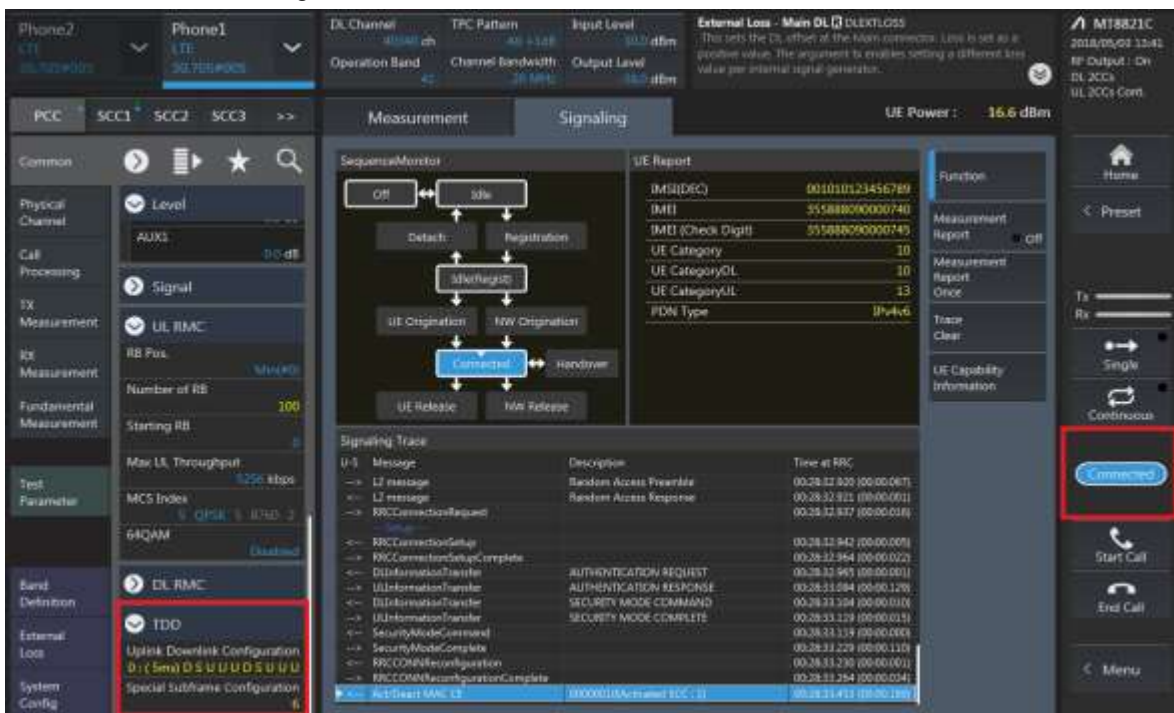
IMS(DEC)	001010123456789
IMEI	355888090000740
IMEI (Check Digit)	355888090000745
UE Category	10
UE CategoryDL	10
UE CategoryUL	13
PDN Type	IPv4v6
- Signaling Trace:**

U-S	Message	Description	Time at RRC
→	UplinkInformationTransfer	IDENTITY RESPONSE	00:27:01.089 (00:00:015)
←	UECapabilityEnquiry		00:27:01.099 (00:00:000)
→	UECapabilityInformation		00:27:01.243 (00:00:154)
←	UplinkInformationTransfer	AUTHENTICATION REQUEST	00:27:01.244 (00:00:001)
→	UplinkInformationTransfer	AUTHENTICATION RESPONSE	00:27:01.263 (00:00:020)
←	UplinkInformationTransfer	SECURITY MODE COMMAND	00:27:01.293 (00:00:010)
→	UplinkInformationTransfer	SECURITY MODE COMPLETE	00:27:01.335 (00:00:206)
←	UplinkInformationTransfer	ACTIVATE TEST MODE	00:27:01.409 (00:00:010)
→	UplinkInformationTransfer	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)
←	UplinkInformationTransfer	ATTACH COMPLETE	00:27:01.639 (00:00:021)
→	RRCConnectionRelease		00:27:01.738 (00:00:330)

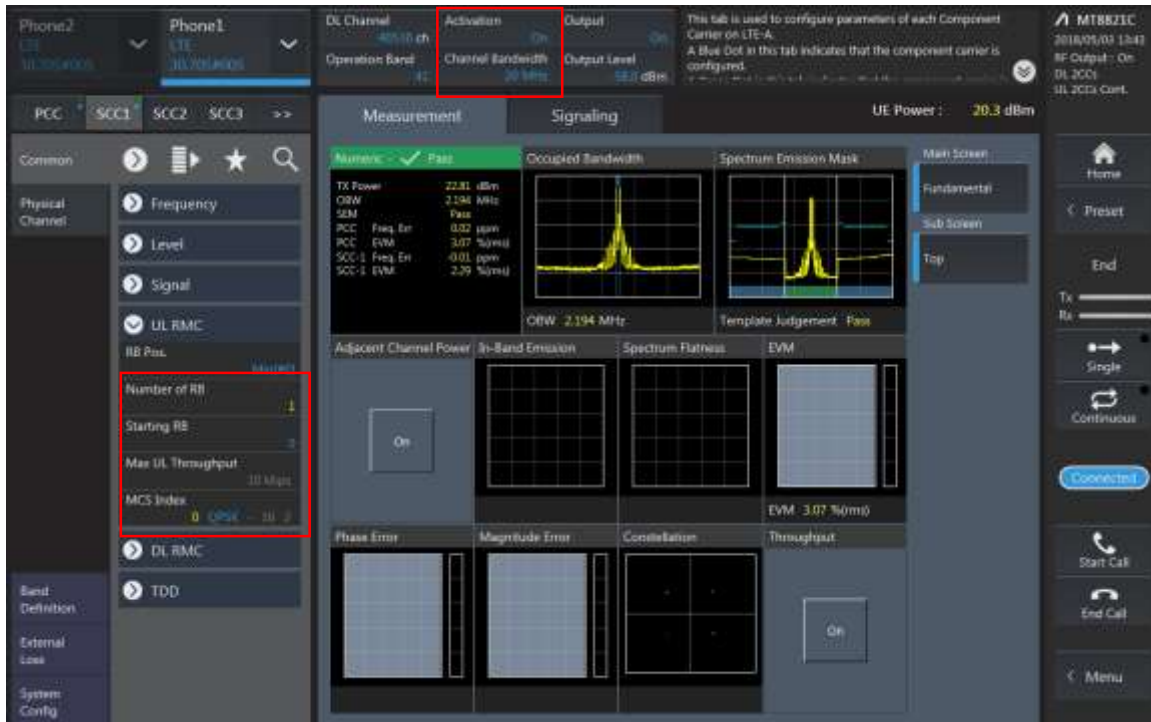
Call 1 :Select PCC Configuration for Authentication key to Register



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



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



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
41C (PC3)	20	40620	2593	QPSK	1	0	20	40422	2573.2	QPSK	1	99	23.97	22.71
41C (PC3)	20	40620	2593	QPSK	1	0	20	40422	2573.2	QPSK	1	99	19.31	18.56
48C	20	55773	3603.3	QPSK	1	99	20	55971	3623.1	QPSK	1	0	20.52	19.24
48C	20	55773	3603.3	QPSK	1	99	20	55971	3623.1	QPSK	1	0	15.99	15.24

11.4 NR Maximum Output Power

11.4.1 NR Band Maximum Conducted Power

NR Band n2_Main #2 Ant. Conducted Power(Pmax, RSI=0,4)

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	pi/2 BPSK	1	1	23.53	23.43	23.58	0
				1	13	23.45	23.38	23.56	0
				1	23	23.56	23.49	23.63	0
				12	0	23.07	22.99	23.18	0.5
				12	7	23.58	23.46	23.62	0
				12	13	23.08	23.00	23.18	0.5
			QPSK	25	0	23.08	23.00	23.16	0.5
				1	1	23.58	23.48	23.66	0
				1	13	23.47	23.44	23.58	0
				1	23	23.55	23.54	23.72	0
				12	0	22.59	22.52	22.66	1
				12	7	23.60	23.52	23.67	0
			16QAM	12	13	22.61	22.53	22.70	1
				25	0	22.57	22.54	22.72	1
				1	1	22.57	22.56	22.74	1
				1	1	21.06	20.98	21.28	2.5
				1	1	19.04	18.86	19.12	4.5
				1	1	22.02	21.94	22.10	1.5
CP	QPSK	1	1	22.02	21.94	22.10	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	pi/2 BPSK	1	1	23.57	23.36	23.55	0
				1	26	23.72	23.53	23.70	0
				1	50	23.59	23.54	23.68	0
				25	0	23.08	22.97	23.14	0.5
				25	14	23.62	23.49	23.71	0
				25	27	23.12	23.01	23.23	0.5
			QPSK	50	0	23.16	23.02	23.20	0.5
				1	1	23.59	23.43	23.63	0
				1	26	23.77	23.59	23.77	0
				1	50	23.72	23.54	23.77	0
				25	0	22.64	22.52	22.68	1
				25	14	23.65	23.55	23.71	0
			16QAM	25	27	22.66	22.56	22.73	1
				50	0	22.69	22.54	22.71	1
				1	1	22.67	22.52	22.53	1
				1	1	21.30	20.95	21.03	2.5
				1	1	18.99	18.72	19.05	4.5
				1	1	22.09	21.93	22.14	1.5
CP	QPSK	1	1	22.09	21.93	22.14	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	pi/2 BPSK	1	1	23.47	23.34	23.45	0
				1	40	23.53	23.40	23.50	0
				1	77	23.52	23.50	23.62	0
				36	0	23.08	22.95	23.05	0.5
				36	22	23.64	23.52	23.63	0
				36	43	23.12	23.04	23.13	0.5
			75	0	23.14	23.00	23.10	0.5	
			QPSK	1	1	23.58	23.41	23.48	0
				1	40	23.56	23.48	23.58	0
				1	77	23.54	23.56	23.56	0
				36	0	22.63	22.49	22.57	1
				36	22	23.67	23.55	23.65	0
				36	43	22.65	22.58	22.67	1
			75	0	22.67	22.54	22.62	1	
			16QAM	1	1	22.56	22.32	22.51	1
			64QAM	1	1	21.12	20.87	21.04	2.5
			256QAM	1	1	19.00	18.77	18.81	4.5
			CP	QPSK	1	1	22.08	21.84	21.95

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	pi/2 BPSK	1	1	23.43	23.31	23.37	0
				1	53	23.63	23.55	23.65	0
				1	104	23.41	23.52	23.57	0
				50	0	23.05	22.93	23.03	0.5
				50	28	23.58	23.50	23.60	0
				50	56	23.08	23.06	23.14	0.5
			100	0	23.12	22.98	23.09	0.5	
			QPSK	1	1	23.49	23.35	23.46	0
				1	53	23.71	23.73	23.66	0
				1	104	23.42	23.51	23.56	0
				50	0	22.64	22.45	22.57	1
				50	28	23.65	23.56	23.60	0
				50	56	22.61	22.59	22.64	1
			100	0	22.63	22.51	22.56	1	
			16QAM	1	1	22.56	22.45	22.49	1
			64QAM	1	1	21.04	20.91	20.95	2.5
			256QAM	1	1	18.93	18.73	18.97	4.5
			CP	QPSK	1	1	21.90	21.80	21.89

NR Band n2 _ 25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						376000	1880 MHz	
25 MHz	15	DFT-s	pi/2 BPSK	1	1		23.37	0
				1	66		23.63	0
				1	131		23.62	0
				64	0		23.02	0.5
				64	35		23.51	0
				64	69		23.12	0.5
			128	0		23.08	0.5	
			QPSK	1	1		23.43	0
				1	66		23.78	0
				1	131		23.59	0
				64	0		22.49	1
				64	35		23.59	0
				64	69		22.60	1
			128	0		22.59	1	
			16QAM	1	1		22.54	1
			64QAM	1	1		20.94	2.5
256QAM	1	1		18.77	4.5			
CP	QPSK	1	1		21.90	1.5		

NR Band n2 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						376000	1880 MHz	
30 MHz	15	DFT-s	pi/2 BPSK	1	1		23.40	0
				1	80		23.60	0
				1	158		23.57	0
				80	0		23.02	0.5
				80	40		23.57	0
				80	80		23.08	0.5
			160	0		23.00	0.5	
			QPSK	1	1		23.39	0
				1	80		23.76	0
				1	158		23.55	0
				80	0		22.52	1
				80	40		23.61	0
				80	80		22.65	1
			160	0		22.60	1	
			16QAM	1	1		22.52	1
			64QAM	1	1		20.92	2.5
256QAM	1	1		18.77	4.5			
CP	QPSK	1	1		21.87	1.5		

NR Band n2 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							376000		
							1880 MHz		
40 MHz	15	DFT-s	pi/2 BPSK	1	1		23.32		0
				1	108		23.65		0
				1	214		23.62		0
				108	0		23.03		0.5
				108	54		23.55		0
				108	108		23.16		0.5
			216	0		23.06		0.5	
			QPSK	1	1		23.45		0
				1	108		23.78		0
				1	214		23.61		0
				108	0		22.55		1
				108	54		23.62		0
				108	108		22.62		1
			216	0		22.60		1	
			16QAM	1	1		22.47		1
		64QAM	1	1		21.01		2.5	
256QAM	1	1		18.82		4.5			
CP	QPSK	1	1		21.82		1.5		

NR Band n5_Main #1 Ant.Conducted Power(Pmax, RSI=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	pi/2 BPSK	1	1	25.00	24.82	24.63	0
				1	13	24.74	24.69	24.66	0
				1	23	24.82	24.61	24.60	0
				12	0	24.53	24.26	24.04	0.5
				12	7	24.95	24.62	24.53	0
				12	13	24.33	24.05	24.17	0.5
			QPSK	25	0	24.42	24.13	24.09	0.5
				1	1	25.04	24.77	24.54	0
				1	13	24.85	24.58	24.68	0
				1	23	25.00	24.77	24.65	0
				12	0	23.84	23.71	23.54	1
				12	7	24.83	24.67	24.72	0
			16QAM	12	13	23.83	23.69	23.64	1
				25	0	23.98	23.72	23.74	1
				1	1	23.86	23.82	23.52	1
				1	1	22.41	21.93	22.10	2.5
				1	1	20.33	20.20	20.11	4.5
				1	1	23.32	23.07	23.08	1.5
CP	QPSK	1	1	23.32	23.07	23.08	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	pi/2 BPSK	1	1		24.76		0
				1	26		24.71		0
				1	50		24.54		0
				25	0		24.28		0.5
				25	14		24.73		0
				25	27		24.08		0.5
			QPSK	50	0		24.03		0.5
				1	1		24.68		0
				1	26		24.74		0
				1	50		24.60		0
				25	0		23.74		1
				25	14		24.74		0
			16QAM	25	27		23.55		1
				50	0		23.70		1
				1	1		23.78		1
				1	1		22.41		2.5
				1	1		20.20		4.5
				1	1		23.23		1.5
CP	QPSK	1	1	23.23		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	pi/2 BPSK	1	1		24.76	0
				1	40		24.71	0
				1	77		24.54	0
				36	0		24.28	0.5
				36	22		24.73	0
				36	43		24.08	0.5
			75	0		24.03	0.5	
			QPSK	1	1		24.68	0
				1	40		24.74	0
				1	77		24.60	0
				36	0		23.74	1
				36	22		24.74	0
				36	43		23.55	1
			75	0		23.70	1	
		16QAM	1	1		23.78	1	
		64QAM	1	1		22.41	2.5	
256QAM	1	1		20.20	4.5			
CP	QPSK	1	1		23.23	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	pi/2 BPSK	1	1		24.77	0
				1	53		24.73	0
				1	104		24.49	0
				50	0		24.23	0.5
				50	28		24.58	0
				50	56		23.98	0.5
			100	0		24.13	0.5	
			QPSK	1	1		24.75	0
				1	53		24.78	0
				1	104		24.60	0
				50	0		23.81	1
				50	28		24.60	0
				50	56		23.68	1
			100	0		23.61	1	
		16QAM	1	1		23.86	1	
		64QAM	1	1		22.21	2.5	
256QAM	1	1		20.13	4.5			
CP	QPSK	1	1		23.36	1.5		

NR Band n25_Main #2 Ant.Conducted Power(Pmax, RSI=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	pi/2 BPSK	1	1	23.50	23.47	23.53	0
				1	13	23.46	23.44	23.51	0
				1	23	23.59	23.54	23.65	0
				12	0	23.06	22.99	23.10	0.5
				12	7	23.56	23.55	23.61	0
				12	13	23.10	23.02	23.12	0.5
			QPSK	25	0	23.11	23.02	23.15	0.5
				1	1	23.61	23.55	23.63	0
				1	13	23.56	23.49	23.57	0
				1	23	23.66	23.57	23.47	0
				12	0	22.61	22.50	22.70	1
				12	7	23.57	23.55	23.71	0
			16QAM	12	13	22.62	22.57	22.70	1
				25	0	22.65	22.55	22.68	1
				1	1	22.71	22.58	22.56	1
			64QAM	1	1	21.18	21.08	21.27	2.5
				1	1	19.06	18.91	19.15	4.5
			CP	QPSK	1	1	22.08	21.98	22.09

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	pi/2 BPSK	1	1	23.62	23.40	23.57	0
				1	26	23.77	23.55	23.71	0
				1	50	23.64	23.55	23.65	0
				25	0	23.15	23.03	23.15	0.5
				25	14	23.67	23.58	23.71	0
				25	27	23.21	23.07	23.22	0.5
			QPSK	50	0	23.22	23.02	23.19	0.5
				1	1	23.62	23.49	23.70	0
				1	26	23.76	23.66	23.84	0
				1	50	23.66	23.57	23.31	0
				25	0	22.68	22.54	22.72	1
				25	14	23.72	23.54	23.73	0
			16QAM	25	27	22.73	22.60	22.74	1
				50	0	22.73	22.54	22.72	1
				1	1	22.77	22.56	22.70	1
			64QAM	1	1	21.21	20.93	21.19	2.5
				1	1	19.10	18.94	19.06	4.5
			CP	QPSK	1	1	22.18	21.97	22.21

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	pi/2 BPSK	1	1	23.49	23.30	23.46	0
				1	40	23.52	23.40	23.61	0
				1	77	23.54	23.53	23.24	0
				36	0	23.09	22.93	23.17	0.5
				36	22	23.66	23.51	23.72	0
				36	43	23.14	23.07	23.26	0.5
			QPSK	75	0	23.15	23.02	23.23	0.5
				1	1	23.56	23.41	23.61	0
				1	40	23.57	23.49	23.75	0
				1	77	23.59	23.61	23.03	0
				36	0	22.64	22.50	22.71	1
				36	22	23.69	23.56	23.74	0
			16QAM	36	43	22.65	22.60	22.78	1
				75	0	22.68	22.56	22.78	1
				1	1	22.61	22.41	22.56	1
			64QAM	1	1	21.19	21.07	21.15	2.5
				1	1	18.97	18.75	19.14	4.5
			256QAM	1	1	18.97	18.75	19.14	4.5
1	1	22.14		21.87	22.07	1.5			
CP	QPSK	1	1	22.14	21.87	22.07	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	pi/2 BPSK	1	1	23.46	23.26	23.51	0
				1	53	23.67	23.56	23.75	0
				1	104	23.47	23.47	23.24	0
				50	0	23.10	22.96	23.12	0.5
				50	28	23.64	23.59	23.76	0
				50	56	23.07	23.10	23.28	0.5
			QPSK	100	0	23.13	23.03	23.21	0.5
				1	1	23.50	23.31	23.52	0
				1	53	23.74	23.64	23.85	0
				1	104	23.45	23.42	22.99	0
				50	0	22.65	22.51	22.67	1
				50	28	23.67	23.60	23.77	0
			16QAM	50	56	22.60	22.60	22.79	1
				100	0	22.66	22.57	22.75	1
				1	1	22.54	22.35	22.52	1
			64QAM	1	1	20.98	20.91	21.10	2.5
				1	1	18.94	18.72	18.96	4.5
			256QAM	1	1	18.94	18.72	18.96	4.5
1	1	21.98		21.76	21.99	1.5			
CP	QPSK	1	1	21.98	21.76	21.99	1.5		

NR Band n25 _ 25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						376500	1882.5 MHz	
25 MHz	15	DFT-s	pi/2 BPSK	1	1		23.24	0
				1	66		23.57	0
				1	131		23.39	0
				64	0		22.88	0.5
				64	35		23.52	0
				64	69		23.04	0.5
			QPSK	128	0		22.96	0.5
				1	1		23.27	0
				1	66		23.62	0
				1	131		23.39	0
				64	0		22.40	1
				64	35		23.53	0
			16QAM	64	69		22.57	1
				128	0		22.53	1
				1	1		22.24	1
				1	1		20.83	2.5
256QAM	1	1		18.60	4.5			
	CP	QPSK	1	1		21.75	1.5	

NR Band n25 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						376500	1882.5 MHz	
30 MHz	15	DFT-s	pi/2 BPSK	1	1		23.11	0
				1	80		23.58	0
				1	158		23.36	0
				80	0		22.87	0.5
				80	40		23.55	0
				80	80		23.08	0.5
			QPSK	160	0		23.01	0.5
				1	1		23.18	0
				1	80		23.57	0
				1	158		23.39	0
				80	0		22.39	1
				80	40		23.58	0
			16QAM	80	80		22.58	1
				160	0		22.50	1
				1	1		22.20	1
				1	1		20.74	2.5
256QAM	1	1		18.73	4.5			
	CP	QPSK	1	1		21.66	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	pi/2 BPSK	1	1		23.03		0
				1	108		23.67		0
				1	214		23.18		0
				108	0		22.76		0.5
				108	54		23.51		0
				108	108		22.98		0.5
			QPSK	216	0		22.89		0.5
				1	1		23.08		0
				1	108		23.63		0
				1	214		23.21		0
				108	0		22.30		1
				108	54		23.51		0
				108	108		22.45		1
				216	0		22.42		1
			16QAM	1	1		22.09		1
			64QAM	1	1		20.52		2.5
256QAM	1	1		18.64		4.5			
CP	QPSK	1	1		21.78		1.5		

NR Band n30_Main #2 Ant.Conducted Power(Pmax, RSI=0,4)

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	pi/2 BPSK	1	1		22.86		0
				1	13		22.75		0
				1	23		22.83		0
				12	0		22.36		0.5
				12	7		22.80		0
				12	13		22.33		0.5
			QPSK	25	0		22.33		0.5
				1	1		22.84		0
				1	13		22.78		0
				1	23		22.85		0
				12	0		21.84		1
				12	7		22.82		0
				12	13		21.80		1
				25	0		21.81		1
			16QAM	1	1		21.96		1
			64QAM	1	1		20.35		2.5
			256QAM	1	1		18.26		4.5
CP	QPSK	1	1		21.29		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	pi/2 BPSK	1	1		22.76		0
				1	26		22.81		0
				1	50		22.79		0
				25	0		22.31		0.5
				25	14		22.80		0
				25	27		22.32		0.5
				50	0		22.31		0.5
			QPSK	1	1		22.80		0
				1	26		22.92		0
				1	50		22.79		0
				25	0		21.84		1
				25	14		22.84		0
				25	27		21.80		1
			50	0		21.85		1	
			16QAM	1	1		21.80		1
			64QAM	1	1		20.27		2.5
			256QAM	1	1		18.22		4.5
CP	QPSK	1	1		21.25		1.5		

NR Band n41_Main #2 Ant.Conducted Power(Pmax, RSI=0,4) Power Class 3

NR Band n41_10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]	
						500202	509400	518598	527802	537000		
						2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz		
10 MHz	30	DFT-s	pi/2 BPSK	1	1	22.27	22.24	22.82	22.83	22.89	0	
				1	12	22.26	22.35	22.96	22.95	22.86	0	
				1	22	22.27	22.59	23.01	22.94	22.95	0	
				12	0	21.73	21.82	22.38	22.49	22.41	0.5	
				12	6	22.30	22.44	22.95	22.95	22.87	0	
				12	12	21.81	21.98	22.53	22.43	22.46	0.5	
			QPSK	1	1	22.22	22.26	22.77	22.79	22.88	0	
				1	12	22.31	22.28	22.84	22.87	22.77	0	
				1	22	22.16	22.50	22.96	22.88	22.85	0	
				12	0	21.30	21.34	21.99	21.94	21.89	1	
				12	6	22.23	22.47	22.93	23.00	22.96	0	
				12	12	21.22	21.45	21.99	21.94	21.96	1	
				24	0	21.26	21.41	22.02	21.96	21.91	1	
				16QAM	1	1	21.11	21.33	21.85	21.81	21.84	1
				64QAM	1	1	19.69	19.81	20.43	20.15	20.25	2.5
				256QAM	1	1	17.59	17.78	18.34	18.27	18.44	4.5
CP	QPSK	1	1	20.71	20.78	21.35	21.35	21.44	1.5			

NR Band n41_15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]	
						500700	509652	518598	527550	536502		
						2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.51 MHz		
15 MHz	30	DFT-s	pi/2 BPSK	1	1	22.23	22.23	22.85	22.83	22.91	0	
				1	18	22.26	22.41	22.91	22.91	22.87	0	
				1	36	22.27	22.51	22.99	22.92	22.87	0	
				18	0	21.77	21.83	22.39	22.52	22.40	0.5	
				18	9	22.27	22.46	22.98	22.98	22.93	0	
				18	18	21.82	21.96	22.53	22.44	22.41	0.5	
			QPSK	36	0	21.81	21.98	22.46	22.47	22.45	0.5	
				1	1	22.18	22.26	22.77	22.83	22.89	0	
				1	18	22.25	22.34	22.86	22.88	22.78	0	
				1	36	22.13	22.49	22.97	22.87	22.87	0	
				18	0	21.29	21.42	21.94	21.96	21.93	1	
				18	9	22.26	22.43	23.00	22.95	22.92	0	
				18	18	21.28	21.46	21.97	21.97	21.97	1	
				36	0	21.23	21.40	21.97	21.98	21.90	1	
				16QAM	1	1	21.06	21.38	21.80	21.80	21.84	1
				64QAM	1	1	19.68	19.75	20.36	20.18	20.29	2.5
256QAM	1	1	17.65	17.75	18.40	18.31	18.47	4.5				
CP	QPSK	1	1	20.71	20.80	21.34	21.36	21.41	1.5			

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	22.28	22.33	22.91	22.88	22.94	0	
				1	26	22.29	22.42	22.98	22.97	22.92	0	
				1	49	22.31	22.59	23.08	23.01	22.95	0	
				25	0	21.81	21.90	22.47	22.53	22.48	0.5	
				25	13	22.33	22.49	23.04	23.00	22.97	0	
				25	26	21.84	22.06	22.55	22.49	22.50	0.5	
			QPSK	50	0	21.83	22.00	22.53	22.48	22.45	0.5	
				1	1	22.23	22.34	22.86	22.86	22.89	0	
				1	26	22.32	22.38	22.94	22.92	22.86	0	
				1	49	22.22	22.55	23.00	22.95	22.88	0	
				25	0	21.31	21.43	22.00	21.96	21.98	1	
				25	13	22.29	22.50	23.03	23.00	22.97	0	
				25	26	21.32	21.54	22.07	22.03	22.01	1	
				50	0	21.30	21.48	22.03	22.01	21.97	1	
				16QAM	1	1	21.14	21.42	21.86	21.87	21.88	1
				64QAM	1	1	19.71	19.84	20.43	20.23	20.31	2.5
256QAM	1	1	17.67	17.80	18.41	18.35	18.48	4.5				
CP	QPSK	1	1	20.77	20.88	21.36	21.40	21.47	1.5			

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	22.38	22.34	22.82	23.00	23.10	0	
				1	39	22.51	22.60	23.08	23.13	23.06	0	
				1	76	22.36	22.72	23.04	23.12	23.03	0	
				36	0	21.88	21.98	22.46	22.57	22.61	0.5	
				36	21	22.40	22.57	23.05	23.14	23.09	0	
				36	42	21.87	22.14	22.58	22.66	22.59	0.5	
			QPSK	75	0	21.90	22.08	22.53	22.62	22.58	0.5	
				1	1	22.31	22.34	22.80	22.98	23.05	0	
				1	39	22.36	22.55	23.03	23.11	23.04	0	
				1	76	22.28	22.68	22.98	23.06	22.97	0	
				36	0	21.41	21.47	21.97	22.11	22.13	1	
				36	21	22.41	22.59	23.08	23.14	23.09	0	
				36	42	21.41	21.71	22.09	22.16	22.10	1	
				75	0	21.42	21.60	22.03	22.15	22.10	1	
				16QAM	1	1	21.44	21.40	21.81	22.09	22.05	1
				64QAM	1	1	19.87	19.83	20.27	20.51	20.58	2.5
256QAM	1	1	17.80	17.80	18.29	18.59	18.65	4.5				
CP	QPSK	1	1	20.80	20.86	21.28	21.47	21.52	1.5			

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	22.22	22.32		22.91	22.98	0	
				1	53	22.30	22.69		23.08	23.09	0	
				1	104	22.27	22.88		23.05	22.98	0	
				50	0	21.78	21.99		22.42	22.55	0.5	
				50	28	22.28	22.70		22.98	22.99	0	
				50	56	21.79	22.31		22.50	22.47	0.5	
			QPSK	100	0	21.79	22.19		22.47	22.53	0.5	
				1	1	22.20	22.29		22.84	22.92	0	
				1	53	22.27	22.66		22.94	22.97	0	
				1	104	22.21	22.82		22.97	22.91	0	
				50	0	21.32	21.52		21.97	22.09	1	
				50	28	22.30	22.71		23.00	23.01	0	
				50	56	21.30	21.83		22.01	22.00	1	
				100	0	21.32	21.69		21.99	22.02	1	
				16QAM	1	1	21.04	21.23		21.94	21.82	1
				64QAM	1	1	19.74	19.75		20.44	20.44	2.5
				256QAM	1	1	17.81	17.80		18.24	18.53	4.5
CP	QPSK	1	1	20.65	20.75		21.30	21.48	1.5			

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	22.33		22.72		23.10	0	
				1	67	22.35		23.00		23.08	0	
				1	131	22.44		23.05		22.98	0	
				64	0	21.88		22.40		22.63	0.5	
				64	35	22.40		23.03		23.12	0	
				64	69	21.86		22.59		22.58	0.5	
			QPSK	128	0	21.87		22.50		22.62	0.5	
				1	1	22.30		22.70		23.09	0	
				1	67	22.30		22.95		23.02	0	
				1	131	22.40		22.96		22.93	0	
				64	0	21.41		21.94		22.19	1	
				64	35	22.40		23.05		23.16	0	
				64	69	21.37		22.08		22.09	1	
				128	0	21.38		22.03		22.14	1	
				16QAM	1	1	21.33		21.71		22.12	1
				64QAM	1	1	19.75		20.31		20.63	2.5
				256QAM	1	1	17.84		18.21		18.51	4.5
CP	QPSK	1	1	20.77		21.13		21.59	1.5			

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	22.24		22.65	22.93	0
				1	81	22.31		23.17	23.14	0
				1	160	22.55		23.01	22.95	0
				81	0	21.79		22.40	22.54	0.5
				81	41	22.30		23.05	23.08	0
				81	81	21.88		22.57	22.53	0.5
			162	0	21.78		22.51	22.56	0.5	
			QPSK	1	1	22.18		22.62	22.88	0
				1	81	22.30		23.09	23.10	0
				1	160	22.49		22.97	22.90	0
				81	0	21.30		21.91	22.05	1
				81	41	22.31		23.07	23.05	0
				81	81	21.41		22.09	22.02	1
			162	0	21.30		22.03	22.06	1	
			16QAM	1	1	21.28		21.68	21.86	1
			64QAM	1	1	19.77		20.26	20.34	2.5
256QAM	1	1	17.64		18.12	18.26	4.5			
CP	QPSK	1	1	20.71		21.10	21.38	1.5		

NR Band n41 _70 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]	
						506208		530994		
						2531.04 MHz		2654.97 MHz		
70 Mhz	30	DFT-s	pi/2 BPSK	1	1	22.32		22.81	22.81	0
				1	81	22.39		22.99	22.99	0
				1	160	22.58		22.92	22.92	0
				81	0	21.93		22.42	22.42	0.5
				81	41	22.39		22.98	22.98	0
				81	81	21.99		22.50	22.50	0.5
			162	0	21.88		22.46	22.46	0.5	
			QPSK	1	1	22.27		22.78	22.78	0
				1	81	22.34		22.94	22.94	0
				1	160	22.53		22.88	22.88	0
				81	0	21.40		21.95	21.95	1
				81	41	22.46		22.98	22.98	0
				81	81	21.50		22.00	22.00	1
			162	0	21.41		21.97	21.97	1	
			16QAM	1	1	21.30		21.86	21.86	1
			64QAM	1	1	19.80		20.26	20.26	2.5
256QAM	1	1	17.70		18.23	18.23	4.5			
CP	QPSK	1	1	20.77		21.29	21.29	1.5		

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	22.25			22.94	0
				1	109	22.27			23.07	0
				1	215	22.86			22.99	0
				108	0	21.76			22.51	0.5
				108	55	22.32			23.10	0
				108	109	22.08			22.55	0.5
			216	0	21.82			22.55	0.5	
			QPSK	1	1	22.25			22.91	0
				1	109	22.29			23.00	0
				1	215	22.82			22.93	0
				108	0	21.30			22.02	1
				108	55	22.32			23.09	0
				108	109	21.59			22.04	1
			216	0	21.34			22.05	1	
			16QAM	1	1	21.29			21.98	1
			64QAM	1	1	19.69			20.28	2.5
			256QAM	1	1	17.74			18.41	4.5
			CP	QPSK	1	1	20.67			21.41

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	22.35			22.99	0
				1	123	22.43			23.15	0
				1	243	22.98			22.95	0
				120	0	21.85			22.58	0.5
				120	63	22.47			23.18	0
				120	125	22.24			22.58	0.5
			243	0	21.95			22.60	0.5	
			QPSK	1	1	22.28			22.98	0
				1	123	22.38			23.11	0
				1	243	22.93			22.89	0
				120	0	21.36			22.09	1
				120	63	22.47			23.15	0
				120	125	21.74			22.10	1
			243	0	21.45			22.09	1	
			16QAM	1	1	21.35			22.02	1
			64QAM	1	1	19.70			20.38	2.5
			256QAM	1	1	17.91			18.44	4.5
			CP	QPSK	1	1	20.82			21.46

NR Band n41_100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]		
								518598				
100 MHz	30	DFT-s	pi/2 BPSK	1	1			22.44			0	
				1	137			23.01			0	
				1	271			23.01			0	
				135	0			22.27			0.5	
				135	69			23.02			0	
				135	138			22.56			0.5	
				270	0			22.47			0.5	
			QPSK	1	1			22.43			0	
				1	137			23.05			0	
				1	271			23.03			0	
				135	0			21.78			1	
				135	69			23.05			0	
				135	138			22.09			1	
				270	0			21.98			1	
			16QAM	1	1			21.44			1	
			64QAM	1	1			19.90			2.5	
			256QAM	1	1			17.92			4.5	
			CP	QPSK	1	1			20.82			1.5

NR Band n41_Main #2 Ant.Conducted Power(Pmax, RSI=0,4) Power Class 2

NR Band n41_10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]	
						500202	509400	518598	527802	537000		
						2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz		
10 MHz	30	DFT-s	pi/2 BPSK	1	1	24.08	24.72	25.25	25.26	25.27	0	
				1	12	24.62	24.81	25.39	25.32	25.31	0	
				1	22	24.57	25.00	25.46	25.36	25.34	0	
				12	0	24.14	24.25	24.85	24.80	24.84	0.5	
				12	6	24.63	24.84	25.38	25.40	25.33	0	
				12	12	24.15	24.37	24.91	24.85	24.82	0.5	
			QPSK	1	1	24.06	24.69	25.21	25.23	25.25	0	
				1	12	24.49	24.77	25.33	25.22	25.26	0	
				1	22	24.58	24.90	25.23	25.27	25.23	0	
				12	0	23.63	23.82	24.34	24.39	24.37	1	
				12	6	24.68	24.87	25.41	25.40	25.36	0	
				12	12	23.67	23.99	24.46	24.22	24.44	1	
				24	0	23.63	23.88	24.36	24.41	24.37	1	
				16QAM	1	1	23.34	23.68	24.19	24.25	24.25	1
				64QAM	1	1	22.02	22.24	22.86	22.78	22.81	2.5
				256QAM	1	1	20.01	20.28	20.80	20.74	20.86	4.5
CP	QPSK	1	1	23.03	23.09	23.73	23.61	23.75	1.5			

NR Band n41_15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]	
						500700	509652	518598	527550	536502		
						2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.51 MHz		
15 MHz	30	DFT-s	pi/2 BPSK	1	1	24.10	24.66	25.27	25.21	25.26	0	
				1	26	24.62	24.82	25.33	25.30	25.28	0	
				1	49	24.58	24.93	25.39	25.41	25.31	0	
				25	0	24.14	24.29	24.83	24.87	24.77	0.5	
				25	13	24.66	24.86	25.41	25.37	25.33	0	
				25	26	24.18	24.33	24.89	24.92	24.91	0.5	
			QPSK	50	0	24.12	24.39	24.92	24.88	24.86	0.5	
				1	1	24.12	24.67	25.24	25.24	25.28	0	
				1	26	24.56	24.77	25.31	25.24	25.20	0	
				1	49	24.62	24.88	25.23	25.25	25.19	0	
				25	0	23.63	23.82	24.31	24.39	24.34	1	
				25	13	24.61	24.83	25.44	25.41	25.37	0	
				25	26	23.71	23.97	24.45	24.25	24.42	1	
				50	0	23.64	23.84	24.39	24.45	24.36	1	
				16QAM	1	1	23.33	23.63	24.13	24.19	24.24	1
				64QAM	1	1	21.99	22.21	22.95	22.70	22.77	2.5
256QAM	1	1	20.01	20.34	20.85	20.73	20.82	4.5				
CP	QPSK	1	1	23.05	23.13	23.75	23.61	23.75	1.5			

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	24.17	24.72	25.31	25.29	25.33	0	
				1	26	24.65	24.84	25.40	25.39	25.32	0	
				1	49	24.67	25.00	25.47	25.43	25.36	0	
				25	0	24.17	24.34	24.90	24.90	24.87	0.5	
				25	13	24.69	24.89	25.44	25.41	25.37	0	
				25	26	24.19	24.39	24.98	24.94	24.91	0.5	
			QPSK	1	1	24.06	24.73	25.30	25.25	25.29	0	
				1	26	24.57	24.82	25.34	25.32	25.29	0	
				1	49	24.62	24.93	25.32	25.33	25.28	0	
				25	0	23.71	23.85	24.40	24.40	24.42	1	
				25	13	24.70	24.91	25.46	25.45	25.40	0	
				25	26	23.71	24.00	24.53	24.25	24.45	1	
				50	0	23.71	23.91	24.46	24.46	24.41	1	
				16QAM	1	1	23.37	23.70	24.21	24.27	24.33	1
				64QAM	1	1	22.02	22.29	22.95	22.79	22.82	2.5
				256QAM	1	1	20.06	20.37	20.87	20.80	20.89	4.5
CP	QPSK	1	1	23.09	23.18	23.77	23.70	23.78	1.5			

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	24.74	24.74	25.26	25.45	25.51	0	
				1	39	24.82	25.08	25.54	25.61	25.56	0	
				1	76	24.74	25.16	25.51	25.55	25.46	0	
				36	0	24.32	24.37	24.90	25.01	25.04	0.5	
				36	21	24.83	24.98	25.46	25.58	25.53	0	
				36	42	24.31	24.57	25.02	25.08	25.04	0.5	
			QPSK	75	0	24.32	24.48	24.82	25.05	25.03	0.5	
				1	1	24.69	24.71	25.22	25.41	25.49	0	
				1	39	24.75	24.90	25.36	25.48	25.41	0	
				1	76	24.70	25.10	25.41	25.49	25.37	0	
				36	0	23.86	23.90	24.41	24.54	24.58	1	
				36	21	24.85	25.01	25.48	25.60	25.55	0	
				36	42	23.85	24.10	24.52	24.61	24.57	1	
				75	0	23.85	24.01	24.47	24.59	24.56	1	
				16QAM	1	1	23.64	23.76	24.16	24.44	24.65	1
				64QAM	1	1	22.32	22.30	22.74	23.05	23.01	2.5
256QAM	1	1	20.28	20.32	20.78	20.97	21.06	4.5				
CP	QPSK	1	1	23.21	23.19	23.70	23.93	23.97	1.5			

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	24.73	24.77		25.31	25.43	0	
				1	53	24.88	25.11		25.41	25.44	0	
				1	104	24.78	25.35		25.51	25.43	0	
				50	0	24.23	24.47		24.90	25.07	0.5	
				50	28	24.74	25.16		25.47	25.46	0	
				50	56	24.24	24.80		24.98	24.96	0.5	
			QPSK	100	0	24.25	24.63		24.97	24.99	0.5	
				1	1	24.62	24.75		25.31	25.39	0	
				1	53	24.65	25.10		25.38	25.36	0	
				1	104	24.67	25.30		25.43	25.35	0	
				50	0	23.75	24.01		24.46	24.57	1	
				50	28	24.77	25.19		25.50	25.50	0	
				50	56	23.76	24.31		24.49	24.49	1	
				100	0	23.76	24.15		24.48	24.50	1	
				16QAM	1	1	23.68	23.75		24.44	24.41	1
				64QAM	1	1	22.29	22.31		22.95	23.14	2.5
256QAM	1	1	20.17	20.24		20.85	20.98	4.5				
CP	QPSK	1	1	23.18	23.26		23.81	23.93	1.5			

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	24.76		25.21		25.56	0	
				1	67	24.80		25.47		25.58	0	
				1	131	24.91		25.49		25.42	0	
				64	0	24.36		24.89		25.09	0.5	
				64	35	24.85		25.52		25.57	0	
				64	69	24.36		25.04		25.02	0.5	
			QPSK	128	0	24.34		24.98		25.07	0.5	
				1	1	24.73		25.22		25.48	0	
				1	67	24.75		25.52		25.49	0	
				1	131	24.85		25.52		25.37	0	
				64	0	23.89		24.42		24.63	1	
				64	35	24.87		25.55		25.38	0	
				64	69	23.87		24.57		24.55	1	
				128	0	23.85		24.52		24.61	1	
				16QAM	1	1	23.85		24.17		24.47	1
				64QAM	1	1	22.35		22.71		23.04	2.5
256QAM	1	1	20.30		20.63		20.94	4.5				
CP	QPSK	1	1	23.23		23.54		24.04	1.5			

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	24.65		25.09	25.35	0
				1	81	24.86		25.62	25.59	0
				1	160	25.02		25.48	25.44	0
				81	0	24.24		24.87	25.01	0.5
				81	41	24.77		25.53	25.57	0
				81	81	24.35		25.04	24.99	0.5
			162	0	24.25		25.00	25.04	0.5	
			QPSK	1	1	24.63		25.05	25.38	0
				1	81	24.69		25.45	25.52	0
				1	160	24.94		25.42	25.38	0
				81	0	23.79		24.42	24.53	1
				81	41	24.79		25.57	25.59	0
				81	81	23.88		24.56	24.51	1
			162	0	23.76		24.51	24.56	1	
			16QAM	1	1	23.67		24.19	24.51	1
			64QAM	1	1	22.24		22.62	22.93	2.5
256QAM	1	1	20.24		20.66	20.87	4.5			
CP	QPSK	1	1	23.05		23.61	23.75	1.5		

NR Band n41 _70 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]	
						506208		530994		
						2531.04 MHz		2654.97 MHz		
70 Mhz	30	DFT-s	pi/2 BPSK	1	1	24.78		25.25	25.25	0
				1	81	24.91		25.43	25.43	0
				1	160	25.08		25.38	25.38	0
				81	0	24.36		24.92	24.92	0.5
				81	41	24.88		25.43	25.43	0
				81	81	24.47		24.94	24.94	0.5
			162	0	24.36		24.94	24.94	0.5	
			QPSK	1	1	24.71		25.24	25.24	0
				1	81	24.82		25.37	25.37	0
				1	160	24.99		25.30	25.30	0
				81	0	23.88		24.43	24.43	1
				81	41	24.90		25.45	25.45	0
				81	81	23.98		24.47	24.47	1
			162	0	23.87		24.45	24.45	1	
			16QAM	1	1	23.75		24.39	24.39	1
			64QAM	1	1	22.27		22.84	22.84	2.5
256QAM	1	1	20.31		20.92	20.92	4.5			
CP	QPSK	1	1	23.22		23.71	23.71	1.5		

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	24.73			25.36	0
				1	109	24.78			25.48	0
				1	215	25.35			25.45	0
				108	0	24.24			25.02	0.5
				108	55	24.82			25.54	0
				108	109	24.56			25.00	0.5
				216	0	24.32			25.00	0.5
			QPSK	1	1	24.66			25.24	0
				1	109	24.71			25.46	0
				1	215	25.28			25.36	0
				108	0	23.80			24.51	1
				108	55	24.84			25.57	0
				108	109	24.09			24.54	1
			16QAM	216	0	23.85			24.53	1
				1	1	23.79			24.46	1
				1	1	22.26			22.84	2.5
				1	1	20.20			20.95	4.5
CP	QPSK	1	1	23.18			23.88	1.5		

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	24.80			25.45	0
				1	123	24.93			25.61	0
				1	243	25.47			25.41	0
				120	0	24.33			25.05	0.5
				120	63	24.97			25.65	0
				120	125	24.71			25.06	0.5
				243	0	24.45			25.08	0.5
			QPSK	1	1	24.76			25.48	0
				1	123	24.89			25.62	0
				1	243	25.38			25.38	0
				120	0	23.87			24.59	1
				120	63	24.97			25.67	0
				120	125	24.23			24.59	1
			16QAM	243	0	23.96			24.61	1
				1	1	23.88			24.49	1
				1	1	22.34			22.97	2.5
				1	1	20.28			20.98	4.5
CP	QPSK	1	1	23.29			23.88	1.5		

NR Band n41 _100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]		
								518598				
100 MHz	30	DFT-s	pi/2 BPSK	1	1			2592.99 MHz			0	
				1	137						0	
				1	271						0	
				135	0						0.5	
				135	69						0	
				135	138						0.5	
				270	0						0.5	
			QPSK	1	1						0	
				1	137						0	
				1	271						0	
				135	0						1	
				135	69						0	
				135	138						1	
				270	0						1	
			16QAM	1	1						1	
			64QAM	1	1						2.5	
			256QAM	1	1						4.5	
			CP	QPSK	1	1						1.5

NR Band n66_Main #2 Ant.Conducted Power(Pmax,RSI=0,4)

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	pi/2 BPSK	1	1	23.08	23.22	23.57	0
				1	13	23.04	23.24	23.53	0
				1	23	23.22	23.36	23.63	0
				12	0	22.65	22.80	23.06	0.5
				12	7	23.16	23.30	23.58	0
				12	13	22.70	22.84	23.11	0.5
			QPSK	25	0	22.69	22.88	23.12	0.5
				1	1	23.17	23.32	23.59	0
				1	13	23.12	23.31	23.49	0
				1	23	23.24	23.45	23.59	0
				12	0	22.21	22.34	22.59	1
				12	7	23.21	23.38	23.62	0
			16QAM	12	13	22.21	22.39	22.62	1
				25	0	22.21	22.36	22.64	1
				1	1	22.18	22.26	22.69	1
			64QAM	1	1	20.75	20.81	21.06	2.5
				1	1	18.70	18.78	19.05	4.5
				1	1	21.70	21.77	22.08	1.5
256QAM	1	1	18.70	18.78	19.05	4.5			
	1	1	21.70	21.77	22.08	1.5			
CP	QPSK	1	1	21.70	21.77	22.08	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	355500	
						1715 MHz	1745 MHz	1775 MHz	
10 MHz	15	DFT-s	pi/2 BPSK	1	1	23.21	23.20	23.50	0
				1	26	23.35	23.39	23.61	0
				1	50	23.30	23.46	23.65	0
				25	0	22.75	22.83	23.10	0.5
				25	14	23.35	23.34	23.64	0
				25	27	22.82	22.92	23.14	0.5
			QPSK	50	0	22.81	22.85	23.17	0.5
				1	1	23.34	23.22	23.58	0
				1	26	23.43	23.42	23.69	0
				1	50	23.33	23.45	23.66	0
				25	0	22.28	22.33	22.66	1
				25	14	23.31	23.37	23.63	0
			16QAM	25	27	22.35	22.46	22.68	1
				25	0	22.31	22.34	22.67	1
				1	1	22.20	22.18	22.63	1
			64QAM	1	1	20.64	20.82	21.16	2.5
				1	1	18.67	18.64	19.03	4.5
				1	1	21.77	21.70	22.07	1.5
256QAM	1	1	18.67	18.64	19.03	4.5			
	1	1	21.77	21.70	22.07	1.5			
CP	QPSK	1	1	21.77	21.70	22.07	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. MHz	1745 MHz	1772.5 MHz	
15 MHz	15	DFT-s	pi/2 BPSK	1	1	23.17	23.09	23.35	0
				1	40	23.16	23.29	23.48	0
				1	77	23.24	23.42	23.55	0
				36	0	22.76	22.76	22.99	0.5
				36	22	23.33	23.41	23.57	0
				36	43	22.80	23.02	23.09	0.5
			QPSK	75	0	22.81	22.87	23.06	0.5
				1	1	23.21	23.10	23.38	0
				1	40	23.21	23.29	23.51	0
				1	77	23.25	23.48	23.60	0
				36	0	22.31	22.31	22.53	1
				36	22	23.32	23.42	23.61	0
				36	43	22.33	22.55	22.60	1
			16QAM	75	0	22.27	22.39	22.56	1
				1	1	22.27	22.12	22.52	1
				1	1	20.71	20.70	20.93	2.5
			256QAM	1	1	18.66	18.57	18.82	4.5
1	1	21.71		21.61	21.86	1.5			
CP	QPSK	1	1	21.71	21.61	21.86	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	23.03	23.05	23.28	0
				1	53	23.35	23.56	23.69	0
				1	104	23.14	23.47	23.56	0
				50	0	22.66	22.75	23.00	0.5
				50	28	23.24	23.42	23.62	0
				50	56	22.73	23.02	23.16	0.5
				100	0	22.72	22.90	23.12	0.5
			QPSK	1	1	23.10	23.15	23.32	0
				1	53	23.35	23.52	23.68	0
				1	104	23.16	23.50	23.62	0
				50	0	22.22	22.28	22.51	1
				50	28	23.26	23.45	23.62	0
				50	56	22.22	22.56	22.65	1
			16QAM	100	0	22.28	22.41	22.60	1
				1	1	22.19	22.12	22.29	1
				1	1	20.62	20.59	20.91	2.5
				1	1	18.40	18.50	18.83	4.5
CP	QPSK	1	1	21.57	21.59	21.77	1.5		

NR Band n66 _ 25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
							1745 MHz		
25 MHz	15	DFT-s	pi/2 BPSK	1	1		23.14		0
				1	66		23.63		0
				1	131		23.55		0
				64	0		22.76		0.5
				64	35		23.47		0
				64	69		23.04		0.5
			128	0		23.00		0.5	
			QPSK	1	1		23.24		0
				1	66		23.59		0
				1	131		23.54		0
				64	0		22.32		1
				64	35		23.46		0
				64	69		22.58		1
			128	0		22.47		1	
			16QAM	1	1		22.16		1
			64QAM	1	1		20.68		2.5
256QAM	1	1		18.52		4.5			
CP	QPSK	1	1		21.68		1.5		

NR Band n66 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
							1745 MHz		
30 MHz	15	DFT-s	pi/2 BPSK	1	1		23.07		0
				1	80		23.53		0
				1	158		23.35		0
				80	0		22.58		0.5
				80	40		23.38		0
				80	80		22.93		0.5
			160	0		22.84		0.5	
			QPSK	1	1		22.97		0
				1	80		23.59		0
				1	158		23.35		0
				80	0		22.13		1
				80	40		23.45		0
				80	80		22.51		1
			160	0		22.37		1	
			16QAM	1	1		22.03		1
			64QAM	1	1		20.53		2.5
256QAM	1	1		18.55		4.5			
CP	QPSK	1	1		21.62		1.5		

NR Band n66 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
							1745 MHz		
40 MHz	15	DFT-s	pi/2 BPSK	1	1		23.03		0
				1	108		23.52		0
				1	214		23.14		0
				108	0		22.52		0.5
				108	54		23.40		0
				108	108		22.93		0.5
			216	0		22.78		0.5	
			QPSK	1	1		23.08		0
				1	108		23.58		0
				1	214		23.17		0
				108	0		22.08		1
				108	54		23.40		0
				108	108		22.44		1
			216	0		22.32		1	
			16QAM	1	1		22.03		1
			64QAM	1	1		20.63		2.5
256QAM	1	1		18.51		4.5			
CP	QPSK	1	1		21.58		1.5		

NR Band n70_Main #2 Ant.Conducted Power(Pmax,RSI=0,4)

NR Band n70_5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						339500	340500	341500	
						1697.5 MHz	1702.5 MHz	1707.5 MHz	
5 MHz	15	DFT-s	pi/2 BPSK	1	1	24.53	24.57	24.57	0
				1	13	24.42	24.50	24.60	0
				1	23	24.54	24.64	24.71	0
				12	0	24.03	24.04	24.14	0.5
				12	7	24.56	24.57	24.67	0
				12	13	24.08	24.09	24.19	0.5
			QPSK	25	0	24.09	24.10	24.19	0.5
				1	1	24.38	24.53	24.61	0
				1	13	24.49	24.51	24.55	0
				1	23	24.60	24.67	24.64	0
				12	0	23.55	23.57	23.67	1
				12	7	24.58	24.58	24.70	0
			16QAM	12	13	23.58	23.60	23.71	1
				25	0	23.58	23.60	23.71	1
				1	1	23.52	23.76	23.80	1
				1	1	22.33	22.15	22.14	2.5
				1	1	19.95	19.92	20.10	4.5
				1	1	23.02	23.02	23.05	1.5
CP	QPSK	1	1	23.02	23.02	23.05	1.5		

NR Band n70_10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						340000	340500	341000	
						1700 MHz	1702.5 MHz	1705 MHz	
10 MHz	15	DFT-s	pi/2 BPSK	1	1	24.18	24.25	24.59	0
				1	26	24.46	24.43	24.78	0
				1	50	24.33	24.43	24.74	0
				25	0	23.83	23.80	24.12	0.5
				25	14	24.36	24.37	24.63	0
				25	27	23.91	23.87	24.21	0.5
			QPSK	50	0	23.83	23.80	24.13	0.5
				1	1	24.30	24.30	24.58	0
				1	26	24.52	24.48	24.74	0
				1	50	24.43	24.48	24.72	0
				25	0	23.37	23.36	23.62	1
				25	14	24.39	24.40	24.65	0
			16QAM	25	27	23.45	23.42	23.72	1
				50	0	23.37	23.38	23.63	1
				1	1	23.43	23.21	23.57	1
				1	1	21.85	21.95	22.32	2.5
				1	1	19.69	19.57	19.98	4.5
				1	1	22.71	22.49	22.92	1.5
CP	QPSK	1	1	22.71	22.49	22.92	1.5		

NR Band n70 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							340500		
							1702.5 MHz		
15 MHz	15	DFT-s	pi/2 BPSK	1	1		23.80		0
				1	40		23.88		0
				1	77		24.17		0
				36	0		23.75		0.5
				36	22		24.33		0
				36	43		23.89		0.5
				75	0		23.81		0.5
			QPSK	1	1		24.16		0
				1	40		24.37		0
				1	77		24.34		0
				36	0		23.29		1
				36	22		24.36		0
				36	43		23.44		1
				75	0		23.34		1
			16QAM	1	1		23.46		1
			64QAM	1	1		21.75		2.5
			256QAM	1	1		19.60		4.5
CP	QPSK	1	1		22.78		1.5		

NR Band n71_Main #1 Ant.Conducted Power(Pmax,RSI=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	pi/2 BPSK	1	1	24.25	24.45	24.51	0
				1	13	24.16	24.40	24.50	0
				1	23	24.34	24.49	24.48	0
				12	0	23.70	23.90	23.99	0.5
				12	7	24.26	24.33	24.59	0
				12	13	23.62	24.03	23.96	0.5
			QPSK	25	0	23.78	23.89	23.93	0.5
				1	1	24.16	24.40	24.53	0
				1	13	24.25	24.55	24.53	0
				1	23	24.28	24.58	24.58	0
				12	0	23.19	23.50	23.51	1
				12	7	24.16	24.43	24.44	0
			16QAM	12	13	23.28	23.53	23.42	1
				25	0	23.17	23.55	23.48	1
				1	1	23.24	23.61	23.49	1
			64QAM	1	1	21.76	22.06	21.96	2.5
				1	1	19.58	19.80	20.00	4.5
			256QAM	1	1	19.58	19.80	20.00	4.5
CP	QPSK	1	1	22.66	22.97	22.96	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	pi/2 BPSK	1	1	24.07	24.45	24.46	0
				1	26	24.30	24.43	24.56	0
				1	50	24.47	24.49	24.37	0
				25	0	23.61	23.88	23.94	0.5
				25	14	24.32	24.39	24.47	0
				25	27	23.78	23.99	23.95	0.5
			QPSK	50	0	23.78	24.06	24.01	0.5
				1	1	24.14	24.42	24.59	0
				1	26	24.51	24.56	24.40	0
				1	50	24.37	24.52	24.47	0
				25	0	23.24	23.35	23.41	1
				25	14	24.30	24.39	24.36	0
			16QAM	25	27	23.37	23.53	23.49	1
				50	0	23.26	23.48	23.37	1
				1	1	23.20	23.38	23.52	1
			64QAM	1	1	21.80	21.86	21.95	2.5
				1	1	19.74	19.85	19.91	4.5
			256QAM	1	1	19.74	19.85	19.91	4.5
CP	QPSK	1	1	22.55	22.72	23.12	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	pi/2 BPSK	1	1		24.13	0
				1	40		24.32	0
				1	77		24.59	0
				36	0		23.86	0.5
				36	22		24.59	0
				36	43		23.99	0.5
			75	0		24.06	0.5	
			QPSK	1	1		24.17	0
				1	40		24.49	0
				1	77		24.56	0
				36	0		23.35	1
				36	22		24.48	0
				36	43		23.61	1
			75	0		23.41	1	
			16QAM	1	1		23.41	1
			64QAM	1	1		21.94	2.5
256QAM	1	1		19.77	4.5			
CP	QPSK	1	1		22.77	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	pi/2 BPSK	1	1		24.15	0
				1	53		24.67	0
				1	104		24.47	0
				50	0		23.71	1
				50	28		24.45	0
				50	56		23.88	1
			100	0		23.97	1	
			QPSK	1	1		24.23	0
				1	53		24.70	0
				1	104		24.63	0
				50	0		23.27	1
				50	28		24.57	0
				50	56		23.54	1
			100	0		23.49	1	
			16QAM	1	1		23.01	1
			64QAM	1	1		21.85	2.5
256QAM	1	1		19.50	4.5			
CP	QPSK	1	1		22.60	1.5		

11.4.2 NR Band Reduced Conducted Power

NR Band n2_Main #2 Ant.Conducted Power(RSI=1,2,3)

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	pi/2 BPSK	1	1	20.85	20.75	20.72	0	
				1	13	20.81	20.75	20.68	0	
				1	23	20.91	20.79	20.80	0	
				12	0	20.88	20.82	20.77	0	
				12	7	20.92	20.77	20.83	0	
				12	13	20.92	20.79	20.80	0	
			QPSK	25	0	20.94	20.83	20.80	0	
				1	1	20.89	20.87	20.82	0	
				1	13	20.90	20.72	20.79	0	
				1	23	20.97	20.89	20.88	0	
				12	0	20.93	20.77	20.79	0	
				12	7	20.96	20.83	20.85	0	
			16QAM	12	13	20.91	20.82	20.83	0	
				25	0	21.00	20.78	20.83	0	
				1	1	20.93	20.85	20.75	0	
				1	1	20.97	20.98	20.97	0	
			256QAM	1	1	19.42	19.26	19.44	1.5	
			CP	QPSK	1	1	20.92	20.86	20.88	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	pi/2 BPSK	1	1	20.94	20.82	20.70	0	
				1	26	21.07	20.93	20.83	0	
				1	50	20.90	20.82	20.79	0	
				25	0	20.99	20.83	20.80	0	
				25	14	21.00	20.84	20.75	0	
				25	27	20.96	20.77	20.78	0	
			QPSK	50	0	20.98	20.83	20.81	0	
				1	1	20.92	20.78	20.79	0	
				1	26	21.05	20.85	20.87	0	
				1	50	20.98	20.75	20.87	0	
				25	0	20.98	20.86	20.83	0	
				25	14	21.00	20.88	20.78	0	
			16QAM	25	27	20.95	20.80	20.86	0	
				50	0	20.92	20.80	20.77	0	
				1	1	20.96	20.88	20.78	0	
				1	1	20.97	21.03	21.19	0	
			256QAM	1	1	19.42	19.55	19.26	1.5	
			CP	QPSK	1	1	20.96	20.77	20.82	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	pi/2 BPSK	1	1	20.83	20.74	20.66	0	
				1	40	20.83	20.66	20.68	0	
				1	77	20.79	20.82	20.80	0	
				36	0	20.94	20.80	20.75	0	
				36	22	20.95	20.76	20.70	0	
				36	43	20.88	20.81	20.73	0	
				75	0	20.90	20.84	20.75	0	
			QPSK	1	1	20.85	20.72	20.77	0	
				1	40	20.88	20.73	20.68	0	
				1	77	20.81	20.80	20.75	0	
				36	0	20.90	20.82	20.72	0	
				36	22	20.92	20.79	20.80	0	
				36	43	20.94	20.83	20.75	0	
				75	0	20.97	20.82	20.79	0	
			16QAM	1	1	20.93	20.74	20.62	0	
			64QAM	1	1	20.94	20.95	20.82	0	
			256QAM	1	1	19.56	19.23	19.14	1.5	
			CP	QPSK	1	1	20.95	20.78	20.76	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	pi/2 BPSK	1	1	20.79	20.62	20.58	0	
				1	53	20.90	20.80	20.79	0	
				1	104	20.71	20.78	20.72	0	
				50	0	20.88	20.69	20.73	0	
				50	28	20.90	20.83	20.79	0	
				50	56	20.79	20.78	20.80	0	
				100	0	20.83	20.82	20.78	0	
			QPSK	1	1	20.86	20.67	20.64	0	
				1	53	21.06	20.93	20.91	0	
				1	104	20.73	20.74	20.79	0	
				50	0	20.85	20.74	20.80	0	
				50	28	20.88	20.78	20.78	0	
				50	56	20.82	20.82	20.79	0	
				100	0	20.84	20.83	20.76	0	
			16QAM	1	1	20.82	20.57	20.67	0	
			64QAM	1	1	20.84	20.84	20.74	0	
			256QAM	1	1	18.94	19.11	19.13	1.5	
			CP	QPSK	1	1	20.75	20.68	20.74	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	pi/2 BPSK	1	1	20.83	20.74	20.66	0	
				1	40	20.83	20.66	20.68	0	
				1	77	20.79	20.82	20.80	0	
				36	0	20.94	20.80	20.75	0	
				36	22	20.95	20.76	20.70	0	
				36	43	20.88	20.81	20.73	0	
			75	0	20.90	20.84	20.75	0		
			QPSK	1	1	20.85	20.72	20.77	0	
				1	40	20.88	20.73	20.68	0	
				1	77	20.81	20.80	20.75	0	
				36	0	20.90	20.82	20.72	0	
				36	22	20.92	20.79	20.80	0	
				36	43	20.94	20.83	20.75	0	
			75	0	20.97	20.82	20.79	0		
			16QAM	1	1	20.93	20.74	20.62	0	
			64QAM	1	1	20.94	20.95	20.82	0	
			256QAM	1	1	19.56	19.23	19.14	1.5	
			CP	QPSK	1	1	20.95	20.78	20.76	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	pi/2 BPSK	1	1	20.79	20.62	20.58	0	
				1	53	20.90	20.80	20.79	0	
				1	104	20.71	20.78	20.72	0	
				50	0	20.88	20.69	20.73	0	
				50	28	20.90	20.83	20.79	0	
				50	56	20.79	20.78	20.80	0	
			100	0	20.83	20.82	20.78	0		
			QPSK	1	1	20.86	20.67	20.64	0	
				1	53	21.06	20.93	20.91	0	
				1	104	20.73	20.74	20.79	0	
				50	0	20.85	20.74	20.80	0	
				50	28	20.88	20.78	20.78	0	
				50	56	20.82	20.82	20.79	0	
			100	0	20.84	20.83	20.76	0		
			16QAM	1	1	20.82	20.57	20.67	0	
			64QAM	1	1	20.84	20.84	20.74	0	
			256QAM	1	1	18.94	19.11	19.13	1.5	
			CP	QPSK	1	1	20.75	20.68	20.74	0

NR Band n2 _ 25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							376000		
							1880 MHz		
25 MHz	15	DFT-s	pi/2 BPSK	1	1		20.70		0
				1	66		20.88		0
				1	131		20.82		0
				64	0		20.71		0
				64	35		20.92		0
				64	69		20.80		0
			128	0		20.85		0	
			QPSK	1	1		20.77		0
				1	66		20.95		0
				1	131		20.82		0
				64	0		20.78		0
				64	35		20.87		0
				64	69		20.87		0
			128	0		20.88		0	
			16QAM	1	1		20.59		0
			64QAM	1	1		20.89		0
256QAM	1	1		19.18		1.5			
CP	QPSK	1	1		20.71		0		

NR Band n2 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							376000		
							1880 MHz		
30 MHz	15	DFT-s	pi/2 BPSK	1	1		20.67		0
				1	80		20.90		0
				1	158		20.87		0
				80	0		20.77		0
				80	40		20.85		0
				80	80		20.79		0
			160	0		20.84		0	
			QPSK	1	1		20.77		0
				1	80		21.03		0
				1	158		20.81		0
				80	0		20.81		0
				80	40		20.80		0
				80	80		20.84		0
			160	0		20.91		0	
			16QAM	1	1		20.63		0
			64QAM	1	1		20.92		0
256QAM	1	1		19.20		1.5			
CP	QPSK	1	1		20.77		0		

NR Band n2 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							376000		
							1880 MHz		
40 MHz	15	DFT-s	pi/2 BPSK	1	1		20.70		0
				1	108		20.88		0
				1	214		20.83		0
				108	0		20.70		0
				108	54		20.88		0
				108	108		20.87		0
			216	0		20.85		0	
			QPSK	1	1		20.68		0
				1	108		20.98		0
				1	214		20.81		0
				108	0		20.83		0
				108	54		20.81		0
				108	108		20.85		0
			216	0		20.93		0	
			16QAM	1	1		20.60		0
		64QAM	1	1		20.86		0	
256QAM	1	1		19.15		1.5			
CP	QPSK	1	1		20.73		0		

NR Band n25_Main #2 Ant.Conducted Power(RSI=1,2,3)

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	pi/2 BPSK	1	1	20.87	20.84	20.80	0
				1	13	20.86	20.70	20.78	0
				1	23	20.95	20.79	20.86	0
				12	0	20.94	20.81	20.82	0
				12	7	20.94	20.83	20.88	0
				12	13	20.93	20.76	20.80	0
			25	0	20.97	20.82	20.86	0	
			QPSK	1	1	20.90	20.76	20.83	0
				1	13	20.88	20.77	20.74	0
				1	23	20.99	20.84	20.84	0
				12	0	20.99	20.81	20.84	0
				12	7	21.00	20.80	20.85	0
				12	13	20.97	20.76	20.79	0
			25	0	20.94	20.80	20.79	0	
			16QAM	1	1	21.03	20.74	20.94	0
			64QAM	1	1	21.09	20.85	20.82	0
			256QAM	1	1	19.37	19.27	19.35	1.5
			CP	QPSK	1	1	20.98	20.80	21.16

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	pi/2 BPSK	1	1	20.89	20.79	20.71	0
				1	26	20.97	20.85	20.85	0
				1	50	20.81	20.79	20.71	0
				25	0	20.97	20.80	20.79	0
				25	14	20.96	20.73	20.80	0
				25	27	20.96	20.75	20.82	0
			50	0	20.89	20.82	20.86	0	
			QPSK	1	1	20.90	20.77	20.71	0
				1	26	21.02	20.86	20.97	0
				1	50	20.94	20.82	20.79	0
				25	0	20.99	20.77	20.74	0
				25	14	21.00	20.81	20.86	0
				25	27	20.98	20.80	20.84	0
			50	0	20.98	20.81	20.80	0	
			16QAM	1	1	21.12	20.73	20.85	0
			64QAM	1	1	21.02	20.87	20.81	0
			256QAM	1	1	19.32	19.51	19.37	1.5
			CP	QPSK	1	1	20.95	20.81	20.66

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	pi/2 BPSK	1	1	20.84	20.72	20.69	0
				1	40	20.74	20.67	20.71	0
				1	77	20.79	20.75	20.76	0
				36	0	20.96	20.72	20.67	0
				36	22	20.99	20.84	20.76	0
				36	43	20.94	20.75	20.78	0
				75	0	20.93	20.83	20.75	0
			QPSK	1	1	20.89	20.72	20.67	0
				1	40	20.87	20.73	20.69	0
				1	77	20.84	20.83	20.75	0
				36	0	20.85	20.74	20.75	0
				36	22	20.98	20.81	20.80	0
				36	43	20.94	20.84	20.84	0
				75	0	20.95	20.80	20.76	0
			16QAM	1	1	20.82	20.90	20.60	0
			64QAM	1	1	20.78	20.82	20.83	0
			256QAM	1	1	19.32	19.29	18.97	1.5
CP	QPSK	1	1	20.85	20.73	21.05	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	pi/2 BPSK	1	1	20.69	20.55	20.62	0
				1	53	20.91	20.79	20.80	0
				1	104	20.62	20.75	20.77	0
				50	0	20.77	20.72	20.68	0
				50	28	20.79	20.76	20.75	0
				50	56	20.74	20.81	20.75	0
				100	0	20.79	20.75	20.79	0
			QPSK	1	1	20.82	20.61	20.66	0
				1	53	20.89	20.84	20.80	0
				1	104	20.70	20.75	20.79	0
				50	0	20.80	20.73	20.74	0
				50	28	20.87	20.80	20.81	0
				50	56	20.77	20.71	20.85	0
				100	0	20.86	20.79	20.76	0
			16QAM	1	1	20.77	20.75	20.72	0
			64QAM	1	1	20.89	20.96	20.92	0
			256QAM	1	1	19.13	19.10	19.05	1.5
CP	QPSK	1	1	20.69	20.83	20.68	0		

NR Band n25 _ 25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						376500	1882.5 MHz	
25 MHz	15	DFT-s	pi/2 BPSK	1	1		20.48	0
				1	66		20.71	0
				1	131		20.57	0
				64	0		20.60	0
				64	35		20.71	0
				64	69		20.65	0
			QPSK	128	0		20.68	0
				1	1		20.44	0
				1	66		20.90	0
				1	131		20.62	0
				64	0		20.70	0
				64	35		20.74	0
			16QAM	64	69		20.73	0
				64	0		20.70	0
				128	0		20.70	0
				1	1		20.61	0
64QAM	1	1		20.71	0			
256QAM	1	1		19.14	1.5			
CP	QPSK	1	1		20.54	0		

NR Band n25 _ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						376500	1882.5 MHz	
30 MHz	15	DFT-s	pi/2 BPSK	1	1		20.37	0
				1	80		20.73	0
				1	158		20.60	0
				80	0		20.56	0
				80	40		20.72	0
				80	80		20.68	0
			QPSK	160	0		20.68	0
				1	1		20.34	0
				1	80		20.77	0
				1	158		20.48	0
				80	0		20.63	0
				80	40		20.73	0
			16QAM	80	80		20.76	0
				80	0		20.66	0
				1	1		20.25	0
				1	1		20.24	0
64QAM	1	1		20.24	0			
256QAM	1	1		18.93	1.5			
CP	QPSK	1	1		20.40	0		

NR Band n25 _ 40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							376500		
							1882.5 MHz		
40 MHz	15	DFT-s	pi/2 BPSK	1	1		20.14		0
				1	108		20.81		0
				1	214		20.30		0
				108	0		20.48		0
				108	54		20.70		0
				108	108		20.62		0
			216	0		20.52		0	
			QPSK	1	1		20.24		0
				1	108		20.71		0
				1	214		20.26		0
				108	0		20.46		0
				108	54		20.70		0
				108	108		20.66		0
			216	0		20.54		0	
			16QAM	1	1		20.20		0
		64QAM	1	1		20.60		0	
256QAM	1	1		18.82		1.5			
CP	QPSK	1	1		20.19		0		

NR Band n30_Main #2 Ant.Conducted Power(RSI=1,2,3)

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	pi/2 BPSK	1	1		21.25		0
				1	13		21.19		0
				1	23		21.27		0
				12	0		21.29		0
				12	7		21.29		0
				12	13		21.37		0
			QPSK	25	0		21.30		0
				1	1		21.30		0
				1	13		21.28		0
				1	23		21.38		0
				12	0		21.34		0
				12	7		21.35		0
				12	13		21.34		0
				25	0		21.40		0
			16QAM	1	1		21.27		0
			64QAM	1	1		20.89		0.5
			256QAM	1	1		18.74		2.5
CP	QPSK	1	1		21.40		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	pi/2 BPSK	1	1		21.19		0
				1	26		21.39		0
				1	50		21.28		0
				25	0		21.24		0
				25	14		21.34		0
				25	27		21.28		0
				50	0		21.34		0
			QPSK	1	1		21.27		0
				1	26		21.37		0
				1	50		21.30		0
				25	0		21.33		0
				25	14		21.36		0
				25	27		21.30		0
			50	0		21.41		0	
			16QAM	1	1		21.40		0
			64QAM	1	1		20.94		0.5
			256QAM	1	1		18.76		2.5
CP	QPSK	1	1		21.31		0		

NR Band n41_Main #2 Ant.Conducted Power(RSI=1,2,3)

NR Band n41_10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						500202	509400	518598	527802	537000	
						2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz	
10 MHz	30	DFT-s	pi/2 BPSK	1	1	19.94	20.09	20.65	20.64	20.72	0
				1	12	20.07	20.16	20.77	20.66	20.67	0
				1	22	20.09	20.35	20.85	20.82	20.67	0
				12	0	20.08	20.13	20.77	20.69	20.78	0
				12	6	20.05	20.20	20.72	20.73	20.79	0
				12	12	20.04	20.28	20.84	20.80	20.80	0
			QPSK	1	1	19.99	20.03	20.61	20.59	20.61	0
				1	12	19.98	20.12	20.62	20.68	20.62	0
				1	22	19.94	20.26	20.72	20.68	20.65	0
				12	0	19.99	20.20	20.70	20.70	20.72	0
				12	6	20.03	20.29	20.74	20.79	20.76	0
				12	12	20.05	20.27	20.77	20.80	20.77	0
			16QAM	24	0	20.05	20.26	20.82	20.76	20.74	0
				1	1	20.07	20.10	20.66	20.64	20.72	0
				1	1	19.39	19.57	19.90	19.93	19.99	0.5
				1	1	17.25	17.28	17.93	17.92	18.07	2.5
CP	QPSK	1	1	19.99	20.17	20.68	20.64	20.72	0		

NR Band n41_15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						500700	509652	518598	527550	536502	
						2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.51 MHz	
15 MHz	30	DFT-s	pi/2 BPSK	1	1	19.92	20.11	20.70	20.66	20.74	0
				1	18	20.02	20.22	20.76	20.71	20.68	0
				1	36	19.99	20.30	20.82	20.80	20.70	0
				18	0	20.00	20.12	20.74	20.74	20.75	0
				18	9	20.03	20.21	20.71	20.72	20.75	0
				18	18	20.05	20.34	20.80	20.82	20.79	0
			QPSK	36	0	20.01	20.25	20.82	20.75	20.73	0
				1	1	19.96	20.04	20.58	20.62	20.62	0
				1	18	19.96	20.16	20.68	20.67	20.55	0
				1	36	19.96	20.22	20.71	20.72	20.64	0
				18	0	20.09	20.19	20.67	20.70	20.69	0
				18	9	20.01	20.23	20.76	20.79	20.79	0
			16QAM	18	18	20.10	20.30	20.80	20.81	20.72	0
				36	0	20.05	20.28	20.83	20.81	20.71	0
				1	1	20.13	20.07	20.63	20.67	20.71	0
				1	1	19.45	19.54	19.92	19.88	19.92	0.5
256QAM	1	1	17.25	17.36	17.92	17.99	18.03	2.5			
CP	QPSK	1	1	20.03	20.16	20.70	20.64	20.71	0		

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	20.01	20.13	20.72	20.70	20.75	0	
				1	26	20.07	20.25	20.77	20.76	20.73	0	
				1	49	20.09	20.40	20.86	20.83	20.76	0	
				25	0	20.09	20.18	20.77	20.75	20.79	0	
				25	13	20.11	20.30	20.81	20.80	20.79	0	
				25	26	20.10	20.35	20.87	20.84	20.81	0	
			QPSK	50	0	20.11	20.29	20.82	20.80	20.78	0	
				1	1	19.99	20.10	20.62	20.64	20.67	0	
				1	26	20.00	20.16	20.71	20.70	20.65	0	
				1	49	19.98	20.29	20.74	20.72	20.66	0	
				25	0	20.09	20.22	20.77	20.76	20.79	0	
				25	13	20.10	20.30	20.81	20.80	20.80	0	
				25	26	20.13	20.34	20.87	20.84	20.82	0	
				50	0	20.11	20.30	20.83	20.81	20.79	0	
				16QAM	1	1	20.13	20.12	20.68	20.69	20.78	0
				64QAM	1	1	19.46	19.57	19.97	19.96	19.99	0.5
256QAM	1	1	17.28	17.38	17.95	18.00	18.11	2.5				
CP	QPSK	1	1	20.07	20.21	20.73	20.71	20.78	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	20.11	20.10	20.57	20.78	20.84	0	
				1	39	20.38	20.27	20.75	20.90	20.84	0	
				1	76	20.16	20.48	20.77	20.88	20.77	0	
				36	0	20.19	20.26	20.78	20.88	20.88	0	
				36	21	20.21	20.35	20.82	20.95	20.89	0	
				36	42	20.18	20.45	20.85	20.96	20.89	0	
			QPSK	75	0	20.20	20.33	20.81	20.92	20.89	0	
				1	1	20.06	20.05	20.66	20.76	20.83	0	
				1	39	20.18	20.37	20.90	20.88	20.81	0	
				1	76	20.02	20.44	20.86	20.83	20.76	0	
				36	0	20.20	20.24	20.74	20.89	20.91	0	
				36	21	20.21	20.34	20.84	20.95	20.90	0	
				36	42	20.17	20.47	20.87	20.96	20.89	0	
				75	0	20.20	20.35	20.80	20.92	20.89	0	
				16QAM	1	1	20.11	20.09	20.63	20.74	20.79	0
				64QAM	1	1	19.36	19.35	19.87	20.00	20.22	0.5
256QAM	1	1	17.37	17.34	17.83	17.97	18.18	2.5				
CP	QPSK	1	1	20.13	20.14	20.59	20.77	20.84	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	20.04	20.17		20.68	20.79	0
				1	53	20.07	20.67		20.80	20.88	0
				1	104	20.09	20.67		20.85	20.79	0
				50	0	20.06	20.31		20.75	20.88	0
				50	28	20.08	20.50		20.81	20.82	0
				50	56	20.08	20.64		20.83	20.80	0
			100	0	20.11	20.49		20.79	20.82	0	
			QPSK	1	1	19.93	20.05		20.61	20.71	0
				1	53	19.98	20.52		20.71	20.73	0
				1	104	19.96	20.52		20.76	20.68	0
				50	0	20.09	20.32		20.75	20.91	0
				50	28	20.11	20.50		20.79	20.84	0
				50	56	20.08	20.62		20.83	20.82	0
			100	0	20.08	20.46		20.81	20.82	0	
			16QAM	1	1	20.06	20.06		20.61	20.72	0
			64QAM	1	1	19.28	19.40		20.03	19.99	0.5
			256QAM	1	1	17.26	17.52		17.93	18.19	2.5
			CP	QPSK	1	1	19.95	20.03		20.66	20.73

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	20.10		20.55		20.89	0
				1	67	20.09		20.79		20.91	0
				1	131	20.18		20.85		20.82	0
				64	0	20.17		20.71		20.96	0
				64	35	20.21		20.83		20.94	0
				64	69	20.17		20.88		20.87	0
			128	0	20.18		20.81		20.95	0	
			QPSK	1	1	20.05		20.44		20.85	0
				1	67	20.03		20.74		20.85	0
				1	131	20.11		20.76		20.71	0
				64	0	20.18		20.72		20.96	0
				64	35	20.19		20.86		20.94	0
				64	69	20.17		20.88		20.89	0
			128	0	20.18		20.81		20.95	0	
			16QAM	1	1	20.06		20.43		20.95	0
			64QAM	1	1	19.43		19.83		20.23	0.5
			256QAM	1	1	17.42		17.75		18.20	2.5
			CP	QPSK	1	1	20.05		20.44		20.82

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	19.99		20.38		20.71	0
				1	81	20.04		20.77		21.01	0
				1	160	20.31		20.75		20.75	0
				81	0	20.07		20.71		20.81	0
				81	41	20.08		20.82		20.89	0
				81	81	20.18		20.85		20.81	0
			162	0	20.10		20.80		20.87	0	
			QPSK	1	1	19.96		20.38		20.63	0
				1	81	20.12		20.88		20.92	0
				1	160	20.22		20.71		20.64	0
				81	0	20.09		20.69		20.84	0
				81	41	20.09		20.85		20.91	0
				81	81	20.16		20.86		20.83	0
			162	0	20.08		20.82		20.90	0	
			16QAM	1	1	20.05		20.54		20.73	0
			64QAM	1	1	19.23		19.71		19.95	0.5
256QAM	1	1	17.45		17.76		18.04	2.5			
CP	QPSK	1	1	19.96		20.38		20.67	0		

NR Band n41 _70 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]	
						506208					530994
						2531.04 Mhz					2654.97 Mhz
70 Mhz	30	DFT-s	pi/2 BPSK	1	1	20.12				20.63	0
				1	81	20.19				20.78	0
				1	160	20.38				20.75	0
				81	0	20.16				20.73	0
				81	41	20.18				20.78	0
				81	81	20.25				20.76	0
			162	0	20.16				20.74	0	
			QPSK	1	1	20.02				20.57	0
				1	81	20.10				20.70	0
				1	160	20.26				20.64	0
				81	0	20.24				20.74	0
				81	41	20.18				20.78	0
				81	81	20.27				20.82	0
			162	0	20.16				20.75	0	
			16QAM	1	1	20.15				20.72	0
			64QAM	1	1	19.38				19.95	0.5
256QAM	1	1	17.44				17.93	2.5			
CP	QPSK	1	1	20.04				20.59	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	20.06				20.69	0
				1	109	20.09				20.80	0
				1	215	20.68				20.74	0
				108	0	20.06				20.82	0
				108	55	20.13				20.88	0
				108	109	20.37				20.84	0
				216	0	20.12				20.85	0
			QPSK	1	1	19.99				20.65	0
				1	109	19.98				20.77	0
				1	215	20.59				20.73	0
				108	0	20.09				20.80	0
				108	55	20.14				20.89	0
				108	109	20.36				20.86	0
				216	0	20.13				20.88	0
			16QAM	1	1	20.04				20.72	0
			64QAM	1	1	19.36				19.95	0.5
			256QAM	1	1	17.26				17.84	2.5
CP	QPSK	1	1	20.04				20.69	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	20.14				20.83	0
				1	123	20.22				20.97	0
				1	243	20.78				20.78	0
				120	0	20.15				20.88	0
				120	63	20.27				20.98	0
				120	125	20.53				20.91	0
				243	0	20.24				20.90	0
			QPSK	1	1	20.07				20.75	0
				1	123	20.13				20.90	0
				1	243	20.68				20.69	0
				120	0	20.16				20.89	0
				120	63	20.25				21.00	0
				120	125	20.53				20.91	0
				243	0	20.26				20.92	0
			16QAM	1	1	20.22				20.83	0
			64QAM	1	1	19.49				20.19	0.5
			256QAM	1	1	17.32				18.07	2.5
CP	QPSK	1	1	20.02				20.78	0		

NR Band n41 _100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]	
								518598			
100 MHz	30	DFT-s	pi/2 BPSK	1	1			2592.99 MHz			0
				1	137						0
				1	271						0
				135	0						0
				135	69						0
				135	138						0
				270	0						0
			QPSK	1	1						0
				1	137						0
				1	271						0
				135	0						0
				135	69						0
				135	138						0
			16QAM	1	1						0
				1	1						0.5
				1	1						2.5
			CP	QPSK	1	1					0

NR Band n48_Sub #3 Ant.Conducted Power(RSI=0,1,2,3)

NR Band n48_10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						637000	640112	643222	646332	
						3555 MHz	3601.68 MHz	3648.33 MHz	3694.98 MHz	
10 MHz	30	DFT-s	pi/2 BPSK	1	1	22.00	21.39	22.00	22.07	0
				1	12	22.07	21.98	22.12	22.29	0
				1	22	22.19	22.09	21.96	22.26	0
				12	0	21.59	21.59	21.73	21.83	0
				12	6	22.00	21.96	22.09	22.22	0
				12	12	21.83	21.72	21.84	21.93	0
			QPSK	24	0	21.71	21.65	21.78	21.93	0
				1	1	22.02	21.86	22.04	22.07	0
				1	12	22.03	21.50	22.19	22.24	0
				1	22	22.23	22.07	22.20	22.25	0
				12	0	21.10	21.10	21.26	21.35	0.5
				12	6	22.03	21.96	22.09	22.27	0
			16QAM	12	12	21.32	21.21	21.34	21.43	0.5
				24	0	21.20	21.10	21.28	21.45	0.5
				1	1	21.26	21.04	21.23	21.30	0.5
			64QAM	1	1	19.73	19.50	19.75	19.69	2
				1	1	17.83	17.58	17.76	17.83	4
			256QAM	1	1	17.83	17.58	17.76	17.83	4
CP	QPSK	1	1	20.64	20.48	20.66	20.69	1		

NR Band n48_15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						637168	640166	643166	646166	
						3557.52 MHz	3602.49 MHz	3647.49 MHz	3692.49 MHz	
15MHz	30	DFT-s	pi/2 BPSK	1	1	22.03	21.46	22.01	22.13	0
				1	18	22.16	21.99	22.18	22.35	0
				1	36	22.27	22.10	21.99	22.30	0
				18	0	21.60	21.66	21.83	21.93	0
				18	9	22.09	22.06	22.11	22.31	0
				18	18	21.87	21.78	21.93	22.01	0
			QPSK	36	0	21.81	21.66	21.86	21.95	0
				1	1	22.06	21.92	22.05	22.13	0
				1	18	22.07	21.58	22.28	22.28	0
				1	36	22.27	22.17	22.29	22.26	0
				18	0	21.12	21.11	21.32	21.41	0.5
				18	9	22.10	22.05	22.18	22.28	0
			16QAM	18	18	21.34	21.27	21.42	21.47	0.5
				36	0	21.25	21.15	21.30	21.48	0.5
				1	1	21.36	21.06	21.26	21.33	0.5
			64QAM	1	1	19.79	19.60	19.81	19.75	2
				1	1	17.88	17.59	17.81	17.92	4
			256QAM	1	1	17.88	17.59	17.81	17.92	4
CP	QPSK	1	1	20.69	20.51	20.68	20.76	1		

NR Band n48 _20 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						637334	640222	643112	646000	
						3560.01 MHz	3603.33 MHz	3646.68 MHz	3690 MHz	
20 MHz	30	DFT-s	pi/2 BPSK	1	1	22.01	21.86	22.11	22.08	0
				1	26	22.31	22.03	21.95	22.38	0
				1	49	22.58	22.19	22.09	22.62	0
				25	0	21.79	21.59	21.58	21.94	0
				25	13	22.31	22.03	21.96	22.40	0
				25	26	22.19	21.88	21.79	22.31	0
			QPSK	50	0	22.01	21.72	21.67	22.09	0
				1	1	22.03	22.08	22.10	22.08	0
				1	26	22.32	22.02	21.94	22.38	0
				1	49	22.48	22.19	22.08	22.60	0
				25	0	21.29	21.08	21.08	21.45	0.5
				25	13	22.33	22.03	21.99	22.41	0
			16QAM	25	26	21.70	21.39	21.30	21.82	0.5
				50	0	21.50	21.21	21.17	21.59	0.5
				1	1	21.20	21.16	21.30	21.18	0.5
				1	1	19.73	19.78	19.95	19.44	2
64QAM	1	1	17.70	17.65	17.74	17.71	4			
	1	1	17.70	17.65	17.74	17.71	4			
256QAM	1	1	20.70	20.80	20.76	20.80	1			
	1	1	20.70	20.80	20.76	20.80	1			
CP	QPSK	1	1	20.70	20.80	20.76	20.80	1		

NR Band n48 _40 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						638000	641666		645332	
						3570 MHz	3624.99 MHz		3679.98 MHz	
40 MHz	30	DFT-s	pi/2 BPSK	1	1	21.88	22.10		22.94	0
				1	53	22.68	22.19		22.42	0
				1	104	22.09	21.25		22.88	0
				50	0	21.86	21.97		22.34	0
				50	28	22.64	22.13		22.42	0
				50	56	22.11	21.33		22.39	0
			QPSK	100	0	22.22	21.76		22.07	0
				1	1	21.88	22.13		22.93	0
				1	53	22.72	22.19		22.48	0
				1	104	22.07	21.41		22.86	0
				50	0	21.38	21.47		21.40	0.5
				50	28	22.66	22.15		22.39	0
			16QAM	50	56	21.59	20.82		21.88	0.5
				100	0	21.72	21.26		21.55	0.5
				1	1	20.78	21.29		21.71	0.5
				1	1	19.47	19.85		20.54	2
64QAM	1	1	17.48	17.74		18.59	4			
	1	1	17.48	17.74		18.59	4			
256QAM	1	1	20.58	20.72		21.61	1			
	1	1	20.58	20.72		21.61	1			
CP	QPSK	1	1	20.58	20.72		21.61	1		

NR Band n48_Sub #3 Ant.Conducted Power(RSI=4)

NR Band n48_10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						637000	640112	643222	646332	
						3555 MHz	3601.68 MHz	3648.33 MHz	3694.98 MHz	
10 MHz	30	DFT-s	pi/2 BPSK	1	1	12.88	13.31	13.83	14.17	0
				1	12	13.59	13.50	13.62	14.19	0
				1	22	13.57	13.57	13.77	14.42	0
				12	0	13.10	13.07	13.77	14.06	0
				12	6	13.48	13.40	13.58	14.14	0
				12	12	13.70	13.55	13.73	14.39	0
			24	0	13.43	13.30	13.53	14.07	0	
			QPSK	1	1	12.91	13.31	13.84	14.16	0
				1	12	13.61	13.44	13.59	14.12	0
				1	22	13.57	13.58	13.76	14.38	0
				12	0	13.09	13.07	13.77	14.05	0
				12	6	13.53	13.41	13.52	14.12	0
				12	12	13.71	13.52	13.78	14.33	0
			24	0	13.47	13.29	13.53	14.11	0	
			16QAM	1	1	12.90	12.97	13.57	14.15	0
			64QAM	1	1	12.85	13.27	13.78	14.19	0
			256QAM	1	1	12.75	12.83	13.20	13.32	0
			CP	QPSK	1	1	12.84	13.26	13.77	14.09

NR Band n48_15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						637168	640166	643166	646166	
						3557.52 MHz	3602.49 MHz	3647.49 MHz	3692.49 MHz	
15MHz	30	DFT-s	pi/2 BPSK	1	1	12.94	13.30	13.74	14.11	0
				1	18	13.55	13.52	13.65	14.18	0
				1	36	13.57	13.59	13.80	14.44	0
				18	0	13.10	13.04	13.77	14.03	0
				18	9	13.54	13.37	13.59	14.14	0
				18	18	13.65	13.54	13.78	14.38	0
			36	0	13.49	13.33	13.51	14.08	0	
			QPSK	1	1	12.94	13.24	13.80	14.19	0
				1	18	13.60	13.51	13.62	14.17	0
				1	36	13.60	13.52	13.76	14.36	0
				18	0	13.16	13.02	13.68	13.98	0
				18	9	13.54	13.41	13.54	14.08	0
				18	18	13.71	13.55	13.70	14.31	0
			36	0	13.43	13.30	13.56	14.05	0	
			16QAM	1	1	12.86	13.01	13.59	14.13	0
			64QAM	1	1	12.85	13.32	13.76	14.14	0
			256QAM	1	1	12.80	12.91	13.26	13.34	0
			CP	QPSK	1	1	12.89	13.25	13.81	14.10

NR Band n48_20 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						637334	640222	643112	646000	
						3560.01 MHz	3603.33 MHz	3646.68 MHz	3690 MHz	
20 MHz	30	DFT-s	pi/2 BPSK	1	1	12.95	13.32	13.76	14.16	0
				1	26	13.51	13.43	13.62	14.16	0
				1	49	13.58	13.60	13.77	14.42	0
				25	0	13.11	13.09	13.77	14.06	0
				25	13	13.49	13.34	13.52	14.11	0
				25	26	13.68	13.55	13.76	14.36	0
			50	0	13.41	13.36	13.53	14.04	0	
			QPSK	1	1	12.92	13.28	13.82	14.15	0
				1	26	13.61	13.46	13.60	14.20	0
				1	49	13.62	13.51	13.77	14.41	0
				25	0	13.14	13.09	13.74	14.06	0
				25	13	13.52	13.36	13.60	14.14	0
				25	26	13.70	13.57	13.73	14.38	0
			50	0	13.49	13.34	13.57	14.09	0	
			16QAM	1	1	12.94	13.02	13.58	14.16	0
			64QAM	1	1	12.82	13.24	13.74	14.11	0
			256QAM	1	1	12.78	12.81	13.25	13.39	0
			CP	QPSK	1	1	12.88	13.23	13.77	14.13

NR Band n48_40 Mhz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]
						638000	641666		645332	
						3570 MHz	3624.99 MHz		3679.98 MHz	
40 MHz	30	DFT-s	pi/2 BPSK	1	1	12.95	13.58		14.38	0
				1	53	13.86	13.77		14.33	0
				1	104	13.42	12.90		14.41	0
				50	0	13.37	13.87		14.39	0
				50	28	13.91	13.80		14.29	0
				50	56	13.75	13.33		14.46	0
			100	0	13.77	13.71		14.21	0	
			QPSK	1	1	13.02	13.63		14.44	0
				1	53	13.94	13.93		14.39	0
				1	104	13.47	12.98		14.46	0
				50	0	13.40	13.89		14.40	0
				50	28	13.90	13.80		14.30	0
				50	56	13.75	13.33		14.42	0
			100	0	13.78	13.72		14.22	0	
			16QAM	1	1	12.98	13.77		14.38	0
			64QAM	1	1	12.95	13.74		14.48	0
			256QAM	1	1	12.95	13.31		14.12	0
			CP	QPSK	1	1	12.96	13.60		14.43

NR Band n48 SRS Conducted Power (RSI=0,1,2,3,4)

NR Band n48_ 40 MHz Bandwidth - Antenna : SRS 1_Main #2

Bandwidth	SCS(kHz)	Modulation	Max. Average Power (dBm)			MPR [dB]
			638000	641666	645332	
			3570 MHz	3624.99 MHz	3679.98 MHz	
40 MHz	30	CW	12.41	12.71	13.84	0

NR Band n48_ 40 MHz Bandwidth - Antenna : SRS 2_Sub #2

Bandwidth	SCS(kHz)	Modulation	Max. Average Power (dBm)			MPR [dB]
			638000	641666	645332	
			3570 MHz	3624.99 MHz	3679.98 MHz	
40 MHz	30	CW	11.56	11.61	12.82	0

NR Band n48_ 40 MHz Bandwidth - Antenna : SRS 3_Sub #5

Bandwidth	SCS(kHz)	Modulation	Max. Average Power (dBm)			MPR [dB]
			638000	641666	645332	
			3570 MHz	3624.99 MHz	3679.98 MHz	
40 MHz	30	CW	12.21	12.42	13.21	0

NR Band n66_Main #2 Ant.Conducted Power(RSI=1,2,3)

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	pi/2 BPSK	1	1	21.09	21.14	21.40	0
				1	13	21.03	21.16	21.44	0
				1	23	21.21	21.28	21.50	0
				12	0	21.08	21.14	21.37	0
				12	7	21.10	21.18	21.45	0
				12	13	21.16	21.28	21.50	0
			QPSK	25	0	21.13	21.16	21.50	0
				1	1	21.12	21.11	21.40	0
				1	13	21.10	21.15	21.39	0
				1	23	21.18	21.35	21.49	0
				12	0	21.14	21.15	21.42	0
				12	7	21.12	21.26	21.48	0
			16QAM	12	13	21.18	21.27	21.53	0
				25	0	21.12	21.21	21.47	0
				1	1	21.37	20.96	21.38	0
			64QAM	1	1	21.07	21.22	21.61	0
			256QAM	1	1	18.99	19.16	19.18	2
			CP	QPSK	1	1	21.13	21.07	21.46

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	21.05	20.99	21.40	0
				1	26	21.32	21.22	21.43	0
				1	50	21.24	21.32	21.44	0
				25	0	21.20	21.07	21.44	0
				25	14	21.22	21.20	21.41	0
				25	27	21.25	21.28	21.49	0
			QPSK	50	0	21.22	21.22	21.44	0
				1	1	21.16	20.96	21.33	0
				1	26	21.38	21.22	21.47	0
				1	50	21.27	21.39	21.42	0
				25	0	21.23	21.15	21.45	0
				25	14	21.21	21.21	21.49	0
			16QAM	25	27	21.26	21.34	21.47	0
				50	0	21.26	21.26	21.44	0
				1	1	21.19	21.02	21.35	0
			64QAM	1	1	21.33	21.23	21.38	0
			256QAM	1	1	19.28	19.14	19.59	2
			CP	QPSK	1	1	21.14	21.12	21.44

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	21.01	20.99	21.34	0
				1	40	21.16	21.19	21.28	0
				1	77	21.26	21.38	21.39	0
				36	0	21.13	21.05	21.43	0
				36	22	21.25	21.24	21.42	0
				36	43	21.31	21.38	21.36	0
				75	0	21.21	21.25	21.46	0
			QPSK	1	1	21.07	20.95	21.35	0
				1	40	21.18	21.20	21.34	0
				1	77	21.24	21.39	21.46	0
				36	0	21.17	21.05	21.45	0
				36	22	21.30	21.23	21.38	0
				36	43	21.27	21.37	21.48	0
				75	0	21.26	21.23	21.45	0
			16QAM	1	1	21.01	21.08	21.37	0
			64QAM	1	1	21.20	21.04	21.39	0
			256QAM	1	1	19.00	19.15	19.48	2
			CP	QPSK	1	1	21.05	21.03	21.30

NR Band n66 _ 20 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	
20 MHz	15	DFT-s	pi/2 BPSK	1	1	20.96	20.89	21.31	0
				1	53	21.27	21.30	21.52	0
				1	104	21.13	21.15	21.29	0
				50	0	21.17	20.94	21.40	0
				50	28	21.22	21.18	21.46	0
				50	56	21.21	21.41	21.39	0
				100	0	21.25	21.20	21.45	0
			QPSK	1	1	21.02	20.95	21.28	0
				1	53	21.37	21.27	21.55	0
				1	104	21.06	21.39	21.39	0
				50	0	21.19	21.00	21.37	0
				50	28	21.23	21.24	21.45	0
				50	56	21.22	21.32	21.44	0
				100	0	21.25	21.16	21.45	0
			16QAM	1	1	20.94	20.95	21.33	0
			64QAM	1	1	21.30	21.16	21.43	0
			256QAM	1	1	18.94	18.63	19.20	2
			CP	QPSK	1	1	21.00	20.97	21.33

NR Band n66 _ 25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
							1745 MHz		
25 MHz	15	DFT-s	pi/2 BPSK	1	1		20.85		0
				1	66		21.27		0
				1	131		21.33		0
				64	0		21.02		0
				64	35		21.17		0
				64	69		21.34		0
			128	0		21.19		0	
			QPSK	1	1		20.88		0
				1	66		21.36		0
				1	131		21.25		0
				64	0		20.96		0
				64	35		21.27		0
				64	69		21.40		0
			128	0		21.15		0	
			16QAM	1	1		20.72		0
			64QAM	1	1		20.72		0
256QAM	1	1		18.91		2			
CP	QPSK	1	1		20.90		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		20.76		0
				1	80		21.26		0
				1	158		21.19		0
				80	0		20.91		0
				80	40		21.13		0
				80	80		21.38		0
				160	0		21.13		0
			QPSK	1	1		20.73		0
				1	80		21.36		0
				1	158		21.26		0
				80	0		20.91		0
				80	40		21.24		0
				80	80		21.34		0
			160	0		21.13		0	
			16QAM	1	1		20.70		0
			64QAM	1	1		20.87		0
256QAM	1	1		18.84		2			
CP	QPSK	1	1		20.87		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		20.60	0
				1	108		21.25	0
				1	214		21.05	0
				108	0		20.85	0
				108	54		21.13	0
				108	108		21.30	0
			216	0		21.03	0	
			QPSK	1	1		20.70	0
				1	108		21.32	0
				1	214		20.97	0
				108	0		20.85	0
				108	54		21.40	0
				108	108		21.35	0
			216	0		21.02	0	
			16QAM	1	1		20.64	0
			64QAM	1	1		20.69	0
			256QAM	1	1		18.57	2
			CP	QPSK	1	1		20.54

NR Band n70_Main #2 Ant.Conducted Power(RSI=1,2,3)

NR Band n70_5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						339500	340500	341500	
						1697.5 MHz	1702.5 MHz	1707.5 MHz	
5 MHz	15	DFT-s	pi/2 BPSK	1	1	21.95	21.95	22.04	0
				1	13	21.94	21.96	22.02	0
				1	23	22.03	22.10	22.10	0
				12	0	22.01	21.98	22.09	0
				12	7	22.04	22.04	22.12	0
				12	13	22.04	22.06	22.14	0
			QPSK	25	0	22.05	22.07	22.12	0
				1	1	22.00	22.01	22.08	0
				1	13	21.99	21.98	22.04	0
				1	23	22.07	22.10	22.14	0
				12	0	22.03	22.04	22.11	0
				12	7	22.06	22.05	22.15	0
			16QAM	12	13	22.04	22.07	22.15	0
				25	0	22.06	22.06	22.11	0
				1	1	21.98	21.98	22.21	0
				1	1	21.98	22.29	22.26	0
				1	1	20.13	20.07	20.18	2
				1	1	22.09	22.02	22.05	0
CP	QPSK	1	1	22.09	22.02	22.05	0		

NR Band n70_10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						340000	340500	341000	
						1700 MHz	1702.5 MHz	1705 MHz	
10 MHz	15	DFT-s	pi/2 BPSK	1	1	21.86	21.89	22.02	0
				1	26	22.05	22.06	22.21	0
				1	50	22.00	22.10	22.16	0
				25	0	21.97	21.96	22.08	0
				25	14	22.01	22.02	22.12	0
				25	27	22.07	22.04	22.20	0
			QPSK	50	0	22.01	22.01	22.09	0
				1	1	21.95	21.94	22.04	0
				1	26	22.11	22.12	22.17	0
				1	50	22.07	22.11	22.19	0
				25	0	22.02	21.99	22.08	0
				25	14	22.01	22.04	22.13	0
			16QAM	25	27	22.09	22.06	22.20	0
				50	0	22.04	22.04	22.11	0
				1	1	21.96	21.96	21.99	0
				1	1	21.89	21.97	22.10	0
				1	1	20.05	19.88	20.09	2
				1	1	22.01	21.93	22.14	0
CP	QPSK	1	1	22.01	21.93	22.14	0		

NR Band n70 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							340500		
							1702.5 MHz		
15 MHz	15	DFT-s	pi/2 BPSK	1	1		21.82		0
				1	40		21.97		0
				1	77		22.10		0
				36	0		21.95		0
				36	22		22.07		0
				36	43		22.11		0
				75	0		22.02		0
			QPSK	1	1		21.86		0
				1	40		22.15		0
				1	77		22.13		0
				36	0		21.98		0
				36	22		22.13		0
				36	43		22.11		0
				75	0		22.04		0
			16QAM	1	1		21.93		0
		64QAM	1	1		22.11		0	
256QAM	1	1		19.81		2			
CP	QPSK	1	1		21.84		0		

NR Band n77_Sub #3 Ant.Conducted Power (RSI=0,1,2,3)

NR Band n77_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647000	650600	654200	657800	661400	665000	
						3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz	
10 MHz	30	DFT-s	pi/2 BPSK	1	1	17.90	17.73	17.29	18.15	18.49	18.15	0
				1	12	18.21	17.69	17.19	18.28	18.67	18.23	0
				1	22	18.15	17.46	17.29	18.52	18.61	18.07	0
				12	0	17.49	17.67	17.13	18.12	18.56	17.91	0
				12	6	18.19	17.69	17.13	18.23	18.64	18.16	0
				12	12	18.15	17.59	17.22	18.36	18.19	18.10	0
			24	0	18.19	17.69	17.13	18.23	18.64	18.17	0	
			QPSK	1	1	17.97	17.75	17.47	18.05	18.52	18.15	0
				1	12	18.25	17.72	17.16	18.32	18.61	18.25	0
				1	22	17.93	17.50	17.29	18.51	18.62	18.09	0
				12	0	17.97	17.76	17.41	18.15	18.54	18.14	0
				12	6	18.19	17.70	17.14	18.22	18.64	18.16	0
				12	12	18.17	17.57	16.77	18.37	18.61	18.11	0
			24	0	18.19	17.67	17.12	18.22	18.63	18.18	0	
			16QAM	1	1	18.05	17.87	17.67	18.13	18.49	18.16	0
			64QAM	1	1	17.51	17.72	17.49	18.10	18.37	18.12	0
			256QAM	1	1	17.85	17.76	17.29	18.06	18.50	18.11	0
			CP	QPSK	1	1	17.89	17.76	17.19	18.06	18.44	17.76

NR Band n77_ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647168	650700	654234	657766	661300	664832	
						3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.5 MHz	3919.5 MHz	3972.48 MHz	
15 MHz	30	DFT-s	pi/2 BPSK	1	1	17.45	17.52	17.33	17.78	18.15	17.78	0
				1	18	18.07	17.56	17.07	18.12	18.44	18.07	0
				1	36	17.98	17.25	17.32	18.56	18.49	18.00	0
				18	0	17.98	17.66	17.27	17.97	18.37	18.21	0
				18	9	18.15	17.62	17.09	18.17	18.47	18.15	0
				18	18	18.09	17.44	17.21	18.34	18.56	18.14	0
			36	0	18.15	17.60	17.10	18.17	18.47	18.15	0	
			QPSK	1	1	17.89	17.73	17.41	17.77	18.23	18.17	0
				1	18	18.05	17.54	17.02	18.08	18.41	18.08	0
				1	36	17.74	17.22	17.30	18.53	18.47	17.99	0
				18	0	17.98	17.45	17.40	17.97	18.38	18.19	0
				18	9	18.14	17.63	17.09	18.18	18.50	18.15	0
				18	18	17.85	17.46	17.24	17.61	18.55	18.15	0
			36	0	18.17	17.64	17.10	18.17	18.45	18.15	0	
			16QAM	1	1	17.87	17.75	17.53	17.80	18.14	18.17	0
			64QAM	1	1	17.87	17.72	17.41	17.80	18.24	18.19	0
			256QAM	1	1	17.88	17.61	17.43	17.72	18.22	18.12	0
			CP	QPSK	1	1	17.83	17.76	17.42	17.72	18.22	18.00

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	pi/2 BPSK	1	1	17.91	17.80	17.48	17.74	18.16	17.69	0
				1	26	18.02	17.50	17.12	18.17	18.43	18.15	0
				1	49	17.80	16.99	17.55	18.68	18.37	18.02	0
				25	0	17.71	17.62	17.36	17.82	18.24	18.00	0
				25	13	18.00	17.50	17.09	18.13	18.38	18.13	0
				25	26	17.87	17.21	17.25	18.38	18.53	18.06	0
			50	0	17.51	17.48	17.10	18.09	18.40	18.12	0	
			QPSK	1	1	17.74	17.59	17.40	17.66	18.09	17.83	0
				1	26	17.92	17.40	17.05	18.06	18.34	18.09	0
				1	49	17.64	17.14	17.48	18.60	18.42	17.97	0
				25	0	18.08	17.64	17.46	17.84	18.24	18.03	0
				25	13	17.98	17.50	17.10	18.14	18.32	18.18	0
				25	26	17.86	16.76	17.26	18.38	18.52	18.09	0
			50	0	17.98	17.49	17.09	18.10	18.39	18.17	0	
			16QAM	1	1	17.83	17.82	17.47	17.80	18.12	17.81	0
			64QAM	1	1	17.89	17.76	17.43	17.63	18.22	17.93	0
			256QAM	1	1	17.80	17.70	17.48	17.77	18.10	17.89	0
			CP	QPSK	1	1	17.80	17.51	17.46	17.73	17.75	17.63

NR Band n77_ 25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647500	650900	654300	657700	661100	664500	
						3712.5 MHz	3763.5 MHz	3814.5 MHz	3865.5 MHz	3916.5 MHz	3967.5 MHz	
25MHz	30	DFT-s	pi/2 BPSK	1	1	17.55	17.53	17.39	17.84	18.22	17.79	0
				1	32	18.12	17.63	17.15	18.17	18.47	18.17	0
				1	63	18.02	17.27	17.37	18.58	18.53	18.01	0
				32	0	18.06	17.68	17.28	18.03	18.44	18.25	0
				32	17	18.16	17.72	17.11	18.26	18.54	18.25	0
				32	33	18.13	17.51	17.23	18.39	18.62	18.20	0
			64	0	18.24	17.62	17.13	18.26	18.49	18.25	0	
			QPSK	1	1	17.93	17.82	17.50	17.82	18.26	18.26	0
				1	32	18.12	17.63	17.10	18.18	18.49	18.13	0
				1	63	17.84	17.31	17.32	18.55	18.52	18.04	0
				32	0	18.06	17.53	17.47	17.98	18.44	18.23	0
				32	17	18.22	17.70	17.10	18.21	18.56	18.21	0
				32	33	17.86	17.49	17.32	17.69	18.62	18.20	0
			64	0	18.19	17.67	17.14	18.18	18.55	18.24	0	
			16QAM	1	1	17.90	17.85	17.54	17.89	18.16	18.23	0
			64QAM	1	1	17.92	17.76	17.43	17.88	18.29	18.27	0
			256QAM	1	1	17.94	17.66	17.47	17.75	18.30	18.21	0
			CP	QPSK	1	1	17.91	17.79	17.52	17.79	18.25	18.07

NR Band n77_30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647668	651000	654334	657666	661000	664332	
						3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz	
30 MHz	30	DFT-s	pi/2 BPSK	1	1	17.56	17.69	17.39	17.80	18.24	17.82	0
				1	39	17.74	17.33	17.09	18.18	18.28	18.11	0
				1	76	17.55	16.94	17.88	18.71	18.41	17.93	0
				36	0	17.81	17.50	17.27	17.71	18.08	17.85	0
				36	21	17.68	17.29	17.06	18.11	18.30	18.05	0
				36	42	17.26	17.13	17.49	18.49	18.51	18.08	0
				75	0	17.66	17.27	17.01	18.01	18.25	18.02	0
			QPSK	1	1	17.53	17.67	17.43	17.86	18.22	17.77	0
				1	39	17.63	17.38	17.03	18.10	18.36	18.06	0
				1	76	17.55	16.92	17.88	18.59	18.40	17.91	0
				36	0	17.78	17.51	17.28	17.84	18.10	17.89	0
				36	21	17.66	17.28	17.05	18.12	18.31	18.06	0
				36	42	17.47	17.18	17.51	18.52	18.50	18.08	0
				75	0	17.66	17.30	17.12	18.06	18.26	18.02	0
			16QAM	1	1	17.53	17.85	17.38	17.96	18.03	17.92	0
			64QAM	1	1	17.55	17.65	17.33	17.72	18.29	17.84	0
			256QAM	1	1	17.50	17.64	17.38	17.89	18.20	17.91	0
CP	QPSK	1	1	17.57	17.64	17.16	17.78	18.20	17.80	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	pi/2 BPSK	1	1	17.25	17.72	17.54	17.81	18.53	17.92	0
				1	53	17.52	17.30	17.19	18.18	18.34	18.03	0
				1	104	17.86	17.21	17.96	18.73	18.41	17.95	0
				50	0	17.65	17.52	17.26	17.84	18.35	17.73	0
				50	28	17.45	17.23	17.08	18.03	18.24	17.93	0
				50	56	17.49	16.95	17.71	18.56	18.50	18.14	0
				100	0	17.44	17.20	16.77	17.70	18.21	17.86	0
			QPSK	1	1	17.18	17.65	17.48	17.96	18.45	17.84	0
				1	53	17.63	17.29	17.28	18.13	18.45	18.00	0
				1	104	17.78	17.12	17.87	18.64	18.35	17.89	0
				50	0	17.63	17.54	17.30	17.84	18.37	17.51	0
				50	28	17.46	17.22	17.09	18.05	18.27	17.93	0
				50	56	17.51	16.93	17.72	18.58	18.49	18.14	0
				100	0	17.44	17.17	16.80	17.93	18.21	17.62	0
			16QAM	1	1	17.19	17.68	17.39	18.01	18.50	18.00	0
			64QAM	1	1	17.45	17.57	17.68	18.19	18.65	17.83	0
			256QAM	1	1	17.52	17.65	17.55	18.05	18.48	17.81	0
CP	QPSK	1	1	17.48	17.65	17.47	17.99	18.36	17.76	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	3782.49	3840		3897.51	3954.99		
						MHz	MHz	MHz		MHz	MHz		
50 MHz	30	DFT-s	pi/2 BPSK	1	1	17.23	17.70	16.93		18.34	18.32	0	
				1	67	17.26	17.33	18.33		18.58	17.99	0	
				1	131	18.14	17.12	17.95		18.43	17.60	0	
				64	0	17.39	17.32	17.71		18.79	17.98	0	
				64	35	17.22	17.25	18.30		18.56	17.94	0	
				64	69	17.73	17.43	17.90		17.96	17.87	0	
				128	0	16.92	17.19	17.93		18.54	17.85	0	
			QPSK	1	1	17.16	17.66	16.92		18.26	18.25	0	
				1	67	17.23	17.04	18.04		18.54	17.94	0	
				1	131	17.88	17.09	17.91		18.38	17.80	0	
				64	0	17.40	17.32	17.71		18.81	17.98	0	
				64	35	17.22	17.28	18.30		18.55	17.95	0	
				64	69	17.53	17.42	17.89		18.19	18.13	0	
				128	0	17.14	17.18	17.95		18.32	17.87	0	
			16QAM	1	1	17.09	17.52	17.05		18.23	18.26	0	
			64QAM	1	1	17.27	17.45	16.69		18.07	18.25	0	
			256QAM	1	1	17.34	17.81	17.00		18.15	18.28	0	
CP	QPSK	1	1	17.03	17.60	16.83		18.27	18.05	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		
						MHz	MHz			MHz	MHz		
60 MHz	30	DFT-s	pi/2 BPSK	1	1	17.13	17.34			17.73	18.28	0	
				1	81	17.35	17.58			18.71	17.80	0	
				1	160	17.67	17.80			18.15	17.89	0	
				81	0	17.26	17.52			17.74	18.12	0	
				81	41	17.30	17.52			18.69	17.80	0	
				81	81	17.88	17.14			18.70	17.97	0	
				162	0	17.22	17.46			18.63	17.71	0	
			QPSK	1	1	17.14	17.33			17.68	18.22	0	
				1	81	17.45	17.60			18.75	18.06	0	
				1	160	17.66	17.73			18.11	17.88	0	
				81	0	17.26	17.53			17.75	18.11	0	
				81	41	17.31	17.50			18.69	17.81	0	
				81	81	17.98	17.14			18.71	18.01	0	
				162	0	17.24	17.45			18.63	17.71	0	
			16QAM	1	1	17.06	17.47			17.93	18.04	0	
			64QAM	1	1	17.11	17.26			17.82	18.21	0	
			256QAM	1	1	17.18	17.35			17.48	18.02	0	
CP	QPSK	1	1	16.98	17.34			17.68	18.38	0			

NR Band n77_ 70 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]	
						649000	653666			658334	663000		
						3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz		
70 MHz	30	DFT-s	pi/2 BPSK	1	1	16.99	17.43			17.91	17.89	0	
				1	95	17.40	17.46			18.63	17.92	0	
				1	187	17.37	17.85			18.23	18.04	0	
				90	0	16.99	17.50			17.37	18.07	0	
				90	50	17.35	17.45			18.63	17.91	0	
				90	99	17.94	17.42			18.63	17.98	0	
			180	0	17.18	17.23			18.42	17.90	0		
			QPSK	1	1	16.96	17.41			17.93	17.96	0	
				1	95	17.15	17.45			18.67	17.98	0	
				1	187	17.35	17.82			18.26	18.09	0	
				90	0	17.01	17.50			17.56	18.22	0	
				90	50	17.36	17.43			18.60	17.93	0	
				90	99	17.94	17.42			18.64	17.99	0	
				180	0	17.17	17.43			18.43	17.91	0	
				16QAM	1	1	17.03	17.52			17.90	18.05	0
				64QAM	1	1	16.95	17.70			17.84	17.97	0
				256QAM	1	1	17.01	17.35			17.86	17.90	0
			CP	QPSK	1	1	16.78	17.17			17.46	17.96	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	pi/2 BPSK	1	1	17.05		17.20		18.27		0	
				1	109	17.64		18.29		18.08		0	
				1	215	16.95		18.82		18.03		0	
				108	0	16.92		17.13		18.35		0	
				108	55	17.59		18.27		18.04		0	
				108	109	17.61		17.77		17.92		0	
			216	0	17.51		17.93		18.01		0		
			QPSK	1	1	17.08		17.45		18.33		0	
				1	109	17.68		18.33		18.11		0	
				1	215	17.02		18.83		18.06		0	
				108	0	16.92		17.12		18.33		0	
				108	55	17.60		18.38		18.06		0	
				108	109	17.61		17.78		17.89		0	
				216	0	17.49		17.96		18.02		0	
				16QAM	1	1	17.12		17.40		18.38		0
				64QAM	1	1	16.97		17.51		18.32		0
				256QAM	1	1	16.98		17.25		18.22		0
			CP	QPSK	1	1	16.83		17.31		18.05		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	pi/2 BPSK	1	1	16.81		17.77		18.78		0	
				1	123	17.67		18.31		18.26		0	
				1	243	17.43		18.91		18.03		0	
				120	0	16.65		17.03		18.20		0	
				120	63	17.50		18.14		18.24		0	
				120	125	17.14		17.94		17.79		0	
				243	0	17.58		17.91		18.20		0	
			QPSK	1	1	17.00		17.74		18.78		0	
				1	123	17.65		18.28		18.23		0	
				1	243	17.13		18.99		18.00		0	
				120	0	16.68		17.01		18.19		0	
				120	63	17.63		18.27		18.22		0	
				120	125	17.15		17.94		17.80		0	
				243	0	17.58		17.93		18.21		0	
				16QAM	1	1	16.99		17.71		18.74		0
				64QAM	1	1	16.97		17.84		18.81		0
				256QAM	1	1	17.18		17.71		18.73		0
			CP	QPSK	1	1	17.03		17.76		18.78		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	pi/2 BPSK	1	1	17.31				18.95		0	
				1	137	17.87				18.55		0	
				1	271	17.64				18.44		0	
				135	0	16.57				18.10		0	
				135	69	17.76				18.47		0	
				135	138	17.09				18.00		0	
				270	0	17.70				18.38		0	
			QPSK	1	1	17.02				18.99		0	
				1	137	17.81				18.47		0	
				1	271	17.59				18.37		0	
				135	0	16.73				18.10		0	
				135	69	17.77				18.25		0	
				135	138	17.09				17.99		0	
				270	0	17.67				18.39		0	
				16QAM	1	1	17.21				18.92		0
			64QAM	1	1	17.22				18.95		0	
			256QAM	1	1	17.30				18.96		0	
			CP	QPSK	1	1	17.26				18.82		0

NR Band n77 DoD_Sub #3 Ant.Conducted Power (RSI=0,1,2,3)

Band n77 DoD_10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630334	633334	636332	
						3445.01 MHz	3500.01 MHz	3544.98 MHz	
10 MHz	30	DFT-s	pi/2 BPSK	1	1	17.71	17.66	17.87	0
				1	12	17.69	17.58	17.97	0
				1	22	17.63	17.53	17.38	0
				12	0	17.66	17.60	17.80	0
				12	6	17.68	17.52	17.91	0
				12	12	17.62	17.53	17.93	0
			24	0	17.66	17.52	17.93	0	
			QPSK	1	1	17.73	17.67	17.90	0
				1	12	17.69	17.55	17.98	0
				1	22	17.59	17.54	17.92	0
				12	0	17.65	17.59	17.81	0
				12	6	17.67	17.52	17.94	0
				12	12	17.62	17.31	17.93	0
			16QAM	24	0	17.66	17.50	17.94	0
				1	1	17.68	17.65	17.23	0
				1	1	17.68	17.70	17.81	0
			64QAM	1	1	17.68	17.70	17.81	0
			256QAM	1	1	17.79	17.53	17.82	0
CP	QPSK	1	1	17.69	17.38	17.87	0		

Band n77 DoD_15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630500	633334	636166	
						3457.5 MHz	3500.01 MHz	3542.49 MHz	
15 MHz	30	DFT-s	pi/2 BPSK	1	1	17.71	17.73	18.02	0
				1	18	17.59	17.49	17.75	0
				1	36	17.46	17.53	17.90	0
				18	0	17.69	17.63	17.92	0
				18	9	17.64	17.51	17.80	0
				18	18	17.60	17.52	17.88	0
			36	0	17.65	17.50	17.80	0	
			QPSK	1	1	16.87	17.67	17.93	0
				1	18	17.56	17.43	17.68	0
				1	36	17.47	17.45	17.82	0
				18	0	17.71	17.61	17.92	0
				18	9	17.67	17.51	17.81	0
				18	18	17.62	17.51	17.90	0
			16QAM	36	0	17.66	17.52	17.79	0
				1	1	17.66	17.61	17.90	0
				1	1	17.73	17.74	18.05	0
			64QAM	1	1	17.73	17.74	18.05	0
			256QAM	1	1	17.53	17.56	18.04	0
CP	QPSK	1	1	17.26	17.66	17.54	0		

Band n77 DoD_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	
20 MHz	30	DFT-s	pi/2 BPSK	1	1	17.43	17.80	18.13	0
				1	26	17.63	17.53	17.85	0
				1	49	17.66	17.48	17.87	0
				25	0	17.47	17.66	17.99	0
				25	13	17.63	17.52	17.84	0
				25	26	17.54	17.51	17.86	0
			50	0	17.41	17.50	17.83	0	
			QPSK	1	1	17.73	17.75	18.08	0
				1	26	17.60	17.49	17.29	0
				1	49	17.17	17.44	17.82	0
				25	0	17.69	17.67	18.00	0
				25	13	17.63	17.49	17.40	0
				25	26	17.07	17.52	17.86	0
			50	0	17.63	17.52	17.83	0	
			16QAM	1	1	17.81	17.63	17.99	0
			64QAM	1	1	17.41	17.96	18.16	0
			256QAM	1	1	17.68	17.88	18.07	0
CP	QPSK	1	1	17.72	17.78	17.67	0		

Band n77 DoD_25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630834	633334	635832	
						3462.51 MHz	3500.01 MHz	3537.48 MHz	
25MHz	30	DFT-s	pi/2 BPSK	1	1	17.46	17.90	18.19	0
				1	32	17.69	17.60	17.90	0
				1	63	17.72	17.49	17.90	0
				32	0	17.53	17.76	18.01	0
				32	17	17.71	17.58	17.91	0
				32	33	17.55	17.52	17.91	0
			64	0	17.42	17.54	17.93	0	
			QPSK	1	1	17.76	17.82	18.16	0
				1	32	17.70	17.51	17.30	0
				1	63	17.27	17.46	17.89	0
				32	0	17.75	17.75	18.04	0
				32	17	17.70	17.53	17.44	0
				32	33	17.16	17.53	17.87	0
			64	0	17.68	17.55	17.92	0	
			16QAM	1	1	17.83	17.73	18.09	0
			64QAM	1	1	17.50	17.97	18.25	0
			256QAM	1	1	17.77	17.94	18.15	0
CP	QPSK	1	1	17.79	17.88	17.71	0		

Band n77 DoD_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	
30 MHz	30	DFT-s	pi/2 BPSK	1	1	17.59	17.81	17.92	0
				1	39	17.50	17.58	18.22	0
				1	76	17.73	17.63	17.90	0
				36	0	17.50	17.73	18.31	0
				36	21	17.42	17.50	18.17	0
				36	42	17.51	17.40	17.73	0
			75	0	17.39	17.49	18.16	0	
			QPSK	1	1	17.55	17.79	17.90	0
				1	39	17.45	17.57	18.20	0
				1	76	17.75	17.62	17.89	0
				36	0	17.52	17.74	18.28	0
				36	21	17.41	17.53	18.17	0
				36	42	17.57	17.09	17.84	0
			75	0	17.40	17.49	17.70	0	
			16QAM	1	1	17.50	17.96	18.02	0
			64QAM	1	1	17.57	17.73	17.93	0
			256QAM	1	1	17.63	17.75	17.93	0
			CP	QPSK	1	1	17.51	17.77	17.94

Band n77 DoD_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	
40 MHz	30	DFT-s	pi/2 BPSK	1	1	17.62		17.36	0
				1	53	17.72		18.27	0
				1	104	17.93		17.84	0
				50	0	17.53		17.78	0
				50	28	17.64		18.19	0
				50	56	18.04		17.85	0
			100	0	17.53		18.16	0	
			QPSK	1	1	17.56		17.27	0
				1	53	17.79		18.21	0
				1	104	17.86		17.79	0
				50	0	17.55		17.76	0
				50	28	17.65		18.20	0
				50	56	18.05		17.85	0
			100	0	17.59		18.16	0	
			16QAM	1	1	17.52		17.39	0
			64QAM	1	1	17.66		17.40	0
			256QAM	1	1	17.55		17.24	0
			CP	QPSK	1	1	17.60		17.36

Band n77 DoD_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	
50 MHz	30	DFT-s	pi/2 BPSK	1	1	17.48		17.11	0
				1	67	17.65		18.18	0
				1	131	17.50		17.73	0
				64	0	17.02		17.34	0
				64	35	17.60		18.16	0
				64	69	17.88		17.85	0
				128	0	17.52		17.90	0
			QPSK	1	1	17.42		17.09	0
				1	67	17.62		18.15	0
				1	131	17.45		17.68	0
				64	0	17.22		17.36	0
				64	35	17.63		18.19	0
				64	69	17.88		17.86	0
			16QAM	128	0	17.53		17.90	0
				1	1	17.51		17.01	0
				1	1	17.10		17.21	0
				1	1	17.23		16.93	0
CP	QPSK	1	1	17.38		16.99	0		

Band n77 DoD_60 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
60 MHz	30	DFT-s	pi/2 BPSK	1	1		17.26		0
				1	81		17.31		0
				1	160		18.17		0
				81	0		17.78		0
				81	41		17.60		0
				81	81		17.66		0
				162	0		17.41		0
			QPSK	1	1		17.22		0
				1	81		17.58		0
				1	160		18.15		0
				81	0		17.80		0
				81	41		17.49		0
				81	81		17.65		0
			16QAM	162	0		17.40		0
				1	1		17.23		0
				1	1		17.07		0
				1	1		17.23		0
CP	QPSK	1	1		17.29		0		

Band n77 DoD_70 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
70 MHz	30	DFT-s	pi/2 BPSK	1	1		17.18		0
				1	95		17.49		0
				1	187		18.10		0
				90	0		17.75		0
				90	50		17.45		0
				90	99		17.75		0
			180	0		17.39		0	
			QPSK	1	1		17.21		0
				1	95		17.52		0
				1	187		18.15		0
				90	0		17.77		0
				90	50		17.47		0
				90	99		17.76		0
			180	0		17.40		0	
			16QAM	1	1		17.25		0
			64QAM	1	1		17.11		0
256QAM	1	1		17.27		0			
CP	QPSK	1	1		17.19		0		

Band n77 DoD_80 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
80 MHz	30	DFT-s	pi/2 BPSK	1	1		17.25		0
				1	109		17.50		0
				1	215		17.92		0
				108	0		17.76		0
				108	55		17.44		0
				108	109		17.84		0
			216	0		17.36		0	
			QPSK	1	1		17.29		0
				1	109		17.54		0
				1	215		17.95		0
				108	0		17.80		0
				108	55		17.44		0
				108	109		17.84		0
			216	0		17.36		0	
			16QAM	1	1		17.18		0
			64QAM	1	1		17.45		0
256QAM	1	1		17.53		0			
CP	QPSK	1	1		17.40		0		

Band n77 DoD_90 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)		MPR [dB]
						633334	3500.01 MHz	
90 MHz	30	DFT-s	pi/2 BPSK	1	1		17.52	0
				1	123		17.55	0
				1	243		18.05	0
				120	0		17.54	0
				120	63		17.44	0
				120	125		17.98	0
			243	0		17.35	0	
			QPSK	1	1		17.44	0
				1	123		17.46	0
				1	243		18.00	0
				120	0		17.55	0
				120	63		17.45	0
				120	125		18.01	0
			243	0		17.37	0	
			16QAM	1	1		17.57	0
			64QAM	1	1		17.48	0
256QAM	1	1		17.50	0			
CP	QPSK	1	1		17.51	0		

Band n77 DoD_100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)		MPR [dB]
						633334	3500.01 MHz	
100 MHz	30	DFT-s	pi/2 BPSK	1	1		17.84	0
				1	137		17.60	0
				1	271		18.27	0
				135	0		17.53	0
				135	69		17.47	0
				135	138		18.14	0
			270	0		17.41	0	
			QPSK	1	1		17.76	0
				1	137		17.51	0
				1	271		18.22	0
				135	0		17.29	0
				135	69		17.47	0
				135	138		18.13	0
			270	0		17.40	0	
			16QAM	1	1		17.71	0
			64QAM	1	1		17.89	0
256QAM	1	1		17.79	0			
CP	QPSK	1	1		17.78	0		

NR Band n77_Sub #3 Ant.Conducted Power (RSI=4)

NR Band n77_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]	
						647000	650600	654200	657800	661400	665000		
						3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz		
10 MHz	30	DFT-s	pi/2 BPSK	1	1	15.79	15.60	15.27	15.89	16.32	15.78	0	
				1	12	16.12	15.55	15.02	16.12	16.46	16.05	0	
				1	22	16.00	15.35	15.12	16.35	16.43	15.58	0	
				12	0	15.84	14.94	15.10	15.51	16.37	15.95	0	
				12	6	16.09	15.54	14.95	16.05	16.48	16.00	0	
				12	12	16.04	15.41	14.82	16.17	16.44	15.94	0	
				24	0	16.08	15.29	14.96	16.07	16.46	15.99	0	
			QPSK	1	1	15.77	15.55	15.23	15.86	16.29	15.70	0	
				1	12	16.03	15.45	14.94	16.03	16.44	15.96	0	
				1	22	15.97	15.07	15.07	16.28	16.38	15.84	0	
				12	0	15.83	15.51	15.23	15.99	16.37	15.95	0	
				12	6	16.08	15.52	14.56	16.06	16.47	15.99	0	
				12	12	16.06	15.42	15.04	16.20	16.45	15.94	0	
				24	0	16.08	15.52	14.95	16.07	16.48	16.01	0	
			16QAM	1	1	15.92	15.63	15.22	16.06	16.42	15.90	0	
			64QAM	1	1	15.83	15.50	15.25	15.86	16.30	16.08	0	
			256QAM	1	1	15.70	15.33	15.13	15.73	16.17	15.90	0	
			CP	QPSK	1	1	15.66	15.31	15.10	15.72	16.11	15.92	0

NR Band n77_ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]	
						647168	650700	654234	657766	661300	664832		
						3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.5 MHz	3919.5 MHz	3972.48 MHz		
15 MHz	30	DFT-s	pi/2 BPSK	1	1	15.33	15.63	15.34	15.67	16.15	16.15	0	
				1	18	15.96	15.44	14.94	16.02	16.34	16.00	0	
				1	36	15.86	15.12	15.22	16.45	16.39	15.91	0	
				18	0	15.85	15.54	15.27	15.87	16.25	16.10	0	
				18	9	16.00	15.49	14.97	16.05	16.37	16.02	0	
				18	18	15.94	15.30	15.08	16.22	16.45	16.04	0	
				36	0	16.00	15.47	14.96	16.04	16.34	16.04	0	
			QPSK	1	1	15.73	15.57	15.29	15.65	16.11	16.08	0	
				1	18	15.92	15.37	14.87	15.99	16.27	15.96	0	
				1	36	15.83	15.04	15.15	16.42	16.37	15.88	0	
				18	0	15.63	15.51	15.27	15.38	16.36	16.10	0	
				18	9	16.01	15.49	14.97	16.06	16.36	16.04	0	
				18	18	15.94	15.31	15.19	16.22	16.43	16.04	0	
				36	0	15.78	15.49	14.97	16.04	16.35	16.03	0	
			16QAM	1	1	15.69	15.52	15.30	15.58	16.16	15.94	0	
			64QAM	1	1	15.75	15.56	14.97	15.02	16.13	15.91	0	
			256QAM	1	1	15.56	15.44	14.79	14.83	15.99	15.78	0	
			CP	QPSK	1	1	15.59	15.40	14.82	14.84	15.97	15.79	0

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	pi/2 BPSK	1	1	15.74	15.68	15.36	15.65	16.11	15.60	0
				1	26	15.91	15.38	15.00	16.09	16.35	16.05	0
				1	49	15.68	14.77	15.45	16.60	16.41	15.90	0
				25	0	15.81	15.53	15.27	15.76	16.17	15.94	0
				25	13	15.92	15.42	15.01	16.06	16.32	16.06	0
				25	26	15.79	15.15	15.16	16.33	16.43	15.98	0
			QPSK	50	0	15.70	15.40	14.98	16.03	16.30	16.05	0
				1	1	15.72	15.65	15.34	15.64	16.06	15.80	0
				1	26	15.90	15.37	14.98	16.05	16.30	16.02	0
				1	49	15.42	15.07	15.41	16.59	16.35	15.88	0
				25	0	16.02	15.55	15.28	15.76	16.15	15.92	0
				25	13	15.90	15.42	15.01	16.06	16.31	15.97	0
			16QAM	25	26	15.79	15.12	15.15	16.32	16.44	15.99	0
				50	0	15.93	15.40	14.98	16.00	16.33	16.05	0
				1	1	15.72	15.77	15.27	15.70	16.05	15.80	0
				1	1	15.72	15.69	15.31	15.67	15.80	15.72	0
			256QAM	1	1	15.53	15.49	15.16	15.47	15.63	15.61	0
				CP	QPSK	1	1	15.55	15.59	15.15	15.49	15.67

NR Band n77_ 25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647500	650900	654300	657700	661100	664500	
						3712.5 MHz	3763.5 MHz	3814.5 MHz	3865.5 MHz	3916.5 MHz	3967.5 MHz	
25MHz	30	DFT-s	pi/2 BPSK	1	1	15.76	15.85	15.52	15.76	16.15	15.61	0
				1	32	15.96	15.49	15.08	16.20	16.54	16.18	0
				1	63	15.83	14.89	15.52	16.76	16.50	15.98	0
				32	0	16.00	15.71	15.33	15.93	16.21	15.96	0
				32	17	16.05	15.47	15.05	16.25	16.36	16.07	0
				32	33	15.88	15.18	15.18	16.41	16.45	16.17	0
			QPSK	64	0	15.86	15.57	15.17	16.05	16.47	16.14	0
				1	1	15.91	15.70	15.37	15.76	16.15	15.97	0
				1	32	16.10	15.48	15.11	16.11	16.40	16.20	0
				1	63	15.44	15.16	15.54	16.78	16.47	15.99	0
				32	0	16.10	15.72	15.41	15.88	16.16	15.98	0
				32	17	16.00	15.50	15.05	16.14	16.33	16.17	0
			16QAM	32	33	15.90	15.29	15.31	16.39	16.53	16.02	0
				64	0	16.02	15.56	15.06	16.20	16.41	16.11	0
				1	1	15.78	15.94	15.29	15.73	16.09	15.81	0
				1	1	15.92	15.76	15.40	15.87	15.96	15.90	0
			256QAM	1	1	15.68	15.57	15.24	15.56	15.82	15.73	0
				CP	QPSK	1	1	15.75	15.71	15.27	15.67	15.78

NR Band n77_30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647668	651000	654334	657666	661000	664332	
						3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz	
30 MHz	30	DFT-s	pi/2 BPSK	1	1	15.49	15.63	15.11	15.80	16.16	15.71	0
				1	39	15.68	15.27	15.03	16.08	16.24	16.00	0
				1	76	15.51	14.87	15.72	16.62	16.33	15.84	0
				36	0	15.75	15.46	15.20	15.74	16.01	15.78	0
				36	21	15.62	15.23	14.99	16.05	16.23	15.99	0
				36	42	15.46	15.15	15.43	16.43	15.84	16.00	0
				75	0	15.62	15.22	14.92	16.00	16.17	15.92	0
			QPSK	1	1	15.50	15.64	15.36	15.80	16.16	15.75	0
				1	39	15.62	15.21	15.09	16.09	15.98	16.03	0
				1	76	15.55	14.87	15.81	16.63	16.33	15.85	0
				36	0	15.77	15.45	15.20	15.40	16.02	15.80	0
				36	21	15.64	15.23	15.00	16.05	15.77	16.00	0
				36	42	15.45	15.11	15.42	16.43	16.42	16.00	0
				75	0	15.62	15.22	14.93	15.98	16.17	15.96	0
			16QAM	1	1	15.59	15.82	15.46	15.90	15.98	15.84	0
			64QAM	1	1	15.10	15.65	15.28	15.77	16.13	15.72	0
			256QAM	1	1	14.97	15.51	15.10	15.61	15.94	15.59	0
CP	QPSK	1	1	14.99	15.50	15.10	15.65	16.01	15.55	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	pi/2 BPSK	1	1	15.42	15.63	15.46	15.73	16.45	15.53	0
				1	53	15.49	15.19	15.13	16.01	16.26	15.85	0
				1	104	15.82	15.13	15.89	16.66	16.33	15.85	0
				50	0	15.62	15.65	15.00	15.79	16.31	15.63	0
				50	28	15.41	15.17	15.04	15.99	16.20	15.85	0
				50	56	15.46	14.88	15.67	16.50	16.42	16.05	0
				100	0	15.39	15.13	14.93	15.88	16.14	15.98	0
			QPSK	1	1	15.38	15.60	15.45	15.94	16.42	15.81	0
				1	53	15.24	15.26	14.98	16.07	16.12	15.96	0
				1	104	15.79	15.12	15.85	16.61	16.29	15.84	0
				50	0	15.62	15.45	14.88	15.78	16.29	15.45	0
				50	28	15.41	15.16	15.02	16.01	16.20	15.85	0
				50	56	15.47	14.89	15.63	16.50	16.44	16.07	0
				100	0	15.42	15.07	14.93	15.89	16.12	15.80	0
			16QAM	1	1	15.15	15.41	15.70	16.11	16.48	15.63	0
			64QAM	1	1	15.41	15.59	15.62	15.82	16.23	15.88	0
			256QAM	1	1	15.29	15.39	15.46	15.65	16.04	15.77	0
CP	QPSK	1	1	15.23	15.48	15.48	15.72	16.11	15.75	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	pi/2 BPSK	1	1	15.09	15.41	14.96		16.29	16.05	0
				1	67	15.21	15.29	16.27		16.55	15.95	0
				1	131	16.10	15.09	15.89		16.39	15.80	0
				64	0	15.34	15.28	15.43		16.79	15.94	0
				64	35	15.19	15.24	16.24		16.54	15.90	0
				64	69	15.67	15.39	15.82		16.15	16.09	0
				128	0	15.11	15.14	15.90		16.51	15.83	0
			QPSK	1	1	14.88	15.64	14.87		16.25	16.25	0
				1	67	15.21	15.26	16.22		16.49	15.93	0
				1	131	16.09	15.05	15.86		16.31	15.76	0
				64	0	15.35	15.29	15.65		16.78	15.94	0
				64	35	15.19	15.22	16.20		16.55	15.92	0
				64	69	15.68	15.39	15.81		16.16	16.08	0
				128	0	15.27	15.15	15.90		16.51	15.83	0
			16QAM	1	1	15.14	15.60	14.80		16.20	16.37	0
			64QAM	1	1	15.21	15.53	14.89		16.34	16.50	0
			256QAM	1	1	15.03	15.38	14.79		16.18	16.37	0
CP	QPSK	1	1	15.09	15.41	14.77		16.14	16.38	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 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz	
60 MHz	30	DFT-s	pi/2 BPSK	1	1	14.65	15.10			15.68	16.00	0
				1	81	15.33	15.51			16.66	15.80	0
				1	160	15.65	15.74			16.05	15.84	0
				81	0	15.20	15.46			15.67	16.08	0
				81	41	15.25	15.23			16.62	15.72	0
				81	81	15.90	15.06			16.65	15.93	0
				162	0	15.17	15.40			16.56	15.66	0
			QPSK	1	1	15.07	15.26			15.60	15.83	0
				1	81	15.34	15.48			16.72	15.69	0
				1	160	15.60	15.67			16.04	15.78	0
				81	0	15.19	15.45			15.70	16.05	0
				81	41	15.25	15.45			16.30	15.73	0
				81	81	15.89	15.07			16.64	15.92	0
				162	0	15.19	15.38			16.55	15.64	0
			16QAM	1	1	14.69	15.31			15.53	16.00	0
			64QAM	1	1	14.95	15.07			15.88	16.24	0
			256QAM	1	1	14.77	14.93			15.78	16.07	0
CP	QPSK	1	1	14.83	14.95			15.69	16.14	0		

NR Band n77_ 70 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649000	653666			658334	663000	
						3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz	
70 MHz	30	DFT-s	pi/2 BPSK	1	1	14.67	15.38			15.87	15.64	0
				1	95	15.32	15.40			16.60	15.89	0
				1	187	15.29	15.77			16.21	15.98	0
				90	0	14.93	15.43			15.51	15.90	0
				90	50	15.29	15.36			16.53	15.82	0
				90	99	15.87	15.34			16.58	15.90	0
			180	0	15.10	15.37			16.36	15.81	0	
			QPSK	1	1	14.91	15.35			15.85	16.03	0
				1	95	15.33	15.39			16.60	15.89	0
				1	187	15.28	15.76			16.18	15.98	0
				90	0	14.93	15.44			15.53	16.14	0
				90	50	15.28	15.37			16.55	15.79	0
				90	99	15.88	15.30			16.60	15.91	0
			180	0	15.13	15.36			16.36	15.84	0	
			16QAM	1	1	14.97	15.42			15.93	15.95	0
			64QAM	1	1	14.86	15.23			15.88	15.90	0
			256QAM	1	1	14.73	15.11			15.70	15.72	0
			CP	QPSK	1	1	14.74	15.09			15.72	15.71

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	pi/2 BPSK	1	1	15.01		15.16		16.23		0
				1	109	15.61		16.26		16.02		0
				1	215	14.94		16.75		15.99		0
				108	0	14.86		15.00		16.22		0
				108	55	15.52		16.19		15.96		0
				108	109	15.57		15.71		15.81		0
			216	0	15.46		15.85		15.93		0	
			QPSK	1	1	15.00		15.34		16.23		0
				1	109	15.59		16.23		15.99		0
				1	215	14.91		16.72		15.97		0
				108	0	14.87		15.05		16.27		0
				108	55	15.52		15.99		15.96		0
				108	109	15.54		15.69		15.81		0
			216	0	15.44		15.85		15.70		0	
			16QAM	1	1	15.15		15.44		16.18		0
			64QAM	1	1	15.02		15.39		16.26		0
			256QAM	1	1	14.91		15.24		16.15		0
			CP	QPSK	1	1	14.89		15.27		16.11	

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	pi/2 BPSK	1	1	14.99		15.71		16.68		0	
				1	123	15.64		16.24		16.22		0	
				1	243	15.41		16.94		15.96		0	
				120	0	14.64		14.84		16.11		0	
				120	63	15.58		16.19		16.17		0	
				120	125	15.10		15.88		15.69		0	
				243	0	15.53		15.96		16.15		0	
			QPSK	1	1	14.94		15.71		16.73		0	
				1	123	15.61		16.23		16.08		0	
				1	243	15.37		16.93		15.93		0	
				120	0	14.66		14.95		16.12		0	
				120	63	15.57		16.19		16.17		0	
				120	125	15.09		15.87		15.71		0	
				243	0	15.54		15.86		16.12		0	
				16QAM	1	1	14.97		15.67		16.75		0
				64QAM	1	1	14.94		15.68		16.66		0
				256QAM	1	1	14.79		15.52		16.55		0
			CP	QPSK	1	1	14.76		15.48		16.49		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	pi/2 BPSK	1	1	15.38				16.98		0	
				1	137	15.93				16.45		0	
				1	271	15.72				16.32		0	
				135	0	14.83				15.80		0	
				135	69	15.87				16.38		0	
				135	138	15.19				15.90		0	
				270	0	15.80				16.31		0	
			QPSK	1	1	15.35				16.99		0	
				1	137	16.14				16.42		0	
				1	271	15.69				16.31		0	
				135	0	15.13				16.02		0	
				135	69	16.19				16.38		0	
				135	138	15.30				15.89		0	
				270	0	15.78				16.19		0	
				16QAM	1	1	15.39				16.95		0
			64QAM	1	1	15.31				16.95		0	
			256QAM	1	1	15.71				16.81		0	
			CP	QPSK	1	1	15.90				16.93		0

NR Band n77 DoD_Sub #3 Ant.Conducted Power (RSI=4)

Band n77 DoD_10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]	
						630334	633334	636332		
						3445.01 MHz	3500.01 MHz	3544.98 MHz		
10 MHz	30	DFT-s	pi/2 BPSK	1	1	15.68	15.63	15.84	0	
				1	12	15.64	15.53	15.91	0	
				1	22	15.57	15.25	15.88	0	
				12	0	15.49	15.53	15.76	0	
				12	6	15.62	15.47	15.87	0	
				12	12	15.58	15.46	15.89	0	
			24	0	15.17	15.46	15.86	0		
			QPSK	1	1	15.64	15.54	15.80	0	
				1	12	15.57	15.39	15.81	0	
				1	22	15.52	15.41	15.83	0	
				12	0	15.61	15.56	15.75	0	
				12	6	15.63	15.48	15.89	0	
				12	12	15.54	15.46	15.89	0	
			24	0	15.61	15.44	15.88	0		
			16QAM	1	1	15.78	15.78	16.16	0	
			64QAM	1	1	15.57	15.65	15.85	0	
			256QAM	1	1	15.44	15.55	15.69	0	
			CP	QPSK	1	1	15.43	15.48	15.69	0

Band n77 DoD_15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]	
						630500	633334	636166		
						3457.5 MHz	3500.01 MHz	3542.49 MHz		
15 MHz	30	DFT-s	pi/2 BPSK	1	1	15.71	15.67	15.96	0	
				1	18	15.58	15.42	15.72	0	
				1	36	15.44	15.44	15.86	0	
				18	0	15.66	15.57	15.89	0	
				18	9	15.62	15.48	15.76	0	
				18	18	15.57	15.46	15.85	0	
			36	0	15.60	15.47	15.75	0		
			QPSK	1	1	15.64	15.64	15.94	0	
				1	18	15.48	15.41	15.69	0	
				1	36	15.38	15.41	15.82	0	
				18	0	15.67	15.58	15.64	0	
				18	9	15.66	15.47	15.76	0	
				18	18	15.56	15.48	15.85	0	
			36	0	15.62	15.49	15.76	0		
			16QAM	1	1	15.71	15.56	15.87	0	
			64QAM	1	1	15.61	15.58	15.87	0	
			256QAM	1	1	15.49	15.47	15.71	0	
			CP	QPSK	1	1	15.42	15.42	15.68	0

Band n77 DoD_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	
20 MHz	30	DFT-s	pi/2 BPSK	1	1	15.26	15.72	16.07	0
				1	26	15.60	15.47	15.79	0
				1	49	15.63	15.41	15.81	0
				25	0	15.67	15.62	15.95	0
				25	13	15.60	15.47	15.80	0
				25	26	15.50	15.45	15.82	0
			50	0	15.59	15.46	15.79	0	
			QPSK	1	1	15.69	15.73	16.07	0
				1	26	15.56	15.47	15.77	0
				1	49	15.55	15.40	15.80	0
				25	0	15.66	15.61	15.95	0
				25	13	15.58	15.46	15.80	0
				25	26	15.23	15.44	15.79	0
			50	0	15.60	15.45	15.79	0	
			16QAM	1	1	15.88	15.73	16.00	0
			64QAM	1	1	15.74	15.75	15.95	0
			256QAM	1	1	15.62	15.59	15.80	0
			CP	QPSK	1	1	15.56	15.64	15.75

Band n77 DoD_25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630834	633334	635832	
						3462.51 MHz	3500.01 MHz	3537.48 MHz	
25MHz	30	DFT-s	pi/2 BPSK	1	1	15.28	15.74	16.09	0
				1	32	15.62	15.48	15.81	0
				1	63	15.65	15.43	15.82	0
				32	0	15.69	15.64	15.96	0
				32	17	15.61	15.49	15.81	0
				32	33	15.51	15.46	15.84	0
			64	0	15.61	15.47	15.81	0	
			QPSK	1	1	15.70	15.74	16.08	0
				1	32	15.57	15.48	15.78	0
				1	63	15.56	15.41	15.81	0
				32	0	15.67	15.62	15.97	0
				32	17	15.60	15.48	15.81	0
				32	33	15.25	15.46	15.81	0
			64	0	15.62	15.46	15.81	0	
			16QAM	1	1	15.90	15.74	16.02	0
			64QAM	1	1	15.75	15.76	15.97	0
			256QAM	1	1	15.63	15.61	15.82	0
			CP	QPSK	1	1	15.58	15.66	15.77

Band n77 DoD_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	
30 MHz	30	DFT-s	pi/2 BPSK	1	1	15.52	15.74	15.79	0
				1	39	15.44	15.53	16.11	0
				1	76	15.69	15.54	15.81	0
				36	0	15.49	15.69	16.23	0
				36	21	15.38	15.57	16.09	0
				36	42	15.69	15.35	15.79	0
			75	0	15.34	15.43	16.08	0	
			QPSK	1	1	15.54	15.53	15.85	0
				1	39	15.18	15.43	16.08	0
				1	76	15.69	15.56	15.82	0
				36	0	15.47	15.77	16.22	0
				36	21	15.48	15.46	16.09	0
				36	42	15.53	15.33	15.79	0
			75	0	15.35	15.44	16.08	0	
			16QAM	1	1	15.15	15.76	15.94	0
			64QAM	1	1	15.57	15.71	15.89	0
			256QAM	1	1	15.46	15.57	15.75	0
CP	QPSK	1	1	15.44	15.57	15.75	0		

Band n77 DoD_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	
40 MHz	30	DFT-s	pi/2 BPSK	1	1	15.47		15.25	0
				1	53	15.69		16.19	0
				1	104	16.04		15.74	0
				50	0	15.49		15.71	0
				50	28	15.60		16.14	0
				50	56	15.98		15.78	0
			100	0	15.52		16.10	0	
			QPSK	1	1	15.53		15.25	0
				1	53	15.55		16.13	0
				1	104	15.83		15.71	0
				50	0	15.47		15.71	0
				50	28	15.61		16.13	0
				50	56	15.97		15.80	0
			100	0	15.53		15.89	0	
			16QAM	1	1	15.56		15.32	0
			64QAM	1	1	15.46		15.37	0
			256QAM	1	1	15.34		15.18	0
CP	QPSK	1	1	15.33		15.20	0		

Band n77 DoD_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	
50 MHz	30	DFT-s	pi/2 BPSK	1	1	15.15		14.89	0
				1	67	15.61		16.14	0
				1	131	15.44		15.66	0
				64	0	15.18		15.28	0
				64	35	15.55		16.12	0
				64	69	15.83		15.70	0
			128	0	15.48		15.83	0	
			QPSK	1	1	15.17		15.03	0
				1	67	15.57		15.85	0
				1	131	15.41		15.61	0
				64	0	14.97		15.30	0
				64	35	15.57		16.11	0
				64	69	15.83		15.79	0
			128	0	15.66		15.83	0	
			16QAM	1	1	15.42		15.10	0
			64QAM	1	1	15.40		15.08	0
			256QAM	1	1	15.20		14.89	0
			CP	QPSK	1	1	15.26		14.92

Band n77 DoD_60 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
60 MHz	30	DFT-s	pi/2 BPSK	1	1		15.00		0
				1	81		15.51		0
				1	160		16.13		0
				81	0		15.74		0
				81	41		15.43		0
				81	81		15.60		0
			162	0		15.35		0	
			QPSK	1	1		15.16		0
				1	81		15.50		0
				1	160		16.07		0
				81	0		15.74		0
				81	41		15.44		0
				81	81		15.61		0
			162	0		15.36		0	
			16QAM	1	1		15.07		0
			64QAM	1	1		15.05		0
			256QAM	1	1		14.86		0
			CP	QPSK	1	1		14.93	

Band n77 DoD_70 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
70 MHz	30	DFT-s	pi/2 BPSK	1	1		15.05		0
				1	95		15.49		0
				1	187		16.07		0
				90	0		15.74		0
				90	50		15.41		0
				90	99		15.70		0
			180	0		15.32		0	
			QPSK	1	1		15.15		0
				1	95		15.44		0
				1	187		16.05		0
				90	0		15.72		0
				90	50		15.41		0
				90	99		15.69		0
			180	0		15.34		0	
			16QAM	1	1		15.23		0
			64QAM	1	1		15.19		0
256QAM	1	1		15.04		0			
CP	QPSK	1	1		15.05		0		

Band n77 DoD_80 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
80 MHz	30	DFT-s	pi/2 BPSK	1	1		15.24		0
				1	109		15.47		0
				1	215		15.91		0
				108	0		15.74		0
				108	55		15.17		0
				108	109		15.78		0
			216	0		15.30		0	
			QPSK	1	1		15.22		0
				1	109		15.21		0
				1	215		15.88		0
				108	0		15.75		0
				108	55		15.39		0
				108	109		15.77		0
			216	0		15.29		0	
			16QAM	1	1		15.30		0
			64QAM	1	1		15.15		0
256QAM	1	1		14.99		0			
CP	QPSK	1	1		15.01		0		

Band n77 DoD_90 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
90 MHz	30	DFT-s	pi/2 BPSK	1	1		15.45		0
				1	123		15.45		0
				1	243		15.97		0
				120	0		15.48		0
				120	63		15.15		0
				120	125		15.92		0
				243	0		15.31		0
			QPSK	1	1		15.42		0
				1	123		15.43		0
				1	243		15.94		0
				120	0		15.50		0
				120	63		15.40		0
				120	125		15.94		0
			16QAM	243	0		15.31		0
				1	1		15.32		0
				1	1		15.24		0
256QAM	1	1		15.11		0			
CP	QPSK	1	1		15.04		0		

Band n77 DoD_100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1		15.74		0
				1	137		15.49		0
				1	271		16.15		0
				135	0		15.44		0
				135	69		15.37		0
				135	138		16.06		0
				270	0		15.32		0
			QPSK	1	1		15.78		0
				1	137		15.51		0
				1	271		16.13		0
				135	0		15.46		0
				135	69		15.38		0
				135	138		16.06		0
			16QAM	270	0		15.10		0
				1	1		15.67		0
				1	1		15.67		0
256QAM	1	1		15.51		0			
CP	QPSK	1	1		15.48		0		

NR Band n77 SRS Conducted Power (RSI=0,1,2,3,4)

NR Band n77_ 100 MHz Bandwidth - Antenna : SRS 1_Main #2

Bandwidth	SCS(kHz)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 MHz				3930 MHz		
100 MHz	30	CW	12.67				13.88		0

NR Band n77_ 100 MHz Bandwidth - Antenna : SRS 2_Sub #2

Bandwidth	SCS(kHz)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 MHz				3930 MHz		
100 MHz	30	CW	12.79				13.05		0

NR Band n77_ 100 MHz Bandwidth - Antenna : SRS 3_Sub #5

Bandwidth	SCS(kHz)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 MHz				3930 MHz		
100 MHz	30	CW	11.91				12.55		0

NR Band n77 DoD SRS Conducted Power (RSI=0,1,2,3,4)

NR Band n77 DoD_ 100 MHz Bandwidth - Antenna : SRS 1_Main #2

Bandwidth	SCS(kHz)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 MHz		
100 MHz	30	CW		12.53		0

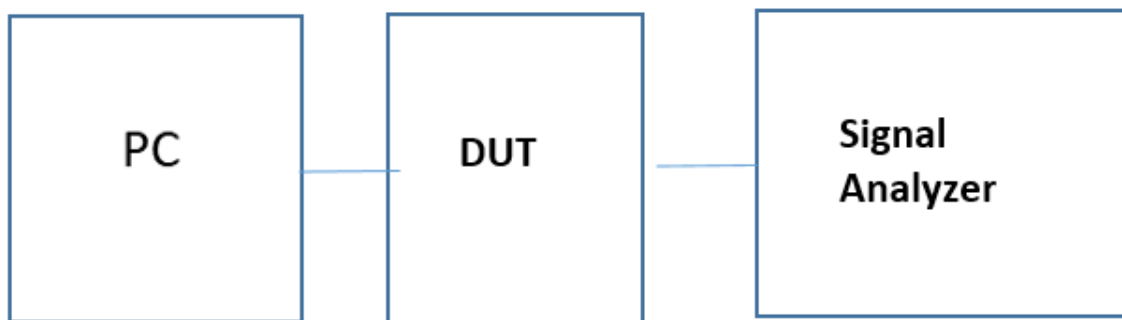
NR Band n77 DoD_ 100 MHz Bandwidth - Antenna : SRS 2_Sub #2

Bandwidth	SCS(kHz)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 MHz		
100 MHz	30	CW		11.58		0

NR Band n77 DoD_ 100 MHz Bandwidth - Antenna : SRS 3_Sub #5

Bandwidth	SCS(kHz)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 MHz		
100 MHz	30	CW		11.52		0

Power Measurement Set Up NR TDD



11.5 WIFI Conducted Power measurement method

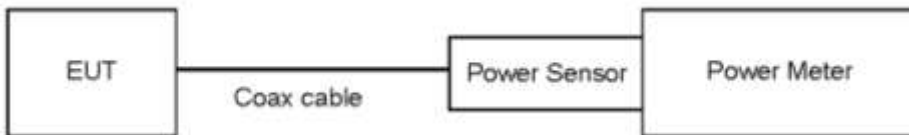
Un-Licensed bands (DTS Band)

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

Test Procedure

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

Test setup



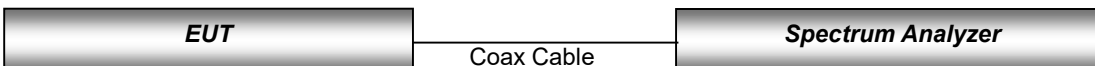
Un-Licensed bands(NII Band)

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

Test Procedure

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

Test setup



11.5.1 IEEE 802.11 (2.4 GHz) Maximum Conducted Power

Mode	Frequency [MHz]	Channel	IEEE 802.11 (2.4 GHz) Average RF Conducted Power [dBm]
			SISO
802.11b	2 412	1	19.90
	2 437	6	19.78
	2 462	11	19.68
802.11g	2 412	1	19.20
	2 437	6	19.25
	2 462	11	18.73
802.11n (HT20)	2 412	1	19.19
	2 437	6	19.13
	2 462	11	18.60

11.5.2 IEEE 802.11 (2.4 GHz) RCV Backoff Conducted Power

Mode	Frequency [MHz]	Channel	IEEE 802.11 (2.4 GHz) Average RF Conducted Power [dBm]
			SISO
802.11b	2 412	1	12.93
	2 437	6	12.95
	2 462	11	12.71
802.11g	2 412	1	12.90
	2 437	6	12.77
	2 462	11	12.58
802.11n (HT20)	2 412	1	12.92
	2 437	6	12.78
	2 462	11	12.56

11.5.4 IEEE 802.11 (5 GHz) Maximum Conducted Power

Mode	Frequency [MHz]	Channel	IEEE 802.11 (5 GHz) Average RF Conducted Power [dBm]
			SISO
802.11a (20 MHz BW)	5 180	36	18.45
	5 200	40	18.52
	5 220	44	18.51
	5 240	48	18.71
	5 260	52	18.59
	5 280	56	18.33
	5 300	60	17.38
	5 320	64	18.37
	5 500	100	17.58
	5 600	120	17.55
	5 620	124	17.40
	5 720	144	17.96
	5 745	149	18.80
	5 785	157	18.93
	5 825	165	18.27

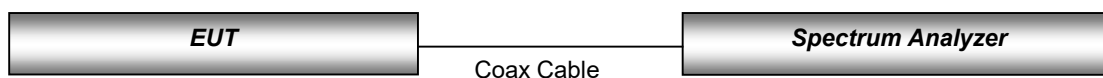
11.5.5 IEEE 802.11 (5 GHz) Reduced Conducted Power

Mode	Frequency [MHz]	Channel	IEEE 802.11 (5 GHz) Average RF Conducted Power [dBm]
			SISO
802.11ac80 (80MHz BW)	5 210	42	12.27
	5 290	58	12.41
	5 530	106	12.02
	5 610	122	12.43
	5 690	138	12.40
	5 775	155	12.68

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 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.
- Only the conducted Power measurement results of the WLAN mode determined by FCC KDB 248227 D01v02r02 are included in the table above. No additional power measurement other than the measurement case is required.

Test Configuration



11.6. Bluetooth Conducted Power

11.6.1 Bluetooth Maximum Conducted Power

The Burst averaged-conducted power

Mode	Channel	Bluetooth Power [dBm]
DH5	0	12.45
	39	12.89
	78	11.49
2-DH5	0	7.95
	39	8.33
	78	6.14
3-DH5	0	7.93
	39	8.32
	78	6.13

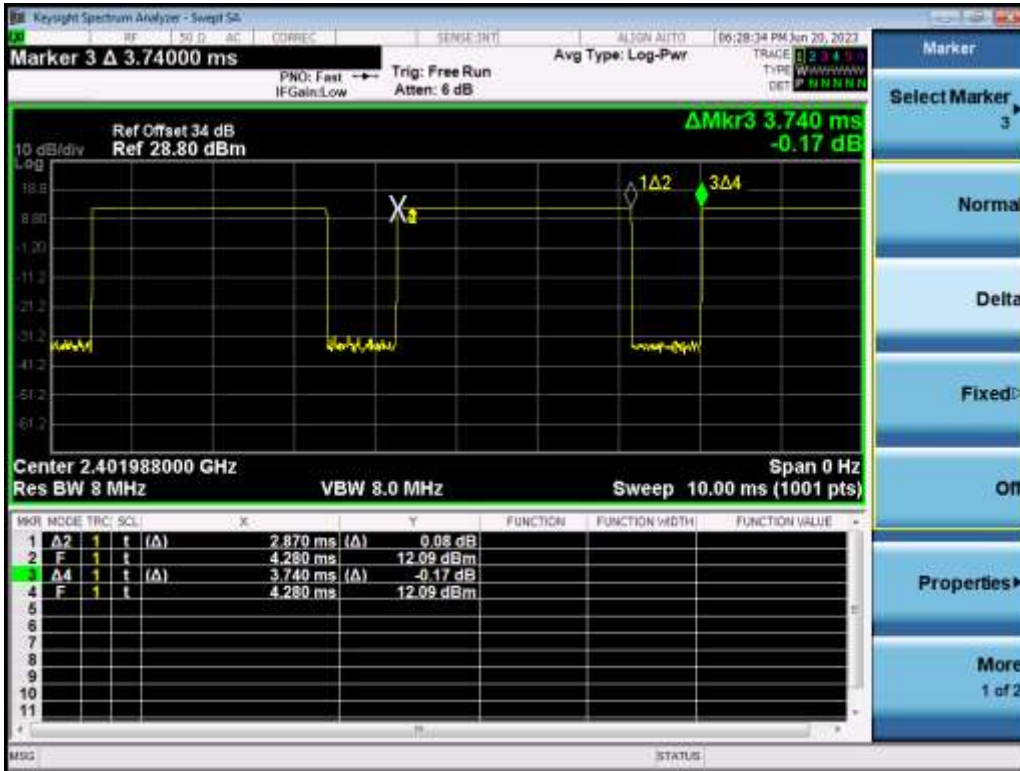
BT LE Burst averaged-conducted power

Mode	Channel	Bluetooth Power [dBm]
LE 1M 37 Packet	0	7.34
	19	7.82
	39	5.39
LE 1M 255 Packet	0	7.39
	19	7.85
	39	5.44
LE 2M 37 Packet	0	7.37
	19	7.71
	39	5.37
LE 2M 255 Packet	0	7.62
	19	7.90
	39	5.52
LE 125K 37 Packet	0	7.39
	19	7.77
	39	5.42
LE 125K 255 Packet	0	7.37
	19	7.81
	39	5.30
LE 255K 37 Packet	0	7.42
	19	7.83
	39	5.52
LE 255K 255 Packet	0	7.29
	19	7.80
	39	5.43

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

$$= (\text{BT-On time} / \text{BT-Full time}) = (2.870 / 3.740) = 0.767 \text{ (DH5)}$$

$$\text{Duty factor} = 1 / \text{Duty cycle} : 1.304$$

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
06/15/2023	21.0	13H	12	0.744	54.251	0.750	55.000	-0.80	-1.36
			13	0.724	54.273	0.750	55.000	-3.47	-1.32
			14	0.756	54.289	0.750	55.000	+0.80	-1.29
05/31/2023	20.1	750H	705	0.863	42.551	0.889	42.174	-2.92	+0.89
			710	0.862	42.516	0.890	42.148	-3.15	+0.87
			750	0.899	41.986	0.893	41.940	+0.67	+0.11
06/01/2023	19.3	750H	750	0.902	42.056	0.893	41.940	+1.01	+0.28
			785	0.938	41.553	0.896	41.758	+4.69	-0.49
06/02/2023	19.9	750H	750	0.904	42.126	0.893	41.940	+1.23	+0.44
			785	0.939	41.648	0.896	41.758	+4.80	-0.26
			800	0.955	41.347	0.897	41.682	+6.47	-0.80
06/12/2023	19.5	750H	680	0.872	42.033	0.888	42.305	-1.80	-0.64
			710	0.867	42.673	0.890	42.148	-2.58	+1.25
			750	0.906	42.150	0.893	41.940	+1.46	+0.50
06/07/2023	19.6	835H	820	0.917	42.135	0.899	41.577	+2.00	+1.34
			835	0.934	41.977	0.900	41.500	+3.78	+1.15
			850	0.953	41.728	0.916	41.500	+4.04	+0.55
06/09/2023	20.9	835H	820	0.915	42.059	0.899	41.577	+1.78	+1.16
			835	0.927	41.852	0.900	41.500	+3.00	+0.85
			850	0.945	41.603	0.916	41.500	+3.17	+0.25
05/30/2023	20.0	835H	820	0.910	41.997	0.899	41.577	+1.22	+1.01
			835	0.920	41.756	0.900	41.500	+2.22	+0.62
			850	0.942	41.470	0.916	41.500	+2.84	-0.07
06/03/2023	19.1	835H	820	0.913	42.000	0.899	41.577	+1.56	+1.02
			835	0.924	41.785	0.900	41.500	+2.67	+0.69
			850	0.944	41.522	0.916	41.500	+3.06	+0.05
06/22/2023	20.2	1800H	1710	1.323	41.560	1.348	40.144	-1.85	+3.53
			1750	1.366	41.358	1.371	40.080	-0.36	+3.19
			1800	1.418	41.137	1.400	40.000	+1.29	+2.84
07/06/2023	20.7	1800H	1710	1.319	41.550	1.348	40.144	-2.15	+3.50
			1750	1.366	41.348	1.371	40.080	-0.36	+3.16
			1800	1.408	41.102	1.400	40.000	+0.57	+2.76
06/30/2023	20.4	1800H	1710	1.310	41.499	1.348	40.144	-2.82	+3.38
			1750	1.362	41.252	1.371	40.080	-0.66	+2.92
			1800	1.405	41.003	1.400	40.000	+0.36	+2.51

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
07/04/2023	21.0	1900H	1850	1.366	41.495	1.400	40.000	-2.43	+3.74
			1900	1.416	41.314	1.400	40.000	+1.14	+3.29
			1910	1.425	41.286	1.400	40.000	+1.79	+3.22
06/22/2023	20.2	1900H	1850	1.370	41.570	1.400	40.000	-2.14	+3.93
			1900	1.426	41.340	1.400	40.000	+1.86	+3.35
			1910	1.432	41.328	1.400	40.000	+2.29	+3.32
09/15/2023	21.1	1900H	1850	1.372	41.423	1.400	40.000	-2.00	+3.56
			1900	1.416	41.237	1.400	40.000	+1.14	+3.09
			1910	1.434	41.274	1.400	40.000	+2.43	+3.18
07/03/2023	20.2	1900H	1850	1.379	41.615	1.400	40.000	-1.50	+4.04
			1900	1.427	41.372	1.400	40.000	+1.93	+3.43
			1910	1.435	41.401	1.400	40.000	+2.50	+3.50
06/22/2023	20.2	2300H	2300	1.710	39.928	1.667	39.470	+2.58	+1.16
			2310	1.718	39.909	1.676	39.452	+2.51	+1.16
			2350	1.750	39.829	1.711	39.380	+2.28	+1.14
			2360	1.758	39.810	1.720	39.362	+2.21	+1.14
06/30/2023	19.2	2450H	2400	1.798	39.064	1.756	39.290	+2.39	-0.58
			2450	1.838	39.144	1.800	39.200	+2.11	-0.14
			2500	1.885	39.255	1.855	39.140	+1.62	+0.29
06/09/2023	20.7	2450H	2400	1.805	39.141	1.756	39.290	+2.79	-0.38
			2450	1.843	39.167	1.800	39.200	+2.39	-0.08
			2500	1.889	39.281	1.855	39.140	+1.83	+0.36
07/03/2023	20.2	2600H	2500	1.894	39.330	1.855	39.140	+2.10	+0.49
			2550	1.948	39.267	1.909	39.070	+2.04	+0.50
			2600	2.027	39.206	1.964	39.010	+3.21	+0.50
07/05/2023	20.1	2600H	2500	1.896	39.420	1.855	39.140	+2.21	+0.72
			2600	1.953	39.303	1.964	39.010	-0.56	+0.75
			2690	2.028	39.290	2.062	38.894	-1.65	+1.02
09/07/2023	22.5	2600H	2500	1.935	38.540	1.855	39.140	+4.31	-1.53
			2600	2.035	38.105	1.964	39.010	+3.62	-2.32
			2690	2.120	37.680	2.062	38.894	+2.81	-3.12

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
09/04/2023	22.0	3500H-3700	3500	2.978	38.063	2.913	37.930	+2.23	+0.35
			3550	2.953	37.363	2.964	37.870	-0.37	-1.34
			3650	3.089	37.478	3.066	37.760	+0.75	-0.75
			3700	3.137	37.523	3.118	37.770	+0.61	-0.65
07/03/2023	21.0	5180H-5320H	5180	4.567	35.769	4.635	36.010	-1.47	-0.67
			5250	4.668	35.599	4.706	35.930	-0.81	-0.92
			5280	4.715	35.553	4.737	35.894	-0.46	-0.95
			5320	4.796	35.552	4.778	35.846	+0.38	-0.82
07/21/2023	22.7	5180H-5320H	5180	4.572	35.788	4.635	36.010	-1.36	-0.62
			5250	4.668	35.675	4.706	35.930	-0.81	-0.71
			5280	4.731	35.634	4.737	35.894	-0.13	-0.72
			5320	4.816	35.619	4.778	35.846	+0.80	-0.63
07/03/2023	21.0	5500H-5600H	5500	4.898	35.426	4.963	35.640	-1.31	-0.60
			5600	4.978	35.083	5.065	35.530	-1.72	-1.26
07/21/2023	22.7	5500H-5600H	5500	4.904	35.480	4.963	35.640	-1.19	-0.45
			5600	5.000	35.140	5.065	35.530	-1.28	-1.10
07/03/2023	21.0	5750H-5825H	5750	5.224	34.822	5.219	35.360	+0.10	-1.52
			5800	5.243	34.884	5.270	35.300	-0.51	-1.18
			5825	5.223	34.858	5.296	35.270	-1.38	-1.17
07/21/2023	22.7	5750H-5825H	5750	5.231	34.901	5.219	35.360	+0.23	-1.30
			5800	5.269	34.971	5.270	35.300	-0.02	-0.93
			5825	5.244	34.925	5.296	35.270	-0.98	-0.98

*** 5G NR Band**

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
06/14/2023	19.4	750H	680	0.875	43.064	0.888	42.305	-1.46	+1.79
			710	0.871	42.733	0.890	42.148	-2.13	+1.39
			750	0.909	42.241	0.893	41.940	+1.79	+0.72
06/13/2023	19.5	835H	820	0.907	41.909	0.899	41.577	+0.89	+0.80
			835	0.919	41.689	0.900	41.500	+2.11	+0.46
			850	0.941	41.396	0.916	41.500	+2.73	-0.25
06/13/2023	19.6	1640H	1640	1.248	41.671	1.310	40.200	-4.73	+3.66
			1700	1.326	41.486	1.342	40.160	-1.19	+3.30
			1710	1.329	41.448	1.348	40.144	-1.41	+3.25
06/12/2023	20.2	1800H	1710	1.319	41.550	1.348	40.144	-2.15	+3.50
			1750	1.366	41.348	1.371	40.080	-0.36	+3.16
			1800	1.408	41.102	1.400	40.000	+0.57	+2.76
06/09/2023	21.0	1900H	1850	1.385	41.633	1.400	40.000	-1.07	+4.08
			1900	1.430	41.381	1.400	40.000	+2.14	+3.45
			1910	1.444	41.496	1.400	40.000	+3.14	+3.74
06/08/2023	20.2	2300H	2300	1.712	39.966	1.667	39.470	+2.70	+1.26
			2310	1.720	39.963	1.676	39.452	+2.63	+1.30
			2350	1.755	39.859	1.711	39.380	+2.57	+1.22
			2360	1.758	39.846	1.720	39.362	+2.21	+1.23
			2500	1.883	39.392	1.855	39.140	+1.51	+0.64
07/10/2023	20.1	2600H	2600	2.020	39.284	1.964	39.010	+2.85	+0.70
			2690	2.128	38.434	2.062	38.894	+3.20	-1.18
			2500	1.935	38.540	1.855	39.140	+4.31	-1.53
09/07/2023	22.5	2600H	2600	2.035	38.105	1.964	39.010	+3.62	-2.32
			2690	2.120	37.680	2.062	38.894	+2.81	-3.12
			3500	2.982	38.105	2.913	37.930	+2.37	+0.46
09/05/2023	22.2	3500H~3700	3550	2.965	37.384	2.964	37.870	+0.03	-1.28
			3650	3.096	37.560	3.066	37.760	+0.98	-0.53
			3700	3.140	37.592	3.118	37.770	+0.71	-0.47
			3500	2.980	38.021	2.913	37.930	+2.30	+0.24
09/21/2023	21.9	3500H~3700	3550	2.966	37.281	2.964	37.870	+0.07	-1.56
			3650	3.093	37.600	3.066	37.760	+0.88	-0.42
			3700	3.140	37.684	3.118	37.770	+0.71	-0.23
			3500	2.995	38.151	2.913	37.930	+2.81	+0.58
07/17/2023	22.1	3500H~3700	3550	2.979	37.422	2.964	37.870	+0.51	-1.18
			3650	3.102	37.626	3.066	37.760	+1.17	-0.35
			3700	3.156	37.669	3.118	37.770	+1.22	-0.27
			3500	3.014	38.080	2.913	37.930	+3.47	+0.40
07/18/2023	20.3	3500H~3700	3550	2.970	37.413	2.964	37.870	+0.20	-1.21
			3650	3.114	37.720	3.066	37.760	+1.57	-0.11
			3700	3.138	37.708	3.118	37.770	+0.64	-0.16
			3400	2.953	38.546	2.810	38.040	+5.09	+1.33
07/04/2023	21.2	3400H~3550	3500	3.005	38.155	2.913	37.930	+3.16	+0.59
			3550	2.991	37.514	2.964	37.870	+0.91	-0.94
			3400	2.944	38.448	2.810	38.040	+4.77	+1.07
07/19/2023	21.5	3400H~3550	3500	2.998	38.063	2.913	37.930	+2.92	+0.35
			3550	2.983	37.449	2.964	37.870	+0.64	-1.11

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
07/20/2023	21.5	3400H~3550	3400	2.944	38.440	2.810	38.040	+4.77	+1.05
			3500	2.983	38.050	2.913	37.930	+2.40	+0.32
			3550	2.966	37.380	2.964	37.870	+0.07	-1.29
09/14/2023	20.0	3400H~3550	3400	2.924	38.297	2.810	38.040	+4.06	+0.68
			3500	2.962	38.043	2.913	37.930	+1.68	+0.30
			3550	2.940	37.332	2.964	37.870	-0.81	-1.42
07/04/2023	21.2	3700H~3970	3700	3.170	37.764	3.118	37.700	+1.67	+0.17
			3750	3.250	37.717	3.169	37.640	+2.56	+0.20
			3800	3.286	37.849	3.220	37.590	+2.05	+0.69
			3900	3.322	37.645	3.323	37.470	-0.03	+0.47
			3970	3.363	37.521	3.394	37.390	-0.91	+0.35
07/19/2023	21.5	3700H~3970	3700	3.150	37.721	3.118	37.700	+1.03	+0.06
			3750	3.240	37.701	3.169	37.640	+2.24	+0.16
			3800	3.273	37.789	3.220	37.590	+1.65	+0.53
			3900	3.305	37.550	3.323	37.470	-0.54	+0.21
			3970	3.357	37.514	3.394	37.390	-1.09	+0.33
07/20/2023	21.5	3700H~3970	3700	3.150	37.712	3.118	37.700	+1.03	+0.03
			3750	3.232	37.767	3.169	37.640	+1.99	+0.34
			3800	3.269	37.820	3.220	37.590	+1.52	+0.61
			3900	3.299	37.450	3.323	37.470	-0.72	-0.05
			3970	3.362	37.466	3.394	37.390	-0.94	+0.20
09/14/2023	20.0	3700H~3970	3700	3.134	37.482	3.118	37.700	+0.51	-0.58
			3750	3.195	37.496	3.169	37.640	+0.82	-0.38
			3800	3.219	37.554	3.220	37.590	-0.03	-0.10
			3900	3.312	37.529	3.323	37.470	-0.33	+0.16
			3970	3.326	37.209	3.394	37.390	-2.00	-0.48

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	05/31/2023	3972	1014	Head	20.1	20.1	8.59	0.411	8.22	-4.31	± 10
750	06/01/2023	3972		Head	19.5	19.3	8.59	0.413	8.26	-3.84	± 10
750	06/02/2023	3972		Head	20.0	19.9	8.59	0.413	8.26	-3.84	± 10
750	06/12/2023	3972		Head	19.6	19.5	8.59	0.415	8.30	-3.38	± 10
835	06/07/2023	3972	4d165	Head	19.7	19.6	9.74	0.522	10.44	+7.19	± 10
835	06/09/2023	3972		Head	20.9	20.9	9.74	0.518	10.36	+6.37	± 10
835	05/30/2023	3972		Head	20.1	20.0	9.74	0.523	10.46	+7.39	± 10
835	06/03/2023	3972		Head	19.3	19.1	9.74	0.524	10.48	+7.60	± 10
1 800	06/22/2023	7655	2d015	Head	20.3	20.2	37.8	2.010	40.2	+6.35	± 10
1 800	07/06/2023	7655		Head	20.8	20.7	37.8	1.990	39.8	+5.29	± 10
1 800	06/30/2023	7655		Head	20.5	20.4	37.8	1.990	39.8	+5.29	± 10
1 900	07/04/2023	7655	5d061	Head	21.1	21.0	38.9	2.070	41.4	+6.43	± 10
1 900	06/22/2023	7655		Head	20.3	20.2	38.9	2.080	41.6	+6.94	± 10
1 900	09/15/2023	7309		Head	21.2	21.1	38.9	1.840	36.8	-5.40	± 10
1 900	07/03/2023	7655		Head	20.2	20.2	38.9	2.090	41.8	+7.46	± 10
2 300	06/22/2023	7655	1010	Head	20.3	20.2	49.4	2.560	51.2	+3.64	± 10
2 450	06/30/2023	3972	1049	Head	19.3	19.2	52.7	2.670	53.4	+1.33	± 10
2 450	06/09/2023	3972		Head	20.9	20.7	52.7	2.680	53.6	+1.71	± 10
2 600	07/03/2023	7655	1106	Head	20.2	20.2	55.6	2.940	58.8	+5.76	± 10
2 600	09/07/2023	7309		Head	22.5	22.5	55.6	2.650	53.0	-4.68	± 10
2 600	07/05/2023	7655		Head	20.2	20.1	55.6	2.920	58.4	+5.04	± 10
3 500	09/04/2023	7702	1040	Head	22.1	22.0	66.5	3.190	63.8	-4.06	± 10
3 700	09/04/2023	7702	1066	Head	22.1	22.0	67.9	3.180	63.6	-6.33	± 10
5 250	07/03/2023	7702	1317	Head	21.2	21.0	78.8	3.790	75.8	-3.81	± 10
5 250	07/21/2023	7702		Head	22.9	22.7	78.8	4.230	84.6	+7.36	± 10
5 600	07/03/2023	7702		Head	21.2	21.0	81.2	3.760	75.2	-7.39	± 10
5 600	07/21/2023	7702		Head	22.9	22.7	81.2	4.340	86.8	+6.90	± 10
5 750	07/03/2023	7702		Head	21.2	21.0	77.4	3.670	73.4	-5.17	± 10
5 750	07/21/2023	7702		Head	22.9	22.7	77.4	4.010	80.2	+3.62	± 10

*** 5G NR Band**

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	06/14/2023	3972	1014	Head	19.5	19.4	8.59	0.416	8.32	-3.14	± 10	
835	06/13/2023	3972	4d165	Head	19.5	19.5	9.74	0.514	10.28	+5.54	± 10	
1 640	06/13/2023	7655	345	Head	19.7	19.6	34.6	1.650	33.0	-4.62	± 10	
1 800	06/12/2023	7655	2d015	Head	20.4	20.2	37.8	1.990	39.8	+5.29	± 10	
1 900	06/09/2023	7655	5d061	Head	21.0	21.0	38.9	2.090	41.8	+7.46	± 10	
2 300	06/08/2023	7655	1010	Head	20.4	20.2	49.4	2.280	45.6	-7.69	± 10	
2 600	07/10/2023	7655	1106	Head	20.1	20.1	55.6	2.940	58.8	+5.76	± 10	
2 600	09/07/2023	7309		Head	22.5	22.5	55.6	2.650	53.0	-4.68	± 10	
3 500	09/05/2023	7702	1040	Head	22.2	22.2	66.5	3.350	67.0	+0.75	± 10	
3 500	07/17/2023	7622		Head	22.2	22.1	66.5	3.270	65.4	-1.65	± 10	
3 500	07/18/2023	7622		Head	20.4	20.3	66.5	3.280	65.6	-1.35	± 10	
3 500	07/04/2023	7702		Head	21.4	21.2	66.5	3.340	66.8	+0.45	± 10	
3 500	07/19/2023	7622		Head	21.5	21.5	66.5	3.260	65.2	-1.95	± 10	
3 500	07/20/2023	7622		Head	21.6	21.5	66.5	3.240	64.8	-2.56	± 10	
3 500	09/14/2023	7702		Head	21.4	21.2	66.5	3.290	65.8	-1.05	± 10	
3 500	09/21/2023	7370		Head	21.9	21.9	66.5	3.230	64.6	-2.86	± 10	
3 700	09/05/2023	7702		1066	Head	22.2	22.2	67.9	3.390	67.8	-0.14	± 10
3 700	07/17/2023	7622			Head	22.2	22.1	67.9	3.290	65.8	-3.09	± 10
3 700	07/18/2023	7622	Head		20.4	20.3	67.9	3.260	65.2	-3.98	± 10	
3 700	07/04/2023	7702	Head		21.4	21.2	67.9	3.370	67.4	-0.74	± 10	
3 700	07/19/2023	7622	Head		21.5	21.5	67.9	3.290	65.8	-3.09	± 10	
3 700	07/20/2023	7622	Head		21.6	21.5	67.9	3.280	65.6	-3.39	± 10	
3 700	09/14/2023	7702	Head		21.4	21.2	67.9*	3.210	64.2	-5.44	± 10	
3 700	09/21/2023	7370	Head		21.9	21.9	67.9	3.420	68.4	+0.74	± 10	
3 900	07/04/2023	7702	1019	Head	21.4	21.2	69.7	3.260	65.2	-6.46	± 10	
3 900	07/19/2023	7622		Head	21.5	21.5	69.7	3.460	69.2	-0.72	± 10	
3 900	07/20/2023	7622		Head	21.6	21.5	69.7	3.430	68.6	-1.58	± 10	
3 900	09/14/2023	7702		Head	21.4	21.2	69.7	3.090	69.4	-0.43	± 10	

System Verification Results – Extremity SAR

Input Power: 50 mW

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR _{10g} (SPEAG) [W/kg]	50mW Measured SAR _{10g} [W/kg]	1 W Normalized SAR _{10g} [W/kg]	Deviation [%]	Limit [%]
13	06/16/2023	7655	1016	Head	21.2	21.0	0.353	0.019	0.38	+7.65	± 10
5 250	07/21/2023	7702	1317	Head	22.9	22.7	22.6	1.220	24.4	+7.96	± 10
5 600	07/21/2023	7702		Head	22.9	22.7	23.0	1.240	24.8	+7.83	± 10

12.3 System Verification Procedure

SAR measurement was prior to assessment, the system is verified to the $\pm 10\%$ of the specifications at each frequency band by using the system verification kit. (Graphic Plots Attached)

- Cabling the system, using the verification kit equipment.
- Generate about 50 mW Input level from the signal generator to the Dipole Antenna.
- Dipole antenna was placed below the flat phantom.
- The measured one-gram SAR at the surface of the phantom above the dipole feed-point should be within 10 % of the target reference value.
- The results are normalized to 1 W input power.

Note;

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

13. SAR Test Data Summary

13.1 Head SAR Measurement Results(RSI=4)

GSM 850 Head SAR												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
836.6	190	GSM	33.5	32.68	0.08	Left Cheek	1:8.30	Main1	0.198	1.208	0.239	-
836.6	190	GSM	33.5	32.68	-0.12	Left Tilt	1:8.30	Main1	0.113	1.208	0.137	-
836.6	190	GSM	33.5	32.68	0.12	Right Cheek	1:8.30	Main1	0.239	1.208	0.289	-
836.6	190	GSM	33.5	32.68	-0.02	Right Tilt	1:8.30	Main1	0.106	1.208	0.128	-
848.8	251	GPRS 3TX	30.0	29.11	-0.03	Left Cheek	1:2.77	Main1	0.242	1.227	0.297	-
848.8	251	GPRS 3TX	30.0	29.11	0.15	Left Tilt	1:2.77	Main1	0.118	1.227	0.145	-
848.8	251	GPRS 3TX	30.0	29.11	-0.15	Right Cheek	1:2.77	Main1	0.355	1.227	0.436	A1
848.8	251	GPRS 3TX	30.0	29.11	-0.15	Right Tilt	1:2.77	Main1	0.157	1.227	0.193	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg Averaged over 1 gram						

GSM 1900 Head SAR												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1 880	661	GSM	30.7	30.04	0.13	Left Cheek	1:8.30	Main2	0.098	1.164	0.114	-
1 880	661	GSM	30.7	30.04	0.15	Left Tilt	1:8.30	Main2	0.090	1.164	0.105	-
1 880	661	GSM	30.7	30.04	0.01	Right Cheek	1:8.30	Main2	0.081	1.164	0.094	-
1 880	661	GSM	30.7	30.04	0.14	Right Tilt	1:8.30	Main2	0.075	1.164	0.087	-
1 880	661	GPRS 4TX	26.0	25.37	-0.11	Left Cheek	1:2.07	Main2	0.158	1.156	0.183	A2
1 880	661	GPRS 4TX	26.0	25.37	-0.04	Left Tilt	1:2.07	Main2	0.141	1.156	0.163	-
1 880	661	GPRS 4TX	26.0	25.37	-0.11	Right Cheek	1:2.07	Main2	0.123	1.156	0.142	-
1 880	661	GPRS 4TX	26.0	25.37	-0.07	Right Tilt	1:2.07	Main2	0.118	1.156	0.136	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg Averaged over 1 gram						

UMTS Band 5 Head SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
836.6	4183	RMC	25.5	24.81	-0.08	Left Cheek	1:1	Main1	0.257	1.172	0.301	-
836.6	4183	RMC	25.5	24.81	0.15	Left Tilt	1:1	Main1	0.123	1.172	0.144	-
836.6	4183	RMC	25.5	24.81	-0.12	Right Cheek	1:1	Main1	0.309	1.172	0.362	A3
836.6	4183	RMC	25.5	24.81	-0.01	Right Tilt	1:1	Main1	0.154	1.172	0.180	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg Averaged over 1 gram						

UMTS Band 4 Head SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1 732.4	1412	RMC	25.0	24.06	0.13	Left Cheek	1:1	Main2	0.251	1.242	0.312	A4
1 732.4	1412	RMC	25.0	24.06	0.04	Left Tilt	1:1	Main2	0.176	1.242	0.219	-
1 732.4	1412	RMC	25.0	24.06	0.04	Right Cheek	1:1	Main2	0.191	1.242	0.237	-
1 732.4	1412	RMC	25.0	24.06	-0.08	Right Tilt	1:1	Main2	0.141	1.242	0.175	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg Averaged over 1 gram						

UMTS Band 2 Head SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1 880	9400	RMC	25.0	24.14	0.04	Left Cheek	1:1	Main2	0.317	1.219	0.386	A5
1 880	9400	RMC	25.0	24.14	0.05	Left Tilt	1:1	Main2	0.193	1.219	0.235	-
1 880	9400	RMC	25.0	24.14	0.14	Right Cheek	1:1	Main2	0.192	1.219	0.234	-
1 880	9400	RMC	25.0	24.14	0.08	Right Tilt	1:1	Main2	0.179	1.219	0.218	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg Averaged over 1 gram						

LTE Band 2 Head SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.															
1 880	18900	QPSK	20	22.0	21.72	-0.16	Left Cheek	0	1	0	1:1	Main3	0.067	1.067	0.071	-
1 860	18700	QPSK	20	22.0	21.92	-0.16	Left Cheek	0	50	25	1:1	Main3	0.060	1.019	0.061	-
1 880	18900	QPSK	20	22.0	21.72	0.12	Left Tilt	0	1	0	1:1	Main3	0.031	1.067	0.033	-
1 860	18700	QPSK	20	22.0	21.92	0.19	Left Tilt	0	50	25	1:1	Main3	0.024	1.019	0.024	-
1 880	18900	QPSK	20	22.0	21.72	-0.15	Right Cheek	0	1	0	1:1	Main3	0.141	1.067	0.150	A6
1 860	18700	QPSK	20	22.0	21.92	-0.09	Right Cheek	0	50	25	1:1	Main3	0.129	1.019	0.131	-
1 880	18900	QPSK	20	22.0	21.72	-0.16	Right Tilt	0	1	0	1:1	Main3	0.045	1.067	0.048	-
1 860	18700	QPSK	20	22.0	21.92	0.13	Right Tilt	0	50	25	1:1	Main3	0.043	1.019	0.044	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram								

LTE Band 5 Head SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.															
836.5	20525	QPSK	10	25.5	24.99	-0.08	Left Cheek	0	1	49	1:1	Main1	0.247	1.125	0.278	-
836.5	20525	QPSK	10	24.5	23.87	0.10	Left Cheek	1	25	24	1:1	Main1	0.203	1.156	0.235	-
836.5	20525	QPSK	10	25.5	24.99	0.04	Left Tilt	0	1	49	1:1	Main1	0.160	1.125	0.180	-
836.5	20525	QPSK	10	24.5	23.87	0.02	Left Tilt	1	25	24	1:1	Main1	0.130	1.156	0.150	-
836.5	20525	QPSK	10	25.5	24.99	0.10	Right Cheek	0	1	49	1:1	Main1	0.335	1.125	0.377	A7
836.5	20525	QPSK	10	24.5	23.87	0.13	Right Cheek	1	25	24	1:1	Main1	0.257	1.156	0.297	-
836.5	20525	QPSK	10	25.5	24.99	-0.03	Right Tilt	0	1	49	1:1	Main1	0.157	1.125	0.177	-
836.5	20525	QPSK	10	24.5	23.87	0.08	Right Tilt	1	25	24	1:1	Main1	0.147	1.156	0.170	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram								

LTE Band 7 Head SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.															
2 535	21100	QPSK	20	24.5	23.19	-0.02	Left Cheek	0	1	0	1:1	Main2	0.278	1.352	0.376	A8
2 510	20850	QPSK	20	23.5	22.49	-0.17	Left Cheek	1	50	25	1:1	Main2	0.217	1.262	0.274	-
2 535	21100	QPSK	20	24.5	23.19	-0.08	Left Tilt	0	1	0	1:1	Main2	0.119	1.352	0.161	-
2 510	20850	QPSK	20	23.5	22.49	-0.13	Left Tilt	1	50	25	1:1	Main2	0.087	1.262	0.110	-
2 535	21100	QPSK	20	24.5	23.19	0.02	Right Cheek	0	1	0	1:1	Main2	0.271	1.352	0.366	-
2 510	20850	QPSK	20	23.5	22.49	0.07	Right Cheek	1	50	25	1:1	Main2	0.204	1.262	0.257	-
2 535	21100	QPSK	20	24.5	23.19	0.10	Right Tilt	0	1	0	1:1	Main2	0.222	1.352	0.300	-
2 510	20850	QPSK	20	23.5	22.49	-0.01	Right Tilt	1	50	25	1:1	Main2	0.161	1.262	0.203	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram								

LTE Band 12 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
707.5	23095	QPSK	10	25.5	24.73	0.08	Left Cheek	0	1	0	1:1	Main1	0.139	1.194	0.166	-
707.5	23095	QPSK	10	24.5	23.83	0.12	Left Cheek	1	25	0	1:1	Main1	0.106	1.167	0.124	-
707.5	23095	QPSK	10	25.5	24.73	0.04	Left Tilt	0	1	0	1:1	Main1	0.079	1.194	0.094	-
707.5	23095	QPSK	10	24.5	23.83	0.14	Left Tilt	1	25	0	1:1	Main1	0.059	1.167	0.069	-
707.5	23095	QPSK	10	25.5	24.73	-0.01	Right Cheek	0	1	0	1:1	Main1	0.155	1.194	0.185	A9
707.5	23095	QPSK	10	24.5	23.83	0.18	Right Cheek	1	25	0	1:1	Main1	0.132	1.167	0.154	-
707.5	23095	QPSK	10	25.5	24.73	0.05	Right Tilt	0	1	0	1:1	Main1	0.088	1.194	0.105	-
707.5	23095	QPSK	10	24.5	23.83	0.01	Right Tilt	1	25	0	1:1	Main1	0.074	1.167	0.086	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 13 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
782	23230	QPSK	10	24.5	23.81	0.09	Left Cheek	0	1	0	1:1	Main1	0.185	1.172	0.217	-
782	23230	QPSK	10	23.5	22.99	0.07	Left Cheek	1	25	0	1:1	Main1	0.154	1.125	0.173	-
782	23230	QPSK	10	24.5	23.81	0.18	Left Tilt	0	1	0	1:1	Main1	0.103	1.172	0.121	-
782	23230	QPSK	10	23.5	22.99	-0.13	Left Tilt	1	25	0	1:1	Main1	0.082	1.125	0.092	-
782	23230	QPSK	10	24.5	23.81	0.04	Right Cheek	0	1	0	1:1	Main1	0.199	1.172	0.233	A10
782	23230	QPSK	10	23.5	22.99	0.09	Right Cheek	1	25	0	1:1	Main1	0.164	1.125	0.185	-
782	23230	QPSK	10	24.5	23.81	0.03	Right Tilt	0	1	0	1:1	Main1	0.114	1.172	0.134	-
782	23230	QPSK	10	23.5	22.99	-0.08	Right Tilt	1	25	0	1:1	Main1	0.089	1.125	0.100	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 14 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
793	23330	QPSK	10	24.5	23.57	0.02	Left Cheek	0	1	0	1:1	Main1	0.140	1.239	0.173	-
793	23330	QPSK	10	23.5	22.68	0.14	Left Cheek	1	25	0	1:1	Main1	0.110	1.208	0.133	-
793	23330	QPSK	10	24.5	23.57	-0.12	Left Tilt	0	1	0	1:1	Main1	0.077	1.239	0.095	-
793	23330	QPSK	10	23.5	22.68	0.03	Left Tilt	1	25	0	1:1	Main1	0.062	1.208	0.075	-
793	23330	QPSK	10	24.5	23.57	0.13	Right Cheek	0	1	0	1:1	Main1	0.179	1.239	0.222	A11
793	23330	QPSK	10	23.5	22.68	0.11	Right Cheek	1	25	0	1:1	Main1	0.139	1.208	0.168	-
793	23330	QPSK	10	24.5	23.57	0.01	Right Tilt	0	1	0	1:1	Main1	0.097	1.239	0.120	-
793	23330	QPSK	10	23.5	22.68	0.01	Right Tilt	1	25	0	1:1	Main1	0.083	1.208	0.100	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 25 Head SAR

Frequency		Mode	Band width (MHz)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
1 882.5	26365	QPSK	20	25.0	24.05	0.02	Left Cheek	0	1	49	1:1	Main2	0.243	1.245	0.303	A12
1 882.5	26365	QPSK	20	24.0	23.31	0.02	Left Cheek	1	50	49	1:1	Main2	0.197	1.172	0.231	-
1 882.5	26365	QPSK	20	25.0	24.05	0.04	Left Tilt	0	1	49	1:1	Main2	0.165	1.245	0.205	-
1 882.5	26365	QPSK	20	24.0	23.31	-0.17	Left Tilt	1	50	49	1:1	Main2	0.129	1.172	0.151	-
1 882.5	26365	QPSK	20	25.0	24.05	0.04	Right Cheek	0	1	49	1:1	Main2	0.223	1.245	0.278	-
1 882.5	26365	QPSK	20	24.0	23.31	-0.08	Right Cheek	1	50	49	1:1	Main2	0.180	1.172	0.211	-
1 882.5	26365	QPSK	20	25.0	24.05	-0.07	Right Tilt	0	1	49	1:1	Main2	0.154	1.245	0.192	-
1 882.5	26365	QPSK	20	24.0	23.31	-0.01	Right Tilt	1	50	49	1:1	Main2	0.123	1.172	0.144	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 26 Head SAR

Frequency		Mode	Band width (MHz)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
831.5	26865	QPSK	15	25.5	24.90	0.09	Left Cheek	0	1	0	1:1	Main1	0.246	1.148	0.282	-
831.5	26865	QPSK	15	24.5	23.92	0.16	Left Cheek	1	36	0	1:1	Main1	0.209	1.143	0.239	-
831.5	26865	QPSK	15	25.5	24.90	0.06	Left Tilt	0	1	0	1:1	Main1	0.151	1.148	0.173	-
831.5	26865	QPSK	15	24.5	23.92	0.01	Left Tilt	1	36	0	1:1	Main1	0.124	1.143	0.142	-
831.5	26865	QPSK	15	25.5	24.90	0.12	Right Cheek	0	1	0	1:1	Main1	0.319	1.148	0.366	A13
831.5	26865	QPSK	15	24.5	23.92	0.07	Right Cheek	1	36	0	1:1	Main1	0.246	1.143	0.281	-
831.5	26865	QPSK	15	25.5	24.90	-0.01	Right Tilt	0	1	0	1:1	Main1	0.172	1.148	0.197	-
831.5	26865	QPSK	15	24.5	23.92	0.02	Right Tilt	1	36	0	1:1	Main1	0.133	1.143	0.152	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 30 Head SAR

Frequency		Mode	Band width (MHz)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
2 310	27710	QPSK	10	24.0	23.06	0.09	Left Cheek	0	1	0	1:1	Main2	0.202	1.242	0.251	A14
2 310	27710	QPSK	10	23.0	22.20	-0.14	Left Cheek	1	25	0	1:1	Main2	0.161	1.202	0.194	-
2 310	27710	QPSK	10	24.0	23.06	0.13	Left Tilt	0	1	0	1:1	Main2	0.080	1.242	0.099	-
2 310	27710	QPSK	10	23.0	22.20	0.06	Left Tilt	1	25	0	1:1	Main2	0.064	1.202	0.077	-
2 310	27710	QPSK	10	24.0	23.06	-0.01	Right Cheek	0	1	0	1:1	Main2	0.201	1.242	0.250	-
2 310	27710	QPSK	10	23.0	22.20	-0.04	Right Cheek	1	25	0	1:1	Main2	0.118	1.202	0.142	-
2 310	27710	QPSK	10	24.0	23.06	0.11	Right Tilt	0	1	0	1:1	Main2	0.118	1.242	0.147	-
2 310	27710	QPSK	10	23.0	22.20	-0.06	Right Tilt	1	25	0	1:1	Main2	0.094	1.202	0.113	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 41 Head SAR

	Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
	Mhz	Ch.															
	2 593	40620	QPSK	20	25.5	23.97	-0.15	Left Cheek	0	1	0	1:1.58	Main2	0.271	1.422	0.385	A15
	2 593	40620	QPSK	20	24.5	23.03	0.11	Left Cheek	1	50	49	1:1.58	Main2	0.223	1.403	0.313	-
	2 593	40620	QPSK	20	25.5	23.97	0.18	Left Tilt	0	1	0	1:1.58	Main2	0.101	1.422	0.144	-
	2 593	40620	QPSK	20	24.5	23.03	0.11	Left Tilt	1	50	49	1:1.58	Main2	0.089	1.403	0.125	-
	2 593	40620	QPSK	20	25.5	23.97	0.13	Right Cheek	0	1	0	1:1.58	Main2	0.181	1.422	0.257	-
	2 593	40620	QPSK	20	24.5	23.03	0.14	Right Cheek	1	50	49	1:1.58	Main2	0.148	1.403	0.208	-
	2 593	40620	QPSK	20	25.5	23.97	0.11	Right Tilt	0	1	0	1:1.58	Main2	0.171	1.422	0.243	-
	2 593	40620	QPSK	20	24.5	23.03	-0.16	Right Tilt	1	50	49	1:1.58	Main2	0.178	1.403	0.250	-
Power class 2 (HPUE)																	
	2 593	40620	QPSK	20	27.0	25.40	0.14	Left Cheek	0	1	0	1:2.31	Main2	0.263	1.445	0.380	-
Up-link Carrier Aggregation Power class 3 (41C)																	
PCC	2 593	40620	QPSK	20	24.5	22.71	-0.11	Left Cheek	0	1	0	1:1.58	Main2	0.202	1.510	0.305	*
SCC	2 573.2	40422		20						1	99		Main2				
SCC	2 573.2	40422		20						1	99		Main2				
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Head 1.6 W/kg Averaged over 1 gram								

Note: * Up-link Carrier Aggregation Power class 3 (41C)

LTE Band 48 Head SAR

	Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
	Mhz	Ch.															
	3 603.3	55773	QPSK	20	17.0	15.99	-0.09	Left Cheek	0	1	99	1:1.58	Sub3	0.167	1.262	0.211	-
	3 603.3	55773	QPSK	20	17.0	16.14	0.17	Left Cheek	0	50	49	1:1.58	Sub3	0.172	1.219	0.210	-
	3 603.3	55773	QPSK	20	17.0	15.99	0.05	Left Tilt	0	1	99	1:1.58	Sub3	0.166	1.262	0.209	-
	3 603.3	55773	QPSK	20	17.0	16.14	0.14	Left Tilt	0	50	49	1:1.58	Sub3	0.180	1.219	0.219	-
	3 603.3	55773	QPSK	20	17.0	15.99	0.00	Right Cheek	0	1	99	1:1.58	Sub3	0.424	1.262	0.535	-
	3 603.3	55773	QPSK	20	17.0	16.14	-0.17	Right Cheek	0	50	49	1:1.58	Sub3	0.479	1.219	0.584	A16
	3 603.3	55773	QPSK	20	17.0	15.99	-0.13	Right Tilt	0	1	99	1:1.58	Sub3	0.299	1.262	0.377	-
	3 603.3	55773	QPSK	20	17.0	16.14	0.07	Right Tilt	0	50	49	1:1.58	Sub3	0.311	1.219	0.379	-
Up-link Carrier Aggregation (48C)																	
PCC	3 603.3	55773	QPSK	20	17.0	15.24	0.04	Right Cheek	0	1	99	1:1.58	Sub3	0.347	1.500	0.521	*
SCC	3 623.1	55971		20						1	0		Sub3				
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Head 1.6 W/kg Averaged over 1 gram								

Note: * Up-link Carrier Aggregation (48C)

LTE Band 66 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.															
1 770	132572	QPSK	20	25.0	24.19	-0.17	Left Cheek	0	1	49	1:1	Main2	0.243	1.205	0.293	-
1 770	132572	QPSK	20	24.0	23.52	-0.10	Left Cheek	1	50	25	1:1	Main2	0.197	1.117	0.220	-
1 770	132572	QPSK	20	25.0	24.19	-0.08	Left Tilt	0	1	49	1:1	Main2	0.205	1.205	0.247	-
1 770	132572	QPSK	20	24.0	23.52	0.12	Left Tilt	1	50	25	1:1	Main2	0.168	1.117	0.188	-
1 770	132572	QPSK	20	25.0	24.19	0.17	Right Cheek	0	1	49	1:1	Main2	0.158	1.205	0.190	-
1 770	132572	QPSK	20	24.0	23.52	0.11	Right Cheek	1	50	25	1:1	Main2	0.131	1.117	0.146	-
1 770	132572	QPSK	20	25.0	24.19	0.01	Right Tilt	0	1	49	1:1	Main2	0.208	1.205	0.251	-
1 770	132572	QPSK	20	24.0	23.52	0.02	Right Tilt	1	50	25	1:1	Main2	0.164	1.117	0.183	-
1 745	132322	QPSK	20	22.0	21.49	-0.15	Left Cheek	0	1	0	1:1	Main3	0.104	1.125	0.117	-
1 745	132322	QPSK	20	22.0	21.67	-0.15	Left Cheek	0	50	0	1:1	Main3	0.118	1.079	0.127	-
1 745	132322	QPSK	20	22.0	21.49	0.02	Left Tilt	0	1	0	1:1	Main3	0.047	1.125	0.053	-
1 745	132322	QPSK	20	22.0	21.67	0.18	Left Tilt	0	50	0	1:1	Main3	0.062	1.079	0.067	-
1 745	132322	QPSK	20	22.0	21.49	0.17	Right Cheek	0	1	0	1:1	Main3	0.381	1.125	0.429	A17
1 745	132322	QPSK	20	22.0	21.67	0.13	Right Cheek	0	50	0	1:1	Main3	0.392	1.079	0.423	-
1 745	132322	QPSK	20	22.0	21.49	-0.01	Right Tilt	0	1	0	1:1	Main3	0.119	1.125	0.134	-
1 745	132322	QPSK	20	22.0	21.67	0.13	Right Tilt	0	50	0	1:1	Main3	0.125	1.079	0.135	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram								

LTE Band 71 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.															
680.5	133297	QPSK	20	24.5	24.08	0.11	Left Cheek	0	1	0	1:1	Main1	0.117	1.102	0.129	-
680.5	133297	QPSK	20	23.5	23.35	0.16	Left Cheek	1	50	0	1:1	Main1	0.091	1.035	0.094	-
680.5	133297	QPSK	20	24.5	24.08	0.14	Left Tilt	0	1	0	1:1	Main1	0.057	1.102	0.063	-
680.5	133297	QPSK	20	23.5	23.35	0.10	Left Tilt	1	50	0	1:1	Main1	0.044	1.035	0.046	-
680.5	133297	QPSK	20	24.5	24.08	0.15	Right Cheek	0	1	0	1:1	Main1	0.151	1.102	0.166	A18
680.5	133297	QPSK	20	23.5	23.35	0.00	Right Cheek	1	50	0	1:1	Main1	0.124	1.035	0.128	-
680.5	133297	QPSK	20	24.5	24.08	-0.10	Right Tilt	0	1	0	1:1	Main1	0.076	1.102	0.084	-
680.5	133297	QPSK	20	23.5	23.35	0.06	Right Tilt	1	50	0	1:1	Main1	0.064	1.035	0.066	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram								

NR Band n5 (Cell) Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.78	-0.14	Left Cheek	0	1	53	1:1	Main1	0.278	1.180	0.328	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.06	Left Cheek	0	50	28	1:1	Main1	0.264	1.230	0.325	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.78	0.14	Left Tilt	0	1	53	1:1	Main1	0.172	1.180	0.203	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.12	Left Tilt	0	50	28	1:1	Main1	0.163	1.230	0.200	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.78	0.11	Right Cheek	0	1	53	1:1	Main1	0.316	1.180	0.373	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.02	Right Cheek	0	50	28	1:1	Main1	0.310	1.230	0.381	A19
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.78	0.04	Right Tilt	0	1	53	1:1	Main1	0.175	1.180	0.207	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.06	Right Tilt	0	50	28	1:1	Main1	0.170	1.230	0.209	-
836.5	167300	CP OFDM QPSK	20	24.0	23.36	0.14	Right Cheek	1.5	1	1	1:1	Main1	0.190	1.159	0.220	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n25 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
1 882.5	376500	DFT-s OFDM QPSK	40	25.0	23.63	-0.08	Left Cheek	0	1	108	1:1	Main2	0.241	1.371	0.330	A20
1 882.5	376500	DFT-s OFDM QPSK	40	25.0	23.51	0.14	Left Cheek	0	1	108	1:1	Main2	0.234	1.409	0.330	-
1 882.5	376500	DFT-s OFDM QPSK	40	25.0	23.63	0.11	Left Tilt	0	1	108	1:1	Main2	0.179	1.371	0.245	-
1 882.5	376500	DFT-s OFDM QPSK	40	25.0	23.51	-0.06	Left Tilt	0	1	108	1:1	Main2	0.136	1.409	0.192	-
1 882.5	376500	DFT-s OFDM QPSK	40	25.0	23.63	0.07	Right Cheek	0	1	108	1:1	Main2	0.148	1.371	0.203	-
1 882.5	376500	DFT-s OFDM QPSK	40	25.0	23.51	0.06	Right Cheek	0	1	108	1:1	Main2	0.132	1.409	0.186	-
1 882.5	376500	DFT-s OFDM QPSK	40	25.0	23.63	0.01	Right Tilt	0	1	108	1:1	Main2	0.131	1.371	0.180	-
1 882.5	376500	DFT-s OFDM QPSK	40	25.0	23.51	0.05	Right Tilt	0	1	108	1:1	Main2	0.128	1.409	0.180	-
1 882.5	376500	CP OFDM QPSK	40	23.5	21.78	-0.05	Left Cheek	1.5	1	1	1:1	Main2	0.142	1.486	0.211	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n30 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
2 310	462000	DFT-s OFDM QPSK	10	24.0	22.92	-0.12	Left Cheek	0	1	26	1:1	Main2	0.182	1.282	0.233	-
2 310	462000	DFT-s OFDM QPSK	10	24.0	22.84	-0.09	Left Cheek	0	25	14	1:1	Main2	0.212	1.306	0.277	A21
2 310	462000	DFT-s OFDM QPSK	10	24.0	22.92	0.09	Left Tilt	0	1	26	1:1	Main2	0.085	1.282	0.109	-
2 310	462000	DFT-s OFDM QPSK	10	24.0	22.84	-0.08	Left Tilt	0	25	14	1:1	Main2	0.083	1.306	0.108	-
2 310	462000	DFT-s OFDM QPSK	10	24.0	22.92	-0.11	Right Cheek	0	1	26	1:1	Main2	0.173	1.282	0.222	-
2 310	462000	DFT-s OFDM QPSK	10	24.0	22.84	0.07	Right Cheek	0	25	14	1:1	Main2	0.180	1.306	0.235	-
2 310	462000	DFT-s OFDM QPSK	10	24.0	22.92	-0.04	Right Tilt	0	1	26	1:1	Main2	0.112	1.282	0.144	-
2 310	462000	DFT-s OFDM QPSK	10	24.0	22.84	0.07	Right Tilt	0	25	14	1:1	Main2	0.117	1.306	0.153	-
2 310	462000	CP OFDM QPSK	10	22.5	21.25	-0.05	Left Cheek	1.5	1	1	1:1	Main2	0.146	1.334	0.195	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n41 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
2 592.99	518598	DFT-s OFDM QPSK	100	24.0	23.05	-0.08	Left Cheek	0	1	137	1:1	Main2	0.388	1.245	0.483	-
2 592.99	518598	DFT-s OFDM QPSK	100	24.0	23.05	-0.08	Left Cheek	0	135	69	1:1	Main2	0.422	1.245	0.525	A22
2 592.99	518598	DFT-s OFDM QPSK	100	24.0	23.05	0.09	Left Tilt	0	1	137	1:1	Main2	0.177	1.245	0.220	-
2 592.99	518598	DFT-s OFDM QPSK	100	24.0	23.05	0.11	Left Tilt	0	135	69	1:1	Main2	0.160	1.245	0.199	-
2 592.99	518598	DFT-s OFDM QPSK	100	24.0	23.05	0.09	Right Cheek	0	1	137	1:1	Main2	0.300	1.245	0.373	-
2 592.99	518598	DFT-s OFDM QPSK	100	24.0	23.05	0.07	Right Cheek	0	135	69	1:1	Main2	0.310	1.245	0.386	-
2 592.99	518598	DFT-s OFDM QPSK	100	24.0	23.05	0.12	Right Tilt	0	1	137	1:1	Main2	0.286	1.245	0.356	-
2 592.99	518598	DFT-s OFDM QPSK	100	24.0	23.05	0.06	Right Tilt	0	135	69	1:1	Main2	0.263	1.245	0.327	-
2 592.99	518598	CP OFDM QPSK	100	22.5	20.82	-0.15	Left Cheek	1.5	1	1	1:1	Main2	0.295	1.472	0.434	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n48 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
3 679.98	645332	DFT-s OFDM QPSK	40	14.5	14.46	0.15	Left Cheek	0	1	104	1:1	Sub3	0.118	1.009	0.119	-
3 679.98	645332	DFT-s OFDM QPSK	40	14.5	14.42	0.15	Left Cheek	0	50	56	1:1	Sub3	0.113	1.019	0.115	-
3 679.98	645332	DFT-s OFDM QPSK	40	14.5	14.46	0.11	Left Tilt	0	1	104	1:1	Sub3	0.096	1.009	0.097	-
3 679.98	645332	DFT-s OFDM QPSK	40	14.5	14.42	0.12	Left Tilt	0	50	56	1:1	Sub3	0.114	1.019	0.116	-
3 679.98	645332	DFT-s OFDM QPSK	40	14.5	14.46	0.12	Right Cheek	0	1	104	1:1	Sub3	0.416	1.009	0.420	-
3 679.98	645332	DFT-s OFDM QPSK	40	14.5	14.42	-0.17	Right Cheek	0	50	56	1:1	Sub3	0.422	1.019	0.430	A23
3 679.98	645332	DFT-s OFDM QPSK	40	14.5	14.46	-0.18	Right Tilt	0	1	104	1:1	Sub3	0.269	1.009	0.271	-
3 679.98	645332	DFT-s OFDM QPSK	40	14.5	14.42	0.15	Right Tilt	0	50	56	1:1	Sub3	0.348	1.019	0.355	-
3 679.98	645332	CP OFDM QPSK	40	14.5	14.43	0.06	Right Cheek	0	1	1	1:1	Sub3	0.414	1.016	0.421	-
3 679.98	645332	CW	40	14.0	13.84	0.00	Left Cheek	0	-	-	1:1	Main2	0.000	1.038	0.000	-
3 679.98	645332	CW	40	14.0	13.84	0.00	Left Tilt	0	-	-	1:1	Main2	0.000	1.038	0.000	-
3 679.98	645332	CW	40	14.0	13.84	0.00	Right Cheek	0	-	-	1:1	Main2	0.000	1.038	0.000	-
3 679.98	645332	CW	40	14.0	13.84	0.00	Right Tilt	0	-	-	1:1	Main2	0.000	1.038	0.000	-
3 679.98	645332	CW	40	14.0	12.82	0.15	Left Cheek	0	-	-	1:1	Sub2	0.046	1.312	0.060	-
3 679.98	645332	CW	40	14.0	12.82	-0.03	Left Tilt	0	-	-	1:1	Sub2	0.050	1.312	0.066	-
3 679.98	645332	CW	40	14.0	12.82	-0.01	Right Cheek	0	-	-	1:1	Sub2	0.098	1.312	0.129	-
3 679.98	645332	CW	40	14.0	12.82	0.17	Right Tilt	0	-	-	1:1	Sub2	0.088	1.312	0.115	-
3 679.98	645332	CW	40	14.0	13.21	0.00	Left Cheek	0	-	-	1:1	Sub5	0.000	1.199	0.000	-
3 679.98	645332	CW	40	14.0	13.21	0.10	Left Tilt	0	-	-	1:1	Sub5	0.00244	1.199	0.003	-
3 679.98	645332	CW	40	14.0	13.21	0.00	Right Cheek	0	-	-	1:1	Sub5	0.000	1.199	0.000	-
3 679.98	645332	CW	40	14.0	13.21	-0.16	Right Tilt	0	-	-	1:1	Sub5	0.00152	1.199	0.002	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n66 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
1 745	349000	DFT-s OFDM QPSK	40	25.0	23.58	-0.07	Left Cheek	0	1	108	1:1	Main2	0.190	1.387	0.264	-
1 745	349000	DFT-s OFDM QPSK	40	25.0	23.40	0.04	Left Cheek	0	108	54	1:1	Main2	0.184	1.445	0.266	A24
1 745	349000	DFT-s OFDM QPSK	40	25.0	23.58	0.05	Left Tilt	0	1	108	1:1	Main2	0.145	1.387	0.201	-
1 745	349000	DFT-s OFDM QPSK	40	25.0	23.40	0.06	Left Tilt	0	108	54	1:1	Main2	0.138	1.445	0.199	-
1 745	349000	DFT-s OFDM QPSK	40	25.0	23.58	0.09	Right Cheek	0	1	108	1:1	Main2	0.134	1.387	0.186	-
1 745	349000	DFT-s OFDM QPSK	40	25.0	23.40	-0.07	Right Cheek	0	108	54	1:1	Main2	0.124	1.445	0.179	-
1 745	349000	DFT-s OFDM QPSK	40	25.0	23.58	0.12	Right Tilt	0	1	108	1:1	Main2	0.130	1.387	0.180	-
1 745	349000	DFT-s OFDM QPSK	40	25.0	23.40	0.12	Right Tilt	0	108	54	1:1	Main2	0.116	1.445	0.168	-
1 745	349000	CP OFDM QPSK	40	23.5	21.58	-0.18	Left Cheek	1.5	1	1	1:1	Main2	0.099	1.556	0.154	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n70 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
1 702.5	340500	DFT-s OFDM QPSK	15	25.0	24.37	-0.06	Left Cheek	0	1	40	1:1	Main2	0.149	1.156	0.172	-
1 702.5	340500	DFT-s OFDM QPSK	15	25.0	24.36	-0.07	Left Cheek	0	36	22	1:1	Main2	0.179	1.159	0.207	A25
1 702.5	340500	DFT-s OFDM QPSK	15	25.0	24.37	0.11	Left Tilt	0	1	40	1:1	Main2	0.103	1.156	0.119	-
1 702.5	340500	DFT-s OFDM QPSK	15	25.0	24.36	-0.13	Left Tilt	0	36	22	1:1	Main2	0.101	1.159	0.117	-
1 702.5	340500	DFT-s OFDM QPSK	15	25.0	24.37	0.19	Right Cheek	0	1	40	1:1	Main2	0.114	1.156	0.132	-
1 702.5	340500	DFT-s OFDM QPSK	15	25.0	24.36	0.09	Right Cheek	0	36	22	1:1	Main2	0.111	1.159	0.129	-
1 702.5	340500	DFT-s OFDM QPSK	15	25.0	24.37	0.11	Right Tilt	0	1	40	1:1	Main2	0.094	1.156	0.109	-
1 702.5	340500	DFT-s OFDM QPSK	15	25.0	24.36	0.08	Right Tilt	0	36	22	1:1	Main2	0.090	1.159	0.104	-
1 702.5	340500	CP OFDM QPSK	15	23.5	22.78	-0.15	Left Cheek	1.5	1	1	1:1	Main2	0.124	1.180	0.146	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n71 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.70	-0.13	Left Cheek	0	1	53	1:1	Main1	0.145	1.202	0.174	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.57	-0.14	Left Cheek	0	50	28	1:1	Main1	0.148	1.239	0.183	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.70	0.14	Left Tilt	0	1	53	1:1	Main1	0.073	1.202	0.088	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.57	0.05	Left Tilt	0	50	28	1:1	Main1	0.074	1.239	0.092	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.70	-0.09	Right Cheek	0	1	53	1:1	Main1	0.223	1.202	0.268	A26
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.57	0.12	Right Cheek	0	50	28	1:1	Main1	0.201	1.239	0.249	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.70	0.18	Right Tilt	0	1	53	1:1	Main1	0.114	1.202	0.137	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.57	-0.09	Right Tilt	0	50	28	1:1	Main1	0.096	1.239	0.119	-
680.5	136100	CP OFDM QPSK	20	24.0	22.60	0.05	Right Cheek	1.5	1	1	1:1	Main1	0.120	1.380	0.166	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n77 Head SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
3 930	662000	DFT-s OFDM QPSK	100	17.0	16.99	-0.07	Left Cheek	0	1	1	1:1	Sub3	0.199	1.002	0.199	-
3 930	662000	DFT-s OFDM QPSK	100	17.0	16.38	-0.09	Left Cheek	0	135	69	1:1	Sub3	0.157	1.153	0.181	-
3 930	662000	DFT-s OFDM QPSK	100	17.0	16.99	-0.13	Left Tilt	0	1	1	1:1	Sub3	0.113	1.002	0.113	-
3 930	662000	DFT-s OFDM QPSK	100	17.0	16.38	0.02	Left Tilt	0	135	69	1:1	Sub3	0.120	1.153	0.138	-
3 930	662000	DFT-s OFDM QPSK	100	17.0	16.99	-0.13	Right Cheek	0	1	1	1:1	Sub3	0.644	1.002	0.645	-
3 750	650000	DFT-s OFDM QPSK	100	17.0	16.14	0.12	Right Cheek	0	1	137	1:1	Sub3	0.547	1.219	0.667	A27
3 930	662000	DFT-s OFDM QPSK	100	17.0	16.38	-0.14	Right Cheek	0	135	69	1:1	Sub3	0.539	1.153	0.621	-
3 750	650000	DFT-s OFDM QPSK	100	17.0	16.19	-0.02	Right Cheek	0	135	69	1:1	Sub3	0.551	1.205	0.664	-
3 930	662000	DFT-s OFDM QPSK	100	17.0	16.39	0.00	Right Cheek	0	270	0	1:1	Sub3	0.573	1.151	0.660	-
3 930	662000	DFT-s OFDM QPSK	100	17.0	16.99	-0.15	Right Tilt	0	1	1	1:1	Sub3	0.381	1.002	0.382	-
3 930	662000	DFT-s OFDM QPSK	100	17.0	16.38	0.00	Right Tilt	0	135	69	1:1	Sub3	0.289	1.153	0.333	-
3 500.01	633334	DFT-s OFDM QPSK	100	17.0	16.13	0.17	Right Cheek	0	1	271	1:1	Sub3	0.385	1.222	0.470	-
3 930	662000	CP OFDM QPSK	100	17.0	16.91	0.05	Right Cheek	0	1	1	1:1	Sub3	0.655	1.016	0.665	-
3 930	662000	CW	100	14.5	13.88	0.00	Left Cheek	0	-	-	1:1	Main2	0.000	1.153	0.000	-
3 930	662000	CW	100	14.5	13.88	0.00	Left Tilt	0	-	-	1:1	Main2	0.000	1.153	0.000	-
3 930	662000	CW	100	14.5	13.88	0.00	Right Cheek	0	-	-	1:1	Main2	0.000	1.153	0.000	-
3 930	662000	CW	100	14.5	13.88	0.00	Right Tilt	0	-	-	1:1	Main2	0.000	1.153	0.000	-
3 500.01	633334	CW	100	14.5	12.53	0.00	Left Touch	0	-	-	1:1	Main2	0.000	1.574	0.000	-
3 930	662000	CW	100	13.5	13.05	0.04	Left Cheek	0	-	-	1:1	Sub2	0.140	1.109	0.155	-
3 930	662000	CW	100	13.5	13.05	-0.17	Left Tilt	0	-	-	1:1	Sub2	0.154	1.109	0.171	-
3 930	662000	CW	100	13.5	13.05	0.16	Right Cheek	0	-	-	1:1	Sub2	0.585	1.109	0.649	-
3 750	650000	CW	100	13.5	12.79	0.01	Right Cheek	0	-	-	1:1	Sub2	0.132	1.178	0.155	-
3 930	662000	CW	100	13.5	13.05	-0.14	Right Tilt	0	-	-	1:1	Sub2	0.554	1.109	0.614	-
3 750	650000	CW	100	13.5	12.79	0.06	Right Tilt	0	-	-	1:1	Sub2	0.111	1.178	0.131	-
3 500.01	633334	CW	100	13.5	11.58	0.17	Right Cheek	0	-	-	1:1	Sub2	0.064	1.556	0.100	-
3 930	662000	CW	100	13.5	12.55	0.00	Left Cheek	0	-	-	1:1	Sub5	0.000	1.245	0.000	-
3 930	662000	CW	100	13.5	12.55	0.00	Left Tilt	0	-	-	1:1	Sub5	0.00668	1.245	0.008	-
3 930	662000	CW	100	13.5	12.55	0.00	Right Cheek	0	-	-	1:1	Sub5	0.000	1.245	0.000	-
3 930	662000	CW	100	13.5	12.55	0.14	Right Tilt	0	-	-	1:1	Sub5	0.0031	1.245	0.004	-
3 500.01	633334	CW	100	13.5	11.52	0.00	Left Tilt	0	-	-	1:1	Sub5	0.000	1.578	0.000	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

DTS Head SAR																
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Duty Cycle	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
2 437	6	802.11b	20	1	14.0	12.95	-0.05	Left Cheek	SISO	98.4	0.170	0.102	1.274	1.016	0.132	-
2 437	6	802.11b	20	1	14.0	12.95	0.12	Left Tilt	SISO	98.4	0.172	0.096	1.274	1.016	0.124	-
2 437	6	802.11b	20	1	14.0	12.95	0.09	Right Cheek	SISO	98.4	0.296	0.159	1.274	1.016	0.206	-
2 437	6	802.11b	20	1	14.0	12.95	0.09	Right Tilt	SISO	98.4	0.348	0.180	1.274	1.016	0.233	A28
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Head 1.6 W/kg Averaged over 1 gram							

NII Head SAR																
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Duty Cycle	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
5 290	58	802.11ac	80	MCS0	13	12.41	-0.05	Left Cheek	SISO	87.2	0.597	0.215	1.146	1.146	0.282	-
5 290	58	802.11ac	80	MCS0	13	12.41	-0.09	Left Tilt	SISO	87.2	0.662	0.273	1.146	1.146	0.359	-
5 290	58	802.11ac	80	MCS0	13	12.41	0.04	Right Cheek	SISO	87.2	0.612	0.230	1.146	1.146	0.302	-
5 290	58	802.11ac	80	MCS0	13	12.41	0.05	Right Tilt	SISO	87.2	0.664	0.288	1.146	1.146	0.378	-
5 610	122	802.11ac	80	MCS0	13	12.43	0.09	Left Cheek	SISO	87.2	1.010	0.324	1.140	1.146	0.423	-
5 610	122	802.11ac	80	MCS0	13	12.43	-0.11	Left Tilt	SISO	87.2	1.000	0.412	1.140	1.146	0.538	A29
5 610	122	802.11ac	80	MCS0	13	12.43	0.03	Right Cheek	SISO	87.2	0.730	0.292	1.140	1.146	0.382	-
5 610	122	802.11ac	80	MCS0	13	12.43	-0.17	Right Tilt	SISO	87.2	0.905	0.375	1.140	1.146	0.490	-
5 775	155	802.11ac	80	MCS0	13	12.68	-0.09	Left Cheek	SISO	87.2	1.010	0.335	1.076	1.146	0.413	-
5 775	155	802.11ac	80	MCS0	13	12.68	-0.05	Left Tilt	SISO	87.2	0.866	0.372	1.076	1.146	0.459	-
5 775	155	802.11ac	80	MCS0	13	12.68	-0.05	Right Cheek	SISO	87.2	0.800	0.277	1.076	1.146	0.342	-
5 775	155	802.11ac	80	MCS0	13	12.68	0.10	Right Tilt	SISO	87.2	0.873	0.382	1.076	1.146	0.471	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Head 1.6 W/kg Averaged over 1 gram							

DSS Head SAR													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.	
Mhz	Ch.												(dBm)
2 441	39	Bluetooth DH5	13	12.89	-0.06	Left Cheek	SISO	0.060	1.026	1.304	0.080	-	
2 441	39	Bluetooth DH5	13	12.89	-0.00	Left Tilt	SISO	0.060	1.026	1.304	0.080	-	
2 441	39	Bluetooth DH5	13	12.89	0.11	Right Cheek	SISO	0.080	1.026	1.304	0.107	-	
2 441	39	Bluetooth DH5	13	12.89	0.08	Right Tilt	SISO	0.097	1.026	1.304	0.130	A30	
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

13.2 Body-worn SAR Measurement Results (RSI=0)

GSM/ UMTS Body-Worn

GSM/UMTS Bodyworn SAR													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
836.6	190	GSM850 VOICE	33.5	32.68	0.17	Rear	1:8.30	Main1	15	0.361	1.208	0.436	-
836.6	190		33.5	32.68	-0.04	Front	1:8.30	Main1	15	0.196	1.208	0.237	-
848.8	251	GSM850 3Tx	30	29.11	0.04	Rear	1:2.77	Main1	15	0.568	1.227	0.697	B1
848.8	251		30	29.11	-0.04	Front	1:2.77	Main1	15	0.286	1.227	0.351	-
1 880	661	GSM1900 VOICE	30.7	30.04	0.06	Rear	1:8.30	Main2	15	0.144	1.164	0.168	-
1 880	661		30.7	30.04	0.04	Front	1:8.30	Main2	15	0.132	1.164	0.154	-
1 880	661	GSM1900 4Tx	26.0	25.37	-0.09	Rear	1:2.07	Main2	15	0.210	1.156	0.243	B2
1 880	661		26.0	25.37	-0.09	Front	1:2.07	Main2	15	0.175	1.156	0.202	-
836.6	4183	UMTS Band 5 RMC	25.5	24.81	-0.05	Rear	1:1	Main1	15	0.330	1.172	0.387	B3
836.6	4183		25.5	24.81	0.02	Front	1:1	Main1	15	0.262	1.172	0.307	-
1 732.4	1412	UMTS Band 4 RMC	25.0	24.06	0.03	Rear	1:1	Main2	15	0.341	1.242	0.423	B4
1 732.4	1412		25.0	24.06	0.06	Front	1:1	Main2	15	0.313	1.242	0.389	-
1 880	9400	UMTS Band 2 RMC	25.0	24.14	0.00	Rear	1:1	Main2	15	0.369	1.219	0.450	B5
1 880	9400		25.0	24.14	-0.01	Front	1:1	Main2	15	0.347	1.219	0.423	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

LTE Body-Worn

LTE Band Bodyworn SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.																
1 880	18900	LTE 2 QPSK	20	22.0	21.72	-0.16	Rear	0	1	0	1:1	Main3	15	0.074	1.067	0.079	B6
1 860	18700		20	22.0	21.92	-0.11	Rear	0	50	25	1:1	Main3	15	0.074	1.019	0.075	-
1 880	18900		20	22.0	21.72	0.09	Front	0	1	0	1:1	Main3	15	0.034	1.067	0.036	-
1 860	18700		20	22.0	21.92	-0.15	Front	0	50	25	1:1	Main3	15	0.03	1.019	0.031	-
836.5	20525	LTE 5 QPSK	10	25.5	24.99	0.05	Rear	0	1	49	1:1	Main1	15	0.430	1.125	0.484	B7
836.5	20525		10	24.5	23.87	0.04	Rear	1	25	24	1:1	Main1	15	0.340	1.156	0.393	-
836.5	20525		10	25.5	24.99	0.00	Front	0	1	49	1:1	Main1	15	0.257	1.125	0.289	-
836.5	20525		10	24.5	23.87	0.03	Front	1	25	24	1:1	Main1	15	0.212	1.156	0.245	-
2 535	21100	LTE 7 QPSK	20	24.5	23.19	-0.11	Rear	0	1	0	1:1	Main2	15	0.473	1.352	0.639	B8
2 510	20850		20	23.5	22.49	-0.11	Rear	1	50	25	1:1	Main2	15	0.374	1.262	0.472	-
2 535	21100		20	24.5	23.19	0.04	Front	0	1	0	1:1	Main2	15	0.352	1.352	0.476	-
2 510	20850		20	23.5	22.49	0.12	Front	1	50	25	1:1	Main2	15	0.293	1.262	0.370	-
707.5	23095	LTE 12 QPSK	10	25.5	24.73	0.01	Rear	0	1	0	1:1	Main1	15	0.254	1.194	0.303	B9
707.5	23095		10	24.5	23.83	0.04	Rear	1	25	0	1:1	Main1	15	0.194	1.167	0.226	-
707.5	23095		10	25.5	24.73	0.04	Front	0	1	0	1:1	Main1	15	0.157	1.194	0.187	-
707.5	23095		10	24.5	23.83	0.01	Front	1	25	0	1:1	Main1	15	0.131	1.167	0.153	-
782	23230	LTE 13 QPSK	10	24.5	23.81	0.02	Rear	0	1	0	1:1	Main1	15	0.336	1.172	0.394	B10
782	23230		10	23.5	22.99	0.05	Rear	1	25	0	1:1	Main1	15	0.277	1.125	0.312	-
782	23230		10	24.5	23.81	0.02	Front	0	1	0	1:1	Main1	15	0.259	1.172	0.304	-
782	23230		10	23.5	22.99	0.04	Front	1	25	0	1:1	Main1	15	0.213	1.125	0.240	-
793	23330	LTE 14 QPSK	10	24.5	23.57	0.01	Rear	0	1	0	1:1	Main1	15	0.243	1.239	0.301	B11
793	23330		10	23.5	22.68	0.04	Rear	1	25	0	1:1	Main1	15	0.193	1.208	0.233	-
793	23330		10	24.5	23.57	0.01	Front	0	1	0	1:1	Main1	15	0.223	1.239	0.276	-
793	23330		10	23.5	22.68	0.05	Front	1	25	0	1:1	Main1	15	0.173	1.208	0.209	-
1 882.5	26365	LTE 25 QPSK	20	25.0	24.05	-0.16	Rear	0	1	49	1:1	Main2	15	0.364	1.245	0.453	B12
1 882.5	26365		20	24.0	23.31	0.04	Rear	1	50	49	1:1	Main2	15	0.302	1.172	0.354	-
1 882.5	26365		20	25.0	24.05	0.07	Rear	0	1	49	1:1	Main2	15	0.291	1.245	0.362	-
1 882.5	26365		20	24.0	23.31	0.00	Front	1	50	49	1:1	Main2	15	0.240	1.172	0.281	-
831.5	26865	LTE 26 QPSK	15	25.5	24.90	0.04	Rear	0	1	0	1:1	Main1	15	0.395	1.148	0.453	B13
831.5	26865		15	24.5	23.92	0.04	Rear	1	36	0	1:1	Main1	15	0.353	1.143	0.403	-
831.5	26865		15	25.5	24.90	0.01	Front	0	1	0	1:1	Main1	15	0.279	1.148	0.320	-
831.5	26865		15	24.5	23.92	0.04	Front	1	36	0	1:1	Main1	15	0.219	1.143	0.250	-
2 310	27710	LTE 30 QPSK	10	24.0	23.06	-0.17	Rear	0	1	0	1:1	Main2	15	0.250	1.242	0.311	B14
2 310	27710		10	23.0	22.20	-0.05	Rear	1	25	0	1:1	Main2	15	0.204	1.202	0.245	-
2 310	27710		10	24.0	23.06	-0.00	Front	0	1	0	1:1	Main2	15	0.225	1.242	0.279	-
2 310	27710		10	23.0	22.20	0.12	Front	1	25	0	1:1	Main2	15	0.183	1.202	0.220	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit							Body										
Spatial Peak							1.6 W/kg										
Uncontrolled Exposure/ General Population							Averaged over 1 gram										

LTE Body-Worn

LTE Band Bodyworn SAR																		
Frequency			Mode	Band width (MHz)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	MPR (dB)	RB Size	RB offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.																	
2 593	40620	LTE 41 QPSK	20	25.5	23.97	-0.17	Rear	0	1	0	1:1.58	Main2	15	0.296	1.422	0.421		
2 593	40620		20	24.5	23.03	-0.10	Rear	1	50	49	1:1.58	Main2	15	0.240	1.403	0.337	-	
2 593	40620		20	25.5	23.97	0.16	Front	0	1	0	1:1.58	Main2	15	0.245	1.422	0.348	-	
2 593	40620		20	24.5	23.03	-0.18	Front	1	50	49	1:1.58	Main2	15	0.172	1.403	0.241	-	
2 593	40620	LTE 41 HPUE QPSK	20	27.0	25.40	-0.18	Rear	0	1	0	1:2.31	Main2	15	0.298	1.445	0.431	B15	
Up-link Carrier Aggregation Power class 3 (41C)																		
PCC	2 593	40620	QPSK	20	24.5	22.71	-0.14	Rear	0	1	0	1:1.58	Main2	15	0.270	1.510	0.408	*
SCC	2 573.2	40422								1	99							
3 603.3	55773	LTE 48 QPSK	20	21.0	20.52	-0.15	Rear	0	1	99	1:1.58	Sub3	15	0.149	1.117	0.166	-	
3 603.3	55773		20	21.0	20.76	0.03	Rear	0	50	49	1:1.58	Sub3	15	0.149	1.057	0.157	-	
3 603.3	55773		20	21.0	20.52	-0.16	Front	0	1	99	1:1.58	Sub3	15	0.113	1.117	0.126	-	
3 603.3	55773		20	21.0	20.76	0.04	Front	0	50	49	1:1.58	Sub3	15	0.113	1.057	0.119	-	
Up-link Carrier Aggregation (48C)																		
PCC	3 603.3	55773	QPSK	20	21.0	19.24	-0.03	Rear	0	1	99	1:1.58	Sub3	15	0.125	1.500	0.188	B16**
SCC	3 623.1	55971		20						1	0							
1 770	132572	LTE 66 QPSK	20	25.0	24.19	-0.01	Rear	0	1	49	1:1	Main2	15	0.327	1.205	0.394	B17	
1 770	132572		20	24.0	23.52	0.01	Rear	1	50	25	1:1	Main2	15	0.267	1.117	0.298	-	
1 770	132572		20	25.0	24.19	0.04	Front	0	1	49	1:1	Main2	15	0.303	1.205	0.365	-	
1 770	132572		20	24.0	23.52	0.05	Front	1	50	25	1:1	Main2	15	0.255	1.117	0.285	-	
1 745	132322		20	22.0	21.49	-0.01	Rear	0	1	0	1:1	Main3	15	0.197	1.125	0.222	-	
1 745	132322		20	22.0	21.67	-0.09	Rear	0	50	0	1:1	Main3	15	0.179	1.079	0.193	-	
1 745	132322		20	22.0	21.49	-0.18	Front	0	1	0	1:1	Main3	15	0.054	1.125	0.061	-	
1 745	132322		20	22.0	21.67	0.11	Front	0	50	0	1:1	Main3	15	0.052	1.079	0.056	-	
680.5	133297	LTE 71 QPSK	20	24.5	24.08	0.00	Rear	0	1	0	1:1	Main1	15	0.207	1.102	0.228	B18	
680.5	133297		20	23.5	23.35	-0.02	Rear	1	50	0	1:1	Main1	15	0.174	1.035	0.180	-	
680.5	133297		20	24.5	24.08	0.02	Front	0	1	0	1:1	Main1	15	0.167	1.102	0.184	-	
680.5	133297		20	23.5	23.35	0.03	Front	1	50	0	1:1	Main1	15	0.128	1.035	0.132	-	
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

Note: * Up-link Carrier Aggregation Power class 3 (41C)

** Up-link Carrier Aggregation (48C)

NR Band Body-Worn

NR Band Bodyworn SAR

Frequency		Mode	Band width (MHz)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	MPR (dB)	RB Size	RB offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.																
836.5	167300	NR n5 DFT-s OFDM QPSK	20	25.5	24.78	0.03	Rear	0	1	53	1:1	Main1	15	0.405	1.180	0.478	-
836.5	167300		20	25.5	24.60	0.02	Rear	0	50	28	1:1	Main1	15	0.442	1.230	0.544	B19
836.5	167300		20	25.5	24.78	0.01	Front	0	1	53	1:1	Main1	15	0.281	1.180	0.332	-
836.5	167300		20	25.5	24.60	-0.00	Front	0	50	28	1:1	Main1	15	0.269	1.230	0.331	-
836.5	167300		CP OFDM QPSK	20	24.0	23.36	0.02	Rear	1.5	1	1	1:1	Main1	15	0.225	1.159	0.261
1 882.5	376500	NR n25 DFT-s OFDM QPSK	40	25.0	23.63	-0.05	Rear	0	1	108	1:1	Main2	15	0.309	1.371	0.424	B20
1 882.5	376500		40	25.0	23.51	-0.06	Rear	0	108	54	1:1	Main2	15	0.293	1.409	0.413	-
1 882.5	376500		40	25.0	23.63	-0.06	Front	0	1	108	1:1	Main2	15	0.224	1.371	0.307	-
1 882.5	376500		40	25.0	23.51	-0.02	Front	0	108	54	1:1	Main2	15	0.231	1.409	0.325	-
1 882.5	376500		CP OFDM QPSK	40	23.5	21.78	-0.08	Rear	1.5	1	1	1:1	Main2	15	0.184	1.486	0.273
2 310	462000	NR n30 DFT-s OFDM QPSK	10	24.0	22.92	-0.07	Rear	0	1	26	1:1	Main2	15	0.175	1.282	0.224	-
2 310	462000		10	24.0	22.84	0.12	Rear	0	25	14	1:1	Main2	15	0.188	1.306	0.246	-
2 310	462000		10	24.0	22.92	0.15	Front	0	1	26	1:1	Main2	15	0.150	1.282	0.192	-
2 310	462000		10	24.0	22.84	0.07	Front	0	25	14	1:1	Main2	15	0.212	1.306	0.277	B21
2 310	462000		CP OFDM QPSK	10	22.5	21.25	-0.11	Front	1.5	1	1	1:1	Main2	15	0.160	1.334	0.213
2592.99	518598	NR n41 DFT-s OFDM QPSK	100	24.0	23.05	-0.09	Rear	0	1	137	1:1	Main2	15	0.661	1.245	0.823	-
2592.99	518598		100	24.0	23.05	-0.11	Rear	0	135	69	1:1	Main2	15	0.664	1.245	0.826	B22
2592.99	518598		100	23.0	21.98	-0.16	Rear	1	270	0	1:1	Main2	15	0.582	1.265	0.736	-
2592.99	518598		100	24.0	23.05	0.16	Front	0	1	137	1:1	Main2	15	0.410	1.245	0.510	-
2592.99	518598		100	24.0	23.05	-0.14	Front	0	135	69	1:1	Main2	15	0.408	1.245	0.508	-
2592.99	518598	CP OFDM QPSK	100	22.5	20.82	-0.02	Rear	1.5	1	1	1:1	Main2	15	0.416	1.472	0.612	-
3 679.98	645332	NR n48 DFT-s OFDM QPSK	40	23.0	22.93	-0.12	Rear	0	1	1	1:1	Sub3	15	0.515	1.016	0.523	-
3 570	638000		40	23.0	22.66	-0.18	Rear	0	50	28	1:1	Sub3	15	0.320	1.081	0.346	-
3 679.98	645332		40	23.0	22.93	-0.03	Front	0	1	1	1:1	Sub3	15	0.258	1.016	0.262	-
3 570	638000		40	23.0	22.66	-0.05	Front	0	50	28	1:1	Sub3	15	0.214	1.081	0.231	-
3 679.98	645332		CP OFDM QPSK	40	22.0	21.61	0.03	Rear	0	1	1	1:1	Sub3	15	0.491	1.094	0.537
3 679.98	645332	NR n48	40	18.0	17.20	0.00	Rear	0	-	-	1:1	Main2	15	0.119	1.202	0.143	-
3 679.98	645332	CW	40	18.0	17.20	0.00	Front	0	-	-	1:1	Main2	15	0.023	1.202	0.028	-
3 570	638000	NR n48	40	18.0	17.24	0.19	Rear	0	-	-	1:1	Sub2	15	0.026	1.191	0.031	-
3 570	638000	CW	40	18.0	17.24	0.10	Front	0	-	-	1:1	Sub2	15	0.00829	1.191	0.010	-
3 679.98	645332	NR n48	40	16.5	16.48	0.00	Rear	0	-	-	1:1	Sub5	15	0.000	1.005	0.000	-
3 679.98	645332	CW	40	16.5	16.48	0.00	Front	0	-	-	1:1	Sub5	15	0.000	1.005	0.000	-
1 745	349000	NR n66 DFT-s OFDM QPSK	40	25.0	23.58	-0.12	Rear	0	1	108	1:1	Main2	15	0.260	1.387	0.361	-
1 745	349000		40	25.0	23.40	-0.09	Rear	0	108	54	1:1	Main2	15	0.253	1.445	0.366	B24
1 745	349000		40	25.0	23.58	-0.04	Front	0	1	108	1:1	Main2	15	0.253	1.387	0.351	-
1 745	349000		40	25.0	23.40	-0.01	Front	0	108	54	1:1	Main2	15	0.245	1.445	0.354	-
1 745	349000		CP OFDM QPSK	40	23.5	21.58	-0.15	Rear	1.5	1	1	1:1	Main2	15	0.142	1.556	0.221
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

NR Band Bodyworn SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
1 702.5	340500	NR n70 DFT-s OFDM QPSK	15	25.0	24.37	-0.05	Rear	0	1	40	1:1	Main2	15	0.269	1.156	0.311	-
1 702.5	340500		15	25.0	24.36	-0.08	Rear	0	36	22	1:1	Main2	15	0.283	1.159	0.328	B25
1 702.5	340500		15	25.0	24.37	0.02	Front	0	1	40	1:1	Main2	15	0.250	1.156	0.289	-
1 702.5	340500		15	25.0	24.36	0.03	Front	0	36	22	1:1	Main2	15	0.246	1.159	0.285	-
1 702.5	340500		CP OFDM QPSK	15	23.5	22.78	-0.13	Rear	1.5	1	1	1:1	Main2	15	0.164	1.180	0.194
680.5	136100	NR n71 DFT-s OFDM QPSK	20	25.5	24.70	0.00	Rear	0	1	53	1:1	Main1	15	0.342	1.202	0.411	B26
680.5	136100		20	25.5	24.57	0.01	Rear	0	50	28	1:1	Main1	15	0.332	1.239	0.411	-
680.5	136100		20	25.5	24.70	-0.02	Front	0	1	53	1:1	Main1	15	0.229	1.202	0.275	-
680.5	136100		20	25.5	24.57	0.00	Front	0	50	28	1:1	Main1	15	0.220	1.239	0.273	-
680.5	136100		CP OFDM QPSK	20	24.0	22.60	0.00	Rear	1.5	1	1	1:1	Main1	15	0.226	1.380	0.312
3 930	662000	NR n77 DFT-s OFDM QPSK	100	19.0	18.99	-0.17	Rear	0	1	1	1:1	Sub3	15	0.155	1.002	0.155	-
3 930	662000		100	19.0	18.25	-0.12	Rear	0	135	69	1:1	Sub3	15	0.134	1.189	0.159	B27
3 930	662000		100	19.0	18.99	0.19	Front	0	1	1	1:1	Sub3	15	0.090	1.002	0.090	-
3 930	662000		100	19.0	18.25	-0.19	Front	0	135	69	1:1	Sub3	15	0.095	1.189	0.113	-
3 500.01	633334		100	19.0	18.22	-0.11	Rear	0	1	271	1:1	Sub3	15	0.072	1.197	0.086	-
3 930	662000	CP OFDM QPSK	100	19.0	18.82	-0.11	Rear	0	1	1	1:1	Sub3	15	0.121	1.042	0.126	-
3 930	662000	NR n77 CW	100	14.5	13.88	0.00	Rear	0	-	-	1:1	Main2	15	0.048	1.153	0.055	-
3 930	662000		100	14.5	13.88	0.00	Front	0	-	-	1:1	Main2	15	0.011	1.153	0.013	-
3 500.01	633334		100	14.5	12.53	0.00	Rear	0	-	-	1:1	Main2	15	0.034	1.574	0.054	-
3 930	662000	NR n77 CW	100	13.5	12.87	0.00	Rear	0	-	-	1:1	Sub2	15	0.040	1.156	0.046	-
3 930	662000		100	13.5	12.87	0.00	Front	0	-	-	1:1	Sub2	15	0.034	1.156	0.039	-
3 500.01	633334		100	13.5	11.58	0.00	Rear	0	-	-	1:1	Sub2	15	0.00813	1.556	0.013	-
3 930	662000	NR n77 CW	100	13.5	12.55	0.00	Rear	0	-	-	1:1	Sub5	15	0.000	1.245	0.000	-
3 930	662000		100	13.5	12.55	0.00	Front	0	-	-	1:1	Sub5	15	0.000	1.245	0.000	-
3 500.01	633334		100	13.5	11.52	0.00	Rear	0	-	-	1:1	Sub5	15	0.000	1.578	0.000	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

DTS Bodyworn SAR

Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Duty Cycle	Distance	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor (Duty)	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)				(mm)	(W/kg)	(W/kg)			(W/kg)	
2 437	6	802.11b	20	1	21.0	19.9	0.04	Rear	SISO	98.4	15	0.443	0.282	1.288	1.016	0.369	B28
2 437	6	802.11b	20	1	21.0	19.9	0.16	Front	SISO	98.4	15	0.159	0.104	1.288	1.016	0.134	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram								

NII Bodyworn SAR

Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)						(W/kg)				
5 260	52	802.11a	20	6	19.0	18.59	0.00	Rear	SISO	90.2	15	0.909	0.390	1.099	1.108	0.475	-
5 260	52	802.11a	20	6	19.0	18.59	0.00	Front	SISO	90.2	15	0.217	0.101	1.099	1.108	0.123	-
5 720	144	802.11a	20	6	19.0	17.96	0.00	Rear	SISO	90.2	15	0.973	0.420	1.271	1.108	0.591	B29
5 720	144	802.11a	20	6	19.0	17.96	0.00	Front	SISO	90.2	15	0.554	0.249	1.271	1.108	0.351	-
5 785	157	802.11a	20	6	19.0	18.93	0.00	Rear	SISO	90.2	15	0.707	0.310	1.016	1.108	0.349	-
5 785	157	802.11a	20	6	19.0	18.93	0.00	Front	SISO	90.2	15	0.489	0.215	1.016	1.108	0.242	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram								

DSS Bodyworn SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Distance (mm)	Meas. SAR	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.		(dBm)	(dBm)	(dB)				(W/kg)				
2 441	39	Bluetooth DH5	13	12.89	0.00	Rear	SISO	15	0.037	1.026	1.304	0.049	B30
2 441	39	Bluetooth DH5	13	12.89	-0.14	Front	SISO	15	0.011	1.026	1.304	0.015	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram						

13.3 Hotspot SAR Measurement Results(RSI=3)

GSM 850 Hotspot SAR													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant.	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
836.6	190	GPRS 3TX	26.0	24.08	0.04	Rear	1:2.77	Main1	10	0.193	1.384	0.300	C1
836.6	190	GPRS 3TX	26.0	24.08	0.05	Front	1:2.77	Main1	10	0.067	1.384	0.104	-
836.6	190	GPRS 3TX	26.0	24.08	0.11	Left	1:2.77	Main1	10	0.052	1.384	0.081	-
836.6	190	GPRS 3TX	26.0	24.08	0.06	Right	1:2.77	Main1	10	0.081	1.384	0.126	-
836.6	190	GPRS 3TX	26.0	24.08	0.12	Bottom	1:2.77	Main1	10	0.122	1.384	0.190	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram						

GSM 1900 Hotspot SAR													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant.	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
1 880	661	GPRS 4Tx	23.0	21.73	-0.19	Rear	1:2.07	Main2	10	0.231	1.340	0.310	-
1 880	661	GPRS 4Tx	23.0	21.73	-0.05	Front	1:2.07	Main2	10	0.225	1.340	0.302	-
1 880	661	GPRS 4Tx	23.0	21.73	0.04	Left	1:2.07	Main2	10	0.128	1.340	0.172	-
1 880	661	GPRS 4Tx	23.0	21.73	0.01	Bottom	1:2.07	Main2	10	0.244	1.340	0.327	C2
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram						

UMTS Band 5 Hotspot SAR													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant.	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
836.6	4183	RMC	25.5	24.81	0.02	Rear	1:1	Main1	10	0.848	1.172	0.994	-
826.4	4132	RMC	25.5	24.98	0.04	Rear	1:1	Main1	10	0.845	1.127	0.952	-
846.6	4233	RMC	25.5	24.99	0.01	Rear	1:1	Main1	10	0.898	1.125	1.010	C3
836.6	4183	RMC	25.5	24.81	-0.01	Front	1:1	Main1	10	0.265	1.172	0.311	-
836.6	4183	RMC	25.5	24.81	0.05	Left	1:1	Main1	10	0.240	1.172	0.281	-
836.6	4183	RMC	25.5	24.81	0.11	Right	1:1	Main1	10	0.354	1.172	0.415	-
836.6	4183	RMC	25.5	24.81	0.17	Bottom	1:1	Main1	10	0.518	1.172	0.607	-
846.6	4233	RMC	25.5	24.99	-0.00	Rear	1:1	Main1	10	0.868	1.125	0.977	*
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram						

Note: * Data entry indicate Variability measurement.

UMTS Band 4 Hotspot SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)					(W/kg)		(W/kg)	
1 732.4	1412	RMC	21.5	21.06	-0.13	Rear	1:1	Main2	10	0.314	1.107	0.347	C4
1 732.4	1412	RMC	21.5	21.06	0.03	Front	1:1	Main2	10	0.252	1.107	0.279	-
1 732.4	1412	RMC	21.5	21.06	-0.08	Left	1:1	Main2	10	0.162	1.107	0.179	-
1 732.4	1412	RMC	21.5	21.06	0.04	Bottom	1:1	Main2	10	0.220	1.107	0.243	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

UMTS Band 2 Hotspot SAR

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)					(W/kg)		(W/kg)	
1 880	9400	RMC	21.5	21.17	0.03	Rear	1:1	Main2	10	0.357	1.079	0.385	C5
1 880	9400	RMC	21.5	21.17	0.04	Front	1:1	Main2	10	0.320	1.079	0.345	-
1 880	9400	RMC	21.5	21.17	0.11	Left	1:1	Main2	10	0.192	1.079	0.207	-
1 880	9400	RMC	21.5	21.17	-0.04	Bottom	1:1	Main2	10	0.279	1.079	0.301	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

LTE Band 2 Hotspot SAR

Frequency		Mode	Band width (MHz)	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)								(W/kg)		(W/kg)	
1 880	18900	QPSK	20	22.0	21.72	-0.18	Rear	0	1	0	1:1	Main3	10	0.176	1.067	0.188	C6
1 860	18700	QPSK	20	22.0	21.92	-0.17	Rear	0	50	25	1:1	Main3	10	0.166	1.019	0.169	-
1 880	18900	QPSK	20	22.0	21.72	0.12	Front	0	1	49	1:1	Main3	10	0.068	1.067	0.073	-
1 860	18700	QPSK	20	22.0	21.92	0.13	Front	0	25	24	1:1	Main3	10	0.062	1.019	0.063	-
1 880	18900	QPSK	20	22.0	21.72	0.09	Left	0	1	49	1:1	Main3	10	0.092	1.067	0.098	-
1 860	18700	QPSK	20	22.0	21.92	0.18	Left	0	25	24	1:1	Main3	10	0.080	1.019	0.081	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram											

LTE Band 5 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.																
836.5	20525	QPSK	10	25.5	24.99	0.04	Rear	0	1	49	1:1	Main1	10	0.791	1.125	0.890	C7
836.5	20525	QPSK	10	24.5	23.87	0.02	Rear	1	25	24	1:1	Main1	10	0.656	1.156	0.758	-
836.5	20525	QPSK	10	24.5	23.86	0.04	Rear	1	50	0	1:1	Main1	10	0.522	1.159	0.605	-
836.5	20525	QPSK	10	25.5	24.99	-0.02	Front	0	1	49	1:1	Main1	10	0.244	1.125	0.275	-
836.5	20525	QPSK	10	24.5	23.87	-0.08	Front	1	25	24	1:1	Main1	10	0.205	1.156	0.237	-
836.5	20525	QPSK	10	25.5	24.99	0.05	Left	0	1	49	1:1	Main1	10	0.225	1.125	0.253	-
836.5	20525	QPSK	10	24.5	23.87	0.03	Left	1	25	24	1:1	Main1	10	0.171	1.156	0.198	-
836.5	20525	QPSK	10	25.5	24.99	0.03	Right	0	1	49	1:1	Main1	10	0.371	1.125	0.417	-
836.5	20525	QPSK	10	24.5	23.87	0.06	Right	1	25	24	1:1	Main1	10	0.301	1.156	0.348	-
836.5	20525	QPSK	10	25.5	24.99	0.19	Bottom	0	1	49	1:1	Main1	10	0.392	1.125	0.441	-
836.5	20525	QPSK	10	24.5	23.87	0.08	Bottom	1	25	24	1:1	Main1	10	0.354	1.156	0.409	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 7 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.																
2 560	21350	QPSK	20	22.0	21.74	-0.14	Rear	0	1	49	1:1	Main2	10	0.438	1.062	0.465	-
2 560	21350	QPSK	20	22.0	21.95	-0.13	Rear	0	50	25	1:1	Main2	10	0.465	1.012	0.471	-
2 560	21350	QPSK	20	22.0	21.74	0.10	Front	0	1	49	1:1	Main2	10	0.356	1.062	0.378	-
2 560	21350	QPSK	20	22.0	21.95	0.12	Front	0	50	25	1:1	Main2	10	0.372	1.012	0.376	-
2 560	21350	QPSK	20	22.0	21.74	0.09	Left	0	1	49	1:1	Main2	10	0.264	1.062	0.280	-
2 560	21350	QPSK	20	22.0	21.95	0.15	Left	0	50	25	1:1	Main2	10	0.264	1.012	0.267	-
2 560	21350	QPSK	20	22.0	21.74	0.07	Bottom	0	1	49	1:1	Main2	10	0.529	1.062	0.562	-
2 560	21350	QPSK	20	22.0	21.95	0.15	Bottom	0	50	25	1:1	Main2	10	0.561	1.012	0.568	C8
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 12 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.																
707.5	23095	QPSK	10	25.5	24.73	-0.01	Rear	0	1	0	1:1	Main1	10	0.324	1.194	0.387	C9
707.5	23095	QPSK	10	24.5	23.83	-0.02	Rear	1	25	0	1:1	Main1	10	0.268	1.167	0.313	-
707.5	23095	QPSK	10	25.5	24.73	-0.19	Front	0	1	0	1:1	Main1	10	0.148	1.194	0.177	-
707.5	23095	QPSK	10	24.5	23.83	-0.08	Front	1	25	0	1:1	Main1	10	0.125	1.167	0.146	-
707.5	23095	QPSK	10	25.5	24.73	0.04	Left	0	1	0	1:1	Main1	10	0.140	1.194	0.167	-
707.5	23095	QPSK	10	24.5	23.83	0.04	Left	1	25	0	1:1	Main1	10	0.106	1.167	0.124	-
707.5	23095	QPSK	10	25.5	24.73	0.00	Right	0	1	0	1:1	Main1	10	0.247	1.194	0.295	-
707.5	23095	QPSK	10	24.5	23.83	0.03	Right	1	25	0	1:1	Main1	10	0.195	1.167	0.228	-
707.5	23095	QPSK	10	25.5	24.73	0.09	Bottom	0	1	0	1:1	Main1	10	0.131	1.194	0.156	-
707.5	23095	QPSK	10	24.5	23.83	0.14	Bottom	1	25	0	1:1	Main1	10	0.115	1.167	0.134	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 13 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.																
782	23230	QPSK	10	24.5	23.81	-0.07	Rear	0	1	0	1:1	Main1	10	0.465	1.172	0.545	C10
782	23230	QPSK	10	23.5	22.99	0.02	Rear	1	25	0	1:1	Main1	10	0.376	1.125	0.423	-
782	23230	QPSK	10	24.5	23.81	0.01	Front	0	1	0	1:1	Main1	10	0.205	1.172	0.240	-
782	23230	QPSK	10	23.5	22.99	0.02	Front	1	25	0	1:1	Main1	10	0.169	1.125	0.190	-
782	23230	QPSK	10	24.5	23.81	0.02	Left	0	1	0	1:1	Main1	10	0.196	1.172	0.230	-
782	23230	QPSK	10	23.5	22.99	0.05	Left	1	25	0	1:1	Main1	10	0.162	1.125	0.182	-
782	23230	QPSK	10	24.5	23.81	0.10	Right	0	1	0	1:1	Main1	10	0.304	1.172	0.356	-
782	23230	QPSK	10	23.5	22.99	0.02	Right	1	25	0	1:1	Main1	10	0.252	1.125	0.284	-
782	23230	QPSK	10	24.5	23.81	0.15	Bottom	0	1	0	1:1	Main1	10	0.272	1.172	0.319	-
782	23230	QPSK	10	23.5	22.99	0.14	Bottom	1	25	0	1:1	Main1	10	0.222	1.125	0.250	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 14 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)								(W/kg)		(W/kg)	
793	23330	QPSK	10	24.5	23.57	0.02	Rear	0	1	0	1:1	Main1	10	0.430	1.239	0.533	C11
793	23330	QPSK	10	23.5	22.68	0.03	Rear	1	25	0	1:1	Main1	10	0.338	1.208	0.408	-
793	23330	QPSK	10	24.5	23.57	0.01	Front	0	1	0	1:1	Main1	10	0.173	1.239	0.214	-
793	23330	QPSK	10	23.5	22.68	0.01	Front	1	25	0	1:1	Main1	10	0.137	1.208	0.165	-
793	23330	QPSK	10	24.5	23.57	0.01	Left	0	1	0	1:1	Main1	10	0.178	1.239	0.221	-
793	23330	QPSK	10	23.5	22.68	0.03	Left	1	25	0	1:1	Main1	10	0.133	1.208	0.161	-
793	23330	QPSK	10	24.5	23.57	0.03	Right	0	1	0	1:1	Main1	10	0.296	1.239	0.367	-
793	23330	QPSK	10	23.5	22.68	0.02	Right	1	25	0	1:1	Main1	10	0.232	1.208	0.280	-
793	23330	QPSK	10	24.5	23.57	0.18	Bottom	0	1	0	1:1	Main1	10	0.256	1.239	0.317	-
793	23330	QPSK	10	23.5	22.68	0.11	Bottom	1	25	0	1:1	Main1	10	0.205	1.208	0.248	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 25 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)								(W/kg)		(W/kg)	
1 860	26140	QPSK	20	22.5	22.18	0.02	Rear	0	1	99	1:1	Main2	10	0.318	1.076	0.342	-
1 860	26140	QPSK	20	22.5	22.43	0.03	Rear	0	50	25	1:1	Main2	10	0.344	1.016	0.350	-
1 860	26140	QPSK	20	22.5	22.18	0.02	Front	0	1	99	1:1	Main2	10	0.284	1.076	0.306	-
1 860	26140	QPSK	20	22.5	22.43	0.02	Front	0	50	25	1:1	Main2	10	0.310	1.016	0.315	-
1 860	26140	QPSK	20	22.5	22.18	0.11	Left	0	1	99	1:1	Main2	10	0.219	1.076	0.236	-
1 860	26140	QPSK	20	22.5	22.43	-0.07	Left	0	50	25	1:1	Main2	10	0.039	1.016	0.040	-
1 860	26140	QPSK	20	22.5	22.18	0.09	Bottom	0	1	99	1:1	Main2	10	0.467	1.076	0.502	-
1 860	26140	QPSK	20	22.5	22.43	0.17	Bottom	0	50	25	1:1	Main2	10	0.527	1.016	0.535	C12
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 26 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.																
831.5	26865	QPSK	15	25.5	24.90	-0.03	Rear	0	1	0	1:1	Main1	10	0.708	1.148	0.813	C13
831.5	26865	QPSK	15	24.5	23.92	-0.01	Rear	1	36	0	1:1	Main1	10	0.583	1.143	0.666	-
831.5	26865	QPSK	15	24.5	23.93	0.04	Rear	1	75	0	1:1	Main1	10	0.508	1.140	0.579	-
831.5	26865	QPSK	15	25.5	24.90	-0.02	Front	0	1	0	1:1	Main1	10	0.235	1.148	0.270	-
831.5	26865	QPSK	15	24.5	23.92	-0.01	Front	1	36	0	1:1	Main1	10	0.190	1.143	0.217	-
831.5	26865	QPSK	15	25.5	24.90	0.01	Left	0	1	0	1:1	Main1	10	0.230	1.148	0.264	-
831.5	26865	QPSK	15	24.5	23.92	0.05	Left	1	36	0	1:1	Main1	10	0.179	1.143	0.205	-
831.5	26865	QPSK	15	25.5	24.90	0.03	Right	0	1	0	1:1	Main1	10	0.393	1.148	0.451	-
831.5	26865	QPSK	15	24.5	23.92	0.03	Right	1	36	0	1:1	Main1	10	0.313	1.143	0.358	-
831.5	26865	QPSK	15	25.5	24.90	0.04	Bottom	0	1	0	1:1	Main1	10	0.408	1.148	0.468	-
831.5	26865	QPSK	15	24.5	23.92	0.19	Bottom	1	36	0	1:1	Main1	10	0.340	1.143	0.389	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 30 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.																
2 310	27710	QPSK	10	22.0	21.65	-0.17	Rear	0	1	0	1:1	Main2	10	0.328	1.084	0.356	C14
2 310	27710	QPSK	10	22.0	21.81	-0.14	Rear	0	25	0	1:1	Main2	10	0.339	1.042	0.353	-
2 310	27710	QPSK	10	22.0	21.65	0.10	Front	0	1	0	1:1	Main2	10	0.261	1.084	0.283	-
2 310	27710	QPSK	10	22.0	21.81	0.01	Front	0	25	0	1:1	Main2	10	0.267	1.042	0.278	-
2 310	27710	QPSK	10	22.0	21.65	0.11	Left	0	1	0	1:1	Main2	10	0.188	1.084	0.204	-
2 310	27710	QPSK	10	22.0	21.81	0.09	Left	0	25	0	1:1	Main2	10	0.192	1.042	0.200	-
2 310	27710	QPSK	10	22.0	21.65	-0.04	Bottom	0	1	0	1:1	Main2	10	0.217	1.084	0.235	-
2 310	27710	QPSK	10	22.0	21.81	-0.04	Bottom	0	25	0	1:1	Main2	10	0.223	1.042	0.232	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 41 Hotspot SAR

Frequency		Mode	Band width (MHz)	Tune-up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	MPR (dB)	RB Size	RB offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.																
2 593	40620	QPSK	20	20.5	19.31	-0.19	Rear	0	1	0	1:1.58	Main2	10	0.225	1.315	0.296	-
2 593	40620	QPSK	20	20.5	19.31	0.18	Rear	0	50	49	1:1.58	Main2	10	0.213	1.315	0.280	-
2 593	40620	QPSK	20	20.5	19.31	0.14	Front	0	1	0	1:1.58	Main2	10	0.167	1.315	0.220	-
2 593	40620	QPSK	20	20.5	19.31	0.12	Front	0	50	49	1:1.58	Main2	10	0.171	1.315	0.225	-
2 593	40620	QPSK	20	20.5	19.31	0.03	Left	0	1	0	1:1.58	Main2	10	0.108	1.315	0.142	-
2 593	40620	QPSK	20	20.5	19.31	0.19	Left	0	50	49	1:1.58	Main2	10	0.115	1.315	0.151	-
2 593	40620	QPSK	20	20.5	19.31	0.04	Bottom	0	1	0	1:1.58	Main2	10	0.223	1.315	0.293	-
2 593	40620	QPSK	20	20.5	19.31	0.13	Bottom	0	50	49	1:1.58	Main2	10	0.224	1.315	0.295	-
2 593	40620	LTE 41 HPUE QPSK	22.5	21.39	27.03	-0.01	Rear	0	1	0	1:2.31	Main2	10	0.243	1.291	0.314	-
Up-link Carrier Aggregation Power class 3 (41C)																	
PCC	2 593	40620	20	20.5	18.56	-0.11	Rear	0	1	0	1:1.58	Main2	10	0.267	1.563	0.417	C15*
SCC	2 573.2	40422							1	99							
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

Note: * Up-link Carrier Aggregation Power class 3 (41C)

LTE Band 48 Hotspot SAR

Frequency		Mode	Band width (MHz)	Tune-up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	MPR (dB)	RB Size	RB offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.																
3 603.3	55773	QPSK	20	21.0	20.52	-0.16	Rear	0	1	99	1:1.58	Sub3	10	0.316	1.117	0.353	-
3 603.3	55773	QPSK	20	21.0	20.76	-0.16	Rear	0	50	49	1:1.58	Sub3	10	0.326	1.057	0.345	-
3 603.3	55773	QPSK	20	21.0	20.52	-0.13	Front	0	1	99	1:1.58	Sub3	10	0.251	1.117	0.280	-
3 603.3	55773	QPSK	20	21.0	20.76	-0.04	Front	0	50	49	1:1.58	Sub3	10	0.254	1.057	0.268	-
3 603.3	55773	QPSK	20	21.0	20.52	-0.06	Left	0	1	99	1:1.58	Sub3	10	0.388	1.117	0.433	-
3 603.3	55773	QPSK	20	21.0	20.76	-0.02	Left	0	50	49	1:1.58	Sub3	10	0.381	1.057	0.403	-
3 603.3	55773	QPSK	20	21.0	20.52	0.07	Top	0	1	99	1:1.58	Sub3	10	0.350	1.117	0.391	-
3 603.3	55773	QPSK	20	21.0	20.76	0.17	Top	0	50	49	1:1.58	Sub3	10	0.371	1.057	0.392	-
Up-link Carrier Aggregation (48C)																	
PCC	3 603.3	55773	20	21.0	19.24	0.03	Left	0	1	99	1:1.58	Sub3	10	0.343	1.500	0.515	C16*
SCC	3 623.1	55971							1	0							
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

Note: * Up-link Carrier Aggregation (48C)

LTE Band 66 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.																
1 770	132572	QPSK	20	22.5	22.15	-0.04	Rear	0	1	99	1:1	Main2	10	0.339	1.084	0.367	-
1 770	132572	QPSK	20	22.5	22.43	-0.01	Rear	0	50	49	1:1	Main2	10	0.352	1.016	0.358	-
1 770	132572	QPSK	20	22.5	22.15	0.04	Front	0	1	99	1:1	Main2	10	0.283	1.084	0.307	-
1 770	132572	QPSK	20	22.5	22.43	0.05	Front	0	50	49	1:1	Main2	10	0.295	1.016	0.300	-
1 770	132572	QPSK	20	22.5	22.15	0.14	Left	0	1	99	1:1	Main2	10	0.283	1.084	0.307	-
1 770	132572	QPSK	20	22.5	22.43	0.10	Left	0	50	49	1:1	Main2	10	0.294	1.016	0.299	-
1 770	132572	QPSK	20	22.5	22.15	0.03	Bottom	0	1	99	1:1	Main2	10	0.551	1.084	0.597	C17
1 770	132572	QPSK	20	22.5	22.43	0.05	Bottom	0	50	49	1:1	Main2	10	0.572	1.016	0.581	-
1 745	132322	QPSK	20	22.0	21.49	-0.11	Rear	0	1	0	1:1	Main3	10	0.407	1.125	0.458	-
1 745	132322	QPSK	20	22.0	21.67	0.16	Rear	0	50	0	1:1	Main3	10	0.367	1.079	0.396	-
1 745	132322	QPSK	20	22.0	21.49	0.17	Front	0	1	0	1:1	Main3	10	0.118	1.125	0.133	-
1 745	132322	QPSK	20	22.0	21.67	0.05	Front	0	50	0	1:1	Main3	10	0.123	1.079	0.133	-
1 745	132322	QPSK	20	22.0	21.49	0.03	Left	0	1	0	1:1	Main3	10	0.195	1.125	0.219	-
1 745	132322	QPSK	20	22.0	21.67	0.14	Left	0	50	0	1:1	Main3	10	0.207	1.079	0.223	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

LTE Band 71 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.																
680.5	133297	QPSK	20	24.5	24.08	0.01	Rear	0	1	0	1:1	Main1	10	0.336	1.102	0.370	C18
680.5	133297	QPSK	20	23.5	23.35	0.03	Rear	1	50	0	1:1	Main1	10	0.283	1.035	0.293	-
680.5	133297	QPSK	20	24.5	24.08	0.01	Front	0	1	0	1:1	Main1	10	0.157	1.102	0.173	-
680.5	133297	QPSK	20	23.5	23.35	0.03	Front	1	50	0	1:1	Main1	10	0.127	1.035	0.131	-
680.5	133297	QPSK	20	24.5	24.08	-0.00	Left	0	1	0	1:1	Main1	10	0.161	1.102	0.177	-
680.5	133297	QPSK	20	23.5	23.35	0.01	Left	1	50	0	1:1	Main1	10	0.120	1.035	0.124	-
680.5	133297	QPSK	20	24.5	24.08	-0.04	Right	0	1	0	1:1	Main1	10	0.324	1.102	0.357	-
680.5	133297	QPSK	20	23.5	23.35	0.03	Right	1	50	0	1:1	Main1	10	0.255	1.035	0.264	-
680.5	133297	QPSK	20	24.5	24.08	0.16	Bottom	0	1	0	1:1	Main1	10	0.147	1.102	0.162	-
680.5	133297	QPSK	20	23.5	23.35	0.01	Bottom	1	50	0	1:1	Main1	10	0.127	1.035	0.131	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

NR Band n5 (Cell) Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)											
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.78	0.01	Rear	0	1	53	1:1	Main1	10	0.828	1.180	0.977	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.01	Rear	0	50	28	1:1	Main1	10	0.856	1.230	1.053	-
836.5	167300	DFT-s OFDM QPSK	20	24.5	23.61	0.02	Rear	1	100	0	1:1	Main1	10	0.698	1.227	0.856	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.78	-0.01	Front	0	1	53	1:1	Main1	10	0.289	1.180	0.341	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.01	Front	0	50	28	1:1	Main1	10	0.252	1.230	0.310	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.78	0.08	Left	0	1	53	1:1	Main1	10	0.228	1.180	0.269	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.01	Left	0	50	28	1:1	Main1	10	0.229	1.230	0.282	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.78	0.07	Right	0	1	53	1:1	Main1	10	0.377	1.180	0.445	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.08	Right	0	50	28	1:1	Main1	10	0.378	1.230	0.465	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.78	0.13	Bottom	0	1	53	1:1	Main1	10	0.458	1.180	0.540	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.17	Bottom	0	50	28	1:1	Main1	10	0.458	1.230	0.563	-
836.5	167300	CP OFDM QPSK	20	24.0	23.36	0.03	Rear	1.5	1	1	1:1	Main1	10	0.544	1.159	0.630	-
836.5	167300	DFT-s OFDM QPSK	20	25.5	24.60	0.02	Rear	0	50	28	1:1	Main1	10	0.889	1.230	1.093	C19*
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

Note: * Data entry indicate Variability measurement.

NR Band n25 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)											
1 882.5	376500	DFT-s OFDM QPSK	40	22.0	20.71	-0.16	Rear	0	1	108	1:1	Main2	10	0.435	1.346	0.586	C20
1 882.5	376500	DFT-s OFDM QPSK	40	22.0	20.70	0.01	Rear	0	108	54	1:1	Main2	10	0.411	1.349	0.554	-
1 882.5	376500	DFT-s OFDM QPSK	40	22.0	20.71	0.00	Front	0	1	108	1:1	Main2	10	0.313	1.346	0.421	-
1 882.5	376500	DFT-s OFDM QPSK	40	22.0	20.70	-0.05	Front	0	108	54	1:1	Main2	10	0.314	1.349	0.424	-
1 882.5	376500	DFT-s OFDM QPSK	40	22.0	20.71	-0.08	Left	0	1	108	1:1	Main2	10	0.183	1.346	0.246	-
1 882.5	376500	DFT-s OFDM QPSK	40	22.0	20.70	-0.11	Left	0	108	54	1:1	Main2	10	0.173	1.349	0.233	-
1 882.5	376500	DFT-s OFDM QPSK	40	22.0	20.71	-0.04	Bottom	0	1	108	1:1	Main2	10	0.334	1.346	0.450	-
1 882.5	376500	DFT-s OFDM QPSK	40	22.0	20.70	-0.09	Bottom	0	108	54	1:1	Main2	10	0.323	1.349	0.436	-
1 882.5	376500	CP OFDM QPSK	40	22.0	20.19	0.06	Rear	0	1	1	1:1	Main2	10	0.251	1.517	0.381	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

NR Band n30 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(MHz)	(dBm)	(dBm)	(dB)								(W/kg)		(W/kg)	
2 310	462000	DFT-s OFDM QPSK	10	22.0	21.37	-0.12	Rear	0	1	26	1:1	Main2	10	0.353	1.156	0.408	C21
2 310	462000	DFT-s OFDM QPSK	10	22.0	21.36	-0.07	Rear	0	25	14	1:1	Main2	10	0.349	1.159	0.404	-
2 310	462000	DFT-s OFDM QPSK	10	22.0	21.37	0.19	Front	0	1	26	1:1	Main2	10	0.280	1.156	0.324	-
2 310	462000	DFT-s OFDM QPSK	10	22.0	21.36	0.12	Front	0	25	14	1:1	Main2	10	0.304	1.159	0.352	-
2 310	462000	DFT-s OFDM QPSK	10	22.0	21.37	-0.03	Left	0	1	26	1:1	Main2	10	0.138	1.156	0.160	-
2 310	462000	DFT-s OFDM QPSK	10	22.0	21.36	0.05	Left	0	25	14	1:1	Main2	10	0.168	1.159	0.195	-
2 310	462000	DFT-s OFDM QPSK	10	22.0	21.37	0.06	Bottom	0	1	26	1:1	Main2	10	0.229	1.156	0.265	-
2 310	462000	DFT-s OFDM QPSK	10	22.0	21.36	0.06	Bottom	0	25	14	1:1	Main2	10	0.222	1.159	0.257	-
2 310	462000	CP OFDM QPSK	10	22.0	21.31	-0.18	Rear	0	1	1	1:1	Main2	10	0.285	1.172	0.334	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

NR Band n41 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(MHz)	(dBm)	(dBm)	(dB)								(W/kg)		(W/kg)	
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.93	-0.05	Rear	0	1	137	1:1	Main2	10	0.678	1.107	0.750	-
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.90	-0.19	Rear	0	135	69	1:1	Main2	10	0.679	1.112	0.755	C22
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.80	-0.12	Rear	0	270	0	1:1	Main2	10	0.656	1.135	0.745	-
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.93	-0.05	Front	0	1	137	1:1	Main2	10	0.289	1.107	0.320	-
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.90	0.11	Front	0	135	69	1:1	Main2	10	0.358	1.112	0.398	-
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.93	0.03	Left	0	1	137	1:1	Main2	10	0.239	1.107	0.264	-
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.90	0.06	Left	0	135	69	1:1	Main2	10	0.274	1.112	0.305	-
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.93	0.08	Bottom	0	1	137	1:1	Main2	10	0.556	1.107	0.615	-
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.90	-0.17	Bottom	0	135	69	1:1	Main2	10	0.548	1.112	0.609	-
2 592.99	518598	DFT-s OFDM QPSK	100	22.0	20.80	0.02	Bottom	0	270	0	1:1	Main2	10	0.426	1.135	0.484	-
2 592.99	518598	CP OFDM QPSK	100	22.0	20.70	-0.10	Rear	0	1	1	1:1	Main2	10	0.642	1.175	0.754	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

NR Band n48 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.																
3 679.98	645332	DFT-s OFDM QPSK	40	23.0	22.93	-0.09	Rear	0	1	1	1:1	Sub3	10	0.787	1.016	0.800	-
3 570	638000	DFT-s OFDM QPSK	40	23.0	22.72	-0.04	Rear	0	1	53	1:1	Sub3	10	0.460	1.067	0.491	-
3 624.99	641666	DFT-s OFDM QPSK	40	23.0	22.19	-0.08	Rear	0	1	53	1:1	Sub3	10	0.507	1.205	0.611	-
3 570	638000	DFT-s OFDM QPSK	40	23.0	22.66	-0.15	Rear	0	50	28	1:1	Sub3	10	0.493	1.081	0.533	-
3 570	638000	DFT-s OFDM QPSK	40	23.0	21.72	-0.11	Rear	0	100	0	1:1	Sub3	10	0.500	1.343	0.672	-
3 679.98	645332	DFT-s OFDM QPSK	40	23.0	22.93	0.08	Front	0	1	1	1:1	Sub3	10	0.399	1.016	0.460	-
3 570	638000	DFT-s OFDM QPSK	40	23.0	22.66	0.08	Front	0	50	28	1:1	Sub3	10	0.383	1.081	0.414	-
3 679.98	645332	DFT-s OFDM QPSK	40	23.0	22.93	-0.04	Left	0	1	1	1:1	Sub3	10	0.928	1.016	0.943	-
3 570	638000	DFT-s OFDM QPSK	40	23.0	22.72	0.01	Left	0	1	53	1:1	Sub3	10	0.514	1.067	0.548	
3 624.99	641666	DFT-s OFDM QPSK	40	23.0	22.19	-0.10	Left	0	1	53	1:1	Sub3	10	0.709	1.205	0.854	
3 570	638000	DFT-s OFDM QPSK	40	23.0	22.66	-0.07	Left	0	50	28	1:1	Sub3	10	0.597	1.081	0.645	
3 624.99	641666	DFT-s OFDM QPSK	40	23.0	22.15	-0.19	Left	0	50	28	1:1	Sub3	10	0.172	1.216	0.209	
3 679.98	645332	DFT-s OFDM QPSK	40	23.0	22.39	0.03	Left	0	50	28	1:1	Sub3	10	0.225	1.151	0.259	
3 570	638000	DFT-s OFDM QPSK	40	23.0	21.72	-0.08	Left	0	100	0	1:1	Sub3	10	0.636	1.343	0.854	
3 679.98	645332	DFT-s OFDM QPSK	40	23.0	22.93	0.06	Top	0	1	1	1:1	Sub3	10	0.348	1.016	0.354	
3 570	638000	DFT-s OFDM QPSK	40	23.0	22.66	-0.18	Top	0	50	28	1:1	Sub3	10	0.640	1.081	0.692	
3 624.99	641666	DFT-s OFDM QPSK	40	23.0	22.15	0.05	Top	0	50	28	1:1	Sub3	10	0.586	1.216	0.713	
3 679.98	645332	DFT-s OFDM QPSK	40	23.0	22.39	0.15	Top	0	50	28	1:1	Sub3	10	0.270	1.151	0.311	
3 570	638000	DFT-s OFDM QPSK	40	23.0	21.72	-0.02	Top	0	100	0	1:1	Sub3	10	0.658	1.343	0.884	
3 679.98	645332	DFT-s OFDM QPSK	40	23.0	22.93	0.02	Left	0	1	1	1:1	Sub3	10	0.929	1.016	0.944	*
3 679.98	645332	CP OFDM QPSK	40	22.0	21.61	-0.06	Left	1	1	1	1:1	Sub3	10	0.886	1.094	0.969	C23
3 680.01	645334	CW	40	14.0	13.84	-0.10	Rear	0	-	-	1:1	Main2	10	0.290	1.038	0.301	-
3 680.01	645334	CW	40	14.0	13.84	0.00	Front	0	-	-	1:1	Main2	10	0.048	1.038	0.050	-
3 680.01	645334	CW	40	14.0	13.84	-0.12	Left	0	-	-	1:1	Main2	10	0.040	1.038	0.042	-
3 680.01	645334	CW	40	14.0	13.84	0.19	Bottom	0	-	-	1:1	Main2	10	0.118	1.038	0.122	-
3 570	638000	CW	40	14.0	12.82	-0.17	Rear	0	-	-	1:1	Sub2	10	0.073	1.312	0.096	-
3 570	638000	CW	40	14.0	12.82	0.11	Front	0	-	-	1:1	Sub2	10	0.050	1.312	0.066	-
3 570	638000	CW	40	14.0	12.82	0.04	Left	0	-	-	1:1	Sub2	10	0.057	1.312	0.075	-
3 570	638000	CW	40	14.0	12.82	-0.13	Top	0	-	-	1:1	Sub2	10	0.065	1.312	0.085	-
3 570	638000	CW	40	14.0	13.21	0.00	Rear	0	-	-	1:1	Sub5	10	0.0098	1.199	0.012	-
3 570	638000	CW	40	14.0	13.21	0.00	Front	0	-	-	1:1	Sub5	10	0.00587	1.199	0.007	-
3 570	638000	CW	40	14.0	13.21	0.00	Top	0	-	-	1:1	Sub5	10	0.00957	1.199	0.012	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

Note: * Data entry indicate Variability measurement.

NR Band n66 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.		(Mhz)	(dBm)	(dBm)	(dB)											
1 745	349000	DFT-s OFDM QPSK	40	22.5	21.32	-0.08	Rear	0	1	108	1:1	Main2	10	0.346	1.312	0.454	-
1 745	349000	DFT-s OFDM QPSK	40	22.5	21.40	-0.03	Rear	0	108	54	1:1	Main2	10	0.377	1.288	0.486	-
1 745	349000	DFT-s OFDM QPSK	40	22.5	21.32	0.04	Front	0	1	108	1:1	Main2	10	0.277	1.312	0.363	-
1 745	349000	DFT-s OFDM QPSK	40	22.5	21.40	0.07	Front	0	108	54	1:1	Main2	10	0.292	1.288	0.376	-
1 745	349000	DFT-s OFDM QPSK	40	22.5	21.32	0.10	Left	0	1	108	1:1	Main2	10	0.163	1.312	0.214	-
1 745	349000	DFT-s OFDM QPSK	40	22.5	21.40	0.10	Left	0	108	54	1:1	Main2	10	0.176	1.288	0.227	-
1 745	349000	DFT-s OFDM QPSK	40	22.5	21.32	0.09	Bottom	0	1	108	1:1	Main2	10	0.420	1.312	0.551	C24
1 745	349000	DFT-s OFDM QPSK	40	22.5	21.40	0.09	Bottom	0	108	54	1:1	Main2	10	0.408	1.288	0.526	-
1 745	349000	CP OFDM QPSK	40	22.5	20.54	0.05	Bottom	0	1	1	1:1	Main2	10	0.182	1.570	0.286	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

NR Band n70 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.		(Mhz)	(dBm)	(dBm)	(dB)											
1 702.5	340500	DFT-s OFDM QPSK	15	22.5	22.15	0.00	Rear	0	1	40	1:1	Main2	10	0.360	1.084	0.390	-
1 702.5	340500	DFT-s OFDM QPSK	15	22.5	22.13	0.04	Rear	0	36	22	1:1	Main2	10	0.361	1.089	0.393	-
1 702.5	340500	DFT-s OFDM QPSK	15	22.5	22.15	0.00	Front	0	1	40	1:1	Main2	10	0.297	1.084	0.322	-
1 702.5	340500	DFT-s OFDM QPSK	15	22.5	22.13	0.00	Front	0	36	22	1:1	Main2	10	0.286	1.089	0.311	-
1 702.5	340500	DFT-s OFDM QPSK	15	22.5	22.15	0.03	Left	0	1	40	1:1	Main2	10	0.163	1.084	0.177	-
1 702.5	340500	DFT-s OFDM QPSK	15	22.5	22.13	0.03	Left	0	36	22	1:1	Main2	10	0.176	1.089	0.192	-
1 702.5	340500	DFT-s OFDM QPSK	15	22.5	22.15	-0.06	Bottom	0	1	40	1:1	Main2	10	0.398	1.084	0.431	-
1 702.5	340500	DFT-s OFDM QPSK	15	22.5	22.13	0.10	Bottom	0	36	22	1:1	Main2	10	0.477	1.089	0.519	C25
1 702.5	340500	CP OFDM QPSK	15	22.5	21.84	-0.02	Bottom	0	1	1	1:1	Main2	10	0.238	1.164	0.277	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

NR Band n71 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.		(Mhz)	(dBm)	(dBm)	(dB)											
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.70	-0.02	Rear	0	1	53	1:1	Main1	10	0.569	1.202	0.684	C26
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.57	0.02	Rear	0	50	28	1:1	Main1	10	0.526	1.239	0.652	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.70	-0.00	Front	0	1	53	1:1	Main1	10	0.202	1.202	0.243	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.57	0.00	Front	0	50	28	1:1	Main1	10	0.204	1.239	0.253	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.70	0.06	Left	0	1	53	1:1	Main1	10	0.191	1.202	0.230	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.57	0.05	Left	0	50	28	1:1	Main1	10	0.185	1.239	0.229	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.70	0.05	Right	0	1	53	1:1	Main1	10	0.390	1.202	0.469	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.57	0.13	Right	0	50	28	1:1	Main1	10	0.382	1.239	0.473	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.70	0.13	Bottom	0	1	53	1:1	Main1	10	0.223	1.202	0.268	-
680.5	136100	DFT-s OFDM QPSK	20	25.5	24.57	0.16	Bottom	0	50	28	1:1	Main1	10	0.219	1.239	0.271	-
680.5	136100	CP OFDM QPSK	20	24.0	22.60	0.04	Rear	1.5	1	1	1:1	Main1	10	0.320	1.380	0.442	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

NR Band n77 Hotspot SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.		(Mhz)	(dBm)	(dBm)	(dB)											
3 930	662000	DFT-s OFDM QPSK	100	19.0	18.99	-0.17	Rear	0	1	1	1:1	Sub3	10	0.333	1.002	0.334	-
3 930	662000	DFT-s OFDM QPSK	100	19.0	18.25	-0.18	Rear	0	135	69	1:1	Sub3	10	0.311	1.189	0.370	C27
3 930	662000	DFT-s OFDM QPSK	100	19.0	18.99	-0.02	Front	0	1	1	1:1	Sub3	10	0.239	1.002	0.239	-
3 930	662000	DFT-s OFDM QPSK	100	19.0	18.25	0.08	Front	0	135	69	1:1	Sub3	10	0.231	1.189	0.275	-
3 930	662000	DFT-s OFDM QPSK	100	19.0	18.99	-0.08	Left	0	1	1	1:1	Sub3	10	0.266	1.002	0.267	-
3 930	662000	DFT-s OFDM QPSK	100	19.0	18.25	-0.17	Left	0	135	69	1:1	Sub3	10	0.258	1.189	0.307	-
3 930	662000	DFT-s OFDM QPSK	100	19.0	18.99	-0.14	Top	0	1	1	1:1	Sub3	10	0.102	1.002	0.102	-
3 930	662000	DFT-s OFDM QPSK	100	19.0	18.25	-0.19	Top	0	135	69	1:1	Sub3	10	0.113	1.189	0.134	-
3 500.01	633334	DFT-s OFDM QPSK	100	19.0	18.22	-0.15	Rear	0	1	271	1:1	Sub3	10	0.136	1.197	0.163	-
3 930	662000	CP OFDM QPSK	100	19.0	18.82	-0.12	Left	0	1	1	1:1	Sub3	10	0.305	1.042	0.318	-
3 930	662000	CW	100	14.5	13.88	0.00	Rear	0	-	-	1:1	Main2	10	0.132	1.153	0.152	-
3 930	662000	CW	100	14.5	13.88	0.00	Front	0	-	-	1:1	Main2	10	0.022	1.153	0.025	-
3 930	662000	CW	100	14.5	13.88	0.00	Left	0	-	-	1:1	Main2	10	0.011	1.153	0.013	-
3 930	662000	CW	100	14.5	13.88	0.15	Bottom	0	-	-	1:1	Main2	10	0.048	1.153	0.055	-
3 500.01	633334	CW	100	14.5	12.53	0.00	Rear	0	-	-	1:1	Main2	10	0.098	1.574	0.154	-
3 930	662000	CW	100	13.5	12.87	0.00	Rear	0	-	-	1:1	Sub2	10	0.068	1.156	0.079	-
3 930	662000	CW	100	13.5	12.87	0.00	Front	0	-	-	1:1	Sub2	10	0.071	1.156	0.082	-
3 930	662000	CW	100	13.5	12.87	0.13	Left	0	-	-	1:1	Sub2	10	0.066	1.156	0.076	-
3 930	662000	CW	100	13.5	12.87	0.12	Top	0	-	-	1:1	Sub2	10	0.182	1.156	0.210	-
3 500.01	633334	CW	100	13.5	11.58	-0.07	Top	0	-	-	1:1	Sub2	10	0.021	1.556	0.033	-
3 930	662000	CW	100	13.5	12.55	0.00	Rear	0	-	-	1:1	Sub5	10	0.000	1.245	0.000	-
3 930	662000	CW	100	13.5	12.55	0.00	Front	0	-	-	1:1	Sub5	10	0.000	1.245	0.000	-
3 930	662000	CW	100	13.5	12.55	0.00	Top	0	-	-	1:1	Sub5	10	0.00178	1.245	0.002	-
3 500.01	633334	CW	100	13.5	11.52	-0.10	Top	0	-	-	1:1	Sub5	10	0.00416	1.578	0.007	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

DTS Hotspot SAR																	
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)										
2 437	6	802.11b	20	1	21.0	19.9	-0.13	Rear	SISO	98.4	10	0.781	0.453	1.288	1.016	0.593	C28
2 437	6	802.11b	20	1	21.0	19.9	0.12	Front	SISO	98.4	10	0.287	0.180	1.288	1.016	0.236	-
2 437	6	802.11b	20	1	21.0	19.9	-0.05	Left	SISO	98.4	10	0.254	0.165	1.288	1.016	0.216	-
2 437	6	802.11b	20	1	21.0	19.9	0.10	Top	SISO	98.4	10	0.666	0.370	1.288	1.016	0.484	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram								

NII Hotspot SAR																	
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)										
5785	157	802.11a	20	6	19.0	18.93	0.00	Rear	SISO	90.2	10	1.310	0.515	1.016	1.108	0.580	C29
5785	157	802.11a	20	6	19.0	18.93	-0.10	Front	SISO	90.2	10	0.751	0.320	1.016	1.108	0.360	-
5785	157	802.11a	20	6	19.0	18.93	-0.05	Left	SISO	90.2	10	0.138	0.047	1.016	1.108	0.053	-
5785	157	802.11a	20	6	19.0	18.93	-0.08	Top	SISO	90.2	10	0.196	0.122	1.016	1.108	0.137	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram								

DSS Hotspot SAR													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.		(dBm)	(dBm)	(dB)								
2441	39	Bluetooth DH5	13.0	12.89	0.18	Rear	SISO	10	0.082	1.026	1.304	0.110	C30
2441	39	Bluetooth DH5	13.0	12.89	-0.13	Front	SISO	10	0.018	1.026	1.304	0.024	-
2441	39	Bluetooth DH5	13.0	12.89	0.16	Left	SISO	10	0.00222	1.026	1.304	0.003	-
2441	39	Bluetooth DH5	13.0	12.89	0.14	Top	SISO	10	0.052	1.026	1.304	0.070	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram						

13.4 Phablet SAR Measurement Considerations

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

13.5 Phablet SAR Measurement Results (RSI=2)

NFC Phablet SAR 10g									
Frequency	Mode	Ant.	Type	Power Drift	Test Position	Ant. Config.	Distance	Meas. SAR(10g)	Plot No.
Mhz				(dB)				(mm)	
13.56	NFC	NFC	Type-A	0.10	Rear	NFC	0	0.058	D1
13.56	NFC	NFC	Type-A	0.00	Front	NFC	0	0.000	-
13.56	NFC	NFC	Type-A	0.00	Left	NFC	0	0.000	-
13.56	NFC	NFC	Type-A	0.00	Top	NFC	0	0.000	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population					Hand 4.0 W/kg Averaged over 10 gram				

NII Phablet SAR 10g																			
Frequency		Mode	Ant.	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	Ant. Config.	Duty Cycle	Distance	Area Scan Peak SAR	Meas. SAR(10g)	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.																		
5 290	58	802.11ac	WiFi	80	MCS0	13.0	12.41	0.00	Rear	On	SISO	87.2	0	4.730	0.435	1.146	1.146	0.571	-
5 260	52	802.11a	WiFi	20	6Mbps	19.0	18.59	0.00	Front	N/A	SISO	90.2	0	3.580	0.369	1.099	1.108	0.449	-
5 260	52	802.11a	WiFi	20	6Mbps	19.0	18.59	0.00	Left	N/A	SISO	90.2	0	1.380	0.146	1.099	1.108	0.178	-
5 290	58	802.11ac	WiFi	80	MCS0	13.0	12.41	0.03	Top	On	SISO	87.2	0	7.990	0.495	1.146	1.146	0.650	-
5 260	52	802.11a	WiFi	20	6Mbps	19.0	18.59	0.00	Rear	Off	SISO	90.2	6	4.960	0.567	1.099	1.108	0.690	-
5 260	52	802.11a	WiFi	20	6Mbps	19.0	18.59	0.05	Top	Off	SISO	90.2	4	9.580	0.999	1.099	1.108	1.216	D2
5 690	138	802.11ac	WiFi	80	MCS0	13.0	12.40	0.00	Rear	On	SISO	87.2	0	4.250	0.439	1.148	1.146	0.578	-
5 720	144	802.11a	WiFi	20	6Mbps	19.0	17.96	0.00	Front	N/A	SISO	90.2	0	3.730	0.504	1.271	1.108	0.710	-
5 720	144	802.11a	WiFi	20	6Mbps	19.0	17.96	0.00	Left	N/A	SISO	90.2	0	1.600	0.174	1.271	1.108	0.245	-
5 690	138	802.11ac	WiFi	80	MCS0	13.0	12.40	0.12	Top	On	SISO	87.2	0	7.070	0.437	1.148	1.146	0.575	-
5 720	144	802.11a	WiFi	20	6Mbps	19.0	17.96	0.00	Rear	Off	SISO	90.2	6	3.150	0.398	1.271	1.108	0.560	-
5 720	144	802.11a	WiFi	20	6Mbps	19.0	17.96	0.02	Top	Off	SISO	90.2	4	5.930	0.667	1.271	1.108	0.939	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Hand 4.0 W/kg Averaged over 10 gram									

13.6 SAR Test Notes

General Notes:

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

GSM/GPRS Test Notes:

1. This EUT'S GSM and GPRS device class is B.
2. This device supports GPRS VOIP in the head and the body-worn configurations therefore GPRS was additionally evaluated for head and body-worn compliance.
3. Justification for reduced test configurations per KDB 941225 D01v03r01: The source-based time-averaged output power was evaluated for all multi-slot operations. The multi-slot configuration with the highest frame averaged output power including tolerance was evaluated for SAR.
4. Per FCC KDB 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is 0.8 W/kg then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is 1/2 dB, instead of the middle channel, the highest output power channel must be used.

UMTS Notes:

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

LTE Notes:

1. LTE Considerations: LTE test configurations are determined according to SAR Evaluation Consideration for LTE Devices in FCC KDB 941225 D05v02r05.
2. According to FCC KDB 941225 D05v02r05:
When the reported SAR is 0.8 W/kg, testing of the 100% RB allocation and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the 1RB, 50%RB and 100%RB allocation with highest output power for that channel.
Only one channel, and as reported SAR values for 1RB allocation and 50%RB allocation were less than 1.45W/kg only the highest power RB offset for each allocation was required.
3. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to target MPR is indicated alongside the SAR results.
4. When Power reduction is applied, MPR is 0 for some modes.
5. A-MPR was disabled for all SAR tests by setting NS=01 on the base station simulator.
6. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) LTE TDD Band 41 SAR measured at the highest output power channel for each test configuration is 0.6 W/kg then testing at the other channels is not required for such test configurations.
7. TDD LTE (Power Class 3) was tested using UL-DL configuration 0 with 6 UL sub frames and 2S subframes using extended cyclic prefix only and special sub frame configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Sec. 4, the duty factor using extended cyclic prefix is 0.633(cf=1.58).
8. Per KDB 941225 D05Av01r02, SAR for LTE Carrier Aggregation operations was not needed because the maximum average output power in LTE CA mode was not > 0.25 dB higher than the maximum output power when downlink CA was not activated.
9. This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The Highest available duty cycle for Power Class 2 operations is 43.3% using UL-DL configuration 1. Per May TCB Workshop 2017 notes, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions.
10. This device supports LTE Carrier Aggregation(CA) in Uplink for LTE 41C/48C with two component carriers in the uplink. SAR measurements and conducted powers were evaluated per Fall 2017 TCBC Workshop notes (LTE Carrier aggregation).
For LTE Band per 2017 TCBC Workshop notes ,SAR was first measured with only a single carrier active in the uplink (carrier aggregation not active). For each exposure condition, the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when carrier aggregation was not active.
Because the maximum output for UL CA of LTE 41C/48C is \leq standalone LTE mode (without CA), SAR for LTE41C/48C Up link CA was performed at the highest standalone SAR configuration without CA and also UL CA SAR is not required for all required test channels, Because the reported SAR for UL CA configuration is < 1.4 W/kg.
The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power.

11. SAR test reduction is applied using the following criteria:

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

NR Notes:

1. Due to Limitations of the SAR measurement equipment, SAR testing for NR was performed using test mode (FTM) software.
2. More detailed specifications of the NR bands are contained in the Technical description document.
3. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
4. For NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power were evaluated for SAR tests.
5. In order to satisfy the limitations of the duty factor of the 5G NR TDD band, these were tested with duty factor 100% as n41/n48 and n77 band were applied to all SAR test Configurations(Head/Bodyworn/Hotspot) in FTM mode.

WLAN Notes:

1. For held-to-ear and hotspot operations, the initial test position procedures were applied. For initial test position, the highest extrapolated peak SAR will be used. When reported SAR for the initial test position is ≤ 0.4 W/kg for 1g SAR and ≤ 1.0 W/kg for 10g SAR, no additional testing for the remaining test positions was required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR results is ≤ 0.8 W/kg for 1g SAR and ≤ 2.0 W/kg for 10g SAR or all test position are measured.
2. Per KDB 2482227 D01v02r02 justification for test configurations of 2.4 GHz WiFi Single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11 g/n) was not required due to the maximum allowed powers and the highest reported DSSS SAR
3. Per KDB 2482227 D01v02r02 justification for test configurations of 5 GHz WiFi Single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission mode were not investigated since the highest reported SAR for initial test configuration adjusted by the ration of maximum output powers is less than 1.2 W/kg for 1g SAR and less than 3.0 W/kg for 10 g SAR.
4. When the maximum reported 1g averaged SAR is ≤ 0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg or all test channels were measured.
5. The device was configured to transmit continuously at the required data rated, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated WLAN test reports.

Bluetooth Notes:

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests mode type. Per October 2016 TCBC Workshop Notes, the reported SAR was scaled to 100% transmission duty factor to determine compliance. Please see sec.11 for the time-domain plot and calculation for duty factor of the device.
2. Head and Bluetooth tethering SAR were evaluated for BT BR tethering applications.

14. Simultaneous SAR Analysis

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per KDB Publication 447498 D01v06 4.3.2, simultaneous transmission SAR test exclusion may be applied when the sum of 1g SAR and 10g SAR for all the simultaneous transmitting antennas in a specific physical test configuration is ≤ 1.6 W/kg for 1g SAR and ≤ 4 W/kg for 10g SAR. The different test positions in an exposure condition may be considered collectively to determine SAR exclusion according to the sum of 1g or 10g SAR.

This device is enabled with S.LSI Time average SAR algorithm with pre-defined sub6 antenna groups (AG0 and AG1). Simultaneous transmission analysis is performed per antenna groups. Section 14.2 contains analysis to demonstrate the AG0 and AG1 are operate mutually exclusive. Additional analysis is provided below to show compliance between AG0 and AG1.

The simultaneous transmission analysis of each antenna group and WLAN/BT was evaluated based on the maximum Reported SAR of the antenna in each Antenna group and the nearest y-axis coordinate of each antenna Group and WLAN/BT

If the sum result with each antenna exceeds the FCC SAR limit of 1.6 W/kg 1g ,4.0 W/kg 10g, the SPLSR was re-evaluated according to FCC KDB 447498 D01v06 4.3.2.

14.1 SAR Antenna Group Analysis

S.LSI Time average SAR(TAS) algorithm operates based on pre-defined sub6 antenna groups (AG). Sub6 Tx antennas in the device are grouped based on spatial variation of RF exposure distributions, where the RF exposure of one AG is mutually exclusive from other AG. This is accomplished by demonstrating either of below conditions for all exposure scenarios:

Sum of SAR of one antenna from each of the sub6 AGs and the RF exposure from radios outside TAS is less than regulatory limits. This condition must be demonstrated for all antenna combinations of sub6 AGs. This device supports two sub6 AG: AG0 and AG1, with AG0 having 2 antennas (Main1 Ant, Main2 Ant.) and AG1 having 4 antenna(Main3 Ant, Sub2 Ant, Sub3 Ant, Sub5 Ant). The conditions are verified through the following criterias

The highest reported SAR at Plimit (or Pmax when Plimit > Pmax) for each antenna should be obtained out of all supported WWAN technologies and frequency bands for each exposure condition Demonstrate that the sum of reported SAR of antenna from each of the sub6 AGs and the sum of RF exposure of TAS should be less than the regulatory limit as given below for each RSI.

Obtain the worst-case reported SAR for each antenna group (i.e., maximum reported SAR at Plimit (or Pmax when Plimit > Pmax) out of all supported technologies, frequency bands and antennas in AG0 and AG1), denoted as max.SAR.AG0 and max.SAR.AG1, and obtain the worst-case RF exposure, and demonstrate that the sum of these RF exposures meets

$$[\text{Max.SAR.AG0} + \text{Max.SAR.AG1}] + [\text{Max.WLAN} + \text{Max.Bluetooth}] \leq 1.6 \text{ (for 1g SAR or 4.0 for 10g)}$$

AG0,AG1,WLAN/BT are described in th table below.

AG0	
Main1	GSM850, UMTS 5, LTE 5,12,13,14,26,71, NR n5,n71
Main2	GSM1900, UMTS 2,4, LTE 7,25(2),30,41,66, NR n2,n25,n30,n41,n66,n70, NR SRS1 n48,n77

AG1	
Main3	LTE(ENDC) 2,66(4)
Sub2	NR SRS2 n48,n77
Sub3	LTE 48, NR n48,n77
Sub5	NR SRS3 n48,n77

WLAN/BT	
Wifi	WLAN 2.4G,5G, Bluetooth

14.2 Head SAR Simultaneous Transmission Analysis.

AG0			
Position	Main1	Main2	Max
Left Touch	0.328	0.525	0.525
Left Tilt	0.203	0.247	0.247
Right Touch	0.436	0.386	0.436
Right Tilt	0.209	0.356	0.356

AG1					
Position	Main3	Sub2	Sub3	Sub5	Max
Left Touch	0.127	0.155	0.211	0.000	0.211
Left Tilt	0.067	0.171	0.219	0.008	0.219
Right Touch	0.429	0.649	0.667	0.000	0.667
Right Tilt	0.135	0.614	0.382	0.004	0.614

WLAN/BT					
Position	WLAN 2.4G	BT	WLAN 5G	BT+WLAN5G	Max
Left Touch	0.132	0.080	0.423	0.503	0.503
Left Tilt	0.124	0.080	0.538	0.618	0.618
Right Touch	0.206	0.107	0.382	0.489	0.489
Right Tilt	0.233	0.130	0.490	0.620	0.620

Position	AG0 Max	AG1 Max	WLAN/BT Max	AG0+AG1+WLAN/BT Max
Left Touch	0.525	0.211	0.503	1.239
Left Tilt	0.247	0.219	0.618	1.084
Right Touch	0.436	0.667	0.489	1.592
Right Tilt	0.356	0.614	0.620	1.590

14.3 BodyWorn SAR Simultaneous Transmission Analysis.

AG0			
Position	Main1	Main2	Max
Rear	0.697	0.826	0.826
Front	0.351	0.510	0.510

AG1					
Position	Main3	Sub2	Sub3	Sub5	Max
Rear	0.222	0.038	0.523	0.000	0.523
Front	0.075	0.013	0.262	0.000	0.262

WLAN/BT					
Position	WLAN 2.4G	BT	WLAN 5G	BT+WLAN5G	Max
Rear	0.369	0.049	0.349	0.398	0.398
Front	0.134	0.015	0.242	0.257	0.257

Position	AG0 Max	AG1 Max	WLAN/BT Max	AG0+AG1+WLAN/BT Max	SPLSR
Rear	0.826	0.523	0.398	1.747	Yes
Front	0.510	0.262	0.257	1.029	NO

14.4 Hotspot SAR Simultaneous Transmission Analysis

AG0			
Position	Main1	Main2	Max
Rear	1.094	0.755	1.094
Front	0.341	0.424	0.424
Left	0.282	0.307	0.307
Right	0.473		0.473
Top			
Bottom	0.607	0.615	0.615

AG1					
Position	Main3	Sub2	Sub3	Sub5	Max
Rear	0.458	0.075	0.800	0.012	0.800
Front	0.133	0.079	0.460	0.007	0.460
Left	0.223	0.075	0.969		0.969
Right					
Top		0.202	0.884	0.012	0.884
Bottom					

WLAN/BT					
Position	WLAN 2.4G	BT	WLAN 5G	BT+WLAN5G	Max
Rear	0.593	0.110	0.580	0.690	0.690
Front	0.236	0.024	0.360	0.384	0.384
Left	0.216	0.003	0.053	0.056	0.216
Right					
Top	0.484	0.070	0.137	0.207	0.484
Bottom					

Position	AG0 Max	AG1 Max	WLAN/BT Max	AG0+AG1+WLAN/BT Max	SPLSR
Rear	1.094	0.800	0.690	2.584	Yes
Front	0.424	0.460	0.384	1.268	NO
Left	0.307	0.969	0.216	1.492	NO
Right	0.473			0.473	NO
Top		0.884	0.484	1.368	NO
Bottom	0.615			0.615	NO

14.5 Phablet SAR Simultaneous Transmission Analysis

Position	NFC	WLAN5G	Summation
Rear	0.058	0.690	0.748
Front	0.000	0.710	0.710
Left	0.000	0.245	0.245
Right	0.000		0.000
Top	0.000	1.216	1.216
Bottom			

14.6 SAR to Peak Location Separation Ratio (SPLSR)

FCC KDB 447498 D01v06 General RF Exposure Guidance introduces a new formula for calculating the SAR a Peak Location Separation Ratio(SPLSR) between pairs of simultaneously transmitting antennas:

$$SPLSR_i = (SAR_1 + SAR_2)^{1.5} / R_i$$

Where:

SAR_1 is the highest measured or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition

SAR_2 is the highest measured or estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first

R_i is the separation distance between the pair of simultaneous transmitting antennas, When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of $[(X_1 - X_2)^2 + (Y_1 - Y_2)^2 + (Z_1 - Z_2)^2]$

In order for a pair of simultaneous transmitting antennas with the sum 1-g of SAR > 1.6 W/kg and with the sum 10-g of SAR > 4 W/kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:

$$(SAR_1 + SAR_2)^{1.5} / R_i \leq 0.04 \text{ for 1g SAR and } (SAR_1 + SAR_2)^{1.5} / R_i \leq 0.1 \text{ for 10g SAR}$$

BodyWorn SPLSR Evaluation
Ant Group 0

Mode/Band	Antenna	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
GSM850	Main 1	-20.0	-81.0	-207.0	0.697
GSM1900	Main 2	-18.5	-69.0	-204.0	0.244
UMTS Band 5	Main 1	-27.5	-84.0	-207.0	0.387
UMTS Band 4	Main 2	-18.5	-67.5	-204.0	0.423
UMTS Band 2	Main 2	4.0	-70.5	-204.0	0.450
LTE Band 5	Main 1	-26.0	-85.0	-207.0	0.484
LTE Band 7	Main 2	5.8	-68.8	-204.0	0.639
LTE Band 12	Main 1	-21.5	-5.5	-208.0	0.303
LTE Band 13	Main 1	-21.5	8.0	-208.0	0.394
LTE Band 14	Main 1	-26.0	-73.0	-207.0	0.301
LTE Band 25	Main 2	3.0	-65.5	-204.0	0.453
LTE Band 26	Main 1	-26.0	-74.5	-207.0	0.453
LTE Band 30	Main 2	8.2	-61.6	-204.0	0.311
LTE Band 41	Main 2	8.2	-66.0	-204.0	0.431
LTE Band 66	Main 2	1.5	-67.0	-204.0	0.394
LTE Band 71	Main 1	-30.5	-85.0	-207.0	0.228
NR Band n5	Main 1	-26.0	-85.0	-207.0	0.544
NR Band n25	Main 2	13.0	-57.0	-204.0	0.424
NR Band n30	Main 2	11.8	-64.2	-204.0	0.246
NR Band n41	Main 2	7.0	-63.6	-204.0	0.826
NR Band n66	Main 2	-24.0	-55.5	-204.0	0.366
NR Band n70	Main 2	-22.5	-57.0	-204.0	0.328
NR Band n71	Main 1	-21.5	-22.0	-208.0	0.411
NR Band n48 SRS#1	Main 2	-1.0	-73.8	-206.0	0.124
NR Band n77 SRS#1	Main 2	-1.0	-85.8	-206.0	0.055

Ant Group 1

Mode/Band	Antenna	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
LTE Band 2	Main 3	11.5	43.5	-206.0	0.079
LTE Band 48	Sub 3	12.2	46.8	-207.0	0.188
LTE Band 66	Main 3	13.0	55.0	-204.0	0.222
NR Band n48	Sub 3	11.0	63.6	-207.0	0.523
NR Band n48 SRS#2	Sub 2	-22.0	86.6	-207.0	0.034
NR Band n77	Sub 3	18.2	56.6	-204.0	0.159
NR Band n77 SRS#2	Sub 2	13.6	86.0	-206.0	0.038

Bluetooth/WLAN

Mode/Band	Antenna	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
WLAN 2.4GHz	WIFI	8.2	66.0	-206.0	0.369
Bluetooth	WIFI	1.0	80.4	-206.0	0.049
WLAN 5GHz	WIFI	-7.0	81.0	-207.0	0.349

	AG0		AG1			
	Main1	Main2	Main3	Sub2	Sub3	Sub5
Max Y-axis(mm)	8.0	-55.5				
Max SAR(W/kg)	0.697	0.826				
Min Y-axis(mm)			43.5	86.0	46.8	N/A
Max SAR(W/kg)			0.222	0.038	0.523	0
AG1-Main 1 Distance(mm)			35.5	78.0	38.8	N/A
AG1-Main 1 SPLSR			0.025	0.008	0.035	N/A
AG1-Main 2 Distance(mm)			99.0	141.5	102.3	N/A
AG1-Main 2 SPLSR			0.008	0.005	0.008	N/A

	AG0 Max	AG1 Max	WLAN/BT Max	AG0+WLAN/BT	AG1+WLAN/BT
Max SAR(W/kg)	0.826	0.523	0.398	1.224	0.921

Hotspot SPLSR Evaluation
Ant Group 0

Mode/Band	Antenna	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
GSM850	Main 1	-38.0	-85.5	-207.0	0.300
GSM1900	Main 2	4.0	-69.0	-204.0	0.310
UMTS Band 5	Main 1	-29.0	-82.5	-207.0	1.010
UMTS Band 4	Main 2	14.5	-69.0	-204.0	0.347
UMTS Band 2	Main 2	2.5	-69.0	-204.0	0.385
LTE Band 5	Main 1	-27.5	-77.5	-207.0	0.890
LTE Band 7	Main 2	8.2	-71.2	-204.0	0.471
LTE Band 12	Main 1	-26.0	-73.0	-207.0	0.387
LTE Band 13	Main 1	-26.0	-74.5	-207.0	0.545
LTE Band 14	Main 1	-27.5	-76.0	-207.0	0.533
LTE Band 25	Main 2	3.0	-67.0	-204.0	0.350
LTE Band 26	Main 1	-30.5	-77.5	-207.0	0.813
LTE Band 30	Main 2	7.0	-64.0	-204.0	0.356
LTE Band 41	Main 2	8.2	-64.8	-204.0	0.296
LTE Band 66	Main 2	1.5	-68.5	-204.0	0.367
LTE Band 71	Main 1	-26.0	-73.0	-207.0	0.370
NR Band n5	Main 1	-36.5	-83.5	-207.0	1.094
NR Band n25	Main 2	4.0	-69.0	-204.0	0.586
NR Band n30	Main 2	9.4	-65.4	-204.0	0.408
NR Band n41	Main 2	8.2	-65.2	-204.0	0.755
NR Band n66	Main 2	3.0	-70.5	-204.0	0.486
NR Band n70	Main 2	10.5	-64.5	-204.0	0.393
NR Band n71	Main 1	-26.0	-85.0	-207.0	0.709
NR Band n48 SRS#1	Main 2	0.2	-71.4	-206.0	0.301
NR Band n77 SRS#1	Main 2	0.2	-72.6	-206.0	0.154

Ant Group 1

Mode/Band	Antenna	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
LTE Band 2	Main 3	16.0	42.0	-206.0	0.188
LTE Band 48	Sub 3	6.2	50.4	-207.0	0.353
LTE Band 66	Main 3	11.5	62.5	-204.0	0.458
NR Band n48	Sub 3	6.2	63.6	-207.0	0.800
NR Band n48 SRS#2	Sub 2	-16.0	79.4	-207.0	0.073
NR Band n48 SRS#3	Sub 5	-55.6	86.6	-207.0	0.012
NR Band n77	Sub 3	13.4	57.8	-204.0	0.370
NR Band n77 SRS#2	Sub 2	11.2	79.4	-206.0	0.075

Bluetooth/WLAN

Mode/Band	Antenna	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
WLAN 2.4GHz	WIFI	2.2	63.6	-206.0	0.593
Blueooth	WIFI	-0.2	78.0	-206.0	0.110
WLAN 5GHz	WIFI	-20.0	78.0	-207.0	0.580

	AG0		AG1			
	Main1	Main2	Main3	Sub2	Sub3	Sub5
Max Y-axis(mm)	-73.0	-64.0				
Max SAR(W/kg)	1.094	0.755				
Min Y-axis(mm)			42.0	79.4	50.4	86.6
Max SAR(W/kg)			0.458	0.075	0.8	0.012
Main 1 Distance			115.0	152.4	123.4	159.6
Main 1 SPLSR			0.017	0.008	0.021	0.007
Main 2 Distance			106.0	143.4	114.4	150.6
Main 2 SPLSR			0.006	0.005	0.006	0.004

	AG0	AG1	WLAN/BT	AG0+WLAN/BT	AG1+WLAN/BT
Max SAR(W/kg)	1.094	0.755	0.69	1.784	1.445

	AG0		WLAN/BT			
	Main1	Main2	WLAN 2.4G	BT	WLAN 5G	BT+WLAN 5G
Max Y-axis(mm)	-73.0	-64.0				
Max SAR(W/kg)	1.094	0.755				
Min Y-axis(mm)			63.6	78.0	78.0	78.0
Max SAR(W/kg)			0.593	0.110	0.580	0.690
Main 1 Distance			136.6	151.0	151.0	151.0
Main 1 SPLSR			0.016	0.009	0.014	0.016

14.7 Simultaneous Transmission Conclusion

The above numerical summed SAR Results are sufficient to determine that simultaneous transmission cases will not exceed the SAR Limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE1528-2013.

15. SAR Measurement Variability and Uncertainty

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

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

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg for 1g SAR or < 2.0 W/kg for 10g SAR; steps 2) through 4) do not apply.
- 2) When the original highest measured 1g SAR is ≥ 0.80 W/kg or 10g SAR ≥ 2.0 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg for 1g SAR or ≥ 3.625 W/kg for 10g SAR (~ 10% from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg for 1g SAR or ≥ 3.75 W/kg for 10g SAR and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Hotspot SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
MHz	Channel					
846.6	4233	UMTS Band 5	Rear	0.898	0.868	0.97
836.5	167300	NR Band n5	Rear	0.856	0.889	1.04
3 679.98	645332	NR Band n48	Left	0.928	0.929	1.00

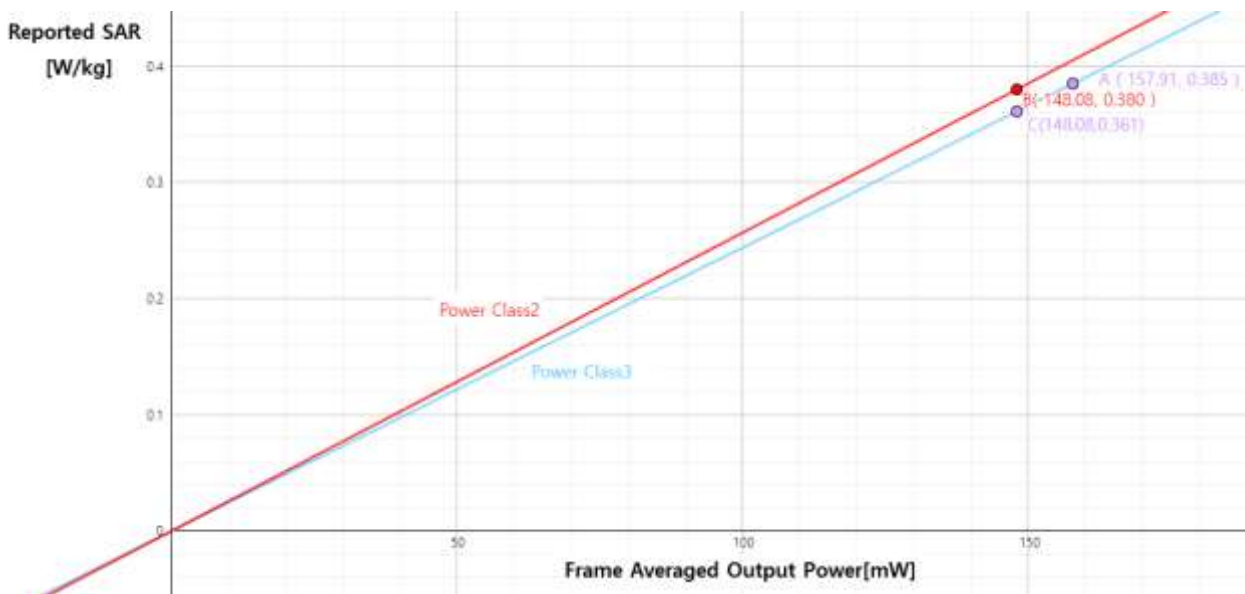
16. LTE Band Power Class 2 and Power class 3 Linearity

This Device Supports Power Class 2 and Power Class 3 operations for LTE band 41. The Highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL Configuration 1. Per May 2017 TCB Workshop Notes based on the device behavior, all SAR tests were performed using Power class 3. SAR with power class 2 at the highest power and available duty factor was additionally performed for the power class 2 configuration with the Highest SAR for each exposure condition.

The linearity between the power class 3 and Power class 2 SAR Results and the respective frame averaged powers was calculated to determine the results were linear.

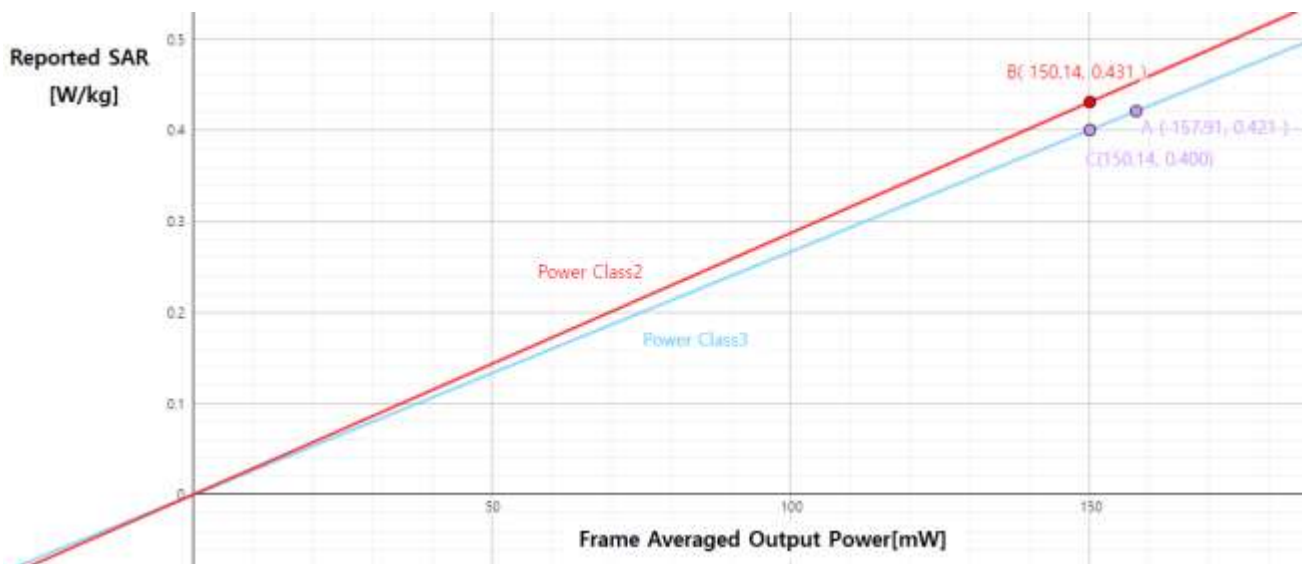
Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes as less than 10 % and all reported SAR values were < 1.4 W/kg

LTE Band 41 Head Linearity Data Table		
Configurations	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	25.5	27
Measured Output Power[dBm]	23.97	25.34
Reported SAR[W/kg]	0.385	0.38
Measured Power[mW]	249.46	341.98
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	157.91	148.08
% deviation from expected linearity		+5.25

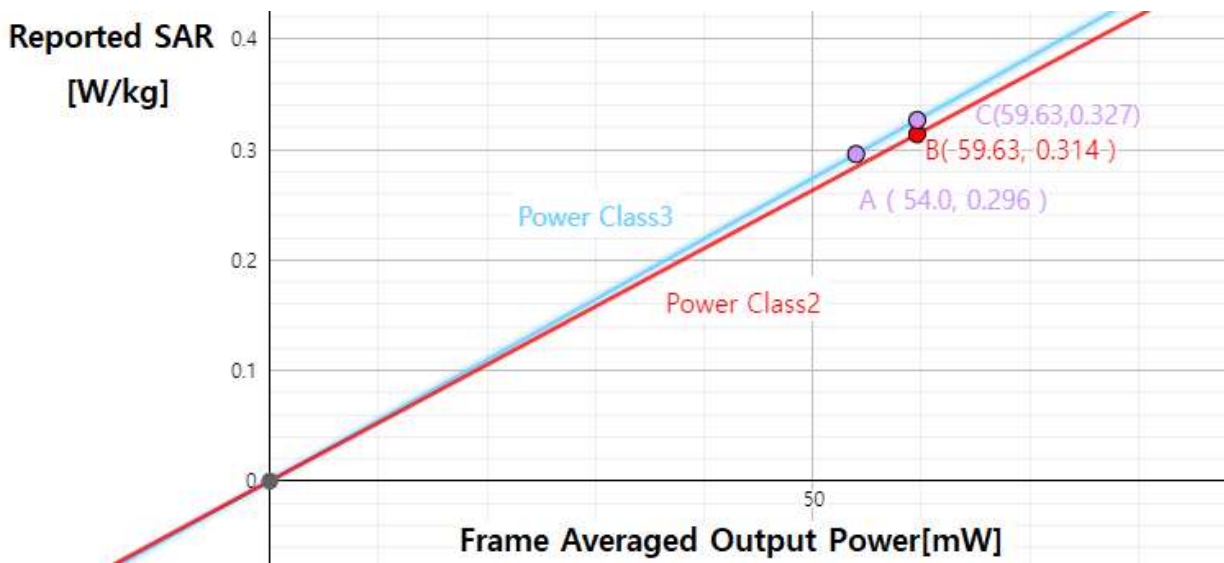


LTE Band 41 BodyWorn Linearity Data Table

Configurations	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	25.5	27
Measured Output Power[dBm]	23.97	25.4
Reported SAR[W/kg]	0.421	0.431
Measured Power[mW]	249.46	346.74
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	157.91	150.14
% deviation from expected linearity		+7.67



LTE Band 41 HotSpot linearity Data Table		
Configurations	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	20.5	22.5
Measured Output Power[dBm]	19.31	21.39
Reported SAR[W/kg]	0.296	0.314
Measured Power[mW]	85.31	137.72
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	54	59.63
% deviation from expected linearity		-3.93



17. Measurement Uncertainty

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

18. SAR Test Equipment

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	SAM Phantom	-	N/A	N/A	N/A
SPEAG	ELI Phantom	-	N/A	N/A	N/A
HP	SAR System Control PC	-	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F12/ 5K9GA1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F13/ 5R4XF1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F08/5AJ0A1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F07/56W9A1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F17/ 59CHA1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX60	F/20/0018446/C/001	N/A	N/A	N/A
Staubli	TX90 XLspeag	F12/ 5K9GA1/ A/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F13/ 5R4XF1/ A/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F08/5AJ0A1/A/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F07/56W9A1/A/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F17/ 59CHA1/ A/ 01	N/A	N/A	N/A
Staubli	TX60 Lspeag	F/20/0018446/A/001	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-1206 0513	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-1338 1332	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-0008	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-0602	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	010963	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	001729	N/A	N/A	N/A
TESTO	175-H1/Thermometer	40331939309	12/29/2022	Annual	12/29/2023
TESTO	175-H1/Thermometer	40332651310	12/29/2022	Annual	12/29/2023
TESTO	175-H1/Thermometer	40331949309	12/29/2022	Annual	12/29/2023
TESTO	608-H1/Thermometer	83406789	06/29/2023	Annual	06/29/2024
TESTO	175-H1/Thermometer	40331915309	12/29/2022	Annual	12/29/2023
TESTO	175-H1/Thermometer	44606611906	03/27/2023	Annual	03/27/2024
SPEAG	DAE4	1750	10/10/2022	Annual	10/10/2023
SPEAG	DAE4	869	03/23/2023	Annual	03/23/2024
SPEAG	DAE4	652	01/20/2023	Annual	01/20/2024
SPEAG	DAE4	1417	03/01/2023	Annual	03/01/2024
SPEAG	DAE4	1464	06/16/2023	Annual	06/16/2024
SPEAG	DAE4	446	04/25/2023	Annual	04/25/2024
SPEAG	DAE4	1225	03/06/2023	Annual	03/06/2024
SPEAG	DAE4	504	01/10/2023	Annual	01/10/2024
SPEAG	E-Field Probe EX3DV4	7655	05/25/2023	Annual	05/25/2024
SPEAG	E-Field Probe ES3DV3	3076	07/20/2022	Annual	07/20/2023
SPEAG	E-Field Probe EX3DV4	3972	08/19/2022	Annual	08/19/2023
SPEAG	E-Field Probe EX3DV4	7702	01/26/2023	Annual	01/26/2024
SPEAG	E-Field Probe EX3DV4	7622	11/22/2022	Annual	11/22/2023
SPEAG	E-Field Probe EX3DV4	7309	06/19/2023	Annual	06/19/2024
SPEAG	E-Field Probe EX3DV4	7370	08/24/2023	Annual	08/24/2024
SPEAG	E-Field Probe EX3DV4	3797	01/24/2023	Annual	01/24/2024
SPEAG	CLA13	1016	11/16/2022	Annual	11/16/2023
SPEAG	Dipole D750V3	1014	05/23/2023	Annual	05/23/2024
SPEAG	Dipole D835V2	4d165	05/23/2023	Annual	05/23/2024
SPEAG	Dipole D1640V2	345	08/08/2022	Annual	08/08/2023
SPEAG	Dipole D1800V2	2d015	05/17/2023	Annual	05/17/2024
SPEAG	Dipole D1900V2	5d061	01/23/2023	Annual	01/23/2024
SPEAG	Dipole D2300V2	1010	08/18/2022	Annual	08/18/2023
SPEAG	Dipole D2450V2	1049	04/25/2023	Annual	04/25/2024
SPEAG	Dipole D2600V2	1106	05/24/2023	Annual	05/24/2024
SPEAG	Dipole D3500V2	1040	01/22/2023	Annual	01/22/2024
SPEAG	Dipole D3700V2	1066	11/14/2022	Annual	11/14/2023
SPEAG	Dipole D3900V2	1019	05/19/2023	Annual	05/19/2024
SPEAG	Dipole D5GHzV2	1317	05/17/2023	Annual	05/17/2024

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
Agilent	Power Meter E4419B	MY41291386	09/27/2022	Annual	09/27/2023
Agilent	Power Meter N1911A	MY45101406	05/26/2023	Annual	05/26/2024
Agilent	Power Sensor 8481A	SG1091286	09/27/2022	Annual	09/27/2023
Agilent	Power Sensor 8481A	MY41090675	09/27/2022	Annual	09/27/2023
Agilent	Power Sensor N1921A	MY55220026	08/02/2022	Annual	08/02/2023
Agilent	Power Sensor N1921A	MY55220026	07/28/2023	Annual	07/28/2024
SPEAG	DAKS 3.5	1038	01/25/2023	Annual	01/25/2024
SPEAG	DAKS_VNA R140	0141013	02/13/2023	Annual	02/13/2024
R&S	Wireless Communication Test Set CMW500	115733	03/23/2023	Annual	03/23/2024
Agilent	11636B/Power Divider	58698	01/26/2023	Annual	01/26/2024
OSI	Power Divider	#1	05/26/2023	Annual	05/26/2024
OSI	Power Divider	#2	05/26/2023	Annual	05/26/2024
OSI	Power Divider	#3	05/26/2023	Annual	05/26/2024
OSI	Power Divider	#4	05/26/2023	Annual	05/26/2024
OSI	Power Divider	#5	05/26/2023	Annual	05/26/2024
Agilent	SIGNAL GENERATOR E4438C	MY49071736	12/28/2022	Annual	12/28/2023
Agilent	SIGNAL GENERATOR N5182A	MY47070230	03/23/2023	Annual	03/23/2024
AR	RF Power Amplifier	0349583	08/11/2022	Annual	08/11/2023
EMPOWER	RF Power Amplifier	1084	06/20/2022	Annual	06/20/2023
EMPOWER	RF Power Amplifier	1084	05/26/2023	Annual	05/26/2024
EMPOWER	RF Power Amplifier	1011	09/27/2022	Annual	09/27/2023
EMPOWER	RF Power Amplifier	1041D/C0508	05/26/2023	Annual	05/26/2024
MICRO LAB	LP Filter / LA-15N	10453	09/27/2022	Annual	09/27/2023
MICRO LAB	LP Filter / LA-30N	-	09/27/2022	Annual	09/27/2023
MICRO LAB	LP Filter / LA-60N	32011	09/27/2022	Annual	09/27/2023
HP	Attenuator (3dB) 333340A	02427	08/25/2022	Annual	08/25/2023
HP	Attenuator (3dB) 333340A	02427	08/22/2023	Annual	08/22/2024
HP	Attenuator (20dB) 8493C	09271	08/25/2022	Annual	08/25/2023
HP	Attenuator (20dB) 8493C	09271	08/22/2023	Annual	08/22/2024
Aeroflex/Weinschel	Fixed Coaxial Attenuator (30dB)	CE6106	11/15/2022	Annual	11/15/2023
Agilent	Directional Bridge 86205A	3140A04581	04/25/2023	Annual	04/25/2024
Narda	Directional Coupler	07066	01/05/2023	Annual	01/05/2024
Agilent	MXA Signal Analyzer N9020A	MY50510407	06/07/2023	Annual	06/07/2024
Anritsu	Radio Communication Tester MT8820C	6200695605	03/23/2023	Annual	03/23/2024
Anritsu	Radio Communication Tester MT8820C	6201074225	01/25/2023	Annual	01/25/2024
Anritsu	Radio Communication Tester MT8821C	6201502997	05/26/2023	Annual	05/26/2024
Anritsu	Radio Communication Tester MT8821C	6262044720	12/07/2022	Annual	12/07/2023
Anritsu	Radio Communication Tester MT8821C	6262287674	04/25/2023	Annual	04/25/2024
Anritsu	Radio Communication Tester MT8821C	6262287678	05/08/2023	Annual	05/08/2024
Anritsu	Radio Communication Test Station MT8000A	6262036812	12/07/2022	Annual	12/07/2023
Agilent	WIRELESS COMMUNICATION E5515C	MY48360252	08/08/2022	Annual	08/08/2023
Agilent	WIRELESS COMMUNICATION E5515C	MY48360252	07/27/2023	Annual	07/27/2024
ROHDE&SCHWARZ	BLUETOOTH TESTER CBT	100272	01/25/2023	Annual	01/25/2024

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

19. Conclusion

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

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

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

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Appendix A. DUT Ant. Information & SETUP PHOTO

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

Report No.
HCT-SR-2309-FC006-R3-P