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# SAR TEST REPORT

<b>Applicant Name:</b> <b>SAMSUNG Electronics Co., Ltd.</b> 129, Samsung-ro, Yeongtong-gu, Suwon-Si, Gyeonggi-do, 16677 Rep. of Korea	<b>Date of Issue:</b> Nov. 21, 2023 <b>Test Report No.:</b> HCT-SR-2311-FC002-R1 <b>Test Site:</b> HCT CO., LTD.
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**FCC ID:**

**A3LSMG556B**

<b>Equipment Type:</b>	<b>Mobile Phone</b>
<b>Application Type</b>	<b>Certification</b>
<b>FCC Rule Part(s):</b>	<b>CFR §2.1093</b>
<b>Model Name:</b>	<b>SM-G556B</b>
<b>Date of Test:</b>	<b>Oct. 11, 2023 ~ Nov. 14, 2023</b>

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

Yoon Ho, Choi  
Test Engineer  
SAR Team  
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Reviewed By

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**REVISION HISTORY**

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

<b>Revision No.</b>	<b>Date of Issue</b>	<b>Description</b>
0	Nov. 15, 2023	Initial Release
1	Nov. 21, 2023	Added GSM850, GSM1900 additional test

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

The above Test Report is not related to the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA.

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## 1. Test Regulations

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

- FCC KDB Publication 941225 D01 3G SAR Procedures v03r01
- FCC KDB Publication 941225 D06 Hot Spot SAR v02r01
- FCC KDB Publication 941225 D05 SAR for LTE Devices v02r05
- FCC KDB Publication 941225 D05A LTE Rel.10 KDB Inquiry sheet v01r02
- FCC KDB Publication 248227 D01 802.11 WLAN SAR v02r02
- FCC KDB Publication 447498 D01 General SAR Guidance v07
- FCC KDB Publication 648474 D04 Handset SAR v01r03
- FCC KDB Publication 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04.
- FCC KDB Publication 865664 D02 SAR Reporting v01r02
- FCC KDB Publication 690783 D01 SAR Listings on Grants v01r03
- FCC KDB Publication 971168 D01 Power Meas License Digital Systems v03r01

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

- October 2013 TCB Workshop Notes (GPRS testing criteria)
- October 2014 TCB Workshop Notes (Overlapping LTE Bands)
- April 2015 TCB Workshop Notes (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)

## 2. Test Location

### 2.1 Test Laboratory

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

### 2.2 Test Facilities

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

<b>Korea</b>	National Radio Research Agency (Designation No. KR0032)
	KOLAS (Testing No. KT197)

## 3. Information of the EUT

### 3.1 General Information of the EUT

<b>Model Name</b>	SM-G556B
<b>Equipment Type</b>	Mobile Phone
<b>FCC ID</b>	A3LSMG556B
<b>Application Type</b>	Certification
<b>Applicant</b>	SAMSUNG Electronics Co., Ltd.

### 3.2 Attestation of test result of device under test

Band	Tx. Frequency	Equipment Class	Reported SAR (W/kg)		
			1g Head	1g Body	10g Phablet
GSM/GPRS/EDGE 850	824.2 MHz ~ 848.8 MHz	PCE	0.29	0.78	N/A
GSM/GPRS/EDGE 1900	1 850.2 MHz ~ 1 909.8 MHz	PCE	0.23	0.47	N/A
UMTS Band 5	826.4 MHz ~ 846.6 MHz	PCE	0.32	0.49	N/A
UMTS Band 4	1 712.4 MHz ~ 1 752.6 MHz	PCE	0.49	0.44	N/A
UMTS Band 2	1 852.4 MHz ~ 1 907.6 MHz	PCE	0.39	0.57	N/A
LTE FDD Band 2 (PCS)	1 850.7 MHz ~ 1 909.3 MHz	PCE	<b>1.01</b>	0.30	N/A
LTE FDD Band 12	699.7 MHz ~ 715.3 MHz	PCE	0.26	0.38	N/A
LTE FDD Band 13	779.5 MHz ~ 784.5 MHz	PCE	0.32	0.48	N/A
LTE FDD Band 26 (Cell)	814.7 MHz ~ 848.3 MHz	PCE	0.30	0.60	N/A
LTE TDD Band 41	2 498.5 MHz ~ 2 687.5 MHz	PCE	0.31	0.59	N/A
LTE FDD Band 66 (AWS)	1 710.7 MHz ~ 1 779.3 MHz	PCE	0.68	0.37	N/A
NR FDD Band n5	826.5 MHz ~ 846.5 MHz	PCE	0.34	0.61	N/A
NR FDD Band n26	816.5 MHz ~ 846.5 MHz	PCE	0.30	0.66	N/A
NR TDD Band n41	2 501.01 MHz ~ 2 685 MHz	PCE	0.34	0.43	N/A
NR FDD Band n66	1 712.5 MHz ~ 1 777.5 MHz	PCE	0.50	0.56	N/A
NR FDD Band n71	665.5 MHz ~ 695.5 MHz	PCE	0.20	0.29	N/A
NR TDD Band n77	3 705 MHz ~ 3 975 MHz	PCE	0.16	<0.10	N/A
NR TDD Band n77 DoD	3 455.01 MHz ~ 3 544.98 MHz	PCE	0.28	<0.10	N/A
NR TDD Band n78 SRS	3 705 MHz ~ 3 795 MHz	PCE	0.24	0.30	N/A
NR TDD Band n78 DoD SRS	3 455.01 MHz ~ 3 544.98 MHz	PCE	0.14	0.22	N/A
802.11b	2 412 MHz ~ 2 472 MHz	DTS	<0.10	<b>1.16</b>	N/A
U-NII-1	5 180 MHz ~ 5 240 MHz	NII	N/A	N/A	N/A
U-NII-2A	5 260 MHz ~ 5 320 MHz	NII	0.11	1.12	<b>1.31</b>
U-NII-2C	5 500 MHz ~ 5 720 MHz	NII	0.11	0.84	0.91
U-NII-3	5 745 MHz ~ 5 825 MHz	NII	0.10	1.07	N/A
Bluetooth	2 402 MHz ~ 2 480 MHz	DSS/DTS	0.13	0.28	N/A
NFC	13.56 MHz	DXX	N/A	N/A	<0.1
Simultaneous SAR per KDB 690783 D01v01r03			<b>1.127</b>	<b>1.593</b>	<b>1.352</b>
Date(s) of Tests:	Oct. 11, 2023 ~ Nov. 14, 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 2	Voice / Data	1 852.4 MHz ~ 1 907.6 MHz
UMTS Band 4	Voice / Data	1 712.4 MHz ~ 1 752.6 MHz
UMTS Band 5	Voice / Data	826.4 MHz ~ 846.6 MHz
LTE FDD Band 2 (PCS)	Voice / Data	1 850.7 MHz ~ 1 909.3 MHz
LTE FDD Band 4 (AWS)	Voice / Data	1 710.7 MHz ~ 1 754.3 MHz
LTE FDD Band 5 (Cell)	Voice / Data	824.7 MHz ~ 848.3 MHz
LTE FDD Band 12	Voice / Data	699.7 MHz ~ 715.3 MHz
LTE FDD Band 13	Voice / Data	779.5 MHz ~ 784.5 MHz
LTE FDD Band 17	Voice / Data	706.5 MHz ~ 713.5 MHz
LTE FDD Band 26	Voice / Data	814.7 MHz ~ 848.3 MHz
LTE TDD Band 41	Voice / Data	2 498.5 MHz ~ 2 687.5 MHz
LTE FDD Band 66 (AWS)	Voice / Data	1 710.7 MHz ~ 1 779.3 MHz
NR FDD Band n5	Voice / Data	826.5 MHz ~ 846.5 MHz
NR FDD Band n26	Voice / Data	816.5 MHz ~ 846.5 MHz
NR TDD Band n41	Voice / Data	2 501.01 MHz ~ 2 685 MHz
NR FDD Band n66	Voice / Data	1 712.5 MHz ~ 1 777.5 MHz
NR FDD Band n71	Voice / Data	665.5 MHz ~ 695.5 MHz
NR TDD Band n77	Voice / Data	3 705 MHz ~ 3 975 MHz
NR TDD Band n77 DoD	Voice / Data	3 455.01 MHz ~ 3 544.98 MHz
NR TDD Band n78	Voice / Data	3 705 MHz ~ 3 795 MHz
NR TDD Band n78 DoD	Voice / Data	3 455.01 MHz ~ 3 544.98 MHz
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																					
S/W Version	G556B.001																				
H/W Version	REV1.0																				
Battery	EB-BG556GBY (ATL)																				
Device Serial Numbers	<table border="1"> <thead> <tr> <th>Mode</th> <th>Serial Number</th> </tr> </thead> <tbody> <tr><td>GSM850, GSM 1900 ,UMTS B2/B4/B5</td><td>WJ42787M</td></tr> <tr><td>LTE2, LTE 12, LTE 13, LTE 26, LTE 66, NFC</td><td>WJ42719M</td></tr> <tr><td>LTE 41,</td><td>WJ43180M</td></tr> <tr><td>LTE 2 (Upper), LTE 66 (Upper)</td><td>WJR4468M</td></tr> <tr><td>NR n5, NR n26, NR n66, NR n71</td><td>WJ42756M, WJ42787M</td></tr> <tr><td>NR n41, NR n41 SRS</td><td>WJR4463M</td></tr> <tr><td>NR n77</td><td>WJ42736M</td></tr> <tr><td>NR n78 SRS, NR n78 DoD SRS</td><td>WJ42739M</td></tr> <tr><td>WLAN 2.4G, WLAN 5G, Bluetooth</td><td>WK33554M</td></tr> </tbody> </table>	Mode	Serial Number	GSM850, GSM 1900 ,UMTS B2/B4/B5	WJ42787M	LTE2, LTE 12, LTE 13, LTE 26, LTE 66, NFC	WJ42719M	LTE 41,	WJ43180M	LTE 2 (Upper), LTE 66 (Upper)	WJR4468M	NR n5, NR n26, NR n66, NR n71	WJ42756M, WJ42787M	NR n41, NR n41 SRS	WJR4463M	NR n77	WJ42736M	NR n78 SRS, NR n78 DoD SRS	WJ42739M	WLAN 2.4G, WLAN 5G, Bluetooth	WK33554M
	Mode	Serial Number																			
	GSM850, GSM 1900 ,UMTS B2/B4/B5	WJ42787M																			
	LTE2, LTE 12, LTE 13, LTE 26, LTE 66, NFC	WJ42719M																			
	LTE 41,	WJ43180M																			
	LTE 2 (Upper), LTE 66 (Upper)	WJR4468M																			
	NR n5, NR n26, NR n66, NR n71	WJ42756M, WJ42787M																			
	NR n41, NR n41 SRS	WJR4463M																			
	NR n77	WJ42736M																			
	NR n78 SRS, NR n78 DoD SRS	WJ42739M																			
WLAN 2.4G, WLAN 5G, Bluetooth	WK33554M																				
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 device is enabled with MediaTek Time-Averaged Specific Absorption Rate [TA-SAR] algorithm to control and manage transmitting power in real time and to ensure that the time-averaged RF exposure from 2G/3G/4G/5G NR WWAN except WLAN/BT is in compliance with FCC requirements.

This Part 0 report shows SAR characterization of WWAN radios for 2G/3G/4G and 5G Sub-6 NR respectively. Characterization is achieved by determining Plimit for 2G/3G/4G and 5G Sub-6 NR except WLAN/BT correspond to the exposure design targets after accounting for all device design related uncertainties, i.e. SAR\_design\_target (< FCC SAR limit) for sub-6 radio. The SAR characterization is denoted as SAR Char in this report. Section 2.3 includes a nomenclature of the specific terms used in this report.

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

Plim values in green indicate Plimit < Pmax			Plimit values in grey indicate Plimit > Pmax			
Plimit corresponding to 1 W/kg (1g) 2.5W/kg(10g) SAR_Design_target			Pmax		UL:DL Ratio	
SAR Exposure Position			Head (RCV ON)	Body Hotspot Phablet		
Averaging volume			1g	1g		10g
seperation Distance			0 mm	10 mm		0 mm
Mode	Band	Antenna	ECI = 1	ECI = 0,2,3		Maximum Tune-up Output Power (Burst Average Power)
GSM/GPRS/EDGE	850	MAIN 1	31.2	26.5		
GSM/GPRS/EDGE	1900	MAIN 2	29.4	24.9		25.0
UMTS	2	MAIN 2	22.6	21.6		23.6
UMTS	4	MAIN 2	27.4	20.0		23.0
UMTS	5	MAIN 1	30.4	23.5		24.5
LTE FDD	2 Lower	MAIN 2	28.4	20.0		23.0
LTE FDD	2 Upper	Sub 1	16.5	16.5		22.0
LTE FDD	66(4) Lower	MAIN 2	27.1	19.5		23.0
LTE FDD	66(4) Upper	Sub 1	18.5	18.5		23.0
LTE FDD	12	MAIN 1	31.3	29.8		24.5
LTE FDD	13	MAIN 1	30.0	28.2		24.0
LTE FDD	26	MAIN 1	30.7	27.7		24.5
LTE TDD PC3	41	MAIN 2	27.1	23.9		23.0
NR FDD	5	MAIN 1	30.2	26.7		24.0
NR FDD	26	MAIN 1	30.2	26.8		24.0
NR TDD	41	MAIN 2	17.0	17.0		23.0
NR TDD SRS 1	41	Sub 1	14.0	14.0		16.5
NR TDD SRS 2	41	Sub 3	15.0	15.0		19.0
NR TDD SRS 3	41	Sub 5	17.0	17.0		21.0
NR FDD	66	MAIN 2	27.3	20.5		23.0
NR FDD	71	MAIN 1	31.2	29.4		23.0
NR TDD	77	Sub 3	17.5	17.5		23.5
NR TDD SRS 1	78	Sub 5	11.0	11.0		17.0
NR TDD SRS 2	78	Main 2	17.0	17.0		22.0
NR TDD SRS 3	78	Main 3	12.5	12.5		17.5
NR TDD DoD	77	Sub 3	17.5	17.5		23.5
NR TDD DoD SRS 1	78	Sub 5	11.0	11.0		17.0
NR TDD DoD SRS 2	78	Main 2	17.0	17.0		22.0
NR TDD DoD SRS 3	78	Main 3	12.5	12.5		17.5



### 4.3 Power Reduction for SAR

In this model, except for WLAN/BT, the output Power of the DUT in WWAN mode is controlled by the application of MediaTek Time-Averaged Specific Absorption Rate [TA-SAR] algorithm, with the output Power depending on the ECI of the predefined DUT.

This device uses an independent fixed level power reduction mechanism for WLAN operations when during all voice or VoIP held to ear scenarios. Per FCC Guidance, the held-to-ear exposure conditions were evaluated at reduced power according to the head SAR positions described in IEEE 1528-2013.

Detailed descriptions of the power reduction mechanism are included in the operational description.

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

### 4.4 Nominal and Maximum Output Power Specifications

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

#### 4.4.1 2G/3G/4G Nominal and Maximum Output Power

##### A. GSM Modes

##### Maximum Output Power (Pmax, ECI=1)

Mode / Band		Voice	Burst Average GMSK (dBm)				Burst Average 8-PSK (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	Maximum	34.0	34.0	31.5	29.5	28.5	26.5	25.5	23.5	22.5
	Nominal	33.0	33.0	30.5	28.5	27.5	25.5	24.5	22.5	21.5
GSM/GPRS/EDGE1900	Maximum	31.0	31.0	28.5	27.0	26.0	25.5	24.5	22.5	21.5
	Nominal	30.0	30.0	27.5	26.0	25.0	24.5	23.5	21.5	20.5

(Tolerance: Nominal +1 dB ~-1.5 dB)

##### Body Reduced Output Power (ECI=0,2,3)

Mode / Band		Voice	Burst Average GMSK (dBm)				Burst Average 8-PSK (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	Maximum	30.5	30.5	30.0	29.5	28.5	24.5	24.0	23.5	22.5
	Nominal	29.5	29.5	29.0	28.5	27.5	23.5	23.0	22.5	21.5
GSM/GPRS/EDGE1900	Maximum	28.5	28.5	28.5	27.0	26.0	23.5	23.5	22.5	21.5
	Nominal	27.5	27.5	27.5	26.0	25.0	22.5	22.5	21.5	20.5

(Tolerance: Nominal +1 dB ~-1.5 dB)

**B. UMTS Modes**

**Maximum Output Power (Pmax, ECI=1)**

Mode/Band		Modulated Average(dBm)				
		3GPP RMC Rel 99	3GPP AMR Rel 99	3GPP Cat.5 HSDPA	3GPP Cat.6 HSUPA	3GPP Cat.8 DC-HSDPA
UMTS Band 4 (1 700 MHz)	Maximum	24.0	24.0	23.5	21.0	23.5
	Nominal	23.0	23.0	22.5	20.0	22.5
UMTS Band 5 (850 MHz)	Maximum	25.5	25.5	23.5	21.5	23.5
	Nominal	24.5	24.5	22.5	20.5	22.5

(Tolerance: Nominal +1 dB ~-1.5 dB)

**Body Reduced Output Power (ECI=0,2,3)**

Mode/Band		Modulated Average(dBm)				
		3GPP RMC Rel 99	3GPP AMR Rel 99	3GPP Cat.5 HSDPA	3GPP Cat.6 HSUPA	3GPP Cat.8 DC-HSDPA
UMTS Band 2 (1 900 MHz)	Maximum	22.6	22.6	21.5	19.0	21.5
	Nominal	21.6	21.6	20.5	18.0	20.5
UMTS Band 4 (1 700 MHz)	Maximum	21.0	21.0	20.5	18.0	20.5
	Nominal	20.0	20.0	19.5	17.0	19.5
UMTS Band 5 (835 MHz)	Maximum	24.5	24.5	22.5	20.5	22.5
	Nominal	23.5	23.5	21.5	19.5	21.5

**Head Reduced Output Power (ECI=1)**

Mode/Band		Modulated Average(dBm)				
		3GPP RMC Rel 99	3GPP AMR Rel 99	3GPP Cat.5 HSDPA	3GPP Cat.6 HSUPA	3GPP Cat.8 DC-HSDPA
UMTS Band 2 (1 900 MHz)	Maximum	23.6	23.6	22.5	20.0	22.5
	Nominal	22.6	22.6	21.5	19.0	21.5

**C. LTE Modes**  
**Maximum Output Power**

Mode / Band		Modulated Average (dBm)		
		Pmax	Body (ECI =2,3)	Head (ECI =1)
LTE Band 2	Maximum	24.0	21.0	24.0
	Nominal	23.0	20.0	23.0
LTE Band 2 (Upper)	Maximum	23.0	17.5	17.5
	Nominal	22.0	16.5	16.5
LTE Band 4	Maximum	24.0	20.5	24.0
	Nominal	23.0	19.5	23.0
LTE Band 4 (Upper)	Maximum	24.0	19.5	19.5
	Nominal	23.0	18.5	18.5
LTE Band 5	Maximum	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5
LTE Band 12	Maximum	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5
LTE Band 13	Maximum	25.0	25.0	25.0
	Nominal	24.0	24.0	24.0
LTE Band 17	Maximum	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5
LTE Band 26	Maximum	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5
LTE Band 41	Maximum	24.0	24.0	24.0
	Nominal	23.0	23.0	23.0
LTE Band 66	Maximum	24.0	20.5	24.0
	Nominal	23.0	19.5	23.0
LTE Band 66 (Upper)	Maximum	24.0	19.5	19.5
	Nominal	23.0	18.5	18.5

(Tolerance: Nominal +1 dB ~-1.5 dB)

**D. 5G NR Modes**  
**Maximum Output Power**

Mode / Band		Modulated Average (dBm)		
		Pmax	Body (ECI =2,3)	Head (ECI =1)
NR Band n5	Maximum	25.0	25.0	25.0
	Nominal	24.0	24.0	24.0
NR Band n26	Maximum	25.0	25.0	25.0
	Nominal	24.0	24.0	24.0
NR Band n41	Maximum	24.0	18.0	18.0
	Nominal	23.0	17.0	17.0
NR Band n41 SRS 1	Maximum	17.5	15.0	15.0
	Nominal	16.5	14.0	14.0
NR Band n41 SRS 2	Maximum	20.0	16.0	16.0
	Nominal	19.0	15.0	15.0
NR Band n41 SRS 3	Maximum	22.0	18.0	18.0
	Nominal	21.0	17.0	17.0
NR Band n66	Maximum	24.0	21.5	24.0
	Nominal	23.0	20.5	23.0
NR Band n71	Maximum	24.0	24.0	24.0
	Nominal	23.0	23.0	23.0
NR Band n77	Maximum	24.5	18.5	18.5
	Nominal	23.5	17.5	17.5
NR Band n77 DoD	Maximum	24.5	18.5	18.5
	Nominal	23.5	17.5	17.5
NR Band n78	Maximum	24.5	18.5	18.5
	Nominal	23.5	17.5	17.5
NR Band n78 DoD	Maximum	24.5	18.5	18.5
	Nominal	23.5	17.5	17.5
NR Band n78 DoD SRS 1	Maximum	18.0	12.0	12.0
	Nominal	17.0	11.0	11.0
NR Band n78 DoD SRS 2	Maximum	23.0	18.0	18.0
	Nominal	22.0	17.0	17.0
NR Band n78 DoD SRS 3	Maximum	18.5	13.5	13.5
	Nominal	17.5	12.5	12.5
NR Band n78 SRS 1	Maximum	18.0	12.0	12.0
	Nominal	17.0	11.0	11.0
NR Band n78 SRS 2	Maximum	23.0	18.0	18.0
	Nominal	22.0	17.0	17.0
NR Band n78 SRS 3	Maximum	18.5	13.5	13.5
	Nominal	17.5	12.5	12.5

(Tolerance: Nominal +1 dB ~ Nominal -1.5 dB)

### 4.4.2 Maximum output power

#### 2.4 GHz, 5 GHz WIFI

Mode	Band	SISO				
		(in dBm)				
		a	b	g	n	ac
2.4 GHz	2.45 GHz		17 12ch-5 13ch-1	15 12ch-5 13ch-1	15 12ch-5 13ch-1	
5 GHz (20 MHz)	5200 MHz	15			15	15
	5300 MHz	15			15	15
	5500 MHz	12			12	12
	5800 MHz	13			13	13
5 GHz (40 MHz)	5200 MHz				14.5 38ch-14.0	14.5 38ch-14.0
	5300 MHz				14.5 62ch-13.5	14.5 62ch-13.5
	5500 MHz				12 142ch-11.5	12 142ch-11.5
	5800 MHz				12	12
5 GHz (80 MHz)	5210 MHz					13 42ch-12.5
	5290 MHz					13 58ch-11
	5500 MHz					11
	5800 MHz					11

(Tolerance: Target +1 dB)

### 4.4.3 Reduced output power

#### 2.4 GHz, 5 GHz WIFI (RCV On)

Mode	Band	SISO				
		(in dBm)				
		a	b	g	n	ac
2.4 GHz	2.45 GHz		13 12ch-5 13ch-1	13 12ch-5 13ch-1	13 12ch-5 13ch-1	
5 GHz (20 MHz)	5200 MHz	10			10	10
	5300 MHz	10			10	10
	5500 MHz	10			10	10
	5800 MHz	10			10	10
5 GHz (40 MHz)	5200 MHz				10	10
	5300 MHz				10	10
	5500 MHz				10	10
	5800 MHz				10	10
5 GHz (80 MHz)	5200 MHz					10
	5300 MHz					10
	5500 MHz					10
	5800 MHz					10

(Tolerance: Target +1 dB)

#### 4.4.4 Maximum Bluetooth Power

Mode	ANT1
	(in dBm)
Bluetooth(1Mbps)	14
Bluetooth (EDR)	11.5
Bluetooth LE 2Mbps	6
Bluetooth LE 1Mbps, 125/500Kbps	6

(Tolerance: Target +1 dB)

### 4.5 LTE Information

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

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		1 732.5 (20175)	
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		836.5 (20525)	
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		707.5 (23095)	
LTE Band 13	5 MHz	779.5 (23205)	782 (23230)	784.5 (23255)
	10 MHz		782 (23230)	
LTE Band 17	5 MHz		710.0(23790)	
	10 MHz		710.0(23790)	

Ch. No.& Freq.(MHz)	Low / Low-Mid		Mid	Mid-High / High	
LTE Band 26 (Cell)	1.4 MHz	814.7 (26697)		831.5 (26865)	
	3 MHz	815.5 (26705)		831.5 (26865)	
	5 MHz	816.5 (26715)		831.5 (26865)	
	10 MHz	819.0 (26740)		831.5 (26865)	
	15 MHz			831.5 (26865)	
LTE Band 66 (AWS)	1.4 MHz	1 710.7 (131979)		1 745 (132322)	
	3 MHz	1 711.5 (131987)		1 745 (132322)	
	5 MHz	1 712.5 (131997)		1 745 (132322)	
	10 MHz	1 715.0 (132022)		1 745 (132322)	
	15 MHz	1 717.5 (132047)		1 745 (132322)	
	20 MHz	1 720.0 (132072)		1 745 (132322)	
LTE TDD Band 41	5 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055) 2 680.0(41490)
	10 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055) 2 680.0(41490)
	15 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055) 2 680.0(41490)
	20 MHz	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055) 2 680.0(41490)
UE Category	LTE Rel. 15, DL: Category 13, UL: Category 18				
HPUE Power Class	LTE TDD 41 Power Class 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 Down-Link Carrier aggregations. Detailed information of Down-Link CA are included in the Appendix.H and Technical Description document.				
LTE Release information	This device does not support full CA features on 3GPP Release 15. The following LTE Release 15 Features are not supported: Relay, Hetnet, Enhanced eICI, MDH, cross-carrier Scheduling, Enhanced SC-FDMA.				



### 4.6 5G NR SUB 6 Information

Item.	Description
NR FDD Band n5	826.5 MHz ~ 846.5 MHz
NR FDD Band n26	816.5 MHz ~ 846.5 MHz
NR TDD Band n41	2 501.01 MHz ~ 2 685 MHz
NR FDD Band n66	1 712.5 MHz ~ 1 777.5 MHz
NR FDD Band n71	665.5 MHz ~ 695.5 MHz
NR TDD Band n77	3 705 MHz ~ 3 975 MHz
NR TDD Band n77 DoD	3 455.01 MHz ~ 3 544.98 MHz
NR TDD Band n78	3 705 MHz ~ 3 795 MHz
NR TDD Band n78 DoD	3 455.01 MHz ~ 3 544.98 MHz
NR FDD Band n5	5 MHz, 10 MHz, 15 MHz, 20 MHz
NR FDD Band n26	5 MHz, 10 MHz, 15 MHz, 20 MHz
NR TDD Band n41	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 FDD Band n66	5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 35 MHz, 40 MHz
NR FDD Band n71	5 MHz, 10 MHz, 15 MHz, 20 MHz
NR TDD 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 TDD 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
NR TDD Band n78	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 TDD Band n78 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 / Low-Mid		Mid		Mid-High / High	
NR FDD Band n5 (Cell)	5 MHz	826.5 (165300)		836.5(167300)		846.5 (169300)	
	10 MHz			836.5(167300)			
	15 MHz			836.5(167300)			
	20 MHz			836.5(167300)			
NR FDD Band n26	5 MHz	816.5(163300)		831.5(166300)		846.5(169300)	
	10 MHz	819(163800)		831.5(166300)		844(168800)	
	15 MHz	821.5(164300)				841.5(168300)	
	20 MHz			831.5(166300)			
NR TDD 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)	
	25 MHz	2508.48(501696)	2550.75(510150)	2592.99(518598)	2635.23(527046)	2677.50(535500)	
	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)				
NR FDD Band n66	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	1722.5(344500)		1745(349000)		1767.5(353500)	
	30 MHz			1745(349000)			
	35 MHz			1745(349000)			
	40 MHz	1730(346000)		1745(349000)		1760(352000)	
NR FDD Band n71	5 MHz	665.5(133100)		680.5(136100)		695.5(139100)	
	10 MHz	668(133600)		680.5(136100)		693(138600)	
	15 MHz			680.5(136100)			
	20 MHz			680.5(136100)			
NR TDD Band n77	10 MHz	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 (664332)
	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)				3930 (662000)		
NR TDD 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	3462.99(630866)		3500.01(633334)		3537(635800)	
	30 MHz	3465 (631000)		3500.01 (633334)		3534.99 (635666)	
	40 MHz	3470.01 (631334)				3529.98 (635332)	
	50 MHz	3475.02 (631668)				3525 (635000)	
	60 MHz			3500.01 (633334)			
	70 MHz			3500.01 (633334)			
	80 MHz			3500.01 (633334)			
	90 MHz			3500.01 (633334)			
100 MHz			3500.01 (633334)				

Ch. No.& Freq.(MHz)	Low / Low-Mid	Mid	Mid-High / High
NR TDD Band n78	10 MHz	3705(647000)	3795(653000)
	15 MHz	3707.5(647166)	3792.48(652832)
	20 MHz	3710.01(647334)	3789.99(652666)
	25 MHz	3712.5(647500)	3787.5(652500)
	30 MHz	3715(647666)	3784.98(652332)
	40 MHz	3720(647800)	3780(652000)
	50 MHz	3725.01(648334)	3774.99(651666)
	60 MHz		3750(650000)
	70 MHz		3750(650000)
	80 MHz		3750(650000)
NR TDD Band n78 (DoD)	10 MHz	3455.01(630334)	3544.98(636332)
	15 MHz	3457.5(630500)	3542.49(636166)
	20 MHz	3460.02(630668)	3540(636000)
	25 MHz	3462.99(630866)	3537(635800)
	30 MHz	3465(631000)	3534.99(635666)
	40 MHz	3470.01(631334)	3529.98(635332)
	50 MHz	3475.02(631668)	3525(635000)
	60 MHz		3500.01(633334)
	70 MHz		3500.01(633334)
	80 MHz		3500.01(633334)

Item.	Description
NR FDD Band n5/n26/n66/n71 SCS	15 kHz
NR TDD Band n41/n77/n78	30 kHz
3GPP Rel.	Rel.16
A-MPR disabled for SAR Testing.	Yes
5G NR UL/DL FR1	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM DFT-s-OFDM: π/2-BPSK(UL Only), QPSK, 16QAM, 64QAM, 256QAM
<p>Non-Standalone &amp; Standalone are supported.                      5G NR FR1 Bands, except n5,n41,n66,n77,n78 are supported to NSA and SA Connectivity.                      n26,n71 is only supported to SA connectivity                      More detailed specifications of the 5G NR bands are contained in the Technical description document.</p>	
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations
LTE Anchor Bands for NR Band n5 (Cell)	LTE Band 2/66
LTE Anchor Bands for NR Band n41	LTE Band 2/4/66
LTE Anchor Bands for NR Band n66 (AWS)	LTE Band 2/5/12/13/17
LTE Anchor Bands for NR Band n77	LTE Band 2/5/12/13/17/66
LTE Anchor Bands for NR Band n78	LTE Band 2/4/5/66/41

### 4.7 DUT Antenna Locations

The overall dimensions of this device are > 9 X 5 cm. A diagram showing device antenna can be found in SAR\_setup\_photos. Since the diagonal dimension of this device is > 160 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 BDR tethering applications.

Antenna	Mode	Rear	Front	Left	Right	Bottom	Top
MAIN1	GSM/GPRS/EDGE 850	Yes	Yes	Yes	Yes	Yes	No
MAIN2	GSM/GPRS/EDGE 1900	Yes	Yes	Yes	No	Yes	No
MAIN1	UMTS Band 5	Yes	Yes	Yes	Yes	Yes	No
MAIN1	LTE Band 12	Yes	Yes	Yes	Yes	Yes	No
MAIN1	LTE Band 13	Yes	Yes	Yes	Yes	Yes	No
MAIN1	LTE Band 26	Yes	Yes	Yes	Yes	Yes	No
MAIN2	UMTS Band 2	Yes	Yes	Yes	No	Yes	No
MAIN2	UMTS Band 4	Yes	Yes	Yes	No	Yes	No
MAIN2	LTE Band 2	Yes	Yes	Yes	No	Yes	No
SUB1	LTE Band 2	Yes	Yes	No	Yes	No	Yes
MAIN2	LTE Band 66	Yes	Yes	Yes	No	Yes	No
SUB1	LTE Band 66	Yes	Yes	No	Yes	No	Yes
MAIN2	LTE TDD Band 41	Yes	Yes	Yes	No	Yes	No
MAIN1	NR Band n5	Yes	Yes	Yes	Yes	Yes	No
MAIN1	NR Band n26	Yes	Yes	Yes	Yes	Yes	No
MAIN2	NR Band n41	Yes	Yes	Yes	No	Yes	No
SUB1	NR Band n41 SRS 1	Yes	Yes	No	Yes	No	Yes
MAIN3	NR Band n41 SRS 2	Yes	Yes	No	Yes	Yes	No
SUB5	NR Band n41 SRS 3	Yes	Yes	No	Yes	No	Yes
MAIN2	NR Band n66	Yes	Yes	Yes	No	Yes	No
MAIN1	NR Band n71	Yes	Yes	Yes	Yes	Yes	No
SUB3	NR Band n77	Yes	Yes	Yes	No	No	No
SUB3	NR Band n77 DoD	Yes	Yes	Yes	No	No	No
SUB5	NR Band n78 SRS 1	Yes	Yes	No	Yes	No	Yes
MAIN2	NR Band n78 SRS 2	Yes	Yes	Yes	No	Yes	No
MAIN3	NR Band n78 SRS 3	Yes	Yes	No	Yes	Yes	No
SUB2	2.4 GHz, 5 GHz WLAN, Bluetooth	Yes	Yes	Yes	No	No	Yes
NFC	NFC	Yes	Yes	Yes	Yes	No	No

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.

#### 4.8 Near Field Communications (NFC) Antenna

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

### 4.9 SAR Summation Scenario

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

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

Simultaneous Transmission Scenarios				
Applicable Combination	Head	BodyWorn	Hotspot	Extremity
GSM Voice + 2.4 GHz WI-FI	Yes	Yes	N/A	Yes
GSM Voice + 5 GHz WI-FI	Yes	Yes	N/A	Yes
GSM Voice + 2.4GHz Bluetooth	Yes <sup>^</sup>	Yes	N/A	Yes
GSM Voice + 5 GHz WI-FI + 2.4GHz Bluetooth	Yes	Yes	N/A	Yes
UMTS + 2.4 GHz WI-FI	Yes	Yes	Yes	Yes
UMTS + 5 GHz WI-FI	Yes	Yes	Yes	Yes
UMTS + 2.4GHz Bluetooth	Yes <sup>^</sup>	Yes	Yes <sup>^</sup>	Yes
UMTS + 5 GHz WI-FI + 2.4GHz Bluetooth	Yes <sup>^</sup>	Yes	Yes	Yes
LTE + 2.4 GHz WI-FI	Yes	Yes	Yes	Yes
LTE + 5 GHz WI-FI	Yes	Yes	Yes	Yes
LTE + 2.4GHz Bluetooth	Yes	Yes	Yes <sup>^</sup>	Yes
LTE + 5 GHz WI-FI + 2.4GHz Bluetooth	Yes <sup>^</sup>	Yes	Yes <sup>^</sup>	Yes
GPRS/EDGE + 2.4 GHz WI-FI	Yes	Yes	Yes	Yes
GPRS/EDGE + 5 GHz WI-FI	Yes	Yes	Yes	Yes
GPRS/EDGE + 2.4GHz Bluetooth	Yes <sup>^</sup>	Yes	Yes <sup>^</sup>	Yes
GPRS/EDGE + 5 GHz WI-FI + 2.4GHz Bluetooth	Yes <sup>^</sup>	Yes	Yes <sup>^</sup>	Yes
NR Band + 2.4 GHz WI-FI	Yes	Yes	Yes	Yes
NR Band + 5 GHz WI-FI	Yes	Yes	Yes	Yes
NR Band + 2.4GHz Bluetooth	Yes <sup>^</sup>	Yes	Yes <sup>^</sup>	Yes
NR Band + 5 GHz WI-FI + 2.4GHz Bluetooth	Yes <sup>^</sup>	Yes	Yes	Yes
NFC + 5 GHz WI-FI	N/A	N/A	N/A	Yes <sup>^</sup>

Note:

- Bluetooth cannot transmit simultaneously with 2.4GHz WLAN.
- 5GHz WLAN can transmit simultaneously with Bluetooth.
- 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.
- WLAN Hotspot is supported for 2.4 GHz/UNII-3 of 5 GHz WLAN.
- Per the manufacture, 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 Bluetooth tethering. <sup>^</sup> Bluetooth Tethering is considered.
- Pre-installed VOIP applications are considered.
- This device supports VoLTE/ VoWiFi.
- NFC was evaluated for phablet based on expected usage conditions.

## 4.10 SAR Test Considerations

### 4.10.1 WiFi

Since wireless router operations are not allowed by the chipset firmware using U-NII-1, U-NII-2A & 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 802.11 ac with the following features:

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

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

### 4.10.2 Licensed Transmitter(s)

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

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

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

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

This device supports LTE capabilities with overlapping transmission frequency ranges. When the supported frequency range of LTE Band falls completely within an LTE Band with a larger transmission frequency range, both LTE bands have the same target power or the band with the larger transmission frequency range has a higher target power and both LTE bands share the same transmission path and signal characteristics, SAR was only tested for the band with the larger transmission frequency range.

LTE capabilities with overlapping transmission frequency ranges were applied to LTE Band 26 and LTE Band 5, LTE Band 4 and LTE Band 66, LTE Band 12 and LTE Band 17 of this model.

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

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

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

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

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

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

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

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 ( $\rho$ ). 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/m<sup>3</sup>)
- = Total RMS electric field strength (V/m)

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

## 6. Description of test equipment

### 6.1 SAR MEASUREMENT SETUP

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

A cell controller system contains the power supply, robot controller, teach pendant (Joystick), and remote control, is used to drive the robot motors. The PC with Windows XP or Windows 7 is working with SAR Measurement system DASY4 & DASY5, A/D interface card, monitor, mouse, and keyboard. The Staubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card.

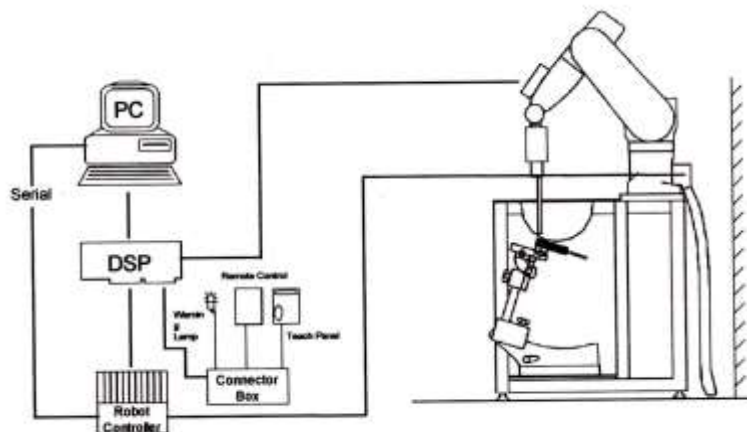


Figure 2. HCT SAR Lab. Test Measurement Set-up

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

## 7. SAR Measurement Procedure

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

1. The SAR distribution at the exposed side of the head or body was measured at a distance no more than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the DUT's head and body area and the horizontal grid resolution was depending on the FCC KDB 865664 D01v01r04 table 4-1 & IEEE 1528-2013.
2. Based on step, the area of the maximum absorption was determined by sophisticated interpolations routines implemented in DASY software. When an Area Scan has measured all reachable point. DASY system computes the field maximal found in the scanned are, within a range of the maximum. SAR at this fixed point was measured and used as a reference value.
3. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB 865664 D01v01r04 table 4-1 and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (reference from the DASY manual.)
  - a. The data at the surface were extrapolated, since the center of the dipoles is no more than 2.7 mm away from the tip of the probe (it is different from the probe type) and the distance between the surface and the lowest measuring point is 1.2 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.
  - b. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed using the 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot" condition in x, y, and z directions. The volume was integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.
  - c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan. If the value changed by more than 5 %, the SAR evaluation and drift measurements were repeated.

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

		$\leq 3$ GHz	$> 3$ GHz	
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		$5 \pm 1$ mm	$\cdot \delta \cdot \ln(2) \pm 0.5$ 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 areascan Spatial resolution: $\Delta x_{Area}, \Delta y_{Area}$		$\leq 2$ GHz: $\leq 15$ mm 2-3 GHz: $\leq 12$ mm	3-4 GHz: $\leq 12$ mm 4-6 GHz: $\leq 10$ 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: $\Delta x_{zoom}, \Delta y_{zoom}$		$\leq 2$ GHz: $\leq 8$ mm 2-3 GHz: $\leq 5$ mm*	3-4 GHz: $\leq 5$ mm* 4-6 GHz: $\leq 4$ mm*	
Maximum zoom scan Spatial resolution normal to phantom surface	uniform grid: $\Delta z_{zoom}(n)$	$\leq 5$ mm	3-4 GHz: $\leq 4$ mm 4-5 GHz: $\leq 3$ mm 5-6 GHz: $\leq 2$ mm	
	graded grid	$\Delta z_{zoom}(1)$ : between 1 <sup>st</sup> two Points closest to phantom surface	$\leq 4$ mm	3-4 GHz: $\leq 3$ mm 4-5 GHz: $\leq 2.5$ mm 5-6 GHz: $\leq 2$ 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	$\geq 30$ mm	3-4 GHz: $\geq 28$ mm 4-5 GHz: $\geq 25$ mm 5-6 GHz: $\geq 22$ mm	
<p>Note: <math>\delta</math> 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 <math>\leq 1.4</math> W/kg, <math>\leq 8</math> mm, <math>\leq 7</math> mm and <math>\leq 5</math> 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 ears 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.

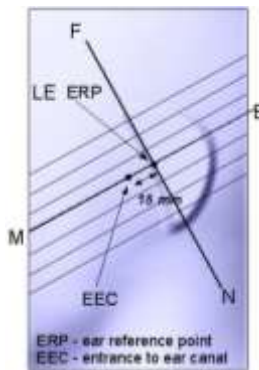


Figure 8-1  
Close-up side view of ERP

### 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

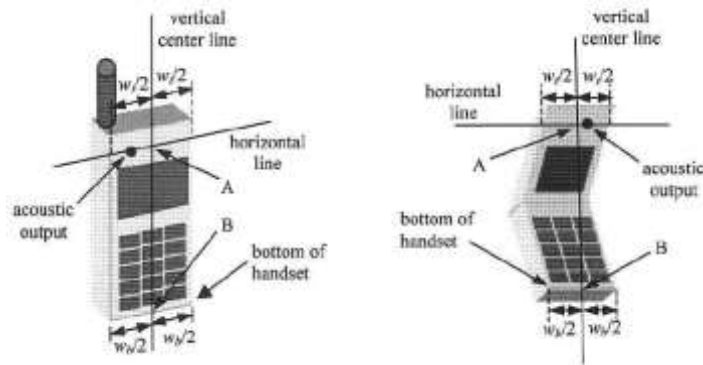


Figure 6-3. Handset vertical and horizontal reference lines

**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.

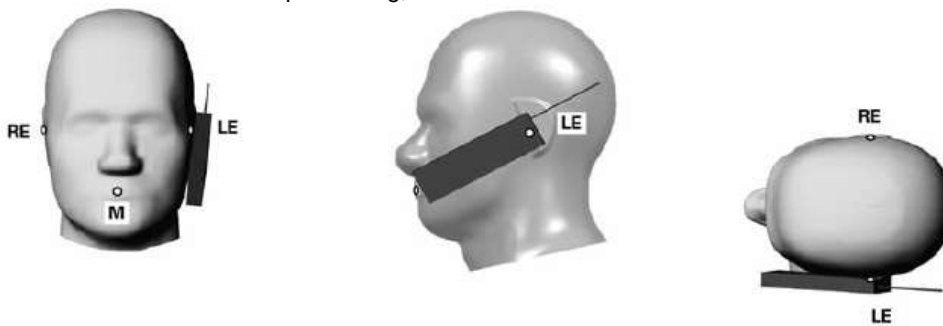


Figure 8.4 Cheek/ Touch position of the wireless device

### 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 ( $L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$ ) 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 mix used 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  $> 15.0 \text{ cm}$  or an overall diagonal dimension  $> 16.0 \text{ cm}$  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  $\leq 25 \text{ mm}$  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  $> 1.2 \text{ W/kg}$ .



## 8.9 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 BDR 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  $\leq 0.25$  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  $\leq 1.2$  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

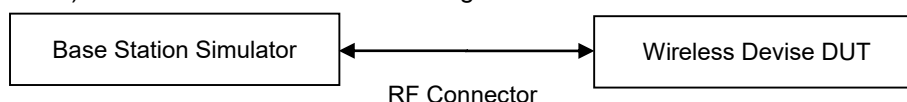
The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control 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  $\leq 0.8$  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 Band widths 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.

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

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

Calculated Duty Cycle – Extended cyclic prefix in uplink x (T<sub>s</sub>) x no of S + no of U

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

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	

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

Where

T<sub>s</sub> = 1/(15000 x 2048) seconds



### 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

## 10.5 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 chipsetbased test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01v02r02 for more details.

### 10.5.1 General Device Setup

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

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

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

For devices that operate in both U-NII-1 and U-NII2A Bands, when the same maximum output power is specified for both Bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is  $> 1.2$  W/kg for 1g SAR or  $> 3.0$  W/kg for 10g SAR. When different maximum output powers are specified for the Bands, SAR measurement for the U-NII Band with the lower maximum output power is not required unless the highest reported SAR for the U-NII Band with the higher maximum output power, adjusted by the ratio of lower to higher specified maximum output power for the two Bands, is  $> 1.2$  W/kg for 1g SAR or  $> 3.0$  W/kg for 10g SAR.

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

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

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

### 10.5.4 Initial Test Position Procedure

For exposure conditions with multiple test positions, such as handset operating 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  $\leq 0.4$  W/kg for 1g SAR and  $\leq 1.0$  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  $\leq 0.8$  W/kg for 1g SAR and  $\leq 2.0$  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  $\leq 0.8$  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 is 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  $\leq 0.8$  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  $\leq 1.2$  W/kg for 1g SAR and  $\leq 3.0$  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

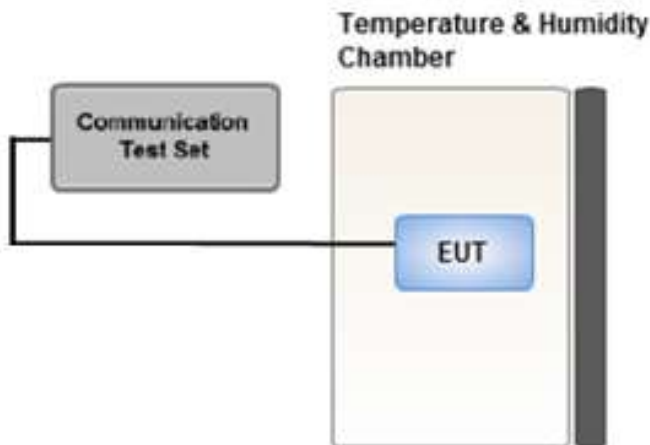
According to ANSI C63.26-2015 Section 5.2.1 when measuring the maximum RF output power from such devices, control over the EUT must be provided either through special test software (provided by manufacturer specifically for compliance testing, but not accessible by an end user) or through use of a base 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, ECI=1)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		<b>34.00</b>	<b>34.00</b>	<b>31.50</b>	<b>29.50</b>	<b>28.50</b>	<b>26.50</b>	<b>25.50</b>	<b>23.50</b>	<b>22.50</b>
Nominal		<b>33.00</b>	<b>33.00</b>	<b>30.50</b>	<b>28.50</b>	<b>27.50</b>	<b>25.50</b>	<b>24.50</b>	<b>22.50</b>	<b>21.50</b>
GSM 850	128	33.60	33.62	30.92	28.93	27.94	25.68	24.81	22.94	21.82
	190	33.73	33.61	30.97	28.97	28.02	25.60	24.69	22.88	21.84
	251	33.36	33.30	30.81	28.78	27.68	25.26	24.33	22.54	21.52
Maximum		<b>31.00</b>	<b>31.00</b>	<b>28.50</b>	<b>27.00</b>	<b>26.00</b>	<b>25.50</b>	<b>24.50</b>	<b>22.50</b>	<b>21.50</b>
Nominal		<b>30.00</b>	<b>30.00</b>	<b>27.50</b>	<b>26.00</b>	<b>25.00</b>	<b>24.50</b>	<b>23.50</b>	<b>21.50</b>	<b>20.50</b>
GSM 1900	512	30.21	30.22	28.11	26.04	25.04	24.86	23.90	21.88	20.87
	661	30.17	30.09	28.02	25.97	24.97	24.57	23.54	21.62	20.58
	810	29.92	29.90	27.91	25.87	24.88	24.32	23.31	21.38	20.31

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		<b>24.97</b>	<b>24.97</b>	<b>25.48</b>	<b>25.24</b>	<b>25.49</b>	<b>17.47</b>	<b>19.48</b>	<b>19.24</b>	<b>19.49</b>
Nominal		<b>23.97</b>	<b>23.97</b>	<b>24.48</b>	<b>24.24</b>	<b>24.49</b>	<b>16.47</b>	<b>18.48</b>	<b>18.24</b>	<b>18.49</b>
GSM 850	128	24.57	24.59	24.90	24.67	24.93	16.65	18.79	18.68	18.81
	190	24.70	24.58	24.95	24.71	24.91	16.57	18.67	18.62	18.83
	251	24.33	24.27	24.79	24.52	24.67	16.23	18.31	18.28	18.51
Maximum		<b>21.97</b>	<b>21.97</b>	<b>22.48</b>	<b>22.74</b>	<b>22.99</b>	<b>16.47</b>	<b>18.48</b>	<b>18.24</b>	<b>18.49</b>
Nominal		<b>20.97</b>	<b>20.97</b>	<b>21.48</b>	<b>21.74</b>	<b>21.99</b>	<b>15.47</b>	<b>17.48</b>	<b>17.24</b>	<b>17.49</b>
GSM 1900	512	21.18	21.19	22.09	21.78	22.03	15.83	17.88	17.62	17.86
	661	21.14	21.06	22.00	21.71	21.96	15.54	17.52	17.36	17.57
	810	20.89	20.87	21.89	21.61	21.87	15.29	17.29	17.12	17.30

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 (Pmax, ECI=1)**

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		<b>30.50</b>	<b>30.50</b>	<b>30.00</b>	<b>29.50</b>	<b>28.50</b>	<b>24.50</b>	<b>24.00</b>	<b>23.50</b>	<b>22.50</b>
Nominal		<b>29.50</b>	<b>29.50</b>	<b>29.00</b>	<b>28.50</b>	<b>27.50</b>	<b>23.50</b>	<b>23.00</b>	<b>22.50</b>	<b>21.50</b>
GSM 850	128	29.83	29.83	29.71	29.05	28.00	23.01	22.90	22.63	21.93
	190	29.96	29.97	29.88	29.19	28.14	22.95	22.86	22.63	21.91
	251	29.86	29.86	29.72	29.08	28.11	22.96	22.84	22.57	21.82
Maximum		<b>28.50</b>	<b>28.50</b>	<b>28.50</b>	<b>27.00</b>	<b>26.00</b>	<b>23.50</b>	<b>23.50</b>	<b>22.50</b>	<b>21.50</b>
Nominal		<b>27.50</b>	<b>27.50</b>	<b>27.50</b>	<b>26.00</b>	<b>25.00</b>	<b>22.50</b>	<b>22.50</b>	<b>21.50</b>	<b>20.50</b>
GSM 1900	512	27.53	27.70	27.64	25.98	25.02	22.59	22.47	21.93	20.84
	661	27.51	27.64	27.56	25.94	24.98	22.37	22.23	21.65	20.59
	810	27.51	27.50	27.45	25.82	24.83	22.09	21.98	21.37	20.23

GSM Conducted output powers (Burst-Average)

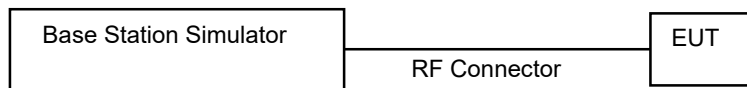
Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		<b>21.47</b>	<b>21.47</b>	<b>23.98</b>	<b>25.24</b>	<b>25.49</b>	<b>15.47</b>	<b>17.98</b>	<b>19.24</b>	<b>19.49</b>
Nominal		<b>20.47</b>	<b>20.47</b>	<b>22.98</b>	<b>24.24</b>	<b>24.49</b>	<b>14.47</b>	<b>16.98</b>	<b>18.24</b>	<b>18.49</b>
GSM 850	20.80	20.80	23.69	24.79	24.99	13.98	16.88	18.37	18.92	18.91
	20.93	20.94	23.86	24.93	25.13	13.92	16.84	18.37	18.90	18.94
	20.83	20.83	23.70	24.82	25.10	13.93	16.82	18.31	18.81	18.95
Maximum		<b>19.47</b>	<b>19.47</b>	<b>22.48</b>	<b>22.74</b>	<b>22.99</b>	<b>14.47</b>	<b>17.48</b>	<b>18.24</b>	<b>18.49</b>
Nominal		<b>18.47</b>	<b>18.47</b>	<b>21.48</b>	<b>21.74</b>	<b>21.99</b>	<b>13.47</b>	<b>16.48</b>	<b>17.24</b>	<b>17.49</b>
GSM 1900	512	18.50	18.67	21.62	21.72	22.01	13.56	16.45	17.67	17.83
	661	18.48	18.61	21.54	21.68	21.97	13.34	16.21	17.39	17.58
	810	18.48	18.47	21.43	21.56	21.82	13.06	15.96	17.11	17.22

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



## 11.2 UMTS Conducted Output Power

### HSPA+

This DUT is capable of HSPA+ in downlink. 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, ECI=1)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 5 [dBm]			3GPP MPR
		Subtest	UL4132 DL4357	UL4183 DL4408	UL4233 DL4458	
99	UMTS	12.2 kbps RMC	24.43	24.31	23.92	-
99		12.2 kbps AMR	24.38	24.29	23.89	-
2	HSDPA	Subtest 1	23.45	23.41	23.27	0
5		Subtest 2	23.46	23.39	23.25	0
5		Subtest 3	22.89	22.85	22.79	0.5
5		Subtest 4	22.92	22.84	22.76	0.5
6	HSUPA	Subtest 1	21.53	21.23	21.03	0
6		Subtest 2	21.55	21.24	21.03	2
6		Subtest 3	22.57	22.26	22.08	1
6		Subtest 4	21.07	20.74	20.51	2
6		Subtest 5	22.53	22.43	22.24	0
8	DC-HSDPA	Subtest1	22.92	22.80	22.55	0
8		Subtest2	22.95	22.84	22.57	0
8		Subtest3	22.45	22.31	22.08	0.5
8		Subtest4	22.46	22.31	22.02	0.5

UMTS Average Conducted output powers

UMTS Band 4 Maximum Conducted Output Power (Pmax, ECI=1)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 4 [dBm]			3GPP MPR
		Subtest	UL1312 DL1537	UL1412 DL1637	UL1513 DL1738	
99	UMTS	12.2 kbps RMC	23.99	23.84	23.81	-
99		12.2 kbps AMR	23.82	23.82	23.79	-
2	HSDPA	Subtest 1	23.24	23.17	22.88	0
5		Subtest 2	23.22	23.19	22.87	0
5		Subtest 3	22.81	22.74	22.44	0.5
5		Subtest 4	22.76	22.68	22.39	0.5
6	HSUPA	Subtest 1	21.24	21.16	20.87	0
6		Subtest 2	21.24	21.20	20.90	2
6		Subtest 3	22.25	22.18	21.90	1
6		Subtest 4	20.76	20.70	20.45	2
6		Subtest 5	22.20	22.17	21.88	0
8	DC-HSDPA	Subtest1	22.76	22.72	22.40	0
8		Subtest2	22.75	22.74	22.43	0
8		Subtest3	22.22	22.25	21.92	0.5
8		Subtest4	22.23	22.23	21.91	0.5

UMTS Band 2 Maximum Conducted Output Power (Pmax)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	
99	UMTS	12.2 kbps RMC	23.50	23.51	23.87	-
99		12.2 kbps AMR	23.48	23.50	23.85	-
2	HSDPA	Subtest 1	22.98	22.80	22.65	0
5		Subtest 2	22.95	22.79	22.60	0
5		Subtest 3	22.51	22.35	22.15	0.5
5		Subtest 4	22.49	22.30	22.10	0.5
6	HSUPA	Subtest 1	20.96	20.79	20.61	0
6		Subtest 2	20.92	20.79	20.62	2
6		Subtest 3	21.95	21.78	21.63	1
6		Subtest 4	20.50	20.35	20.16	2
6		Subtest 5	21.95	21.79	21.61	0
8	DC-HSDPA	Subtest1	22.48	22.30	22.09	0
8		Subtest2	22.52	22.34	22.12	0
8		Subtest3	22.00	21.83	21.62	0.5
8		Subtest4	22.02	21.81	21.61	0.5

### 11.2.2 UMTS Reduced Conducted Output Power

#### UMTS Band 5 Reduced Conducted Output Power (ECI=0,2,3)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 5 [dBm]			3GPP MPR
		Subtest	UL4132 DL4357	UL4183 DL4408	UL4233 DL4458	
99	UMTS	12.2 kbps RMC	23.44	23.38	23.18	-
99		12.2 kbps AMR	23.44	23.38	23.17	-
2	HSDPA	Subtest 1	21.19	22.12	21.92	0
5		Subtest 2	22.23	22.16	21.95	0
5		Subtest 3	21.79	21.70	21.49	0.5
5		Subtest 4	21.76	21.67	21.47	0.5
6	HSUPA	Subtest 1	20.22	20.15	19.94	0
6		Subtest 2	20.21	20.13	19.92	2
6		Subtest 3	21.22	21.17	20.95	1
6		Subtest 4	19.72	19.64	19.43	2
6		Subtest 5	20.21	20.16	19.94	0
8	DC-HSDPA	Subtest1	21.83	21.74	21.42	0
8		Subtest2	21.86	21.75	21.44	0
8		Subtest3	21.35	21.25	20.95	0.5
8		Subtest4	21.33	21.25	20.94	0.5

UMTS Average Conducted output powers

#### UMTS Band 2 Reduced Conducted Output Power (ECI=0,2,3)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	
99	UMTS	12.2 kbps RMC	21.49	21.50	21.87	-
99		12.2 kbps AMR	21.47	21.47	21.85	-
2	HSDPA	Subtest 1	21.01	20.82	20.70	0
5		Subtest 2	20.96	20.83	20.66	0
5		Subtest 3	20.54	20.38	20.19	0.5
5		Subtest 4	20.48	20.34	20.13	0.5
6	HSUPA	Subtest 1	18.97	18.80	18.63	0
6		Subtest 2	18.98	18.79	18.64	2
6		Subtest 3	19.95	19.80	19.67	1
6		Subtest 4	18.50	18.33	18.16	2
6		Subtest 5	19.98	19.79	19.62	0
8	DC-HSDPA	Subtest1	20.45	20.28	20.12	0
8		Subtest2	20.51	20.33	20.14	0
8		Subtest3	20.02	19.81	19.63	0.5
8		Subtest4	20.01	19.83	19.62	0.5

UMTS Band 4 Reduced Conducted Output Power (ECI=0,2,3)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 4 [dBm]			3GPP MPR
		Subtest	UL1312 DL1537	UL1412 DL1637	UL1513 DL1738	
99	UMTS	12.2 kbps RMC	20.94	20.83	20.77	-
99		12.2 kbps AMR	20.93	20.82	20.77	-
2	HSDPA	Subtest 1	20.23	20.18	19.90	0
5		Subtest 2	20.24	20.18	19.89	0
5		Subtest 3	19.76	19.73	19.42	0.5
5		Subtest 4	19.74	19.70	19.40	0.5
6	HSUPA	Subtest 1	18.24	18.16	17.86	0
6		Subtest 2	18.22	18.20	17.92	2
6		Subtest 3	19.24	19.20	18.90	1
6		Subtest 4	17.76	17.71	17.40	2
6		Subtest 5	19.20	19.19	18.91	0
8	DC-HSDPA	Subtest1	19.85	19.83	19.52	0
8		Subtest2	19.87	19.88	19.56	0
8		Subtest3	19.36	19.37	19.04	0.5
8		Subtest4	19.35	19.35	19.03	0.5

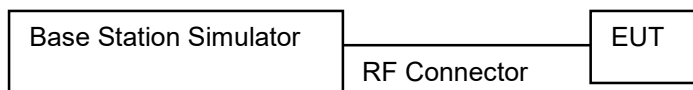
**11.2.3 UMTS Reduced Conducted Output Power**

UMTS Band 2 Reduced Conducted Output Power (ECI=1)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	
99	UMTS	12.2 kbps RMC	22.08	22.22	22.31	-
99		12.2 kbps AMR	22.06	22.20	22.31	-
2	HSDPA	Subtest 1	21.45	21.18	21.25	0
5		Subtest 2	21.44	21.16	21.22	0
5		Subtest 3	20.99	20.69	20.76	0.5
5		Subtest 4	20.95	20.67	20.75	0.5
6	HSUPA	Subtest 1	19.42	19.15	19.21	0
6		Subtest 2	19.44	19.14	19.19	2
6		Subtest 3	20.42	20.16	20.21	1
6		Subtest 4	18.97	18.67	18.72	2
6		Subtest 5	20.41	20.13	20.22	0
8	DC-HSDPA	Subtest1	21.33	21.12	21.20	0
8		Subtest2	21.32	21.11	21.20	0
8		Subtest3	20.86	20.62	20.43	0.5
8		Subtest4	20.85	20.62	20.46	0.5

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/B17/B26 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 Conducted Power

[ LTE Band 2 Conducted Power Main #2 Ant. Pmax, ECI=1]

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	22.69	22.81	21.75	0	0
		1	3	22.74	22.75	21.66	0	0
		1	5	22.73	22.73	21.71	0	0
		3	0	22.68	22.75	21.67	0	0
		3	1	22.70	22.73	21.63	0	0
		3	3	22.72	22.70	21.79	0	0
		6	0	22.17	22.03	21.59	0-1	1
	16QAM	1	0	22.39	22.28	21.87	0-1	1
		1	3	22.38	22.29	21.75	0-1	1
		1	5	22.40	22.33	21.52	0-1	1
		3	0	22.23	22.11	21.65	0-1	1
		3	1	22.21	22.04	21.61	0-1	1
		3	3	22.23	22.10	21.50	0-1	1
		6	0	21.30	21.26	21.57	0-2	2
	64QAM	1	0	21.37	21.42	21.66	0-2	2
		1	3	21.42	21.40	21.61	0-2	2
		1	5	21.44	21.36	21.42	0-2	2
		3	0	21.31	21.21	21.49	0-2	2
		3	1	21.32	21.24	21.51	0-2	2
		3	3	21.27	21.21	21.45	0-2	2
		6	0	20.29	20.19	20.48	0-3	3
	256QAM	1	0	18.35	18.23	18.53	0-5	5
		1	3	18.30	18.23	18.57	0-5	5
		1	5	18.31	18.29	18.54	0-5	5
		3	0	18.31	18.24	18.58	0-5	5
		3	1	18.30	18.25	18.52	0-5	5
		3	3	18.35	18.24	18.49	0-5	5
		6	0	18.26	18.17	18.46	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	22.90	22.95	21.83	0	0
		1	7	22.87	22.78	21.75	0	0
		1	14	22.95	22.86	21.78	0	0
		8	0	22.10	22.02	21.80	0	0
		8	3	22.14	21.99	21.75	0	0
		8	7	22.16	22.00	21.69	0	0
		15	0	22.18	22.02	21.74	0-1	1
	16QAM	1	0	22.44	22.33	22.03	0-1	1
		1	7	22.40	22.38	21.94	0-1	1
		1	14	22.41	22.26	21.64	0-1	1
		8	0	21.38	21.27	21.62	0-1	1
		8	3	21.36	21.29	21.61	0-1	1
		8	7	21.41	21.29	21.60	0-1	1
		15	0	21.30	21.22	21.52	0-2	2
	64QAM	1	0	21.40	21.36	21.67	0-2	2
		1	7	21.45	21.39	21.67	0-2	2
		1	14	21.49	21.37	21.51	0-2	2
		8	0	20.27	20.21	20.55	0-2	2
		8	3	20.30	20.17	20.52	0-2	2
		8	7	20.31	20.21	20.53	0-2	2
		15	0	20.29	20.21	20.52	0-3	3
	256QAM	1	0	18.33	18.29	18.54	0-5	5
		1	7	18.33	18.26	18.53	0-5	5
		1	14	18.35	18.26	18.51	0-5	5
		8	0	18.29	18.19	18.48	0-5	5
		8	3	18.25	18.16	18.46	0-5	5
		8	7	18.29	18.18	18.50	0-5	5
		15	0	18.26	18.17	18.47	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	23.00	22.95	21.81	0	0
		1	12	22.96	22.77	21.70	0	0
		1	24	23.01	22.80	21.51	0	0
		12	0	22.24	22.10	21.62	0	0
		12	6	22.27	22.07	21.65	0	0
		12	11	22.31	22.06	21.69	0	0
		25	0	22.29	22.12	21.67	0-1	1
	16QAM	1	0	22.52	22.43	21.92	0-1	1
		1	12	22.51	22.46	21.89	0-1	1
		1	24	22.58	22.36	21.61	0-1	1
		12	0	21.37	21.29	21.61	0-1	1
		12	6	21.37	21.27	21.59	0-1	1
		12	11	21.40	21.31	21.61	0-1	1
		25	0	21.37	21.30	21.57	0-2	2
	64QAM	1	0	21.45	21.39	21.69	0-2	2
		1	12	21.52	21.44	21.67	0-2	2
		1	24	21.56	21.39	21.50	0-2	2
		12	0	20.35	20.27	20.60	0-2	2
		12	6	20.37	20.25	20.56	0-2	2
		12	11	20.36	20.29	20.56	0-2	2
		25	0	20.35	20.25	20.52	0-3	3
	256QAM	1	0	18.41	18.34	18.62	0-5	5
		1	12	18.39	18.34	18.59	0-5	5
		1	24	18.49	18.34	18.60	0-5	5
		12	0	18.27	18.20	18.51	0-5	5
		12	6	18.29	18.19	18.48	0-5	5
		12	11	18.31	18.22	18.51	0-5	5
		25	0	18.31	18.25	18.51	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	22.69	22.57	21.60	0	0
		1	24	22.99	22.73	21.53	0	0
		1	49	22.83	22.65	21.76	0	0
		25	0	22.26	22.10	21.54	0	0
		25	12	22.25	22.07	21.45	0	0
		25	24	22.30	22.11	21.48	0	0
		50	0	22.29	22.13	21.50	0-1	1
	16QAM	1	0	22.49	22.50	21.80	0-1	1
		1	24	22.53	22.37	21.73	0-1	1
		1	49	22.61	22.40	21.58	0-1	1
		25	0	21.32	21.20	21.46	0-1	1
		25	12	21.31	21.22	21.40	0-1	1
		25	24	21.35	21.23	21.43	0-1	1
		50	0	21.31	21.22	21.43	0-2	2
	64QAM	1	0	21.47	21.43	21.63	0-2	2
		1	24	21.53	21.41	21.61	0-2	2
		1	49	21.60	21.44	21.49	0-2	2
		25	0	20.27	20.20	20.51	0-2	2
		25	12	20.29	20.17	20.52	0-2	2
		25	24	20.33	20.23	20.53	0-2	2
		50	0	20.31	20.25	20.51	0-3	3
	256QAM	1	0	18.42	18.39	18.60	0-5	5
		1	24	18.49	18.34	18.59	0-5	5
		1	49	18.53	18.40	18.62	0-5	5
		25	0	18.29	18.19	18.50	0-5	5
		25	12	18.28	18.17	18.48	0-5	5
		25	24	18.32	18.21	18.49	0-5	5
		50	0	18.29	18.20	18.48	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	22.96	22.78	22.19	0	0
		1	36	23.09	22.84	21.70	0	0
		1	74	22.85	22.76	21.67	0	0
		36	0	22.33	22.11	21.85	0	0
		36	18	22.29	22.08	21.66	0	0
		36	39	22.30	22.14	21.55	0	0
		75	0	22.30	22.13	21.69	0-1	1
	16QAM	1	0	22.61	22.52	22.32	0-1	1
		1	36	22.69	22.42	21.85	0-1	1
		1	74	22.67	22.43	21.85	0-1	1
		36	0	21.36	21.25	21.47	0-1	1
		36	18	21.36	21.24	21.49	0-1	1
		36	39	21.36	21.27	21.49	0-1	1
		75	0	21.37	21.28	21.53	0-2	2
	64QAM	1	0	21.58	21.52	21.63	0-2	2
		1	36	21.55	21.46	21.69	0-2	2
		1	74	21.60	21.53	21.69	0-2	2
		36	0	20.36	20.25	20.48	0-2	2
		36	18	20.38	20.24	20.50	0-2	2
		36	39	20.38	20.31	20.58	0-2	2
		75	0	20.39	20.30	20.54	0-3	3
	256QAM	1	0	18.46	18.42	18.52	0-5	5
		1	36	18.48	18.34	18.62	0-5	5
		1	74	18.53	18.42	18.67	0-5	5
		36	0	18.33	18.23	18.44	0-5	5
		36	18	18.35	18.21	18.48	0-5	5
		36	39	18.33	18.25	18.53	0-5	5
		75	0	18.38	18.28	18.53	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	22.75	22.51	22.47	0	0
		1	49	22.97	22.74	21.71	0	0
		1	99	22.58	22.25	21.62	0	0
		50	0	22.34	22.15	21.99	0	0
		50	25	22.31	22.17	21.68	0	0
		50	49	22.29	22.17	21.54	0	0
		100	0	22.32	22.16	21.74	0-1	1
	16QAM	1	0	22.56	22.52	22.56	0-1	1
		1	49	22.63	22.52	21.88	0-1	1
		1	99	22.66	22.39	21.78	0-1	1
		50	0	21.39	21.27	21.47	0-1	1
		50	25	21.37	21.29	21.50	0-1	1
		50	49	21.36	21.33	21.48	0-1	1
		100	0	21.39	21.32	21.56	0-2	2
	64QAM	1	0	21.52	21.57	21.58	0-2	2
		1	49	21.57	21.46	21.68	0-2	2
		1	99	21.57	21.58	21.69	0-2	2
		50	0	20.41	20.28	20.49	0-2	2
		50	25	20.38	20.29	20.51	0-2	2
		50	49	20.36	20.34	20.56	0-2	2
		100	0	20.40	20.33	20.53	0-3	3
	256QAM	1	0	18.50	18.43	18.52	0-5	5
		1	49	18.50	18.41	18.58	0-5	5
		1	99	18.49	18.51	18.65	0-5	5
		50	0	18.37	18.26	18.45	0-5	5
		50	25	18.36	18.28	18.50	0-5	5
		50	49	18.34	18.32	18.54	0-5	5
		100	0	18.39	18.33	18.52	0-5	5

[ LTE Band 2 Conducted Power Sub #1 Ant. Pmax]

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	21.80	21.56	21.58	0	0
		1	3	21.80	21.55	21.51	0	0
		1	5	21.78	21.58	21.62	0	0
		3	0	21.80	21.49	21.56	0	1
		3	1	21.74	21.49	21.60	0	1
		3	3	21.77	21.50	21.54	0	1
		6	0	20.87	20.64	20.70	0-1	1
	16QAM	1	0	21.16	21.02	21.07	0-1	1
		1	3	21.15	21.03	21.09	0-1	1
		1	5	21.09	20.85	21.13	0-1	1
		3	0	20.86	20.72	20.80	0-1	2
		3	1	20.88	20.66	20.76	0-1	2
		3	3	20.78	20.68	20.79	0-1	2
		6	0	19.98	19.73	19.76	0-2	2
	64QAM	1	0	19.97	19.76	19.85	0-2	2
		1	3	20.10	19.80	19.85	0-2	2
		1	5	20.10	19.83	19.85	0-2	2
		3	0	19.98	19.62	19.78	0-2	3
		3	1	20.00	19.64	19.71	0-2	3
		3	3	19.91	19.60	19.81	0-2	3
		6	0	18.88	18.59	18.70	0-3	3
	256QAM	1	0	16.90	16.72	16.78	0-5	5
		1	3	16.95	16.70	16.75	0-5	5
		1	5	16.89	16.74	16.77	0-5	5
		3	0	17.00	16.66	16.73	0-5	5
		3	1	16.96	16.61	16.69	0-5	5
		3	3	16.90	16.63	16.73	0-5	5
		6	0	16.91	16.60	16.64	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	21.75	21.53	21.54	0	0
		1	7	21.67	21.47	21.57	0	0
		1	14	21.64	21.57	21.54	0	0
		8	0	20.85	20.62	20.70	0	1
		8	3	20.82	20.62	20.69	0	1
		8	7	20.82	20.57	20.67	0	1
		15	0	20.85	20.59	20.66	0-1	1
	16QAM	1	0	21.24	20.97	20.97	0-1	1
		1	7	21.19	20.92	20.95	0-1	1
		1	14	21.19	20.86	21.08	0-1	1
		8	0	19.93	19.69	19.76	0-1	2
		8	3	19.90	19.64	19.72	0-1	2
		8	7	19.89	19.65	19.74	0-1	2
		15	0	19.86	19.60	19.68	0-2	2
	64QAM	1	0	19.95	19.76	19.83	0-2	2
		1	7	20.03	19.78	19.91	0-2	2
		1	14	19.99	19.64	19.79	0-2	2
		8	0	18.81	18.64	18.67	0-2	3
		8	3	18.78	18.54	18.65	0-2	3
		8	7	18.78	18.58	18.66	0-2	3
		15	0	18.81	18.59	18.69	0-3	3
	256QAM	1	0	16.95	16.68	16.74	0-5	5
		1	7	16.88	16.68	16.77	0-5	5
		1	14	16.84	16.65	16.74	0-5	5
		8	0	16.79	16.62	16.68	0-5	5
		8	3	16.81	16.51	16.60	0-5	5
		8	7	16.78	16.56	16.64	0-5	5
		15	0	16.80	16.52	16.60	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	21.74	21.50	21.67	0	0
		1	12	21.70	21.64	21.73	0	0
		1	24	21.68	21.59	21.59	0	0
		12	0	20.88	20.63	20.73	0	1
		12	6	20.80	20.64	20.71	0	1
		12	11	20.79	20.64	20.68	0	1
		25	0	20.83	20.63	20.72	0-1	1
	16QAM	1	0	21.06	20.99	21.18	0-1	1
		1	12	21.14	21.05	21.05	0-1	1
		1	24	21.07	20.95	20.94	0-1	1
		12	0	19.89	19.67	19.77	0-1	2
		12	6	19.86	19.69	19.77	0-1	2
		12	11	19.85	19.68	19.73	0-1	2
		25	0	19.83	19.61	19.74	0-2	2
	64QAM	1	0	20.10	19.71	19.89	0-2	2
		1	12	19.98	19.80	19.86	0-2	2
		1	24	19.88	19.87	19.89	0-2	2
		12	0	18.87	18.61	18.70	0-2	3
		12	6	18.80	18.67	18.70	0-2	3
		12	11	18.77	18.63	18.66	0-2	3
		25	0	18.79	18.56	18.68	0-3	3
	256QAM	1	0	16.97	16.70	16.78	0-5	5
		1	12	16.80	16.69	16.76	0-5	5
		1	24	16.84	16.64	16.66	0-5	5
		12	0	16.83	16.56	16.67	0-5	5
		12	6	16.74	16.57	16.67	0-5	5
		12	11	16.68	16.57	16.63	0-5	5
		25	0	16.77	16.57	16.67	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	21.75	21.63	21.66	0	0
		1	24	21.67	21.54	21.16	0	0
		1	49	21.65	21.17	21.32	0	0
		25	0	20.78	20.62	20.73	0	1
		25	12	20.76	20.62	20.71	0	1
		25	24	20.74	20.61	20.68	0	1
		50	0	20.78	20.64	20.73	0-1	1
	16QAM	1	0	21.19	21.02	21.12	0-1	1
		1	24	20.97	20.97	21.04	0-1	1
		1	49	20.99	20.43	21.05	0-1	1
		25	0	19.76	19.62	19.70	0-1	2
		25	12	19.76	19.60	19.70	0-1	2
		25	24	19.70	19.57	19.67	0-1	2
		50	0	19.76	19.60	19.72	0-2	2
	64QAM	1	0	20.01	19.79	19.77	0-2	2
		1	24	19.90	19.79	19.88	0-2	2
		1	49	19.88	19.83	19.83	0-2	2
		25	0	18.74	18.54	18.68	0-2	3
		25	12	18.70	18.57	18.67	0-2	3
		25	24	18.67	18.57	18.62	0-2	3
		50	0	18.71	18.59	18.69	0-3	3
	256QAM	1	0	16.87	16.75	16.77	0-5	5
		1	24	16.86	16.70	16.83	0-5	5
		1	49	16.77	16.71	16.77	0-5	5
		25	0	16.75	16.56	16.66	0-5	5
		25	12	16.71	16.56	16.65	0-5	5
		25	24	16.66	16.54	16.63	0-5	5
		50	0	16.73	16.59	16.68	0-5	5

TE 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	21.84	21.10	21.20	0	0
		1	36	21.77	21.12	21.12	0	0
		1	74	21.68	21.18	21.15	0	0
		36	0	20.78	20.59	20.67	0	1
		36	18	20.70	20.60	20.66	0	1
		36	39	20.70	20.61	20.67	0	1
		75	0	20.74	20.59	20.69	0-1	1
	16QAM	1	0	21.12	20.58	21.17	0-1	1
		1	36	20.43	20.45	21.06	0-1	1
		1	74	20.69	20.58	20.55	0-1	1
		36	0	19.76	19.57	19.67	0-1	2
		36	18	19.70	19.57	19.66	0-1	2
		36	39	19.67	19.57	19.65	0-1	2
		75	0	19.76	19.56	19.68	0-2	2
	64QAM	1	0	20.01	19.47	19.88	0-2	2
		1	36	19.89	19.82	19.90	0-2	2
		1	74	19.88	19.83	19.35	0-2	2
		36	0	18.76	18.58	18.66	0-2	3
		36	18	18.70	18.57	18.66	0-2	3
		36	39	18.67	18.56	18.64	0-2	3
		75	0	18.71	18.55	18.67	0-3	3
	256QAM	1	0	17.03	16.72	16.74	0-5	5
		1	36	16.82	16.78	16.81	0-5	5
		1	74	16.87	16.73	16.72	0-5	5
		36	0	16.72	16.52	16.65	0-5	5
		36	18	16.67	16.55	16.62	0-5	5
		36	39	16.68	16.54	16.60	0-5	5
		75	0	16.73	16.54	16.68	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	21.35	21.14	21.21	0	0
		1	49	21.22	21.11	21.16	0	0
		1	99	21.16	21.17	21.19	0	0
		50	0	20.79	20.65	20.73	0	1
		50	25	20.76	20.64	20.73	0	1
		50	49	20.72	20.63	20.70	0	1
		100	0	20.74	20.65	20.70	0-1	1
	16QAM	1	0	20.64	20.50	20.58	0-1	1
		1	49	20.51	20.48	20.51	0-1	1
		1	99	20.56	20.59	20.55	0-1	1
		50	0	19.75	19.61	19.69	0-1	2
		50	25	19.73	19.62	19.71	0-1	2
		50	49	19.68	19.63	19.67	0-1	2
		100	0	19.77	19.64	19.73	0-2	2
	64QAM	1	0	19.98	19.30	19.43	0-2	2
		1	49	19.90	19.28	19.36	0-2	2
		1	99	19.69	19.34	19.41	0-2	2
		50	0	18.75	18.61	18.66	0-2	3
		50	25	18.71	18.60	18.66	0-2	3
		50	49	18.66	18.61	18.64	0-2	3
		100	0	18.71	18.63	18.70	0-3	3
	256QAM	1	0	16.89	16.68	16.76	0-5	5
		1	49	16.73	16.66	16.80	0-5	5
		1	99	16.84	16.80	16.82	0-5	5
		50	0	16.71	16.57	16.64	0-5	5
		50	25	16.70	16.57	16.65	0-5	5
		50	49	16.66	16.61	16.66	0-5	5
		100	0	16.73	16.61	16.68	0-5	5

[ LTE Band 4 Conducted Power Main #2 Ant. Pmax, ECI=1]

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	23.07	23.10	23.12	0	0
		1	3	23.07	23.11	23.13	0	0
		1	5	23.02	23.12	23.09	0	0
		3	0	23.01	23.04	23.07	0	0
		3	1	23.00	23.06	23.07	0	0
		3	3	22.99	23.09	23.08	0	0
		6	0	22.38	22.22	22.20	0-1	1
	16QAM	1	0	22.60	22.53	22.55	0-1	1
		1	3	22.59	22.54	22.52	0-1	1
		1	5	22.63	22.61	22.55	0-1	1
		3	0	22.50	22.35	22.37	0-1	1
		3	1	22.48	22.38	22.29	0-1	1
		3	3	22.43	22.38	22.26	0-1	1
		6	0	21.46	21.27	21.29	0-2	2
	64QAM	1	0	21.53	21.42	21.44	0-2	2
		1	3	21.57	21.41	21.41	0-2	2
		1	5	21.52	21.41	21.45	0-2	2
		3	0	21.39	21.23	21.25	0-2	2
		3	1	21.42	21.26	21.28	0-2	2
		3	3	21.40	21.25	21.25	0-2	2
		6	0	20.38	20.23	20.23	0-3	3
	256QAM	1	0	18.39	18.30	18.28	0-5	5
		1	3	18.45	18.29	18.27	0-5	5
		1	5	18.43	18.35	18.28	0-5	5
		3	0	18.38	18.27	18.26	0-5	5
		3	1	18.45	18.30	18.23	0-5	5
		3	3	18.40	18.28	18.24	0-5	5
		6	0	18.34	18.20	18.16	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	23.12	23.06	23.06	0	0
		1	7	23.10	23.13	23.09	0	0
		1	14	23.11	23.08	23.08	0	0
		8	0	22.37	22.24	22.20	0	0
		8	3	22.37	22.23	22.16	0	0
		8	7	22.40	22.23	22.17	0	0
		15	0	22.38	22.24	22.19	0-1	1
	16QAM	1	0	22.55	22.60	22.44	0-1	1
		1	7	22.56	22.56	22.42	0-1	1
		1	14	22.61	22.55	22.54	0-1	1
		8	0	21.50	21.34	21.29	0-1	1
		8	3	21.50	21.32	21.27	0-1	1
		8	7	21.49	21.35	21.28	0-1	1
		15	0	21.39	21.26	21.20	0-2	2
	64QAM	1	0	21.51	21.41	21.32	0-2	2
		1	7	21.54	21.44	21.34	0-2	2
		1	14	21.55	21.42	21.42	0-2	2
		8	0	20.37	20.23	20.21	0-2	2
		8	3	20.40	20.24	20.17	0-2	2
		8	7	20.43	20.25	20.17	0-2	2
		15	0	20.41	20.27	20.20	0-3	3
	256QAM	1	0	18.39	18.31	18.26	0-5	5
		1	7	18.43	18.30	18.22	0-5	5
		1	14	18.45	18.33	18.26	0-5	5
		8	0	18.36	18.23	18.15	0-5	5
		8	3	18.35	18.20	18.15	0-5	5
		8	7	18.37	18.24	18.16	0-5	5
		15	0	18.35	18.24	18.17	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	23.12	23.20	23.03	0	0
		1	12	23.15	23.21	23.13	0	0
		1	24	23.20	23.16	23.17	0	0
		12	0	22.41	22.32	22.20	0	0
		12	6	22.44	22.28	22.21	0	0
		12	11	22.48	22.31	22.23	0	0
		25	0	22.45	22.30	22.20	0-1	1
	16QAM	1	0	22.61	22.60	22.48	0-1	1
		1	12	22.67	22.59	22.49	0-1	1
		1	24	22.79	22.63	22.55	0-1	1
		12	0	21.44	21.36	21.23	0-1	1
		12	6	21.48	21.34	21.27	0-1	1
		12	11	21.54	21.34	21.27	0-1	1
		25	0	21.45	21.33	21.24	0-2	2
	64QAM	1	0	21.57	21.48	21.36	0-2	2
		1	12	21.60	21.51	21.43	0-2	2
		1	24	21.69	21.53	21.46	0-2	2
		12	0	20.41	20.35	20.19	0-2	2
		12	6	20.44	20.32	20.23	0-2	2
		12	11	20.49	20.32	20.22	0-2	2
		25	0	20.41	20.27	20.21	0-3	3
	256QAM	1	0	18.42	18.38	18.25	0-5	5
		1	12	18.49	18.40	18.29	0-5	5
		1	24	18.56	18.40	18.31	0-5	5
		12	0	18.35	18.28	18.14	0-5	5
		12	6	18.38	18.23	18.16	0-5	5
		12	11	18.43	18.25	18.17	0-5	5
		25	0	18.39	18.26	18.18	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	22.90	23.13	23.12	0	0
		1	24	23.16	23.13	23.04	0	0
		1	49	23.17	23.17	23.20	0	0
		25	0	22.42	22.30	22.20	0	0
		25	12	22.45	22.30	22.18	0	0
		25	24	22.50	22.29	22.22	0	0
		50	0	22.44	22.26	22.23	0-1	1
	16QAM	1	0	22.71	22.59	22.51	0-1	1
		1	24	22.74	22.59	22.47	0-1	1
		1	49	22.71	22.60	22.67	0-1	1
		25	0	21.41	21.31	21.19	0-1	1
		25	12	21.43	21.29	21.19	0-1	1
		25	24	21.50	21.29	21.22	0-1	1
		50	0	21.39	21.27	21.21	0-2	2
	64QAM	1	0	21.57	21.53	21.39	0-2	2
		1	24	21.60	21.44	21.33	0-2	2
		1	49	21.66	21.50	21.51	0-2	2
		25	0	20.38	20.26	20.15	0-2	2
		25	12	20.39	20.27	20.15	0-2	2
		25	24	20.47	20.27	20.20	0-2	2
		50	0	20.40	20.26	20.19	0-3	3
	256QAM	1	0	18.51	18.42	18.31	0-5	5
		1	24	18.57	18.36	18.24	0-5	5
		1	49	18.57	18.40	18.43	0-5	5
		25	0	18.37	18.24	18.14	0-5	5
		25	12	18.39	18.26	18.14	0-5	5
		25	24	18.44	18.25	18.18	0-5	5
		50	0	18.37	18.24	18.19	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	23.19	23.22	23.20	0	0
		1	36	23.32	23.22	23.16	0	0
		1	74	23.28	23.24	23.27	0	0
		36	0	22.47	22.33	22.23	0	0
		36	18	22.47	22.34	22.24	0	0
		36	39	22.47	22.30	22.28	0	0
		75	0	22.49	22.33	22.23	0-1	1
	16QAM	1	0	22.68	22.68	22.49	0-1	1
		1	36	22.73	22.59	22.57	0-1	1
		1	74	22.71	22.62	22.70	0-1	1
		36	0	21.46	21.31	21.20	0-1	1
		36	18	21.45	21.34	21.21	0-1	1
		36	39	21.45	21.29	21.27	0-1	1
		75	0	21.48	21.30	21.23	0-2	2
	64QAM	1	0	21.56	21.54	21.44	0-2	2
		1	36	21.64	21.45	21.40	0-2	2
		1	74	21.68	21.53	21.55	0-2	2
		36	0	20.47	20.31	20.21	0-2	2
		36	18	20.46	20.33	20.22	0-2	2
		36	39	20.45	20.29	20.28	0-2	2
		75	0	20.49	20.32	20.23	0-3	3
	256QAM	1	0	18.54	18.49	18.38	0-5	5
		1	36	18.58	18.41	18.33	0-5	5
		1	74	18.55	18.45	18.43	0-5	5
		36	0	18.44	18.29	18.19	0-5	5
		36	18	18.43	18.28	18.20	0-5	5
		36	39	18.42	18.26	18.25	0-5	5
		75	0	18.46	18.29	18.22	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	23.17	0	0
		1	49	23.22	0	0
		1	99	23.27	0	0
		50	0	22.41	0	0
		50	25	22.35	0	0
		50	49	22.34	0	0
		100	0	22.38	0-1	1
	16QAM	1	0	22.76	0-1	1
		1	49	22.63	0-1	1
		1	99	22.68	0-1	1
		50	0	21.37	0-1	1
		50	25	21.31	0-1	1
		50	49	21.31	0-1	1
		100	0	21.39	0-2	2
	64QAM	1	0	21.64	0-2	2
		1	49	21.49	0-2	2
		1	99	21.58	0-2	2
		50	0	20.37	0-2	2
		50	25	20.33	0-2	2
		50	49	20.33	0-2	2
		100	0	20.39	0-3	3
	256QAM	1	0	18.47	0-5	5
		1	49	18.44	0-5	5
		1	99	18.46	0-5	5
		50	0	18.35	0-5	5
		50	25	18.29	0-5	5
		50	49	18.32	0-5	5
		100	0	18.37	0-5	5

[ LTE Band 4 Conducted Power Sub #1 Ant. Pmax]

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	22.12	23.30	23.05	0	0
		1	3	22.55	22.87	22.93	0	0
		1	5	22.54	22.90	22.95	0	0
		3	0	23.13	23.41	23.59	0	0
		3	1	23.10	23.46	23.60	0	0
		3	3	23.17	23.39	23.59	0	0
		6	0	22.13	22.44	22.60	0-1	1
	16QAM	1	0	21.88	22.32	22.49	0-1	1
		1	3	21.86	22.34	22.25	0-1	1
		1	5	21.77	22.14	22.27	0-1	1
		3	0	22.16	22.49	22.59	0-1	1
		3	1	22.08	22.64	22.70	0-1	1
		3	3	22.40	22.53	22.71	0-1	1
		6	0	21.19	21.52	21.63	0-2	2
	64QAM	1	0	20.75	21.15	21.17	0-2	2
		1	3	20.78	21.11	21.20	0-2	2
		1	5	20.86	21.14	21.16	0-2	2
		3	0	21.27	21.42	21.66	0-2	2
		3	1	21.18	21.46	21.63	0-2	2
		3	3	21.19	21.50	21.72	0-2	2
		6	0	20.18	20.53	20.60	0-3	3
	256QAM	1	0	18.21	18.65	18.68	0-5	5
		1	3	18.28	18.66	18.72	0-5	5
		1	5	18.28	18.64	18.65	0-5	5
		3	0	18.21	18.59	18.71	0-5	5
		3	1	18.22	18.57	18.61	0-5	5
		3	3	18.26	18.57	18.63	0-5	5
		6	0	18.18	18.50	18.56	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	22.55	22.83	22.92	0	0
		1	7	22.59	22.93	23.07	0	0
		1	14	22.69	22.90	23.03	0	0
		8	0	22.11	22.45	22.58	0	0
		8	3	22.12	22.44	22.55	0	0
		8	7	22.21	22.46	22.58	0	0
		15	0	22.15	22.47	22.56	0-1	1
	16QAM	1	0	21.95	22.36	22.42	0-1	1
		1	7	21.92	22.06	22.43	0-1	1
		1	14	22.10	22.27	22.28	0-1	1
		8	0	21.26	21.59	21.73	0-1	1
		8	3	21.25	21.58	21.66	0-1	1
		8	7	21.38	21.60	21.70	0-1	1
		15	0	21.22	21.54	21.58	0-2	2
	64QAM	1	0	20.73	21.08	21.20	0-2	2
		1	7	20.86	21.15	21.28	0-2	2
		1	14	20.89	21.21	21.23	0-2	2
		8	0	20.19	20.54	20.65	0-2	2
		8	3	20.17	20.48	20.62	0-2	2
		8	7	20.21	20.50	20.48	0-2	2
		15	0	20.19	20.49	20.61	0-3	3
	256QAM	1	0	18.27	18.66	18.67	0-5	5
		1	7	18.32	18.61	18.68	0-5	5
		1	14	18.35	18.61	18.58	0-5	5
		8	0	18.20	18.52	18.66	0-5	5
		8	3	18.19	18.51	18.61	0-5	5
		8	7	18.30	18.57	18.59	0-5	5
		15	0	18.21	18.50	18.60	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	22.58	22.96	23.04	0	0
		1	12	22.74	23.04	23.01	0	0
		1	24	22.77	22.97	23.04	0	0
		12	0	22.23	22.54	22.69	0	0
		12	6	22.29	22.54	22.64	0	0
		12	11	22.31	22.55	22.65	0	0
		25	0	22.29	22.60	22.66	0-1	1
	16QAM	1	0	21.98	22.39	22.41	0-1	1
		1	12	22.06	22.23	22.36	0-1	1
		1	24	22.14	22.19	22.46	0-1	1
		12	0	21.25	21.57	21.69	0-1	1
		12	6	21.30	21.57	21.68	0-1	1
		12	11	21.35	21.59	21.68	0-1	1
		25	0	21.33	21.63	21.63	0-2	2
	64QAM	1	0	20.79	21.25	21.27	0-2	2
		1	12	21.01	21.31	21.38	0-2	2
		1	24	21.03	21.27	21.34	0-2	2
		12	0	20.23	20.59	20.67	0-2	2
		12	6	20.31	20.59	20.68	0-2	2
		12	11	20.34	20.55	20.66	0-2	2
		25	0	20.26	20.54	20.63	0-3	3
	256QAM	1	0	18.34	18.60	18.81	0-5	5
		1	12	18.40	18.70	18.78	0-5	5
		1	24	18.38	18.75	18.70	0-5	5
		12	0	18.20	18.52	18.68	0-5	5
		12	6	18.24	18.50	18.63	0-5	5
		12	11	18.24	18.55	18.64	0-5	5
		25	0	18.27	18.56	18.63	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	22.67	22.92	23.04	0	0
		1	24	22.73	22.85	22.99	0	0
		1	49	22.86	23.06	23.17	0	0
		25	0	22.20	22.49	22.61	0	0
		25	12	22.27	22.46	22.61	0	0
		25	24	22.36	22.63	22.62	0	0
		50	0	22.31	22.58	22.63	0-1	1
	16QAM	1	0	22.05	22.18	22.34	0-1	1
		1	24	22.09	22.34	22.35	0-1	1
		1	49	22.48	22.39	22.39	0-1	1
		25	0	21.20	21.51	21.60	0-1	1
		25	12	21.27	21.48	21.62	0-1	1
		25	24	21.39	21.64	21.64	0-1	1
		50	0	21.29	21.54	21.60	0-2	2
	64QAM	1	0	20.87	21.20	21.29	0-2	2
		1	24	20.99	21.17	21.39	0-2	2
		1	49	21.09	21.39	21.42	0-2	2
		25	0	20.19	20.49	20.59	0-2	2
		25	12	20.21	20.47	20.58	0-2	2
		25	24	20.35	20.59	20.61	0-2	2
		50	0	20.30	20.53	20.60	0-3	3
	256QAM	1	0	18.39	18.61	18.81	0-5	5
		1	24	18.50	18.64	18.77	0-5	5
		1	49	18.54	18.71	18.87	0-5	5
		25	0	18.15	18.49	18.58	0-5	5
		25	12	18.21	18.45	18.62	0-5	5
		25	24	18.29	18.56	18.61	0-5	5
		50	0	18.27	18.53	18.61	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	22.67	22.86	23.00	0	0
		1	36	22.86	23.03	23.07	0	0
		1	74	22.98	23.10	23.16	0	0
		36	0	22.30	22.52	22.62	0	0
		36	18	22.38	22.57	22.70	0	0
		36	39	22.45	22.67	22.67	0	0
		75	0	22.34	22.59	22.65	0-1	1
	16QAM	1	0	22.19	22.05	22.42	0-1	1
		1	36	22.10	22.26	22.49	0-1	1
		1	74	22.45	22.45	22.60	0-1	1
		36	0	21.26	21.53	21.64	0-1	1
		36	18	21.31	21.55	21.68	0-1	1
		36	39	21.38	21.65	21.67	0-1	1
		75	0	21.34	21.61	21.61	0-2	2
	64QAM	1	0	20.88	21.10	21.30	0-2	2
		1	36	21.04	21.28	21.34	0-2	2
		1	74	21.22	21.37	21.48	0-2	2
		36	0	20.28	20.52	20.61	0-2	2
		36	18	20.33	20.56	20.67	0-2	2
		36	39	20.45	20.68	20.69	0-2	2
		75	0	20.36	20.60	20.63	0-3	3
	256QAM	1	0	18.31	18.62	18.65	0-5	5
		1	36	18.45	18.69	18.84	0-5	5
		1	74	18.66	18.79	18.88	0-5	5
		36	0	18.25	18.49	18.57	0-5	5
		36	18	18.35	18.53	18.64	0-5	5
		36	39	18.37	18.63	18.67	0-5	5
		75	0	18.29	18.57	18.65	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	22.84	0	0
		1	49	23.06	0	0
		1	99	23.19	0	0
		50	0	22.56	0	0
		50	25	22.61	0	0
		50	49	22.76	0	0
		100	0	22.66	0-1	1
	16QAM	1	0	22.00	0-1	1
		1	49	22.43	0-1	1
		1	99	22.44	0-1	1
		50	0	21.57	0-1	1
		50	25	21.59	0-1	1
		50	49	21.75	0-1	1
		100	0	21.70	0-2	2
	64QAM	1	0	21.10	0-2	2
		1	49	21.33	0-2	2
		1	99	21.36	0-2	2
		50	0	20.59	0-2	2
		50	25	20.60	0-2	2
		50	49	20.73	0-2	2
		100	0	20.68	0-3	3
	256QAM	1	0	18.48	0-5	5
		1	49	18.78	0-5	5
		1	99	18.82	0-5	5
		50	0	18.53	0-5	5
		50	25	18.57	0-5	5
		50	49	18.68	0-5	5
		100	0	18.63	0-5	5



[ LTE Band 5 Conducted Power Main #1 Ant. Pmax, ECI=1]

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	24.53	24.51	24.03	0	0
		1	3	24.51	24.52	23.98	0	0
		1	5	24.53	24.43	23.95	0	0
		3	0	24.47	24.49	24.00	0	0
		3	1	24.48	24.49	23.98	0	0
		3	3	24.49	24.46	23.99	0	0
	16QAM	6	0	23.53	23.47	23.00	0-1	1
		1	0	23.85	23.85	23.35	0-1	1
		1	3	23.90	23.83	23.29	0-1	1
		1	5	23.84	23.73	23.27	0-1	1
		3	0	23.63	23.58	23.13	0-1	1
		3	1	23.66	23.64	23.13	0-1	1
	64QAM	3	3	23.59	23.66	23.08	0-1	1
		6	0	22.57	22.55	22.04	0-2	2
		1	0	22.70	22.71	22.20	0-2	2
		1	3	22.71	22.70	22.15	0-2	2
		1	5	22.66	22.66	22.08	0-2	2
		3	0	22.50	22.54	22.05	0-2	2
	256QAM	3	1	22.54	22.56	22.05	0-2	2
		3	3	22.51	22.48	22.04	0-2	2
		6	0	21.52	21.50	21.02	0-3	3
		1	0	19.58	19.61	19.07	0-5	5
		1	3	19.58	19.62	19.13	0-5	5
		1	5	19.57	19.54	19.02	0-5	5
		3	0	19.52	19.56	19.10	0-5	5
		3	1	19.56	19.56	19.08	0-5	5
		3	3	19.56	19.52	19.05	0-5	5
		6	0	19.49	19.41	19.00	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	24.50	24.53	24.13	0	0
		1	7	24.49	24.49	24.08	0	0
		1	14	24.54	24.42	23.91	0	0
		8	0	23.55	23.58	23.12	0	0
		8	3	23.57	23.49	23.05	0	0
		8	7	23.52	23.47	23.02	0	0
		15	0	23.54	23.51	23.06	0-1	1
	16QAM	1	0	23.89	23.91	23.50	0-1	1
		1	7	23.87	23.78	23.47	0-1	1
		1	14	23.85	23.74	23.31	0-1	1
		8	0	22.64	22.65	22.21	0-1	1
		8	3	22.65	22.58	22.18	0-1	1
		8	7	22.60	22.58	22.14	0-1	1
		15	0	22.57	22.54	22.08	0-2	2
	64QAM	1	0	22.69	22.71	22.28	0-2	2
		1	7	22.72	22.72	22.24	0-2	2
		1	14	22.73	22.64	22.18	0-2	2
		8	0	21.56	21.58	21.13	0-2	2
		8	3	21.55	21.47	21.11	0-2	2
		8	7	21.53	21.51	21.06	0-2	2
		15	0	21.57	21.55	21.08	0-3	3
	256QAM	1	0	19.64	19.60	19.25	0-5	5
		1	7	19.56	19.68	19.17	0-5	5
		1	14	19.60	19.55	19.08	0-5	5
		8	0	19.54	19.55	19.13	0-5	5
		8	3	19.54	19.45	19.03	0-5	5
		8	7	19.52	19.48	19.05	0-5	5
15		0	19.48	19.51	19.02	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	24.55	24.55	24.27	0	0
		1	12	24.56	24.55	24.16	0	0
		1	24	24.64	24.44	24.03	0	0
		12	0	23.60	23.61	23.23	0	0
		12	6	23.61	23.57	23.20	0	0
		12	11	23.62	23.50	23.14	0	0
		25	0	23.61	23.55	23.19	0-1	1
	16QAM	1	0	23.92	23.88	23.64	0-1	1
		1	12	23.87	23.08	23.49	0-1	1
		1	24	23.97	23.82	23.27	0-1	1
		12	0	22.67	22.66	22.27	0-1	1
		12	6	22.67	22.59	22.25	0-1	1
		12	11	22.67	22.54	22.19	0-1	1
		25	0	22.62	22.54	22.19	0-2	2
	64QAM	1	0	22.77	22.78	22.46	0-2	2
		1	12	22.83	22.78	22.36	0-2	2
		1	24	22.77	22.66	22.22	0-2	2
		12	0	21.62	21.62	21.23	0-2	2
		12	6	21.60	21.60	21.18	0-2	2
		12	11	21.59	21.50	21.13	0-2	2
		25	0	21.59	21.53	21.17	0-3	3
	256QAM	1	0	19.68	19.71	19.33	0-5	5
		1	12	19.68	19.66	19.30	0-5	5
		1	24	19.67	19.59	19.12	0-5	5
		12	0	19.58	19.56	19.18	0-5	5
		12	6	19.54	19.52	19.12	0-5	5
		12	11	19.56	19.46	19.06	0-5	5
		25	0	19.57	19.50	19.12	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	24.38	0	0
		1	24	24.44	0	0
		1	49	24.46	0	0
		25	0	23.46	0	0
		25	12	23.48	0	0
		25	24	23.44	0	0
		50	0	23.46	0-1	1
	16QAM	1	0	23.81	0-1	1
		1	24	23.79	0-1	1
		1	49	23.90	0-1	1
		25	0	22.48	0-1	1
		25	12	22.47	0-1	1
		25	24	22.44	0-1	1
		50	0	22.46	0-2	2
	64QAM	1	0	22.59	0-2	2
		1	24	22.62	0-2	2
		1	49	22.63	0-2	2
		25	0	21.47	0-2	2
		25	12	21.44	0-2	2
		25	24	21.39	0-2	2
		50	0	21.46	0-3	3
	256QAM	1	0	19.58	0-5	5
		1	24	19.55	0-5	5
		1	49	19.61	0-5	5
		25	0	19.44	0-5	5
		25	12	19.46	0-5	5
		25	24	19.39	0-5	5
		50	0	19.42	0-5	5

[ LTE Band 12 Conducted Power Main #1 Ant. Pmax, ECI=1]

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	23.64	23.69	23.41	0	0
		1	3	23.61	23.64	23.37	0	0
		1	5	23.64	23.68	23.37	0	0
		3	0	23.65	23.62	23.45	0	0
		3	1	23.64	23.63	23.39	0	0
		3	3	23.62	23.62	23.36	0	0
	16QAM	6	0	22.65	22.67	22.38	0-1	1
		1	0	22.99	22.90	22.68	0-1	1
		1	3	22.93	22.95	22.74	0-1	1
		1	5	22.95	22.94	22.70	0-1	1
		3	0	22.74	22.77	22.52	0-1	1
		3	1	22.73	22.71	22.48	0-1	1
	64QAM	3	3	22.70	22.73	22.46	0-1	1
		6	0	21.68	21.72	21.46	0-2	2
		1	0	21.81	21.82	21.58	0-2	2
		1	3	21.79	21.83	21.55	0-2	2
		1	5	21.80	21.81	21.56	0-2	2
		3	0	21.67	21.69	21.46	0-2	2
	256QAM	3	1	21.70	21.72	21.42	0-2	2
		3	3	21.68	21.67	21.44	0-2	2
		6	0	20.63	20.65	20.39	0-3	3
		1	0	18.71	18.78	18.47	0-5	5
		1	3	18.74	18.74	18.47	0-5	5
		1	5	18.71	18.75	18.43	0-5	5
		3	0	18.68	18.71	18.46	0-5	5
		3	1	18.72	18.70	18.42	0-5	5
		3	3	18.66	18.70	18.42	0-5	5
		6	0	18.62	18.61	18.33	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	23.67	23.63	23.43	0	0
		1	7	23.65	23.67	23.37	0	0
		1	14	23.62	23.55	23.34	0	0
		8	0	22.70	22.65	22.45	0	0
		8	3	22.65	22.66	22.43	0	0
		8	7	22.66	22.62	22.39	0	0
		15	0	22.67	22.63	22.42	0-1	1
	16QAM	1	0	22.99	22.87	22.81	0-1	1
		1	7	22.95	22.91	22.69	0-1	1
		1	14	22.95	22.90	22.62	0-1	1
		8	0	21.76	21.70	21.50	0-1	1
		8	3	21.74	21.73	21.50	0-1	1
		8	7	21.74	21.71	21.44	0-1	1
		15	0	21.67	21.63	21.43	0-2	2
	64QAM	1	0	21.84	21.81	21.60	0-2	2
		1	7	21.88	21.90	21.56	0-2	2
		1	14	21.80	21.81	21.51	0-2	2
		8	0	20.69	20.67	20.47	0-2	2
		8	3	20.62	20.63	20.45	0-2	2
		8	7	20.68	20.62	20.34	0-2	2
		15	0	20.68	20.64	20.44	0-3	3
	256QAM	1	0	18.68	18.71	18.53	0-5	5
		1	7	18.74	18.70	18.49	0-5	5
		1	14	18.69	18.63	18.41	0-5	5
		8	0	18.67	18.63	18.43	0-5	5
		8	3	18.63	18.62	18.37	0-5	5
		8	7	18.62	18.60	18.34	0-5	5
15		0	18.62	18.60	18.40	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	23.70	23.72	23.58	0	0
		1	12	23.69	23.72	23.50	0	0
		1	24	23.68	23.63	23.39	0	0
		12	0	22.74	22.69	22.58	0	0
		12	6	22.67	22.66	22.50	0	0
		12	11	22.69	22.65	22.45	0	0
		25	0	22.72	22.70	22.52	0-1	1
	16QAM	1	0	22.92	22.96	22.87	0-1	1
		1	12	22.94	22.91	22.83	0-1	1
		1	24	22.95	22.99	22.80	0-1	1
		12	0	21.77	21.75	21.62	0-1	1
		12	6	21.77	21.75	21.56	0-1	1
		12	11	21.74	21.69	21.49	0-1	1
		25	0	21.72	21.68	21.53	0-2	2
	64QAM	1	0	21.94	21.91	21.76	0-2	2
		1	12	21.89	21.94	21.71	0-2	2
		1	24	21.83	21.80	21.62	0-2	2
		12	0	20.73	20.69	20.59	0-2	2
		12	6	20.71	20.68	20.50	0-2	2
		12	11	20.71	20.67	20.48	0-2	2
		25	0	20.69	20.65	20.46	0-3	3
	256QAM	1	0	18.78	18.78	18.65	0-5	5
		1	12	18.81	18.80	18.60	0-5	5
		1	24	18.77	18.72	18.46	0-5	5
		12	0	18.66	18.62	18.53	0-5	5
		12	6	18.66	18.61	18.47	0-5	5
		12	11	18.64	18.62	18.39	0-5	5
		25	0	18.68	18.64	18.49	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	23.72	0	0
		1	24	23.69	0	0
		1	49	23.52	0	0
		25	0	22.70	0	0
		25	12	22.64	0	0
		25	24	22.62	0	0
	16QAM	50	0	22.67	0-1	1
		1	0	22.94	0-1	1
		1	24	22.93	0-1	1
		1	49	22.83	0-1	1
		25	0	21.71	0-1	1
		25	12	21.64	0-1	1
	64QAM	25	24	21.61	0-1	1
		50	0	21.66	0-2	2
		1	0	21.94	0-2	2
		1	24	21.87	0-2	2
		1	49	21.73	0-2	2
		25	0	20.65	0-2	2
	256QAM	25	12	20.58	0-2	2
		25	24	20.57	0-2	2
		50	0	20.63	0-3	3
		1	0	18.86	0-5	5
		1	24	18.78	0-5	5
		1	49	18.62	0-5	5
	25	0	18.66	0-5	5	
	25	12	18.60	0-5	5	
	25	24	18.59	0-5	5	
	50	0	18.64	0-5	5	



[ LTE Band 13 Conducted Power Main #1 Ant. Pmax, ECI=1]

LTE Band 13 \_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23205 Ch. 779.5 MHz	23230 Ch. 782 MHz	23255 Ch. 784.5 MHz		
5 MHz	QPSK	1	0	23.36	23.52	23.59	0	0
		1	12	23.47	23.60	23.68	0	0
		1	24	23.58	23.62	23.74	0	0
		12	0	22.47	22.55	22.65	0	0
		12	6	22.49	22.59	22.65	0	0
		12	11	22.49	22.63	22.72	0	0
		25	0	22.50	22.62	22.68	0-1	1
	16QAM	1	0	22.77	22.89	22.95	0-1	1
		1	12	22.75	22.98	22.94	0-1	1
		1	24	22.89	22.95	22.99	0-1	1
		12	0	21.54	21.63	21.70	0-1	1
		12	6	21.55	21.64	21.72	0-1	1
		12	11	21.53	21.69	21.78	0-1	1
		25	0	21.51	21.64	21.68	0-2	2
	64QAM	1	0	21.60	21.73	21.79	0-2	2
		1	12	21.73	21.80	21.90	0-2	2
		1	24	21.77	21.83	21.93	0-2	2
		12	0	20.47	20.59	20.67	0-2	2
		12	6	20.52	20.60	20.68	0-2	2
		12	11	20.53	20.66	20.74	0-2	2
		25	0	20.47	20.58	20.65	0-3	3
	256QAM	1	0	18.47	18.60	18.70	0-5	5
		1	12	18.61	18.71	18.78	0-5	5
		1	24	18.65	18.72	18.84	0-5	5
		12	0	18.42	18.55	18.61	0-5	5
		12	6	18.44	18.57	18.63	0-5	5
		12	11	18.45	18.59	18.69	0-5	5
25		0	18.47	18.58	18.65	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	23.43	0	0
		1	24	23.57	0	0
		1	49	23.71	0	0
		25	0	22.55	0	0
		25	12	22.58	0	0
		25	24	22.64	0	0
		50	0	22.61	0-1	1
	16QAM	1	0	22.81	0-1	1
		1	24	22.90	0-1	1
		1	49	22.97	0-1	1
		25	0	21.53	0-1	1
		25	12	21.57	0-1	1
		25	24	21.64	0-1	1
		50	0	21.57	0-2	2
	64QAM	1	0	21.68	0-2	2
		1	24	21.78	0-2	2
		1	49	21.87	0-2	2
		25	0	20.52	0-2	2
		25	12	20.54	0-2	2
		25	24	20.62	0-2	2
		50	0	20.58	0-3	3
	256QAM	1	0	18.55	0-5	5
		1	24	18.69	0-5	5
		1	49	18.84	0-5	5
		25	0	18.52	0-5	5
		25	12	18.51	0-5	5
		25	24	18.60	0-5	5
		50	0	18.56	0-5	5

[ LTE Band 17 Conducted Power Main #1 Ant. Pmax, ECI=1]

LTE Band 17 \_ 5 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23755 Ch. 706.5 MHz	23790 Ch. 710 MHz	23825 Ch. 713.5 MHz		
5 MHz	QPSK	1	0	23.72	23.69	23.58	0	0
		1	12	23.67	23.64	23.46	0	0
		1	24	23.63	23.50	23.30	0	0
		12	0	22.70	22.64	22.52	0	0
		12	6	22.66	22.61	22.44	0	0
		12	11	22.66	22.58	22.37	0	0
		25	0	22.70	22.64	22.45	0-1	1
	16QAM	1	0	22.98	22.91	22.98	0-1	1
		1	12	22.97	22.94	22.81	0-1	1
		1	24	22.93	22.85	22.63	0-1	1
		12	0	21.74	21.70	21.58	0-1	1
		12	6	21.73	21.66	21.51	0-1	1
		12	11	21.72	21.63	21.42	0-1	1
		25	0	21.68	21.62	21.47	0-2	2
	64QAM	1	0	21.91	21.90	21.74	0-2	2
		1	12	21.92	21.87	21.65	0-2	2
		1	24	21.80	21.67	21.50	0-2	2
		12	0	20.70	20.63	20.54	0-2	2
		12	6	20.67	20.63	20.48	0-2	2
		12	11	20.65	20.57	20.39	0-2	2
		25	0	20.63	20.59	20.41	0-3	3
	256QAM	1	0	18.82	18.75	18.62	0-5	5
		1	12	18.74	18.74	18.58	0-5	5
		1	24	18.71	18.56	18.42	0-5	5
		12	0	18.65	18.57	18.50	0-5	5
		12	6	18.62	18.56	18.39	0-5	5
		12	11	18.62	18.55	18.34	0-5	5
25		0	18.64	18.58	18.40	0-5	5	

LTE Band 17 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR Allowed Per 3GPP [dB]	MPR [dB]
				23790 Ch.	710 MHz		
10 MHz	QPSK	1	0	23.72	0	0	
		1	24	23.60	0	0	
		1	49	23.39	0	0	
		25	0	22.62	0	0	
		25	12	22.59	0	0	
		25	24	22.47	0	0	
		50	0	22.56	0-1	1	
	16QAM	1	0	22.97	0-1	1	
		1	24	22.90	0-1	1	
		1	49	22.71	0-1	1	
		25	0	21.61	0-1	1	
		25	12	21.60	0-1	1	
		25	24	21.47	0-1	1	
		50	0	21.56	0-2	2	
	64QAM	1	0	21.94	0-2	2	
		1	24	21.77	0-2	2	
		1	49	21.57	0-2	2	
		25	0	20.57	0-2	2	
		25	12	20.54	0-2	2	
		25	24	20.56	0-2	2	
		50	0	20.52	0-3	3	
	256QAM	1	0	18.83	0-5	5	
		1	24	18.75	0-5	5	
		1	49	18.49	0-5	5	
25		0	18.60	0-5	5		
25		12	18.55	0-5	5		
25		24	18.45	0-5	5		
50		0	18.52	0-5	5		

[ LTE Band 26 Conducted Power Main #1 Ant. Pmax, ECI=1]

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	24.11	24.09	23.80	0	0
		1	3	24.05	23.98	23.89	0	0
		1	5	23.90	24.25	23.91	0	0
		3	0	23.99	23.98	23.82	0	0
		3	1	23.96	24.02	23.85	0	0
		3	3	23.97	24.17	23.90	0	0
		6	0	22.86	22.94	22.83	0-1	1
	16QAM	1	0	23.24	23.35	23.39	0-1	1
		1	3	23.34	23.60	23.24	0-1	1
		1	5	23.27	23.47	23.36	0-1	1
		3	0	23.01	23.30	22.98	0-1	1
		3	1	23.20	23.28	23.01	0-1	1
		3	3	23.12	23.01	23.07	0-1	1
		6	0	22.18	21.97	22.06	0-2	2
	64QAM	1	0	22.33	22.08	22.06	0-2	2
		1	3	22.09	22.18	22.04	0-2	2
		1	5	22.24	22.28	22.10	0-2	2
		3	0	22.09	22.25	21.98	0-2	2
		3	1	21.79	21.93	22.18	0-2	2
		3	3	22.05	22.38	21.81	0-2	2
		6	0	21.12	21.25	21.02	0-3	3
	256QAM	1	0	19.14	19.17	18.99	0-5	5
		1	3	19.22	19.14	18.91	0-5	5
		1	5	18.96	19.43	19.01	0-5	5
		3	0	19.21	19.19	19.03	0-5	5
		3	1	19.19	19.02	18.95	0-5	5
		3	3	19.18	19.10	18.95	0-5	5
		6	0	19.05	18.90	18.70	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	23.89	23.91	23.84	0	0
		1	7	24.17	23.92	23.86	0	0
		1	14	24.07	24.01	23.91	0	0
		8	0	23.04	22.97	23.19	0	0
		8	3	23.02	22.97	22.94	0	0
		8	7	22.87	23.25	23.00	0	0
		15	0	23.09	23.25	23.06	0-1	1
	16QAM	1	0	23.47	23.34	23.39	0-1	1
		1	7	23.26	23.54	23.18	0-1	1
		1	14	23.26	23.51	23.40	0-1	1
		8	0	22.12	22.14	22.22	0-1	1
		8	3	22.08	22.26	22.04	0-1	1
		8	7	22.06	22.22	21.81	0-1	1
		15	0	21.93	22.11	21.93	0-2	2
	64QAM	1	0	22.23	22.21	22.13	0-2	2
		1	7	22.36	22.17	21.89	0-2	2
		1	14	22.11	22.38	22.24	0-2	2
		8	0	21.06	21.06	21.05	0-2	2
		8	3	21.19	20.92	21.00	0-2	2
		8	7	21.04	21.25	20.99	0-2	2
		15	0	20.97	20.85	21.12	0-3	3
	256QAM	1	0	19.24	19.07	19.08	0-5	5
		1	7	19.14	19.08	18.98	0-5	5
		1	14	19.11	19.23	19.00	0-5	5
		8	0	18.94	19.01	18.86	0-5	5
		8	3	19.14	19.03	19.10	0-5	5
		8	7	19.07	19.23	18.99	0-5	5
		15	0	18.99	19.07	19.15	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	24.05	24.05	23.91	0	0
		1	12	24.12	23.93	23.88	0	0
		1	24	24.25	24.15	24.42	0	0
		12	0	23.10	23.15	23.03	0	0
		12	6	23.08	23.08	23.18	0	0
		12	11	23.00	23.29	23.02	0	0
		25	0	22.89	23.20	22.95	0-1	1
	16QAM	1	0	23.23	23.37	23.38	0-1	1
		1	12	23.25	23.55	23.38	0-1	1
		1	24	23.31	23.44	23.34	0-1	1
		12	0	22.12	22.25	22.29	0-1	1
		12	6	22.25	22.29	22.08	0-1	1
		12	11	22.03	22.03	22.21	0-1	1
		25	0	22.17	22.03	21.97	0-2	2
	64QAM	1	0	22.16	22.39	22.29	0-2	2
		1	12	22.13	22.44	22.32	0-2	2
		1	24	22.05	22.41	22.25	0-2	2
		12	0	21.22	21.13	21.14	0-2	2
		12	6	21.12	21.33	21.13	0-2	2
		12	11	21.08	21.32	21.12	0-2	2
		25	0	20.91	21.09	21.07	0-3	3
	256QAM	1	0	19.43	19.31	19.38	0-5	5
		1	12	19.15	19.21	19.24	0-5	5
		1	24	19.24	19.33	19.03	0-5	5
12		0	19.18	19.14	18.93	0-5	5	
12		6	19.04	19.14	19.12	0-5	5	
12		11	19.18	19.24	19.00	0-5	5	
25		0	19.05	19.26	19.02	0-5	5	

LTE Band 26 \_ 10 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26740 Ch. 819 MHz	26865 Ch. 831.5 MHz	26990 Ch. 844 MHz		
10 MHz	QPSK	1	0	24.00	24.11	24.11	0	0
		1	24	24.34	24.00	24.07	0	0
		1	49	24.31	24.04	24.09	0	0
		25	0	22.99	23.17	23.28	0	0
		25	12	23.24	23.26	23.00	0	0
		25	24	23.05	23.07	23.13	0	0
		50	0	22.98	23.15	23.33	0-1	1
	16QAM	1	0	23.44	23.51	23.62	0-1	1
		1	24	23.43	23.55	23.51	0-1	1
		1	49	23.41	23.46	23.36	0-1	1
		25	0	22.08	21.98	21.89	0-1	1
		25	12	22.22	22.13	22.27	0-1	1
		25	24	21.99	22.04	22.22	0-1	1
		50	0	22.21	22.28	22.09	0-2	2
	64QAM	1	0	22.39	22.32	22.29	0-2	2
		1	24	22.37	22.45	22.38	0-2	2
		1	49	22.45	22.25	22.19	0-2	2
		25	0	21.10	21.14	20.95	0-2	2
		25	12	21.17	21.08	21.15	0-2	2
		25	24	20.80	21.07	21.03	0-2	2
		50	0	21.09	21.01	21.11	0-3	3
	256QAM	1	0	19.11	19.44	19.41	0-5	5
		1	24	19.11	19.09	19.16	0-5	5
		1	49	19.07	19.00	19.06	0-5	5
25		0	19.20	19.06	19.16	0-5	5	
25		12	19.15	19.27	19.05	0-5	5	
25		24	19.00	18.95	19.00	0-5	5	
50		0	18.95	19.09	19.11	0-5	5	



LTE Band 26 \_ 15 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR Allowed Per 3GPP [dB]	MPR [dB]
				26865 Ch.	831.5 MHz		
15 MHz	QPSK	1	0	24.09	0	0	
		1	36	24.18	0	0	
		1	74	24.17	0	0	
		36	0	23.19	0	0	
		36	18	23.30	0	0	
		36	39	23.08	0	0	
		75	0	23.38	0-1	1	
	16QAM	1	0	23.44	0-1	1	
		1	36	23.40	0-1	1	
		1	74	23.45	0-1	1	
		36	0	22.05	0-1	1	
		36	18	22.18	0-1	1	
		36	39	21.91	0-1	1	
		75	0	22.11	0-2	2	
	64QAM	1	0	22.25	0-2	2	
		1	36	22.49	0-2	2	
		1	74	22.27	0-2	2	
		36	0	21.15	0-2	2	
		36	18	21.21	0-2	2	
		36	39	21.11	0-2	2	
		75	0	21.01	0-3	3	
	256QAM	1	0	19.37	0-5	5	
		1	36	19.39	0-5	5	
		1	74	19.16	0-5	5	
36		0	19.18	0-5	5		
36		18	19.07	0-5	5		
36		39	19.01	0-5	5		
75		0	19.16	0-5	5		

[ LTE Band 41 Conducted Power Main #2 Ant. Pmax, ECI=1]

LTE Band 41 \_ 5 MHz Bandwidth

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
5 MHz	QPSK	1	0	22.41	23.34	22.94	22.47	22.74	0	0
		1	12	22.53	23.39	22.97	22.49	22.59	0	0
		1	24	22.58	23.34	22.88	22.45	21.80	0	0
		12	0	21.51	22.37	21.96	21.50	21.78	0-1	1
		12	6	21.52	22.36	21.93	21.48	21.78	0-1	1
		12	11	21.57	22.37	21.90	21.46	21.80	0-1	1
		25	0	21.56	22.40	21.96	21.50	21.78	0-1	1
	16QAM	1	0	21.53	22.39	21.98	21.53	21.84	0-1	1
		1	12	21.66	22.39	21.97	21.50	21.89	0-1	1
		1	24	21.69	22.35	21.93	21.51	21.88	0-1	1
		12	0	20.49	21.31	20.90	20.46	20.69	0-2	2
		12	6	20.49	21.30	20.89	20.44	20.68	0-2	2
		12	11	20.52	21.30	20.88	20.42	20.67	0-2	2
		25	0	20.56	21.43	21.01	20.57	20.76	0-2	2
	64QAM	1	0	20.17	21.10	20.72	20.28	20.45	0-2	2
		1	12	20.32	21.09	20.70	20.28	20.48	0-2	2
		1	24	20.39	21.07	20.64	20.24	20.61	0-2	2
		12	0	19.54	20.34	19.94	19.51	19.69	0-3	3
		12	6	19.55	20.31	19.93	19.49	19.75	0-3	3
		12	11	19.60	20.31	19.92	19.48	19.69	0-3	3
		25	0	19.59	20.38	19.98	19.55	19.77	0-3	3
	256QAM	1	0	17.70	18.17	18.09	17.89	17.80	0-5	5
		1	12	17.71	18.14	18.09	17.87	17.78	0-5	5
		1	24	17.71	18.13	18.03	17.86	17.77	0-5	5
		12	0	17.97	18.41	18.31	18.11	18.02	0-5	5
12		6	17.92	18.41	18.29	18.12	18.01	0-5	5	
12		11	17.94	18.39	18.28	18.11	17.98	0-5	5	
25		0	17.93	18.37	18.27	18.10	17.99	0-5	5	

LTE Band 41 \_ 10 MHz Bandwidth

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		
10 MHz	QPSK	1	0	22.41	23.38	23.01	22.51	22.72	0	0
		1	24	22.48	23.32	22.90	22.43	22.48	0	0
		1	49	22.66	23.34	22.84	22.44	21.81	0	0
		25	0	21.48	22.38	21.97	21.49	21.74	0-1	1
		25	12	21.50	22.37	21.90	21.46	21.74	0-1	1
		25	24	21.60	22.37	21.89	21.46	21.80	0-1	1
	16QAM	50	0	21.54	22.38	21.93	21.49	21.78	0-1	1
		1	0	21.45	22.42	22.06	21.58	21.76	0-1	1
		1	24	21.56	22.41	21.97	21.55	21.81	0-1	1
		1	49	21.72	22.43	21.91	21.52	21.79	0-1	1
		25	0	20.52	21.41	21.01	20.56	20.78	0-2	2
		25	12	20.53	21.40	20.96	20.53	20.77	0-2	2
	64QAM	25	24	20.63	21.40	20.93	20.52	20.81	0-2	2
		50	0	20.56	21.40	20.97	20.53	20.80	0-2	2
		1	0	20.18	21.15	20.81	20.33	20.55	0-2	2
		1	24	20.23	21.09	20.66	20.23	20.49	0-2	2
		1	49	20.40	21.10	20.63	20.25	20.70	0-2	2
		25	0	19.48	20.39	20.00	19.57	19.72	0-3	3
	256QAM	25	12	19.51	20.35	19.96	19.51	19.74	0-3	3
		25	24	19.58	20.34	19.93	19.51	19.74	0-3	3
		50	0	19.59	20.44	20.04	19.61	19.83	0-3	3
		1	0	17.68	18.21	18.10	17.93	17.84	0-5	5
		1	24	17.69	18.15	18.06	17.86	17.78	0-5	5
		1	49	17.83	18.18	18.09	17.89	17.82	0-5	5
	25	0	17.82	18.35	18.21	18.08	17.97	0-5	5	
	25	12	17.86	18.34	18.23	18.06	17.94	0-5	5	
	25	24	17.93	18.33	18.22	18.06	17.93	0-5	5	
	50	0	17.93	18.38	18.24	18.11	18.01	0-5	5	

LTE Band 41 \_ 15 MHz Bandwidth

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		
15 MHz	QPSK	1	0	22.37	23.37	23.00	22.55	22.44	0	0
		1	36	22.56	23.41	22.99	22.51	22.81	0	0
		1	74	22.74	23.34	22.82	22.44	22.09	0	0
		36	0	21.48	22.43	21.99	21.53	21.74	0-1	1
		36	18	21.55	22.38	21.95	21.53	21.78	0-1	1
		36	39	21.67	22.38	21.91	21.51	21.96	0-1	1
		75	0	21.56	22.41	21.96	21.53	21.96	0-1	1
	16QAM	1	0	21.46	22.48	22.07	21.65	21.86	0-1	1
		1	36	21.65	22.48	22.06	21.63	21.70	0-1	1
		1	74	21.81	22.41	21.90	21.58	21.63	0-1	1
		36	0	20.42	21.37	20.96	20.54	20.69	0-2	2
		36	18	20.49	21.35	20.92	20.50	20.72	0-2	2
		36	39	20.60	21.34	20.88	20.47	20.76	0-2	2
		75	0	20.59	21.43	21.02	20.58	20.80	0-2	2
	64QAM	1	0	20.17	21.13	20.79	20.33	20.51	0-2	2
		1	36	20.31	21.14	20.75	20.36	20.61	0-2	2
		1	74	20.49	21.10	20.61	20.29	20.74	0-2	2
		36	0	19.50	20.43	20.05	19.62	19.76	0-3	3
		36	18	19.56	20.39	19.99	19.58	19.78	0-3	3
		36	39	19.67	20.39	19.97	19.56	19.83	0-3	3
		75	0	19.65	20.45	20.07	19.64	19.84	0-3	3
	256QAM	1	0	17.70	18.22	18.14	17.99	17.86	0-5	5
		1	36	17.77	18.22	18.15	17.93	17.85	0-5	5
		1	74	17.87	18.23	18.09	17.91	17.64	0-5	5
		36	0	17.85	18.36	18.26	18.09	17.98	0-5	5
		36	18	17.90	18.37	18.25	18.10	17.98	0-5	5
		36	39	17.98	18.38	18.25	18.07	17.99	0-5	5
		75	0	17.96	18.40	18.30	18.12	18.00	0-5	5

LTE Band 41 \_ 20 MHz Bandwidth

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		
20 MHz	QPSK	1	0	22.38	23.32	23.03	22.54	22.63	0	0
		1	49	22.56	23.27	23.34	22.55	22.30	0	0
		1	99	22.79	23.32	22.76	22.44	21.88	0	0
		50	0	21.48	22.45	22.03	21.63	21.75	0-1	1
		50	25	21.61	22.44	22.00	21.56	21.83	0-1	1
		50	49	21.72	22.41	21.94	21.53	21.88	0-1	1
	16QAM	100	0	21.60	22.42	21.95	21.56	21.79	0-1	1
		1	0	21.49	22.42	22.11	21.66	21.76	0-1	1
		1	49	21.62	22.45	22.10	21.64	21.94	0-1	1
		1	99	21.88	22.39	21.86	21.53	21.58	0-1	1
		50	0	20.52	21.44	21.09	20.64	20.79	0-2	2
		50	25	20.65	21.47	21.04	20.61	20.83	0-2	2
	64QAM	50	49	20.75	21.44	20.97	20.56	20.88	0-2	2
		100	0	20.68	21.47	21.03	20.65	20.86	0-2	2
		1	0	20.20	21.10	20.83	20.40	20.52	0-2	2
		1	49	20.33	21.17	20.75	20.35	20.65	0-2	2
		1	99	20.56	21.08	20.58	20.25	20.75	0-2	2
		50	0	19.57	20.49	20.14	19.72	19.87	0-3	3
	256QAM	50	25	19.68	20.52	20.11	19.69	19.89	0-3	3
		50	49	19.79	20.48	20.04	19.62	19.93	0-3	3
		100	0	19.68	20.49	20.07	19.66	19.86	0-3	3
		1	0	17.69	18.25	18.15	18.02	17.90	0-5	5
		1	49	17.79	18.23	18.17	17.96	17.87	0-5	5
		1	99	17.93	18.20	18.03	17.92	17.68	0-5	5
	50	0	17.92	18.45	18.36	18.19	18.08	0-5	5	
	50	25	18.02	18.46	18.34	18.18	18.07	0-5	5	
	50	49	18.08	18.45	18.30	18.15	18.04	0-5	5	
	100	0	18.00	18.43	18.30	18.15	18.05	0-5	5	

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

[ LTE Band 66 Conducted Power Main 2 Ant. Pmax, ECI=1]

LTE Band 66 \_ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979 Ch. 1710.7 MHz	132322 Ch. 1745 MHz	132665 Ch. 1779.3 MHz		
1.4 MHz	QPSK	1	0	22.52	22.92	22.85	0	0
		1	3	22.50	22.93	22.82	0	0
		1	5	22.48	22.96	22.74	0	0
		3	0	22.46	22.93	22.77	0	0
		3	1	22.46	22.91	22.75	0	0
		3	3	22.44	22.96	22.73	0	0
		6	0	22.31	22.06	22.25	0-1	1
	16QAM	1	0	22.53	22.43	22.50	0-1	1
		1	3	22.51	22.43	22.45	0-1	1
		1	5	22.48	22.41	22.50	0-1	1
		3	0	22.38	22.19	22.37	0-1	1
		3	1	22.41	22.12	22.36	0-1	1
		3	3	22.34	22.18	22.37	0-1	1
		6	0	21.39	21.16	21.34	0-2	2
	64QAM	1	0	21.45	21.27	21.43	0-2	2
		1	3	21.43	21.25	21.37	0-2	2
		1	5	21.46	21.24	21.39	0-2	2
		3	0	21.33	21.09	21.27	0-2	2
		3	1	21.36	21.10	21.30	0-2	2
		3	3	21.33	21.10	21.27	0-2	2
		6	0	20.29	20.09	20.30	0-3	3
	256QAM	1	0	18.38	18.18	18.33	0-5	5
		1	3	18.37	18.17	18.28	0-5	5
		1	5	18.35	18.15	18.29	0-5	5
		3	0	18.33	18.13	18.31	0-5	5
		3	1	18.34	18.12	18.25	0-5	5
		3	3	18.35	18.13	18.34	0-5	5
		6	0	18.24	18.05	18.23	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	22.68	22.92	22.94	0	0
		1	7	22.56	22.95	22.84	0	0
		1	14	22.64	22.97	22.87	0	0
		8	0	22.32	22.06	22.26	0	0
		8	3	22.31	22.06	22.25	0	0
		8	7	22.31	22.09	22.26	0	0
		15	0	22.32	22.09	22.26	0-1	1
	16QAM	1	0	22.51	22.31	22.58	0-1	1
		1	7	22.57	22.41	22.47	0-1	1
		1	14	22.55	22.37	22.43	0-1	1
		8	0	21.41	21.16	21.36	0-1	1
		8	3	21.39	21.15	21.37	0-1	1
		8	7	21.41	21.21	21.35	0-1	1
		15	0	21.35	21.12	21.27	0-2	2
	64QAM	1	0	21.44	21.27	21.41	0-2	2
		1	7	21.51	21.26	21.42	0-2	2
		1	14	21.49	21.27	21.38	0-2	2
		8	0	20.35	20.12	20.29	0-2	2
		8	3	20.32	20.08	20.29	0-2	2
		8	7	20.34	20.11	20.28	0-2	2
		15	0	20.35	20.13	20.29	0-3	3
	256QAM	1	0	18.34	18.17	18.31	0-5	5
		1	7	18.36	18.12	18.34	0-5	5
		1	14	18.32	18.10	18.26	0-5	5
		8	0	18.30	18.06	18.25	0-5	5
		8	3	18.29	18.05	18.22	0-5	5
		8	7	18.30	18.09	18.26	0-5	5
		15	0	18.29	18.08	18.25	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	132322 Ch. 1745 MHz	132647 Ch. 1777.5 MHz		
5 MHz	QPSK	1	0	22.77	23.05	23.02	0	0
		1	12	22.64	23.07	22.81	0	0
		1	24	22.73	23.03	22.85	0	0
		12	0	22.37	22.15	22.37	0	0
		12	6	22.36	22.11	22.32	0	0
		12	11	22.40	22.15	22.33	0	0
		25	0	22.38	22.17	22.34	0-1	1
	16QAM	1	0	22.53	22.42	22.61	0-1	1
		1	12	22.64	22.44	22.62	0-1	1
		1	24	22.63	22.45	22.49	0-1	1
		12	0	21.42	21.21	21.40	0-1	1
		12	6	21.41	21.18	21.37	0-1	1
		12	11	21.45	21.20	21.38	0-1	1
		25	0	21.40	21.16	21.36	0-2	2
	64QAM	1	0	21.51	21.29	21.50	0-2	2
		1	12	21.55	21.33	21.46	0-2	2
		1	24	21.58	21.32	21.46	0-2	2
		12	0	20.37	20.16	20.38	0-2	2
		12	6	20.37	20.14	20.33	0-2	2
		12	11	20.41	20.16	20.34	0-2	2
		25	0	20.34	20.15	20.33	0-3	3
	256QAM	1	0	18.40	18.19	18.39	0-5	5
		1	12	18.43	18.25	18.38	0-5	5
		1	24	18.44	18.18	18.32	0-5	5
		12	0	18.30	18.10	18.29	0-5	5
		12	6	18.31	18.07	18.26	0-5	5
		12	11	18.34	18.12	18.26	0-5	5
		25	0	18.31	18.10	18.30	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	22.48	23.01	22.83	0	0
		1	24	22.69	23.02	22.72	0	0
		1	49	22.76	23.13	22.75	0	0
		25	0	22.34	22.13	22.33	0	0
		25	12	22.36	22.11	22.33	0	0
		25	24	22.40	22.13	22.32	0	0
		50	0	22.35	22.13	22.33	0-1	1
	16QAM	1	0	22.60	22.42	22.56	0-1	1
		1	24	22.57	22.34	22.66	0-1	1
		1	49	22.74	22.56	22.56	0-1	1
		25	0	21.33	21.13	21.31	0-1	1
		25	12	21.37	21.11	21.32	0-1	1
		25	24	21.39	21.15	21.33	0-1	1
	64QAM	50	0	21.34	21.11	21.32	0-2	2
		1	0	21.53	21.35	21.49	0-2	2
		1	24	21.57	21.29	21.52	0-2	2
		1	49	21.60	21.40	21.44	0-2	2
		25	0	20.30	20.11	20.31	0-2	2
		25	12	20.33	20.08	20.31	0-2	2
		25	24	20.37	20.13	20.29	0-2	2
	256QAM	50	0	20.34	20.12	20.31	0-3	3
		1	0	18.40	18.26	18.41	0-5	5
		1	24	18.44	18.23	18.40	0-5	5
		1	49	18.51	18.31	18.37	0-5	5
		25	0	18.29	18.10	18.27	0-5	5
		25	12	18.30	18.09	18.27	0-5	5
		25	24	18.33	18.10	18.26	0-5	5
		50	0	18.30	18.10	18.27	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	22.64	23.07	23.11	0	0
		1	36	22.93	23.09	22.86	0	0
		1	74	22.92	23.14	22.91	0	0
		36	0	22.36	22.14	22.34	0	0
		36	18	22.39	22.16	22.35	0	0
		36	39	22.39	22.21	22.37	0	0
		75	0	22.38	22.21	22.34	0-1	1
	16QAM	1	0	22.60	22.54	22.54	0-1	1
		1	36	22.57	22.47	22.66	0-1	1
		1	74	22.76	22.54	22.57	0-1	1
		36	0	21.35	21.13	21.34	0-1	1
		36	18	21.38	21.14	21.34	0-1	1
		36	39	21.37	21.20	21.36	0-1	1
		75	0	21.38	21.18	21.35	0-2	2
	64QAM	1	0	21.55	21.42	21.49	0-2	2
		1	36	21.56	21.32	21.58	0-2	2
		1	74	21.57	21.42	21.56	0-2	2
		36	0	20.36	20.15	20.33	0-2	2
		36	18	20.40	20.15	20.36	0-2	2
		36	39	20.39	20.23	20.37	0-2	2
		75	0	20.39	20.21	20.36	0-3	3
	256QAM	1	0	18.46	18.31	18.39	0-5	5
		1	36	18.42	18.25	18.40	0-5	5
		1	74	18.48	18.36	18.47	0-5	5
		36	0	18.32	18.12	18.30	0-5	5
		36	18	18.34	18.13	18.31	0-5	5
		36	39	18.35	18.18	18.34	0-5	5
		75	0	18.36	18.18	18.33	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	22.46	22.86	23.05	0	0
		1	49	22.87	23.07	22.88	0	0
		1	99	22.78	23.18	22.75	0	0
		50	0	22.41	22.18	22.33	0	0
		50	25	22.39	22.19	22.36	0	0
		50	49	22.40	22.24	22.40	0	0
		100	0	22.37	22.18	22.34	0-1	1
	16QAM	1	0	22.57	22.54	22.51	0-1	1
		1	49	22.68	22.47	22.67	0-1	1
		1	99	22.70	22.62	22.59	0-1	1
		50	0	21.40	21.17	21.30	0-1	1
		50	25	21.37	21.19	21.34	0-1	1
		50	49	21.36	21.24	21.38	0-1	1
		100	0	21.39	21.20	21.38	0-2	2
	64QAM	1	0	21.54	21.40	21.44	0-2	2
		1	49	21.56	21.36	21.49	0-2	2
		1	99	21.50	21.47	21.57	0-2	2
		50	0	20.37	20.17	20.30	0-2	2
		50	25	20.37	20.18	20.35	0-2	2
		50	49	20.37	20.24	20.39	0-2	2
		100	0	20.37	20.20	20.35	0-3	3
	256QAM	1	0	18.49	18.32	18.40	0-5	5
		1	49	18.47	18.26	18.42	0-5	5
		1	99	18.42	18.42	18.49	0-5	5
		50	0	18.35	18.12	18.29	0-5	5
		50	25	18.34	18.16	18.33	0-5	5
		50	49	18.34	18.22	18.37	0-5	5
		100	0	18.35	18.18	18.33	0-5	5

[ LTE Band 66 Conducted Power Sub 1 Ant. Pmax]

LTE Band 66 \_ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979 Ch. 1710.7 MHz	132322 Ch. 1745 MHz	132665 Ch. 1779.3 MHz		
1.4 MHz	QPSK	1	0	22.54	23.05	22.82	0	0
		1	3	22.47	23.00	22.75	0	0
		1	5	22.50	23.07	22.86	0	0
		3	0	23.11	23.59	23.36	0	0
		3	1	23.07	23.53	23.37	0	0
		3	3	23.07	23.61	23.38	0	0
		6	0	22.09	22.62	22.44	0-1	1
	16QAM	1	0	21.78	22.41	22.08	0-1	1
		1	3	21.82	22.39	22.14	0-1	1
		1	5	21.74	22.36	22.18	0-1	1
		3	0	22.25	22.63	22.63	0-1	1
		3	1	22.25	22.68	22.56	0-1	1
		3	3	22.05	22.76	22.64	0-1	1
		6	0	21.19	21.75	21.63	0-2	2
	64QAM	1	0	20.76	21.17	21.10	0-2	2
		1	3	20.80	21.19	21.07	0-2	2
		1	5	20.76	21.25	21.12	0-2	2
		3	0	21.20	21.66	21.45	0-2	2
		3	1	21.19	21.72	21.42	0-2	2
		3	3	21.15	21.59	21.40	0-2	2
		6	0	20.12	20.59	20.44	0-3	3
	256QAM	1	0	18.23	18.72	18.65	0-5	5
		1	3	18.30	18.67	18.66	0-5	5
		1	5	18.26	18.70	18.64	0-5	5
		3	0	18.21	18.68	18.61	0-5	5
		3	1	18.14	18.62	18.65	0-5	5
		3	3	18.18	18.62	18.63	0-5	5
		6	0	18.08	18.60	18.49	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	22.49	22.98	22.79	0	0
		1	7	22.58	23.07	22.89	0	0
		1	14	22.51	23.00	22.87	0	0
		8	0	22.08	22.55	22.46	0	0
		8	3	22.08	22.57	22.38	0	0
		8	7	22.14	22.62	22.42	0	0
		15	0	22.13	22.58	22.42	0-1	1
	16QAM	1	0	21.86	22.30	22.24	0-1	1
		1	7	21.95	22.64	22.10	0-1	1
		1	14	21.90	22.44	22.30	0-1	1
		8	0	21.16	21.69	21.63	0-1	1
		8	3	21.21	21.67	21.56	0-1	1
		8	7	21.21	21.74	21.51	0-1	1
		15	0	21.10	21.64	21.50	0-2	2
	64QAM	1	0	20.74	21.19	21.12	0-2	2
		1	7	20.92	21.19	21.19	0-2	2
		1	14	20.78	21.26	21.12	0-2	2
		8	0	20.08	20.54	20.54	0-2	2
		8	3	20.12	20.62	20.38	0-2	2
		8	7	20.18	20.67	20.35	0-2	2
		15	0	20.15	20.67	20.43	0-3	3
	256QAM	1	0	18.15	18.67	18.59	0-5	5
		1	7	18.22	18.65	18.61	0-5	5
		1	14	18.25	18.71	18.64	0-5	5
		8	0	18.15	18.62	18.57	0-5	5
		8	3	18.12	18.57	18.55	0-5	5
		8	7	18.24	18.60	18.51	0-5	5
		15	0	18.15	18.57	18.52	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	132322 Ch. 1745 MHz	132647 Ch. 1777.5 MHz		
5 MHz	QPSK	1	0	22.55	23.02	22.97	0	0
		1	12	22.64	23.24	22.88	0	0
		1	24	22.60	23.05	22.91	0	0
		12	0	22.14	22.62	22.53	0	0
		12	6	22.19	22.69	22.50	0	0
		12	11	22.19	22.67	22.49	0	0
		25	0	22.22	22.64	22.54	0-1	1
	16QAM	1	0	21.76	22.42	22.16	0-1	1
		1	12	22.07	22.53	22.20	0-1	1
		1	24	21.94	22.48	22.44	0-1	1
		12	0	21.16	21.67	21.59	0-1	1
		12	6	21.21	21.76	21.58	0-1	1
		12	11	21.23	21.70	21.52	0-1	1
		25	0	21.23	21.65	21.55	0-2	2
	64QAM	1	0	20.77	21.29	21.27	0-2	2
		1	12	20.93	21.41	21.14	0-2	2
		1	24	20.86	21.31	21.19	0-2	2
		12	0	20.18	20.62	20.58	0-2	2
		12	6	20.21	20.63	20.56	0-2	2
		12	11	20.24	20.69	20.49	0-2	2
		25	0	20.19	20.61	20.52	0-3	3
	256QAM	1	0	18.23	18.70	18.62	0-5	5
		1	12	18.33	18.70	18.70	0-5	5
		1	24	18.42	18.65	18.69	0-5	5
		12	0	18.12	18.51	18.55	0-5	5
		12	6	18.20	18.61	18.54	0-5	5
		12	11	18.22	18.60	18.56	0-5	5
		25	0	18.19	18.57	18.56	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	22.65	23.07	23.00	0	0
		1	24	22.59	23.07	22.94	0	0
		1	49	22.75	23.19	23.04	0	0
		25	0	22.15	22.59	22.49	0	0
		25	12	22.21	22.61	22.53	0	0
		25	24	22.26	22.70	22.51	0	0
		50	0	22.25	22.64	22.51	0-1	1
	16QAM	1	0	21.91	22.33	22.27	0-1	1
		1	24	21.91	22.65	22.36	0-1	1
		1	49	22.09	22.56	22.47	0-1	1
		25	0	21.12	21.56	21.52	0-1	1
		25	12	21.18	21.61	21.51	0-1	1
		25	24	21.27	21.71	21.47	0-1	1
		50	0	21.20	21.62	21.49	0-2	2
	64QAM	1	0	20.86	21.29	21.22	0-2	2
		1	24	20.77	21.33	21.16	0-2	2
		1	49	21.11	21.35	21.19	0-2	2
		25	0	20.10	20.50	20.47	0-2	2
		25	12	20.14	20.57	20.48	0-2	2
		25	24	20.25	20.66	20.47	0-2	2
		50	0	20.23	20.61	20.48	0-3	3
	256QAM	1	0	18.24	18.67	18.72	0-5	5
		1	24	18.36	18.74	18.62	0-5	5
		1	49	18.46	18.77	18.76	0-5	5
		25	0	18.11	18.50	18.48	0-5	5
		25	12	18.18	18.54	18.50	0-5	5
		25	24	18.27	18.61	18.51	0-5	5
		50	0	18.23	18.59	18.51	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	22.68	23.01	23.03	0	0
		1	36	22.71	23.16	23.13	0	0
		1	74	22.92	23.12	23.05	0	0
		36	0	22.21	22.62	22.55	0	0
		36	18	22.27	22.70	22.59	0	0
		36	39	22.35	22.72	22.58	0	0
		75	0	22.29	22.67	22.55	0-1	1
	16QAM	1	0	21.95	22.28	22.46	0-1	1
		1	36	22.21	22.53	22.52	0-1	1
		1	74	22.23	22.59	22.30	0-1	1
		36	0	21.22	21.59	21.56	0-1	1
		36	18	21.26	21.69	21.58	0-1	1
		36	39	21.29	21.70	21.51	0-1	1
		75	0	21.26	21.65	21.52	0-2	2
	64QAM	1	0	20.86	21.26	21.28	0-2	2
		1	36	21.05	21.49	21.32	0-2	2
		1	74	21.05	21.42	21.34	0-2	2
		36	0	20.20	20.63	20.53	0-2	2
		36	18	20.25	20.66	20.61	0-2	2
		36	39	20.35	20.71	20.57	0-2	2
		75	0	20.26	20.68	20.58	0-3	3
	256QAM	1	0	18.33	18.64	18.63	0-5	5
		1	36	18.42	18.87	18.68	0-5	5
		1	74	18.61	18.76	18.77	0-5	5
		36	0	18.21	18.56	18.53	0-5	5
		36	18	18.32	18.61	18.58	0-5	5
		36	39	18.32	18.64	18.57	0-5	5
		75	0	18.28	18.60	18.55	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	22.57	22.91	22.97	0	0
		1	49	22.81	23.19	23.08	0	0
		1	99	22.98	23.10	23.07	0	0
		50	0	22.25	22.59	22.60	0	0
		50	25	22.37	22.73	22.66	0	0
		50	49	22.39	22.76	22.66	0	0
		100	0	22.29	22.68	22.61	0-1	1
	16QAM	1	0	21.96	22.28	22.32	0-1	1
		1	49	22.02	22.51	22.41	0-1	1
		1	99	22.43	22.78	22.39	0-1	1
		50	0	21.26	21.60	21.56	0-1	1
		50	25	21.37	21.73	21.62	0-1	1
		50	49	21.36	21.73	21.63	0-1	1
		100	0	21.33	21.68	21.63	0-2	2
	64QAM	1	0	20.84	21.32	21.25	0-2	2
		1	49	20.96	21.57	21.36	0-2	2
		1	99	21.26	21.40	21.34	0-2	2
		50	0	20.25	20.58	20.56	0-2	2
		50	25	20.36	20.70	20.59	0-2	2
		50	49	20.41	20.75	20.63	0-2	2
		100	0	20.31	20.71	20.61	0-3	3
	256QAM	1	0	18.26	18.65	18.65	0-5	5
		1	49	18.56	18.88	18.65	0-5	5
		1	99	18.62	18.79	18.80	0-5	5
		50	0	18.23	18.49	18.57	0-5	5
		50	25	18.30	18.65	18.62	0-5	5
		50	49	18.34	18.67	18.61	0-5	5
		100	0	18.28	18.63	18.66	0-5	5

### 11.3.2 LTE Reduced Conducted Power

#### [ LTE Band 2 Conducted Power Main #2 Ant. ECI=0,2,3]

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	20.65	20.49	20.37	0	0
		1	3	20.55	20.50	20.45	0	0
		1	5	20.61	20.53	20.46	0	0
		3	0	20.65	20.45	20.40	0	0
		3	1	20.62	20.43	20.41	0	0
		3	3	20.59	20.47	20.41	0	0
		6	0	20.65	20.51	20.42	0-1	0
	16QAM	1	0	20.94	20.80	20.81	0-1	0
		1	3	20.91	20.85	20.64	0-1	0
		1	5	20.92	20.81	20.82	0-1	0
		3	0	20.56	20.55	20.53	0-1	0
		3	1	20.62	20.56	20.55	0-1	0
		3	3	20.61	20.57	20.65	0-1	0
		6	0	20.77	20.52	20.59	0-2	0
	64QAM	1	0	20.79	20.74	20.56	0-2	0
		1	3	20.74	20.59	20.61	0-2	0
		1	5	20.88	20.68	20.74	0-2	0
		3	0	20.71	20.56	20.54	0-2	0
		3	1	20.67	20.56	20.54	0-2	0
		3	3	20.70	20.51	20.52	0-2	0
		6	0	20.65	20.48	20.46	0-3	0
	256QAM	1	0	18.73	18.58	18.54	0-5	1.5
		1	3	18.73	18.64	18.56	0-5	1.5
		1	5	18.76	18.57	18.55	0-5	1.5
		3	0	18.72	18.58	18.52	0-5	1.5
		3	1	18.75	18.53	18.58	0-5	1.5
		3	3	18.72	18.57	18.54	0-5	1.5
		6	0	18.65	18.48	18.45	0-5	1.5

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	20.55	20.49	20.35	0	0
		1	7	20.59	20.45	20.47	0	0
		1	14	20.60	20.46	20.44	0	0
		8	0	20.64	20.49	20.43	0	0
		8	3	20.65	20.51	20.48	0	0
		8	7	20.65	20.50	20.45	0	0
		15	0	20.65	20.52	20.45	0-1	0
	16QAM	1	0	20.97	20.79	20.72	0-1	0
		1	7	20.94	20.77	20.70	0-1	0
		1	14	20.94	20.86	20.80	0-1	0
		8	0	20.74	20.59	20.60	0-1	0
		8	3	20.72	20.62	20.58	0-1	0
		8	7	20.76	20.59	20.58	0-1	0
		15	0	20.68	20.50	20.52	0-2	0
	64QAM	1	0	20.81	20.67	20.61	0-2	0
		1	7	20.83	20.65	20.67	0-2	0
		1	14	20.75	20.70	20.71	0-2	0
		8	0	20.66	20.49	20.55	0-2	0
		8	3	20.69	20.50	20.45	0-2	0
		8	7	20.73	20.51	20.50	0-2	0
		15	0	20.69	20.52	20.48	0-3	0
	256QAM	1	0	18.71	18.58	18.53	0-5	1.5
		1	7	18.66	18.59	18.56	0-5	1.5
		1	14	18.72	18.61	18.57	0-5	1.5
		8	0	18.64	18.53	18.47	0-5	1.5
		8	3	18.65	18.50	18.44	0-5	1.5
		8	7	18.68	18.54	18.50	0-5	1.5
		15	0	18.62	18.50	18.47	0-5	1.5

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	20.65	20.55	20.38	0	0
		1	12	20.65	20.53	20.43	0	0
		1	24	20.61	20.53	20.56	0	0
		12	0	20.70	20.56	20.47	0	0
		12	6	20.71	20.52	20.46	0	0
		12	11	20.70	20.57	20.51	0	0
		25	0	20.73	20.58	20.51	0-1	0
	16QAM	1	0	20.98	20.96	20.65	0-1	0
		1	12	20.90	20.89	20.72	0-1	0
		1	24	20.97	20.86	20.91	0-1	0
		12	0	20.74	20.62	20.53	0-1	0
		12	6	20.75	20.61	20.57	0-1	0
		12	11	20.75	20.61	20.57	0-1	0
		25	0	20.71	20.56	20.53	0-2	0
	64QAM	1	0	20.93	20.78	20.68	0-2	0
		1	12	20.91	20.78	20.68	0-2	0
		1	24	20.85	20.76	20.75	0-2	0
		12	0	20.74	20.59	20.51	0-2	0
		12	6	20.73	20.57	20.55	0-2	0
		12	11	20.73	20.58	20.57	0-2	0
		25	0	20.70	20.55	20.54	0-3	0
	256QAM	1	0	18.81	18.71	18.59	0-5	1.5
		1	12	18.80	18.66	18.61	0-5	1.5
		1	24	18.80	18.68	18.65	0-5	1.5
		12	0	18.67	18.55	18.44	0-5	1.5
		12	6	18.66	18.54	18.47	0-5	1.5
		12	11	18.67	18.53	18.47	0-5	1.5
		25	0	18.69	18.54	18.48	0-5	1.5

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	20.67	20.63	20.46	0	0
		1	24	20.62	20.56	20.42	0	0
		1	49	20.70	20.55	20.50	0	0
		25	0	20.71	20.56	20.46	0	0
		25	12	20.70	20.56	20.48	0	0
		25	24	20.70	20.52	20.52	0	0
		50	0	20.72	20.54	20.47	0-1	0
	16QAM	1	0	20.90	20.93	20.94	0-1	0
		1	24	20.99	20.93	20.73	0-1	0
		1	49	20.97	20.85	20.95	0-1	0
		25	0	20.71	20.56	20.48	0-1	0
		25	12	20.71	20.58	20.48	0-1	0
		25	24	20.71	20.52	20.51	0-1	0
		50	0	20.70	20.52	20.47	0-2	0
	64QAM	1	0	20.89	20.84	20.67	0-2	0
		1	24	20.89	20.78	20.69	0-2	0
		1	49	20.90	20.76	20.76	0-2	0
		25	0	20.67	20.57	20.45	0-2	0
		25	12	20.70	20.54	20.46	0-2	0
		25	24	20.69	20.49	20.51	0-2	0
		50	0	20.69	20.53	20.48	0-3	0
	256QAM	1	0	18.86	18.75	18.57	0-5	1.5
		1	24	18.84	18.62	18.58	0-5	1.5
		1	49	18.73	18.66	18.75	0-5	1.5
		25	0	18.68	18.55	18.44	0-5	1.5
		25	12	18.71	18.51	18.46	0-5	1.5
		25	24	18.68	18.51	18.50	0-5	1.5
		50	0	18.69	18.50	18.45	0-5	1.5

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	20.68	20.57	20.43	0	0
		1	36	20.67	20.68	20.41	0	0
		1	74	20.61	20.53	20.50	0	0
		36	0	20.73	20.61	20.46	0	0
		36	18	20.71	20.59	20.47	0	0
		36	39	20.70	20.54	20.53	0	0
		75	0	20.73	20.57	20.50	0-1	0
	16QAM	1	0	20.98	20.84	20.83	0-1	0
		1	36	20.99	20.95	20.80	0-1	0
		1	74	20.96	20.87	20.88	0-1	0
		36	0	20.72	20.58	20.45	0-1	0
		36	18	20.70	20.54	20.47	0-1	0
		36	39	20.68	20.51	20.53	0-1	0
		75	0	20.72	20.57	20.50	0-2	0
	64QAM	1	0	20.95	20.81	20.67	0-2	0
		1	36	20.86	20.84	20.71	0-2	0
		1	74	20.91	20.71	20.76	0-2	0
		36	0	20.72	20.62	20.48	0-2	0
		36	18	20.73	20.56	20.50	0-2	0
		36	39	20.72	20.52	20.54	0-2	0
		75	0	20.73	20.56	20.50	0-3	0
	256QAM	1	0	18.89	18.76	18.54	0-5	1.5
		1	36	18.81	18.75	18.56	0-5	1.5
		1	74	18.80	18.68	18.67	0-5	1.5
		36	0	18.72	18.58	18.45	0-5	1.5
		36	18	18.72	18.55	18.46	0-5	1.5
		36	39	18.68	18.49	18.52	0-5	1.5
		75	0	18.73	18.57	18.47	0-5	1.5

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	20.75	20.60	20.46	0	0
		1	49	20.77	20.57	20.53	0	0
		1	99	20.63	20.53	20.55	0	0
		50	0	20.78	20.65	20.54	0	0
		50	25	20.77	20.58	20.52	0	0
		50	49	20.74	20.51	20.55	0	0
		100	0	20.75	20.58	20.54	0-1	0
	16QAM	1	0	20.95	20.92	20.90	0-1	0
		1	49	20.92	20.97	20.86	0-1	0
		1	99	20.98	20.96	20.94	0-1	0
		50	0	20.74	20.60	20.51	0-1	0
		50	25	20.74	20.56	20.52	0-1	0
		50	49	20.71	20.50	20.54	0-1	0
		100	0	20.73	20.60	20.56	0-2	0
	64QAM	1	0	20.95	20.80	20.77	0-2	0
		1	49	20.92	20.81	20.76	0-2	0
		1	99	20.83	20.76	20.82	0-2	0
		50	0	20.77	20.63	20.52	0-2	0
		50	25	20.74	20.57	20.51	0-2	0
		50	49	20.72	20.52	20.54	0-2	0
		100	0	20.76	20.57	20.55	0-3	0
	256QAM	1	0	18.90	18.73	18.65	0-5	1.5
		1	49	18.79	18.71	18.68	0-5	1.5
		1	99	18.87	18.65	18.73	0-5	1.5
		50	0	18.75	18.61	18.50	0-5	1.5
		50	25	18.73	18.54	18.50	0-5	1.5
		50	49	18.73	18.51	18.52	0-5	1.5
		100	0	18.75	18.59	18.55	0-5	1.5

[ LTE Band 2 Conducted Power Sub 1 Ant. ECI=1,2,3]

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	16.36	16.10	16.09	0	0
		1	3	16.32	16.07	16.06	0	0
		1	5	16.34	16.10	16.06	0	0
		3	0	16.34	16.04	16.04	0	0
		3	1	16.35	16.04	16.03	0	0
		3	3	16.31	16.02	16.05	0	0
	16QAM	6	0	16.36	16.08	16.09	0-1	0
		1	0	16.69	16.45	16.38	0-1	0
		1	3	16.69	16.48	16.39	0-1	0
		1	5	16.72	16.48	16.39	0-1	0
		3	0	16.39	16.19	16.13	0-1	0
		3	1	16.40	16.12	16.21	0-1	0
	64QAM	3	3	16.34	16.17	16.12	0-1	0
		6	0	16.50	16.11	16.19	0-2	0
		1	0	16.56	16.26	16.21	0-2	0
		1	3	16.50	16.27	16.16	0-2	0
		1	5	16.56	16.36	16.24	0-2	0
		3	0	16.45	16.10	16.16	0-2	0
	256QAM	3	1	16.44	16.07	16.17	0-2	0
		3	3	16.41	16.12	16.14	0-2	0
		6	0	16.38	16.04	16.09	0-3	0
		1	0	16.43	16.17	16.23	0-5	0
		1	3	16.51	16.10	16.25	0-5	0
		1	5	16.40	16.20	16.18	0-5	0
	3	0	16.52	16.16	16.21	0-5	0	
	3	1	16.51	16.17	16.25	0-5	0	
	3	3	16.47	16.16	16.20	0-5	0	
	6	0	16.44	16.01	16.10	0-5	0	



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	16.35	16.06	16.07	0	0
		1	7	16.32	16.12	16.11	0	0
		1	14	16.30	16.08	16.08	0	0
		8	0	16.38	16.11	16.13	0	0
		8	3	16.35	16.04	16.10	0	0
		8	7	16.36	16.08	16.09	0	0
		15	0	16.37	16.06	16.07	0-1	0
	16QAM	1	0	16.69	16.44	16.47	0-1	0
		1	7	16.75	16.54	16.46	0-1	0
		1	14	16.68	16.41	16.46	0-1	0
		8	0	16.49	16.16	16.21	0-1	0
		8	3	16.40	16.11	16.23	0-1	0
		8	7	16.44	16.21	16.15	0-1	0
		15	0	16.41	16.11	16.13	0-2	0
	64QAM	1	0	16.50	16.21	16.28	0-2	0
		1	7	16.52	16.30	16.35	0-2	0
		1	14	16.52	16.31	16.28	0-2	0
		8	0	16.41	16.13	16.16	0-2	0
		8	3	16.37	16.11	16.10	0-2	0
		8	7	16.36	16.09	16.10	0-2	0
		15	0	16.39	16.11	16.10	0-3	0
	256QAM	1	0	16.56	16.13	16.19	0-5	0
		1	7	16.41	16.24	16.15	0-5	0
		1	14	16.39	16.19	16.14	0-5	0
		8	0	16.44	16.13	16.17	0-5	0
		8	3	16.36	16.09	16.08	0-5	0
		8	7	16.38	16.10	16.12	0-5	0
		15	0	16.39	16.11	16.11	0-5	0

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	16.41	16.11	16.21	0	0
		1	12	16.37	16.16	16.18	0	0
		1	24	16.34	16.15	16.15	0	0
		12	0	16.40	16.12	16.17	0	0
		12	6	16.36	16.13	16.18	0	0
		12	11	16.37	16.12	16.15	0	0
		25	0	16.40	16.13	16.19	0-1	0
	16QAM	1	0	16.76	16.37	16.50	0-1	0
		1	12	16.64	16.43	16.54	0-1	0
		1	24	16.60	16.47	16.49	0-1	0
		12	0	16.46	16.21	16.24	0-1	0
		12	6	16.41	16.25	16.25	0-1	0
		12	11	16.44	16.20	16.18	0-1	0
		25	0	16.41	16.14	16.17	0-2	0
	64QAM	1	0	16.63	16.32	16.52	0-2	0
		1	12	16.65	16.34	16.31	0-2	0
		1	24	16.53	16.36	16.36	0-2	0
		12	0	16.42	16.11	16.21	0-2	0
		12	6	16.35	16.17	16.19	0-2	0
		12	11	16.39	16.19	16.14	0-2	0
		25	0	16.39	16.11	16.18	0-3	0
	256QAM	1	0	16.60	16.19	16.40	0-5	0
		1	12	16.62	16.20	16.18	0-5	0
		1	24	16.46	16.33	16.27	0-5	0
		12	0	16.35	16.17	16.20	0-5	0
		12	6	16.36	16.11	16.17	0-5	0
		12	11	16.37	16.10	16.15	0-5	0
		25	0	16.36	16.12	16.19	0-5	0

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	16.38	16.19	16.21	0	0
		1	24	16.30	16.12	16.22	0	0
		1	49	16.35	16.20	16.14	0	0
		25	0	16.39	16.17	16.23	0	0
		25	12	16.37	16.12	16.20	0	0
		25	24	16.33	16.15	16.18	0	0
		50	0	16.36	16.20	16.20	0-1	0
	16QAM	1	0	16.80	16.61	16.60	0-1	0
		1	24	16.66	16.53	16.58	0-1	0
		1	49	16.70	16.58	16.57	0-1	0
		25	0	16.35	16.15	16.23	0-1	0
		25	12	16.33	16.16	16.23	0-1	0
		25	24	16.35	16.15	16.19	0-1	0
		50	0	16.34	16.15	16.19	0-2	0
	64QAM	1	0	16.64	16.33	16.45	0-2	0
		1	24	16.52	16.37	16.49	0-2	0
		1	49	16.52	16.40	16.35	0-2	0
		25	0	16.35	16.16	16.18	0-2	0
		25	12	16.33	16.12	16.20	0-2	0
		25	24	16.31	16.11	16.17	0-2	0
		50	0	16.35	16.15	16.18	0-3	0
	256QAM	1	0	16.59	16.29	16.43	0-5	0
		1	24	16.42	16.32	16.37	0-5	0
		1	49	16.44	16.30	16.26	0-5	0
		25	0	16.39	16.16	16.23	0-5	0
		25	12	16.34	16.15	16.22	0-5	0
		25	24	16.32	16.15	16.17	0-5	0
		50	0	16.34	16.17	16.19	0-5	0

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	16.42	16.24	16.27	0	0
		1	36	16.36	16.16	16.29	0	0
		1	74	16.27	16.25	16.21	0	0
		36	0	16.34	16.15	16.22	0	0
		36	18	16.33	16.16	16.23	0	0
		36	39	16.28	16.17	16.21	0	0
		75	0	16.34	16.18	16.24	0-1	0
	16QAM	1	0	16.61	16.38	16.70	0-1	0
		1	36	16.70	16.50	16.53	0-1	0
		1	74	16.59	16.61	16.48	0-1	0
		36	0	16.33	16.15	16.22	0-1	0
		36	18	16.29	16.11	16.20	0-1	0
		36	39	16.28	16.18	16.20	0-1	0
		75	0	16.31	16.15	16.25	0-2	0
	64QAM	1	0	16.56	16.42	16.44	0-2	0
		1	36	16.56	16.35	16.46	0-2	0
		1	74	16.48	16.34	16.38	0-2	0
		36	0	16.34	16.14	16.22	0-2	0
		36	18	16.31	16.16	16.23	0-2	0
		36	39	16.33	16.20	16.22	0-2	0
		75	0	16.32	16.17	16.22	0-3	0
	256QAM	1	0	16.48	16.31	16.38	0-5	0
		1	36	16.37	16.33	16.37	0-5	0
		1	74	16.41	16.43	16.28	0-5	0
		36	0	16.32	16.15	16.23	0-5	0
		36	18	16.31	16.15	16.22	0-5	0
		36	39	16.31	16.16	16.20	0-5	0
		75	0	16.33	16.19	16.27	0-5	0

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	16.40	16.26	16.57	0	0
		1	49	16.29	16.10	16.26	0	0
		1	99	16.27	16.25	16.23	0	0
		50	0	16.36	16.20	16.55	0	0
		50	25	16.37	16.20	16.27	0	0
		50	49	16.29	16.24	16.29	0	0
		100	0	16.30	16.17	16.26	0-1	0
	16QAM	1	0	16.74	16.62	16.55	0-1	0
		1	49	16.56	16.53	16.64	0-1	0
		1	99	16.53	16.61	16.49	0-1	0
		50	0	16.33	16.19	16.27	0-1	0
		50	25	16.34	16.19	16.27	0-1	0
		50	49	16.29	16.20	16.27	0-1	0
		100	0	16.33	16.21	16.31	0-2	0
	64QAM	1	0	16.65	16.42	16.47	0-2	0
		1	49	16.50	16.39	16.48	0-2	0
		1	99	16.45	16.42	16.31	0-2	0
		50	0	16.34	16.19	16.30	0-2	0
		50	25	16.31	16.18	16.26	0-2	0
		50	49	16.30	16.20	16.26	0-2	0
		100	0	16.31	16.20	16.28	0-3	0
	256QAM	1	0	16.54	16.34	16.36	0-5	0
		1	49	16.45	16.25	16.27	0-5	0
		1	99	16.40	16.39	16.35	0-5	0
		50	0	16.31	16.18	16.29	0-5	0
		50	25	16.32	16.17	16.25	0-5	0
		50	49	16.29	16.21	16.26	0-5	0
		100	0	16.32	16.21	16.28	0-5	0

[ LTE Band 4 Conducted Power Main 2 Ant. ECI=0,2,3]

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	19.61	19.90	19.99	0	0
		1	3	19.64	19.86	19.98	0	0
		1	5	19.70	19.87	20.02	0	0
		3	0	19.61	19.85	20.00	0	0
		3	1	19.64	19.86	19.98	0	0
		3	3	19.65	19.85	19.96	0	0
		6	0	19.64	19.93	20.03	0-1	0
	16QAM	1	0	19.99	20.13	20.26	0-1	0
		1	3	19.90	20.15	20.37	0-1	0
		1	5	19.90	20.23	20.32	0-1	0
		3	0	19.61	20.04	20.11	0-1	0
		3	1	19.55	19.90	20.14	0-1	0
		3	3	19.60	19.98	20.19	0-1	0
		6	0	19.80	19.95	20.11	0-2	0
	64QAM	1	0	19.88	20.11	20.21	0-2	0
		1	3	19.86	20.13	20.26	0-2	0
		1	5	19.80	20.08	20.19	0-2	0
		3	0	19.73	19.97	20.08	0-2	0
		3	1	19.74	19.90	20.06	0-2	0
		3	3	19.84	19.97	20.07	0-2	0
		6	0	19.69	19.93	20.03	0-3	0
	256QAM	1	0	18.24	18.50	18.64	0-5	1.5
		1	3	18.31	18.52	18.62	0-5	1.5
		1	5	18.33	18.52	18.64	0-5	1.5
		3	0	18.22	18.49	18.68	0-5	1.5
		3	1	18.21	18.48	18.58	0-5	1.5
		3	3	18.30	18.47	18.62	0-5	1.5
		6	0	18.14	18.43	18.57	0-5	1.5

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	19.60	19.88	19.92	0	0
		1	7	19.61	19.86	19.98	0	0
		1	14	19.63	19.87	19.96	0	0
		8	0	19.72	19.90	20.04	0	0
		8	3	19.69	19.90	20.06	0	0
		8	7	19.71	19.89	20.06	0	0
		15	0	19.71	19.90	20.08	0-1	0
	16QAM	1	0	20.01	20.20	20.36	0-1	0
		1	7	19.90	20.22	20.30	0-1	0
		1	14	19.92	20.18	20.32	0-1	0
		8	0	19.75	19.98	20.13	0-1	0
		8	3	19.80	19.98	20.16	0-1	0
		8	7	19.80	20.00	20.18	0-1	0
		15	0	19.71	19.92	20.09	0-2	0
	64QAM	1	0	19.83	20.15	20.17	0-2	0
		1	7	19.89	20.17	20.21	0-2	0
		1	14	19.88	20.07	20.19	0-2	0
		8	0	19.73	19.98	20.07	0-2	0
		8	3	19.74	19.89	20.10	0-2	0
		8	7	19.76	19.97	20.10	0-2	0
		15	0	19.78	19.94	20.09	0-3	0
	256QAM	1	0	18.20	18.51	18.62	0-5	1.5
		1	7	18.27	18.43	18.53	0-5	1.5
		1	14	18.29	18.50	18.60	0-5	1.5
		8	0	18.18	18.40	18.56	0-5	1.5
		8	3	18.23	18.40	18.58	0-5	1.5
		8	7	18.24	18.41	18.59	0-5	1.5
		15	0	18.21	18.36	18.57	0-5	1.5

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	19.72	19.95	19.97	0	0
		1	12	19.69	19.95	20.03	0	0
		1	24	19.78	19.95	20.05	0	0
		12	0	19.78	19.94	20.12	0	0
		12	6	19.78	19.94	20.07	0	0
		12	11	19.83	19.95	20.10	0	0
		25	0	19.80	20.01	20.10	0-1	0
	16QAM	1	0	20.00	20.37	20.41	0-1	0
		1	12	20.08	20.30	20.44	0-1	0
		1	24	20.04	20.27	20.37	0-1	0
		12	0	19.83	20.02	20.14	0-1	0
		12	6	19.84	19.99	20.11	0-1	0
		12	11	19.84	19.99	20.16	0-1	0
		25	0	19.81	19.99	20.12	0-2	0
	64QAM	1	0	19.86	20.13	20.23	0-2	0
		1	12	20.00	20.22	20.27	0-2	0
		1	24	19.99	20.21	20.30	0-2	0
		12	0	19.80	19.97	20.12	0-2	0
		12	6	19.83	19.97	20.13	0-2	0
		12	11	19.82	19.99	20.14	0-2	0
		25	0	19.79	19.98	20.09	0-3	0
	256QAM	1	0	18.34	18.60	18.70	0-5	1.5
		1	12	18.37	18.68	18.76	0-5	1.5
		1	24	18.44	18.56	18.71	0-5	1.5
		12	0	18.22	18.47	18.55	0-5	1.5
		12	6	18.27	18.43	18.56	0-5	1.5
		12	11	18.28	18.44	18.62	0-5	1.5
		25	0	18.30	18.49	18.58	0-5	1.5



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	19.68	19.89	20.05	0	0
		1	24	19.73	19.93	20.00	0	0
		1	49	19.82	20.02	20.08	0	0
		25	0	19.76	19.89	20.04	0	0
		25	12	19.77	19.89	20.02	0	0
		25	24	19.81	19.97	20.07	0	0
		50	0	19.81	19.93	20.04	0-1	0
	16QAM	1	0	19.96	20.27	20.37	0-1	0
		1	24	20.00	20.33	20.32	0-1	0
		1	49	20.18	20.41	20.40	0-1	0
		25	0	19.77	19.86	20.03	0-1	0
		25	12	19.76	19.91	20.02	0-1	0
		25	24	19.85	19.95	20.03	0-1	0
		50	0	19.76	19.90	20.03	0-2	0
	64QAM	1	0	19.93	20.08	20.25	0-2	0
		1	24	19.96	20.02	20.25	0-2	0
		1	49	20.09	20.17	20.34	0-2	0
		25	0	19.72	19.88	20.02	0-2	0
		25	12	19.75	19.87	19.98	0-2	0
		25	24	19.80	19.98	20.06	0-2	0
		50	0	19.78	19.95	20.03	0-3	0
	256QAM	1	0	18.37	18.59	18.67	0-5	1.5
		1	24	18.41	18.57	18.60	0-5	1.5
		1	49	18.47	18.65	18.74	0-5	1.5
		25	0	18.25	18.39	18.51	0-5	1.5
		25	12	18.26	18.38	18.52	0-5	1.5
		25	24	18.30	18.45	18.55	0-5	1.5
		50	0	18.27	18.42	18.53	0-5	1.5

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	19.69	19.82	19.98	0	0
		1	36	19.83	19.98	19.96	0	0
		1	74	19.91	20.03	20.09	0	0
		36	0	19.83	19.93	20.05	0	0
		36	18	19.86	19.99	20.09	0	0
		36	39	19.90	20.01	20.12	0	0
		75	0	19.85	19.98	20.10	0-1	0
	16QAM	1	0	20.11	20.22	20.32	0-1	0
		1	36	20.24	20.41	20.38	0-1	0
		1	74	20.23	20.28	20.44	0-1	0
		36	0	19.82	19.92	20.05	0-1	0
		36	18	19.83	19.97	20.07	0-1	0
		36	39	19.87	19.99	20.13	0-1	0
		75	0	19.86	19.95	20.08	0-2	0
	64QAM	1	0	19.93	20.15	20.23	0-2	0
		1	36	20.17	20.20	20.16	0-2	0
		1	74	20.04	20.20	20.25	0-2	0
		36	0	19.83	19.92	20.07	0-2	0
		36	18	19.85	19.98	20.08	0-2	0
		36	39	19.90	20.02	20.11	0-2	0
		75	0	19.89	19.99	20.09	0-3	0
	256QAM	1	0	18.33	18.51	18.61	0-5	1.5
		1	36	18.55	18.61	18.69	0-5	1.5
		1	74	18.54	18.70	18.72	0-5	1.5
		36	0	18.31	18.41	18.54	0-5	1.5
		36	18	18.34	18.47	18.59	0-5	1.5
		36	39	18.37	18.51	18.62	0-5	1.5
		75	0	18.36	18.48	18.60	0-5	1.5

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	19.86	0	0
		1	49	19.95	0	0
		1	99	20.03	0	0
		50	0	19.95	0	0
		50	25	20.00	0	0
		50	49	20.06	0	0
		100	0	19.99	0-1	0
	16QAM	1	0	20.27	0-1	0
		1	49	20.35	0-1	0
		1	99	20.38	0-1	0
		50	0	19.94	0-1	0
		50	25	19.99	0-1	0
		50	49	20.01	0-1	0
		100	0	20.00	0-2	0
	64QAM	1	0	20.09	0-2	0
		1	49	20.19	0-2	0
		1	99	20.25	0-2	0
		50	0	19.96	0-2	0
		50	25	20.00	0-2	0
		50	49	20.07	0-2	0
		100	0	20.03	0-3	0
	256QAM	1	0	18.55	0-5	1.5
		1	49	18.64	0-5	1.5
		1	99	18.65	0-5	1.5
		50	0	18.45	0-5	1.5
		50	25	18.52	0-5	1.5
		50	49	18.54	0-5	1.5
		100	0	18.52	0-5	1.5

[ LTE Band 4 Conducted Power Sub 1 Ant. ECI=0,2,3]

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	18.78	18.56	18.78	0	0
		1	3	18.75	18.56	18.75	0	0
		1	5	18.79	18.57	18.80	0	0
		3	0	18.80	18.51	18.75	0	0
		3	1	18.79	18.53	18.75	0	0
		3	3	18.82	18.52	18.77	0	0
		6	0	18.81	18.55	18.74	0-1	0
	16QAM	1	0	19.11	18.79	19.14	0-1	0
		1	3	19.14	18.90	19.15	0-1	0
		1	5	19.19	18.96	18.92	0-1	0
		3	0	18.95	18.64	18.82	0-1	0
		3	1	18.95	18.68	18.88	0-1	0
		3	3	18.93	18.65	18.82	0-1	0
		6	0	18.96	18.68	18.82	0-2	0
	64QAM	1	0	19.02	18.81	18.90	0-2	0
		1	3	18.97	18.66	18.93	0-2	0
		1	5	19.00	18.77	19.02	0-2	0
		3	0	18.87	18.58	18.78	0-2	0
		3	1	18.85	18.64	18.82	0-2	0
		3	3	18.89	18.61	18.83	0-2	0
		6	0	18.95	18.60	18.85	0-3	0
	256QAM	1	0	17.91	17.69	17.88	0-5	1
		1	3	17.84	17.75	17.87	0-5	1
		1	5	17.96	17.64	17.86	0-5	1
		3	0	17.94	17.72	17.84	0-5	1
		3	1	17.96	17.67	17.86	0-5	1
		3	3	17.99	17.65	17.85	0-5	1
		6	0	17.84	17.59	17.75	0-5	1

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	18.86	18.53	18.71	0	0
		1	7	18.71	18.56	18.75	0	0
		1	14	18.75	18.57	18.70	0	0
		8	0	18.83	18.57	18.82	0	0
		8	3	18.85	18.55	18.80	0	0
		8	7	18.79	18.56	18.79	0	0
		15	0	18.86	18.56	18.82	0-1	0
	16QAM	1	0	19.15	18.87	19.05	0-1	0
		1	7	19.10	18.91	19.14	0-1	0
		1	14	19.10	18.92	18.99	0-1	0
		8	0	18.89	18.72	18.94	0-1	0
		8	3	18.98	18.64	18.90	0-1	0
		8	7	18.97	18.62	18.89	0-1	0
		15	0	18.87	18.60	18.80	0-2	0
	64QAM	1	0	18.97	18.77	18.97	0-2	0
		1	7	19.01	18.80	18.94	0-2	0
		1	14	19.01	18.69	18.94	0-2	0
		8	0	18.89	18.65	18.83	0-2	0
		8	3	18.89	18.60	18.78	0-2	0
		8	7	18.88	18.63	18.86	0-2	0
		15	0	18.88	18.61	18.84	0-3	0
	256QAM	1	0	17.89	17.65	17.90	0-5	1
		1	7	17.86	17.70	17.89	0-5	1
		1	14	17.96	17.69	17.91	0-5	1
		8	0	17.86	17.64	17.85	0-5	1
		8	3	17.86	17.59	17.79	0-5	1
		8	7	17.84	17.58	17.84	0-5	1
		15	0	17.86	17.55	17.81	0-5	1

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	18.82	18.60	18.79	0	0
		1	12	18.90	18.61	18.80	0	0
		1	24	18.78	18.62	18.76	0	0
		12	0	18.89	18.64	18.89	0	0
		12	6	18.86	18.64	18.86	0	0
		12	11	18.88	18.64	18.84	0	0
		25	0	18.85	18.64	18.84	0-1	0
	16QAM	1	0	19.28	18.84	19.09	0-1	0
		1	12	19.28	18.99	19.01	0-1	0
		1	24	19.11	18.99	19.12	0-1	0
		12	0	18.93	18.71	18.96	0-1	0
		12	6	18.94	18.70	18.92	0-1	0
		12	11	18.93	18.72	18.91	0-1	0
		25	0	18.89	18.67	18.86	0-2	0
	64QAM	1	0	19.11	18.79	19.03	0-2	0
		1	12	19.12	18.87	19.01	0-2	0
		1	24	19.03	18.69	18.99	0-2	0
		12	0	18.90	18.69	18.95	0-2	0
		12	6	18.89	18.64	18.86	0-2	0
		12	11	18.92	18.73	18.85	0-2	0
		25	0	18.86	18.63	18.81	0-3	0
	256QAM	1	0	18.02	17.80	17.95	0-5	1
		1	12	17.97	17.79	17.89	0-5	1
		1	24	17.98	17.78	17.88	0-5	1
		12	0	17.85	17.65	17.87	0-5	1
		12	6	17.83	17.60	17.82	0-5	1
		12	11	17.89	17.62	17.78	0-5	1
		25	0	17.84	17.65	17.83	0-5	1

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	18.81	18.65	18.75	0	0
		1	24	18.81	18.59	18.75	0	0
		1	49	18.79	18.62	18.81	0	0
		25	0	18.81	18.61	18.79	0	0
		25	12	18.83	18.64	18.82	0	0
		25	24	18.78	18.65	18.76	0	0
		50	0	18.81	18.63	18.78	0-1	0
	16QAM	1	0	19.12	18.84	19.08	0-1	0
		1	24	19.21	18.87	19.11	0-1	0
		1	49	18.96	19.03	19.14	0-1	0
		25	0	18.83	18.61	18.78	0-1	0
		25	12	18.83	18.60	18.83	0-1	0
		25	24	18.78	18.65	18.79	0-1	0
		50	0	18.81	18.62	18.79	0-2	0
	64QAM	1	0	19.09	18.83	19.05	0-2	0
		1	24	19.00	18.77	19.02	0-2	0
		1	49	18.96	18.89	19.03	0-2	0
		25	0	18.78	18.61	18.78	0-2	0
		25	12	18.84	18.61	18.83	0-2	0
		25	24	18.77	18.65	18.76	0-2	0
		50	0	18.81	18.65	18.79	0-3	0
	256QAM	1	0	17.96	17.80	17.90	0-5	1
		1	24	17.96	17.78	17.95	0-5	1
		1	49	17.90	17.77	17.88	0-5	1
		25	0	17.79	17.61	17.77	0-5	1
		25	12	17.81	17.59	17.79	0-5	1
		25	24	17.78	17.62	17.76	0-5	1
		50	0	17.79	17.65	17.79	0-5	1

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	18.86	18.61	18.70	0	0
		1	36	18.75	18.57	18.74	0	0
		1	74	18.66	18.63	18.79	0	0
		36	0	18.80	18.61	18.68	0	0
		36	18	18.78	18.61	18.75	0	0
		36	39	18.70	18.64	18.75	0	0
		75	0	18.75	18.62	18.74	0-1	0
	16QAM	1	0	19.14	18.99	19.06	0-1	0
		1	36	18.97	18.82	19.03	0-1	0
		1	74	18.93	19.06	19.09	0-1	0
		36	0	18.82	18.59	18.70	0-1	0
		36	18	18.77	18.57	18.72	0-1	0
		36	39	18.70	18.63	18.75	0-1	0
		75	0	18.77	18.61	18.75	0-2	0
	64QAM	1	0	19.03	18.89	18.93	0-2	0
		1	36	18.94	18.76	18.92	0-2	0
		1	74	18.92	18.87	19.00	0-2	0
		36	0	18.85	18.64	18.72	0-2	0
		36	18	18.80	18.62	18.78	0-2	0
		36	39	18.75	18.68	18.78	0-2	0
		75	0	18.77	18.64	18.73	0-3	0
	256QAM	1	0	18.00	17.82	17.80	0-5	1
		1	36	17.87	17.70	17.93	0-5	1
		1	74	17.87	17.76	17.91	0-5	1
		36	0	17.82	17.61	17.65	0-5	1
		36	18	17.76	17.60	17.71	0-5	1
		36	39	17.68	17.61	17.72	0-5	1
		75	0	17.76	17.61	17.75	0-5	1



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	18.66	0	0
		1	49	18.57	0	0
		1	99	18.74	0	0
		50	0	18.68	0	0
		50	25	18.64	0	0
		50	49	18.74	0	0
		100	0	18.70	0-1	0
	16QAM	1	0	18.99	0-1	0
		1	49	18.83	0-1	0
		1	99	19.10	0-1	0
		50	0	18.68	0-1	0
		50	25	18.63	0-1	0
		50	49	18.74	0-1	0
		100	0	18.74	0-2	0
	64QAM	1	0	18.85	0-2	0
		1	49	18.75	0-2	0
		1	99	19.01	0-2	0
		50	0	18.68	0-2	0
		50	25	18.62	0-2	0
		50	49	18.74	0-2	0
		100	0	18.72	0-3	0
	256QAM	1	0	17.89	0-5	1
		1	49	17.72	0-5	1
		1	99	17.95	0-5	1
		50	0	17.67	0-5	1
		50	25	17.63	0-5	1
		50	49	17.75	0-5	1
		100	0	17.73	0-5	1

[ LTE Band 66 Conducted Power Main 2 Ant. ECI=0,2,3]

LTE Band 66 \_ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979 Ch. 1710.7 MHz	132322 Ch. 1745 MHz	132665 Ch. 1779.3 MHz		
1.4 MHz	QPSK	1	0	19.73	20.02	19.82	0	0
		1	3	19.64	19.98	19.84	0	0
		1	5	19.71	20.02	19.90	0	0
		3	0	19.68	20.02	19.86	0	0
		3	1	19.69	19.97	19.84	0	0
		3	3	19.71	19.98	19.84	0	0
		6	0	19.73	20.04	19.89	0-1	0
	16QAM	1	0	20.03	20.37	20.17	0-1	0
		1	3	20.13	20.22	20.18	0-1	0
		1	5	20.08	20.38	20.17	0-1	0
		3	0	19.84	20.13	20.04	0-1	0
		3	1	19.83	20.04	19.93	0-1	0
		3	3	19.85	20.15	20.06	0-1	0
		6	0	19.78	20.13	19.90	0-2	0
	64QAM	1	0	19.86	20.17	20.09	0-2	0
		1	3	19.90	20.15	20.03	0-2	0
		1	5	19.88	20.28	20.12	0-2	0
		3	0	19.78	20.00	19.92	0-2	0
		3	1	19.81	20.06	19.92	0-2	0
		3	3	19.77	20.04	19.88	0-2	0
		6	0	19.77	20.08	19.93	0-3	0
	256QAM	1	0	18.36	18.61	18.50	0-5	1.5
		1	3	18.29	18.71	18.51	0-5	1.5
		1	5	18.21	18.65	18.50	0-5	1.5
		3	0	18.31	18.64	18.48	0-5	1.5
		3	1	18.34	18.61	18.51	0-5	1.5
		3	3	18.34	18.56	18.48	0-5	1.5
		6	0	18.24	18.46	18.42	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	19.66	20.04	19.86	0	0
		1	7	19.73	20.02	19.84	0	0
		1	14	19.75	20.00	19.91	0	0
		8	0	19.72	20.01	19.91	0	0
		8	3	19.74	20.05	19.90	0	0
		8	7	19.74	20.03	19.89	0	0
		15	0	19.75	20.04	19.92	0-1	0
	16QAM	1	0	20.12	20.38	20.12	0-1	0
		1	7	20.03	20.39	20.12	0-1	0
		1	14	20.09	20.33	20.34	0-1	0
		8	0	19.80	20.12	19.99	0-1	0
		8	3	19.81	20.11	19.97	0-1	0
		8	7	19.87	20.12	20.01	0-1	0
		15	0	19.76	20.02	19.93	0-2	0
	64QAM	1	0	19.88	20.19	20.10	0-2	0
		1	7	19.91	20.24	20.02	0-2	0
		1	14	19.92	20.23	20.09	0-2	0
		8	0	19.79	20.11	19.93	0-2	0
		8	3	19.80	20.00	19.96	0-2	0
		8	7	19.75	20.03	19.86	0-2	0
		15	0	19.80	20.07	19.95	0-3	0
	256QAM	1	0	18.38	18.66	18.49	0-5	1.5
		1	7	18.34	18.66	18.51	0-5	1.5
		1	14	18.33	18.63	18.49	0-5	1.5
		8	0	18.27	18.56	18.41	0-5	1.5
		8	3	18.25	18.53	18.43	0-5	1.5
		8	7	18.25	18.55	18.41	0-5	1.5
		15	0	18.23	18.54	18.38	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	132322 Ch. 1745 MHz	132647 Ch. 1777.5 MHz		
5 MHz	QPSK	1	0	19.73	20.03	19.97	0	0
		1	12	19.77	20.12	19.93	0	0
		1	24	19.77	20.10	19.89	0	0
		12	0	19.79	20.04	19.95	0	0
		12	6	19.79	20.05	19.95	0	0
		12	11	19.80	20.07	19.95	0	0
		25	0	19.80	20.10	19.96	0-1	0
	16QAM	1	0	20.09	20.43	20.22	0-1	0
		1	12	20.09	20.48	20.37	0-1	0
		1	24	20.16	20.35	20.32	0-1	0
		12	0	19.87	20.13	20.00	0-1	0
		12	6	19.82	20.11	19.98	0-1	0
		12	11	19.81	20.14	20.01	0-1	0
		25	0	19.82	20.11	19.96	0-2	0
	64QAM	1	0	19.98	20.22	20.17	0-2	0
		1	12	20.07	20.31	20.12	0-2	0
		1	24	20.00	20.24	20.14	0-2	0
		12	0	19.82	20.07	19.99	0-2	0
		12	6	19.80	20.08	19.98	0-2	0
		12	11	19.82	20.09	19.98	0-2	0
		25	0	19.81	20.10	19.94	0-3	0
	256QAM	1	0	18.44	18.66	18.61	0-5	1.5
		1	12	18.41	18.66	18.62	0-5	1.5
		1	24	18.37	18.72	18.50	0-5	1.5
		12	0	18.26	18.53	18.45	0-5	1.5
		12	6	18.24	18.55	18.44	0-5	1.5
		12	11	18.25	18.56	18.45	0-5	1.5
		25	0	18.30	18.57	18.46	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	19.76	20.00	19.97	0	0
		1	24	19.68	19.97	19.90	0	0
		1	49	19.87	20.14	19.98	0	0
		25	0	19.75	20.03	19.98	0	0
		25	12	19.73	20.01	19.96	0	0
		25	24	19.75	20.04	19.94	0	0
		50	0	19.76	20.04	19.95	0-1	0
	16QAM	1	0	20.15	20.29	20.35	0-1	0
		1	24	20.07	20.30	20.16	0-1	0
		1	49	20.15	20.40	20.37	0-1	0
		25	0	19.75	20.03	19.96	0-1	0
		25	12	19.75	20.00	19.96	0-1	0
		25	24	19.74	20.03	19.93	0-1	0
		50	0	19.73	19.99	19.94	0-2	0
	64QAM	1	0	19.98	20.29	20.21	0-2	0
		1	24	19.91	20.23	20.06	0-2	0
		1	49	20.02	20.32	20.18	0-2	0
		25	0	19.75	19.97	19.94	0-2	0
		25	12	19.74	19.99	19.92	0-2	0
		25	24	19.71	20.02	19.91	0-2	0
		50	0	19.74	20.01	19.94	0-3	0
	256QAM	1	0	18.47	18.64	18.60	0-5	1.5
		1	24	18.38	18.68	18.58	0-5	1.5
		1	49	18.43	18.78	18.61	0-5	1.5
		25	0	18.24	18.52	18.47	0-5	1.5
		25	12	18.22	18.50	18.44	0-5	1.5
		25	24	18.26	18.53	18.43	0-5	1.5
		50	0	18.26	18.50	18.46	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	19.72	19.99	20.00	0	0
		1	36	19.79	20.16	20.01	0	0
		1	74	19.83	20.05	19.93	0	0
		36	0	19.80	20.08	20.03	0	0
		36	18	19.82	20.06	20.01	0	0
		36	39	19.85	20.08	19.99	0	0
		75	0	19.84	20.11	20.04	0-1	0
	16QAM	1	0	20.22	20.30	20.40	0-1	0
		1	36	20.15	20.43	20.33	0-1	0
		1	74	20.14	20.39	20.36	0-1	0
		36	0	19.77	20.02	19.99	0-1	0
		36	18	19.82	20.02	19.97	0-1	0
		36	39	19.83	20.08	19.95	0-1	0
		75	0	19.80	20.09	19.99	0-2	0
	64QAM	1	0	20.01	20.17	20.17	0-2	0
		1	36	20.04	20.32	20.29	0-2	0
		1	74	20.04	20.31	20.19	0-2	0
		36	0	19.79	20.05	20.03	0-2	0
		36	18	19.83	20.07	20.02	0-2	0
		36	39	19.87	20.10	19.98	0-2	0
		75	0	19.81	20.08	20.00	0-3	0
	256QAM	1	0	18.39	18.66	18.68	0-5	1.5
		1	36	18.44	18.73	18.61	0-5	1.5
		1	74	18.48	18.75	18.65	0-5	1.5
		36	0	18.27	18.53	18.50	0-5	1.5
		36	18	18.31	18.55	18.49	0-5	1.5
		36	39	18.34	18.56	18.46	0-5	1.5
		75	0	18.30	18.58	18.53	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	19.74	20.14	20.01	0	0
		1	49	19.84	20.13	20.07	0	0
		1	99	19.89	20.12	20.02	0	0
		50	0	19.90	20.02	20.06	0	0
		50	25	20.06	20.01	20.05	0	0
		50	49	19.91	20.02	20.04	0	0
		100	0	19.88	20.07	20.05	0-1	0
	16QAM	1	0	20.11	20.30	20.34	0-1	0
		1	49	20.12	20.42	20.41	0-1	0
		1	99	20.25	20.40	20.29	0-1	0
		50	0	19.83	20.01	20.07	0-1	0
		50	25	19.83	20.09	20.07	0-1	0
		50	49	19.91	20.12	20.03	0-1	0
		100	0	19.90	20.08	20.07	0-2	0
	64QAM	1	0	19.94	20.21	20.26	0-2	0
		1	49	20.05	20.35	20.28	0-2	0
		1	99	20.15	20.30	20.22	0-2	0
		50	0	19.84	20.03	20.06	0-2	0
		50	25	19.84	20.08	20.04	0-2	0
		50	49	19.90	20.10	20.03	0-2	0
		100	0	19.90	20.09	20.06	0-3	0
	256QAM	1	0	18.44	18.62	18.72	0-5	1.5
		1	49	18.50	18.75	18.73	0-5	1.5
		1	99	18.54	18.72	18.60	0-5	1.5
		50	0	18.32	18.52	18.57	0-5	1.5
		50	25	18.33	18.57	18.57	0-5	1.5
		50	49	18.40	18.60	18.53	0-5	1.5
		100	0	18.39	18.61	18.56	0-5	1.5

[ LTE Band 66 Conducted Power Sub 1 Ant. ECI=0,2,3]

LTE Band 66 \_ 1.4 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979 Ch. 1710.7 MHz	132322 Ch. 1745 MHz	132665 Ch. 1779.3 MHz		
1.4 MHz	QPSK	1	0	18.82	18.67	18.32	0	0
		1	3	18.79	18.66	18.33	0	0
		1	5	18.82	18.66	18.36	0	0
		3	0	18.85	18.64	18.27	0	0
		3	1	18.83	18.62	18.32	0	0
		3	3	18.81	18.67	18.32	0	0
		6	0	18.85	18.64	18.32	0-1	0
	16QAM	1	0	19.20	18.88	18.71	0-1	0
		1	3	19.09	19.06	18.59	0-1	0
		1	5	19.08	19.04	18.67	0-1	0
		3	0	18.97	18.83	18.49	0-1	0
		3	1	18.99	18.78	18.41	0-1	0
		3	3	18.96	18.75	18.46	0-1	0
		6	0	18.93	18.76	18.49	0-2	0
	64QAM	1	0	19.01	18.89	18.55	0-2	0
		1	3	18.91	18.83	18.54	0-2	0
		1	5	19.05	18.86	18.50	0-2	0
		3	0	18.91	18.76	18.45	0-2	0
		3	1	18.88	18.73	18.43	0-2	0
		3	3	18.88	18.74	18.42	0-2	0
		6	0	18.86	18.71	18.35	0-3	0
	256QAM	1	0	18.00	17.79	17.41	0-5	1
		1	3	18.00	17.83	17.45	0-5	1
		1	5	17.95	17.82	17.41	0-5	1
		3	0	17.94	17.72	17.45	0-5	1
		3	1	17.96	17.74	17.49	0-5	1
		3	3	17.97	17.75	17.48	0-5	1
		6	0	17.84	17.70	17.37	0-5	1



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	18.77	18.69	18.32	0	0
		1	7	18.76	18.68	18.30	0	0
		1	14	18.80	18.57	18.33	0	0
		8	0	18.86	18.66	18.37	0	0
		8	3	18.81	18.64	18.32	0	0
		8	7	18.84	18.61	18.35	0	0
		15	0	18.82	18.66	18.36	0-1	1
	16QAM	1	0	19.12	19.10	18.72	0-1	1
		1	7	19.02	19.06	18.70	0-1	1
		1	14	19.16	18.77	18.69	0-1	1
		8	0	18.93	18.71	18.46	0-1	1
		8	3	18.91	18.76	18.48	0-1	1
		8	7	19.01	18.76	18.47	0-1	1
		15	0	18.81	18.63	18.42	0-2	2
	64QAM	1	0	19.06	18.85	18.63	0-2	2
		1	7	18.95	18.92	18.53	0-2	2
		1	14	18.89	18.85	18.55	0-2	2
		8	0	18.91	18.67	18.39	0-2	2
		8	3	18.85	18.65	18.40	0-2	2
		8	7	18.90	18.64	18.40	0-2	2
		15	0	18.89	18.68	18.42	0-3	3
	256QAM	1	0	17.90	17.75	17.45	0-5	5
		1	7	17.88	17.85	17.40	0-5	5
		1	14	17.89	17.69	17.34	0-5	5
		8	0	17.86	17.70	17.41	0-5	5
		8	3	17.84	17.67	17.40	0-5	5
		8	7	17.84	17.64	17.41	0-5	5
		15	0	17.84	17.63	17.36	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	132322 Ch. 1745 MHz	132647 Ch. 1777.5 MHz		
5 MHz	QPSK	1	0	18.82	18.72	18.35	0	0
		1	12	18.80	18.72	18.36	0	0
		1	24	18.75	18.67	18.39	0	0
		12	0	18.85	18.70	18.43	0	0
		12	6	18.82	18.65	18.40	0	0
		12	11	18.81	18.70	18.41	0	0
		25	0	18.85	18.69	18.41	0-1	1
	16QAM	1	0	19.07	19.01	18.68	0-1	1
		1	12	19.04	19.04	18.67	0-1	1
		1	24	19.13	18.95	18.66	0-1	1
		12	0	18.94	18.74	18.52	0-1	1
		12	6	18.89	18.74	18.43	0-1	1
		12	11	18.90	18.75	18.47	0-1	1
		25	0	18.87	18.67	18.44	0-2	2
	64QAM	1	0	19.11	18.90	18.53	0-2	2
		1	12	19.08	18.94	18.59	0-2	2
		1	24	19.00	18.82	18.51	0-2	2
		12	0	18.89	18.69	18.47	0-2	2
		12	6	18.87	18.71	18.42	0-2	2
		12	11	18.88	18.73	18.42	0-2	2
		25	0	18.82	18.65	18.43	0-3	3
	256QAM	1	0	17.99	17.83	17.51	0-5	5
		1	12	17.97	17.87	17.53	0-5	5
		1	24	17.89	17.70	17.42	0-5	5
		12	0	17.83	17.65	17.44	0-5	5
		12	6	17.83	17.64	17.39	0-5	5
		12	11	17.80	17.64	17.38	0-5	5
		25	0	17.84	17.64	17.36	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	18.84	18.68	18.49	0	0
		1	24	18.69	18.67	18.34	0	0
		1	49	18.74	18.67	18.35	0	0
		25	0	18.79	18.67	18.47	0	0
		25	12	18.79	18.70	18.38	0	0
		25	24	18.76	18.66	18.37	0	0
		50	0	18.76	18.68	18.44	0-1	1
	16QAM	1	0	19.18	18.97	18.82	0-1	1
		1	24	19.06	18.95	18.64	0-1	1
		1	49	19.06	18.96	18.75	0-1	1
		25	0	18.79	18.66	18.42	0-1	1
		25	12	18.84	18.67	18.41	0-1	1
		25	24	18.75	18.67	18.37	0-1	1
		50	0	18.78	18.68	18.41	0-2	2
	64QAM	1	0	18.97	18.91	18.71	0-2	2
		1	24	19.00	18.90	18.58	0-2	2
		1	49	18.97	18.82	18.61	0-2	2
		25	0	18.79	18.67	18.41	0-2	2
		25	12	18.79	18.66	18.36	0-2	2
		25	24	18.76	18.64	18.36	0-2	2
		50	0	18.77	18.66	18.42	0-3	3
	256QAM	1	0	18.05	17.81	17.56	0-5	5
		1	24	17.84	17.77	17.47	0-5	5
		1	49	17.82	17.69	17.44	0-5	5
		25	0	17.78	17.63	17.43	0-5	5
		25	12	17.77	17.63	17.38	0-5	5
		25	24	17.76	17.63	17.34	0-5	5
		50	0	17.77	17.67	17.41	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	18.83	18.69	18.51	0	0
		1	36	18.71	18.65	18.37	0	0
		1	74	18.77	18.59	18.37	0	0
		36	0	18.77	18.64	18.44	0	0
		36	18	18.73	18.67	18.42	0	0
		36	39	18.73	18.61	18.33	0	0
		75	0	18.75	18.63	18.38	0-1	1
	16QAM	1	0	19.04	19.02	18.86	0-1	1
		1	36	19.00	19.00	18.85	0-1	1
		1	74	19.11	18.92	18.81	0-1	1
		36	0	18.73	18.64	18.46	0-1	1
		36	18	18.76	18.66	18.40	0-1	1
		36	39	18.72	18.59	18.32	0-1	1
		75	0	18.75	18.61	18.38	0-2	2
	64QAM	1	0	19.08	18.95	18.71	0-2	2
		1	36	18.93	18.95	18.61	0-2	2
		1	74	18.94	18.80	18.69	0-2	2
		36	0	18.79	18.68	18.45	0-2	2
		36	18	18.79	18.68	18.43	0-2	2
		36	39	18.74	18.62	18.35	0-2	2
		75	0	18.77	18.63	18.40	0-3	3
	256QAM	1	0	18.00	17.91	17.61	0-5	5
		1	36	17.83	17.75	17.57	0-5	5
		1	74	17.91	17.79	17.53	0-5	5
		36	0	17.74	17.62	17.43	0-5	5
		36	18	17.75	17.64	17.41	0-5	5
		36	39	17.72	17.57	17.34	0-5	5
		75	0	17.75	17.60	17.43	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	18.86	18.73	18.57	0	0
		1	49	18.66	18.71	18.41	0	0
		1	99	18.76	18.63	18.43	0	0
		50	0	18.84	18.67	18.49	0	0
		50	25	18.77	18.69	18.48	0	0
		50	49	18.74	18.62	18.40	0	0
		100	0	18.78	18.61	18.42	0-1	1
	16QAM	1	0	19.22	19.18	18.98	0-1	1
		1	49	18.96	19.02	18.90	0-1	1
		1	99	19.09	18.95	18.86	0-1	1
		50	0	18.81	18.65	18.48	0-1	1
		50	25	18.77	18.70	18.51	0-1	1
		50	49	18.71	18.61	18.39	0-1	1
		100	0	18.81	18.62	18.45	0-2	2
	64QAM	1	0	19.09	18.95	18.73	0-2	2
		1	49	18.92	18.90	18.68	0-2	2
		1	99	19.03	18.94	18.64	0-2	2
		50	0	18.85	18.63	18.47	0-2	2
		50	25	18.77	18.69	18.45	0-2	2
		50	49	18.74	18.61	18.41	0-2	2
		100	0	18.79	18.63	18.46	0-3	3
	256QAM	1	0	17.92	17.85	17.69	0-5	5
		1	49	17.89	17.85	17.59	0-5	5
		1	99	17.92	17.73	17.53	0-5	5
		50	0	17.82	17.60	17.45	0-5	5
		50	25	17.77	17.67	17.46	0-5	5
		50	49	17.72	17.61	17.39	0-5	5
		100	0	17.80	17.61	17.44	0-5	5

### 11.3.3 NR Band Maximum Conducted Power

[ NR Band n5 Conducted Power Main 1 Ant. Pmax, ECI=1,2,3]

NR Band n5\_ 5 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						165300	167300	169300	
						826.5 MHz	836.5 MHz	846.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.27	23.29	23.41	0
				1	13	23.25	23.30	23.39	0
				1	23	23.28	23.42	23.43	0
				12	0	22.86	22.91	22.94	0.5
				12	7	23.32	23.38	23.44	0
				12	13	22.86	22.89	22.94	0.5
				25	0	22.85	22.88	22.92	0.5
			QPSK	1	1	23.31	23.23	23.31	0
				1	13	23.25	23.25	23.32	0
				1	23	23.28	23.32	23.30	0
				12	0	22.37	22.41	22.45	1
				12	7	23.36	23.44	23.49	0
				12	13	22.37	22.40	22.48	1
				25	0	22.37	22.39	22.41	1
			16QAM	1	1	22.30	22.38	22.36	1
			64QAM	1	1	20.84	20.94	20.94	2.5
			256QAM	1	1	18.45	18.53	20.75	4.5
			CP	QPSK	1	1	21.68	21.70	21.71

NR Band n5\_ 10 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
							167300	
							836.5 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		23.25	0
				1	26		23.37	0
				1	50		23.46	0
				25	0		22.84	0.5
				25	14		23.41	0
				25	27		22.86	0.5
				50	0		22.88	0.5
			QPSK	1	1		23.25	0
				1	26		23.31	0
				1	50		23.39	0
				25	0		22.35	1
				25	14		23.43	0
				25	27		22.40	1
				50	0		22.35	1
			16QAM	1	1		22.38	1
			64QAM	1	1		20.92	2.5
			256QAM	1	1		18.48	4.5
			CP	QPSK	1	1		21.64

**NR Band n5\_ 15 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						167300	836.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		23.36	0
				1	40		23.42	0
				1	77		23.49	0
				36	0		22.80	0.5
				36	22		23.38	0
				36	43		22.89	0.5
				75	0		22.81	0.5
			QPSK	1	1		23.24	0
				1	40		23.29	0
				1	77		23.39	0
				36	0		22.29	1
				36	22		23.35	0
				36	43		22.32	1
				75	0		22.35	1
		16QAM	1	1		22.33	1	
		64QAM	1	1		20.86	2.5	
256QAM	1	1		18.43	4.5			
CP	QPSK	1	1		21.66	1.5		

**NR Band n5\_ 20 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						167300	836.5 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		23.30	0
				1	53		23.40	0
				1	104		23.46	0
				50	0		22.78	0.5
				50	28		23.38	0
				50	56		22.84	0.5
				100	0		22.76	0.5
			QPSK	1	1		23.22	0
				1	53		23.30	0
				1	104		23.39	0
				50	0		22.26	1
				50	28		23.38	0
				50	56		22.31	1
				100	0		22.32	1
		16QAM	1	1		22.28	1	
		64QAM	1	1		20.83	2.5	
256QAM	1	1		18.43	4.5			
CP	QPSK	1	1		21.64	1.5		

**[NR Band n26 Conducted Power \_ Main 1 Ant. Pmax, ECI=1,2,3]**

**NR Band n26 \_ 5 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]	
						163300	166300	169300		
						816.5 MHz	831.5 MHz	846.5 MHz		
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.54	23.51	23.52	0	
				1	13	23.47	23.49	23.47	0	
				1	23	23.49	23.40	23.45	0	
				12	0	22.98	22.94	23.02	0.5	
				12	7	23.53	23.49	23.52	0	
				12	13	22.99	22.95	22.99	0.5	
			QPSK	25	0	23.00	22.93	23.00	0.5	
				1	1	23.41	23.38	23.42	0	
				1	13	23.36	23.38	23.39	0	
				1	23	23.39	23.33	23.34	0	
				12	0	22.51	22.44	22.51	1	
				12	7	23.56	23.49	23.55	0	
			16QAM	12	13	22.50	22.48	22.51	1	
				25	0	22.51	22.43	22.50	1	
				16QAM	1	1	22.49	22.41	22.41	1
				64QAM	1	1	21.06	21.00	21.04	2.5
				256QAM	1	1	18.64	18.59	18.55	4.5
			CP	QPSK	1	1	21.81	21.80	21.77	1.5

**NR Band n26 \_ 10 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]	
						163800	166300	168800		
						819 MHz	831.5 MHz	844 MHz		
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.44	23.50	23.44	0	
				1	26	23.41	23.50	23.56	0	
				1	50	23.45	23.50	23.52	0	
				25	0	22.95	22.90	23.03	0.5	
				25	14	23.47	23.42	23.55	0	
				25	27	22.95	22.94	23.05	0.5	
			QPSK	50	0	22.96	22.93	23.06	0.5	
				1	1	23.42	23.38	23.38	0	
				1	26	23.37	23.36	23.45	0	
				1	50	23.48	23.40	23.38	0	
				25	0	22.45	22.40	22.54	1	
				25	14	23.48	23.42	23.57	0	
			16QAM	25	27	22.46	22.48	22.55	1	
				50	0	22.49	22.45	22.55	1	
				16QAM	1	1	22.50	22.44	22.41	1
				64QAM	1	1	21.11	20.99	20.96	2.5
				256QAM	1	1	18.67	18.57	18.55	4.5
			CP	QPSK	1	1	21.86	21.80	21.79	1.5



**NR Band n26 \_ 15 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						164300		168300	
						821.5 MHz		841.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.42		23.40	0
				1	40	23.40		23.50	0
				1	77	23.46		23.52	0
				36	0	22.97		22.96	0.5
				36	22	23.50		23.49	0
				36	43	22.99		23.05	0.5
				75	0	22.98		22.99	0.5
			QPSK	1	1	23.42		23.30	0
				1	40	23.40		23.43	0
				1	77	23.42		23.41	0
				36	0	22.46		22.43	1
				36	22	23.46		23.47	0
				36	43	22.46		22.54	1
				75	0	22.50		22.50	1
			16QAM	1	1	22.51		22.42	1
			64QAM	1	1	21.08		20.99	2.5
256QAM	1	1	18.63		18.55	4.5			
CP	QPSK	1	1	21.83		21.71	1.5		

**NR Band n26 \_ 20 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							166300		
							831.5 MHz		
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		23.50		0
				1	53		23.49		0
				1	104		23.53		0
				50	0		22.95		0.5
				50	28		23.45		0
				50	56		22.93		0.5
				100	0		22.97		0.5
			QPSK	1	1		23.41		0
				1	53		23.40		0
				1	104		23.44		0
				50	0		22.45		1
				50	28		23.45		0
				50	56		22.40		1
				100	0		22.46		1
			16QAM	1	1		22.43		1
			64QAM	1	1		21.01		2.5
256QAM	1	1		18.61		4.5			
CP	QPSK	1	1	21.83		21.83	1.5		

**[NR Band n41 Conducted Power\_Power Class 3 \_ Main 2 Ant. Pmax]**

**NR Band n41 \_10 MHz Bandwidth\_ (Power Class 3)**

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	22.52	23.11	23.08	22.34	22.39	0
				1	12	22.64	23.36	23.37	22.21	22.35	0
				1	22	22.58	23.19	22.82	22.28	22.12	0
				12	0	22.08	22.64	22.59	21.84	22.00	0.5
				12	6	22.52	23.06	22.95	22.29	22.25	0
				12	12	22.09	22.67	22.46	21.81	21.82	0.5
				24	0	22.07	22.67	22.50	21.82	21.82	0.5
			QPSK	1	1	22.48	23.11	23.10	22.30	22.29	0
				1	12	22.57	23.15	23.03	22.29	22.14	0
				1	22	22.56	23.18	22.92	22.26	21.86	0
				12	0	21.55	22.18	22.12	21.36	21.54	1
				12	6	22.65	23.19	23.04	22.37	22.18	0
				12	12	21.74	22.16	22.11	21.35	21.42	1
			CP	24	0	21.47	22.18	22.01	21.33	21.36	1
		16QAM		1	1	22.32	22.54	22.44	21.68	21.71	1
		64QAM		1	1	20.11	20.19	20.42	19.96	19.62	2.5
				256QAM	1	1	18.59	18.61	18.84	18.30	17.95
		CP	QPSK	1	1	21.10	21.70	21.60	20.79	20.74	1.5

**NR Band n41 \_15 MHz Bandwidth\_ (Power Class 3)**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						500700	509664	518598	527562	536496	
						2503.5 MHz	2548.32 MHz	2592.99 MHz	2637.81 MHz	2682.48 MHz	
15 MHz	30	DFT-s	pi/2 BPSK	1	1	22.64	23.17	23.08	22.38	22.47	0
				1	18	22.74	23.24	23.04	22.40	22.58	0
				1	36	22.84	23.25	22.96	22.27	22.49	0
				18	0	22.29	22.73	22.62	21.95	22.22	0.5
				18	9	22.78	23.41	23.10	22.23	22.70	0
				18	18	22.31	22.90	22.43	21.82	22.29	0.5
				36	0	22.38	22.79	22.62	21.86	22.24	0.5
			QPSK	1	1	22.66	23.26	23.10	22.28	22.47	0
				1	18	22.73	23.33	23.07	22.28	22.53	0
				1	36	22.87	23.30	22.84	22.21	22.23	0
				18	0	21.86	22.42	22.27	21.45	21.74	1
				18	9	22.84	23.39	23.14	22.37	22.61	0
				18	18	21.89	22.44	22.07	21.42	21.80	1
			CP	36	0	21.89	22.37	22.14	21.41	21.70	1
		16QAM		1	1	22.28	22.55	22.43	21.66	21.80	1
		64QAM		1	1	20.23	20.30	20.39	19.97	19.83	2.5
				256QAM	1	1	18.59	18.50	18.87	18.71	18.92
		CP	QPSK	1	1	21.10	21.65	21.58	20.77	20.72	1.5

**NR Band n41\_20 MHz Bandwidth\_ (Power Class 3)**

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	22.47	23.28	23.19	22.38	22.44	0
				1	26	22.65	23.40	23.11	22.28	22.51	0
				1	49	22.88	23.43	22.98	22.25	22.29	0
				25	0	22.11	22.93	22.66	21.87	22.00	0.5
				25	13	22.62	23.42	23.11	22.35	22.61	0
				25	26	22.30	22.91	22.56	21.81	22.23	0.5
			QPSK	1	1	22.51	23.30	23.15	22.31	22.23	0
				1	26	22.57	23.32	23.04	22.22	22.47	0
				1	49	22.84	23.32	22.86	22.23	22.22	0
				25	0	21.67	22.44	22.21	21.44	21.65	1
				25	13	22.73	23.39	23.09	22.36	22.58	0
				25	26	21.80	22.43	22.08	21.35	21.65	1
			16QAM	50	0	21.72	22.44	22.17	21.41	21.65	1
				1	1	22.20	22.68	22.54	21.72	21.70	1
				1	1	20.15	20.37	20.43	20.00	19.82	2.5
			64QAM	1	1	18.56	18.78	18.98	18.83	19.03	4.5
1	1	21.05		21.59	21.64	21.14	21.52	1.5			
CP	QPSK	1	1	21.05	21.59	21.64	21.14	21.52	1.5		

**NR Band n41\_25 MHz Bandwidth\_ (Power Class 3)**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						501696	510150	518598	527046	535500	
						2508.48 MHz	2550.75 MHz	2592.99 MHz	2635.23 MHz	2677.50 MHz	
25 MHz	30	DFT-s	pi/2 BPSK	1	1	22.40	23.25	23.14	22.34	22.41	0
				1	32	22.57	23.38	23.03	22.28	22.49	0
				1	63	22.87	23.41	22.96	22.24	22.28	0
				32	0	22.05	22.91	22.64	21.80	21.96	0.5
				32	17	22.59	23.41	23.10	22.29	22.55	0
				32	33	22.23	22.87	22.53	21.77	22.19	0.5
			QPSK	64	0	22.16	22.86	22.58	21.79	22.12	0.5
				1	1	22.43	23.26	23.13	22.29	22.16	0
				1	32	22.53	23.27	23.01	22.17	22.44	0
				1	63	22.82	23.28	22.84	22.15	22.20	0
				32	0	21.65	22.38	22.18	21.41	21.61	1
				32	17	22.67	23.34	23.03	22.30	22.52	0
			16QAM	32	33	21.74	22.42	22.01	21.28	21.59	1
				64	0	21.66	22.42	22.15	21.37	21.59	1
				1	1	22.19	22.63	22.49	21.69	21.63	1
			64QAM	1	1	20.12	20.29	20.39	20.00	19.79	2.5
1	1	18.54		18.74	18.95	18.77	18.96	4.5			
CP	QPSK	1	1	21.04	21.57	21.57	21.09	21.50	1.5		

**NR Band n41\_30 MHz Bandwidth\_ (Power Class 3)**

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	22.59	23.34	23.25	22.65	22.38	0
				1	39	23.17	23.65	23.23	22.73	22.44	0
				1	76	23.21	23.44	22.90	22.39	22.26	0
				36	0	22.27	23.01	22.75	22.17	22.07	0.5
				36	21	22.87	23.49	23.07	22.55	22.61	0
				36	42	22.65	23.01	22.54	21.99	22.21	0.5
			75	0	22.43	22.98	22.65	22.08	22.20	0.5	
			QPSK	1	1	22.61	23.42	23.25	22.61	22.45	0
				1	39	22.91	23.56	22.97	22.57	22.62	0
				1	76	23.19	23.40	22.81	22.33	22.10	0
				36	0	21.87	22.57	22.30	21.67	21.72	1
				36	21	22.94	23.43	23.10	22.54	22.71	0
				36	42	22.20	22.53	22.10	21.55	21.80	1
			75	0	21.99	22.53	22.18	21.60	21.71	1	
			16QAM	1	1	22.20	22.79	22.63	22.03	21.81	1
		64QAM	1	1	20.08	20.46	20.49	20.23	20.04	2.5	
		256QAM	1	1	18.53	18.74	18.95	18.96	19.03	4.5	
		CP	QPSK	1	1	21.02	21.64	21.66	21.36	21.44	1.5

**NR Band n41\_40 MHz Bandwidth\_ (Power Class 3)**

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	22.61	23.06		22.98	22.79	0
				1	53	23.23	23.28		22.68	23.24	0
				1	104	23.37	23.11		22.41	22.11	0
				50	0	22.42	22.91		22.32	22.55	0.5
				50	28	23.06	23.31		22.62	23.10	0
				50	56	22.74	22.94		22.38	22.60	0.5
			100	0	22.46	22.83		22.47	22.88	0.5	
			QPSK	1	1	22.69	23.40		23.13	22.42	0
				1	53	22.95	23.22		22.85	22.58	0
				1	104	23.36	23.13		22.75	22.04	0
				50	0	21.81	22.47		22.08	21.72	1
				50	28	22.92	23.28		22.99	22.67	0
				50	56	22.25	22.31		21.93	22.47	1
			100	0	21.99	22.36		21.99	22.19	1	
			16QAM	1	1	22.19	22.78		22.32	22.04	1
			64QAM	1	1	20.00	20.41		20.63	20.51	2.5
			256QAM	1	1	18.49	18.75		18.90	18.89	4.5
CP	QPSK	1	1	20.96	21.65		21.47	21.30	1.5		

**NR Band n41\_50 MHz Bandwidth\_ (Power Class 3)**

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	22.70		23.33		22.91	0
				1	67	23.12		23.25		23.14	0
				1	131	23.44		23.00		22.18	0
				64	0	22.28		22.87		22.65	0.5
				64	35	23.18		23.24		23.24	0
				64	69	22.84		22.72		22.77	0.5
				128	0	22.65		22.73		22.67	0.5
			QPSK	1	1	22.66		23.39		22.93	0
				1	67	23.04		23.14		23.09	0
				1	131	23.32		22.94		22.01	0
				64	0	21.90		22.39		22.17	1
				64	35	23.10		23.31		23.22	0
				64	69	22.40		22.22		22.41	1
				128	0	22.21		22.33		22.25	1
			16QAM	1	1	21.82		22.53		22.18	1
			64QAM	1	1	20.23		20.94		20.60	2.5
			256QAM	1	1	18.64		18.89		18.94	4.5
CP	QPSK	1	1	20.93		21.73		21.26	1.5		

**NR Band n41\_60 MHz Bandwidth\_ (Power Class 3)**

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	22.52		23.41		22.79	0
				1	81	23.05		23.36		22.99	0
				1	160	23.43		22.95		22.11	0
				81	0	22.29		22.87		22.40	0.5
				81	41	23.06		23.25		23.04	0
				81	81	22.83		22.64		22.81	0.5
			162	0	22.57		22.79		22.51	0.5	
			QPSK	1	1	22.63		23.40		22.71	0
				1	81	23.01		23.04		23.03	0
				1	160	23.43		22.88		22.07	0
				81	0	21.76		22.41		21.96	1
				81	41	23.02		23.26		22.99	0
				81	81	22.36		22.17		22.22	1
				162	0	22.18		22.29		22.06	1
				16QAM	1	1	21.42		22.57		21.99
			64QAM	1	1	20.12		20.90		20.26	2.5
			256QAM	1	1	18.54		18.81		18.77	4.5
CP	QPSK	1	1	20.92		21.73		21.17	1.5		

**NR Band n41\_70 MHz Bandwidth\_ (Power Class 3)**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]	
						506202					531000
						2531.01 MHz					2655 MHz
70 MHz	30	DFT-s	pi/2 BPSK	1	1	22.66				22.93	0
				1	81	23.20				22.97	0
				1	160	23.49				22.93	0
				81	0	22.44				22.36	0.5
				81	41	23.15				22.98	0
				81	81	22.78				22.63	0.5
			162	0	22.71				22.56	0.5	
			QPSK	1	1	22.60				22.96	0
				1	81	23.11				22.91	0
				1	160	23.39				22.64	0
				81	0	21.97				22.15	1
				81	41	22.62				23.02	0
				81	81	22.46				22.16	1
				162	0	22.22				22.14	1
				16QAM	1	1	21.85				22.23
			64QAM	1	1	20.19				19.55	2.5
			256QAM	1	1	18.53				18.91	4.5
CP	QPSK	1	1	20.89				21.44	1.5		

**NR Band n41\_80 MHz Bandwidth\_ (Power Class 3)**

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	22.64			23.01	0
				1	109	23.20			22.88	0
				1	215	23.43			22.10	0
				108	0	22.40			22.52	0.5
				108	55	23.09			22.91	0
				108	109	22.73			22.54	0.5
				216	0	22.65			22.49	0.5
			QPSK	1	1	22.52			23.05	0
				1	109	23.05			22.80	0
				1	215	23.31			22.04	0
				108	0	21.92			22.06	1
				108	55	22.62			22.75	0
				108	109	22.40			22.12	1
				216	0	22.16			22.09	1
			16QAM	1	1	21.84			22.29	1
			64QAM	1	1	20.36			20.78	2.5
			256QAM	1	1	18.59			18.90	4.5
CP	QPSK	1	1	20.87			21.50	1.5		

**NR Band n41\_90 MHz Bandwidth\_ (Power Class 3)**

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	22.69			23.26	0
				1	123	23.36			22.99	0
				1	243	23.27			22.14	0
				120	0	22.58			22.68	0.5
				120	63	23.27			22.91	0
				120	125	22.96			22.77	0.5
				243	0	22.11			22.45	0.5
			QPSK	1	1	22.52			23.20	0
				1	123	23.35			22.96	0
				1	243	23.20			22.06	0
				120	0	22.12			22.23	1
				120	63	22.95			22.83	0
				120	125	22.47			22.07	1
				243	0	22.27			22.13	1
			16QAM	1	1	21.91			22.44	1
			64QAM	1	1	20.32			19.98	2.5
			256QAM	1	1	18.56			18.97	4.5
CP	QPSK	1	1	20.83			21.65	1.5		

**NR Band n41\_100 MHz Bandwidth\_ (Power Class 3)**

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					23.59		0
				1	271					23.21		0
				135	0					22.83		0
				135	69					22.98		0.5
				135	138					23.24		0
				270	0					22.54		0.5
			270	0					22.73		0.5	
			1	1					23.41		0	
			1	137					23.35		0	
			1	271					22.78		0	
			135	0					22.51		1	
			135	69					23.28		0	
			135	138					22.11		1	
			270	0					22.25		1	
			16QAM	1	1				22.59		1	
			64QAM	1	1				21.20		2.5	
			256QAM	1	1				18.79		4.5	
		CP	QPSK	1	1			21.84		1.5		



**[NR Band n66 Conducted Power\_ Main 2 Ant. Pmax, ECI=1]**

**NR Band n66\_5 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						342500	349000	355500	
						1712.5 MHz	1745 MHz	1777.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.71	22.70	22.74	0
				1	13	22.76	22.69	22.67	0
				1	23	22.76	22.65	22.62	0
				12	0	22.30	22.20	22.26	0.5
				12	7	22.83	22.72	22.73	0
				12	13	22.34	22.21	22.24	0.5
				25	0	22.35	22.21	22.26	0.5
			QPSK	1	1	22.67	22.58	22.62	0
				1	13	22.66	22.55	22.55	0
				1	23	22.68	22.56	22.53	0
				12	0	22.07	21.87	22.01	1
				12	7	22.88	22.75	22.77	0
				12	13	22.08	21.86	21.97	1
				25	0	22.04	21.83	22.00	1
			16QAM	1	1	22.10	21.90	22.09	1
			64QAM	1	1	20.65	20.44	20.63	2.5
			256QAM	1	1	18.40	18.21	18.35	4.5
CP	QPSK	1	1	21.32	21.18	21.32	1.5		

**NR Band n66\_10 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343000	349000	355000	
						1715 MHz	1745 MHz	1775 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.87	22.67	22.86	0
				1	26	22.89	22.70	22.77	0
				1	50	22.89	22.75	22.67	0
				25	0	22.40	22.20	22.38	0.5
				25	14	22.90	22.71	22.80	0
				25	27	22.43	22.20	22.27	0.5
				50	0	22.40	22.22	22.34	0.5
			QPSK	1	1	22.77	22.58	22.75	0
				1	26	22.77	22.58	22.66	0
				1	50	22.81	22.61	22.56	0
				25	0	22.05	21.80	22.05	1
				25	14	22.92	22.72	22.83	0
				25	27	22.13	21.82	22.01	1
				50	0	22.11	21.84	22.01	1
			16QAM	1	1	22.18	21.94	22.17	1
			64QAM	1	1	20.71	20.51	20.71	2.5
			256QAM	1	1	18.44	18.24	18.44	4.5
CP	QPSK	1	1	21.39	21.22	21.38	1.5		

**NR Band n66 \_ 15 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343500	349000	354500	
						1717.5 MHz	1745 MHz	1772.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.95	22.81	22.84	0
				1	40	22.96	22.78	22.83	0
				1	77	22.95	22.83	22.70	0
				36	0	22.45	22.27	22.41	0.5
				36	22	22.95	22.75	22.86	0
				36	43	22.48	22.31	22.31	0.5
				75	0	22.47	22.31	22.36	0.5
			QPSK	1	1	22.82	22.72	22.78	0
				1	40	22.84	22.67	22.74	0
				1	77	22.84	22.72	22.61	0
				36	0	22.13	21.93	22.03	1
				36	22	22.99	22.78	22.86	0
				36	43	22.16	21.90	22.00	1
				75	0	22.14	21.90	22.02	1
			16QAM	1	1	22.22	22.04	22.11	1
			64QAM	1	1	20.77	20.60	20.67	2.5
			256QAM	1	1	18.51	18.33	18.39	4.5
			CP	QPSK	1	1	21.43	21.26	21.32

**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 OFDM	pi/2 BPSK	1	1	22.89	22.82	22.83	0
				1	53	22.95	22.77	22.94	0
				1	104	22.86	22.87	22.73	0
				50	0	22.44	22.32	22.46	0.5
				50	28	22.99	22.83	22.95	0
				50	56	22.46	22.37	22.38	0.5
				100	0	22.46	22.36	22.42	0.5
			QPSK	1	1	22.79	22.73	22.74	0
				1	53	22.86	22.67	22.82	0
				1	104	22.75	22.76	22.62	0
				50	0	22.11	21.90	22.07	1
				50	28	23.00	22.82	22.98	0
				50	56	22.11	21.97	22.03	1
				100	0	22.13	21.91	22.03	1
			16QAM	1	1	22.21	22.08	22.09	1
			64QAM	1	1	20.75	20.66	20.66	2.5
			256QAM	1	1	18.50	18.38	18.42	4.5
			CP	QPSK	1	1	21.41	21.35	21.34

**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 OFDM	pi/2 BPSK	1	1		22.70	0	
				1	80		22.71	0	
				1	158		22.79	0	
				80	0		22.26	0.5	
				80	40		22.78	0	
				80	80		22.34	0.5	
				160	0		22.30	0.5	
			QPSK	1	1		22.64	0	
				1	80		22.63	0	
				1	158		22.69	0	
				80	0		21.97	1	
				80	40		22.80	0	
				80	80		21.97	1	
				160	0		21.93	1	
			16QAM	1	1		22.04	1	
			64QAM	1	1		20.62	2.5	
256QAM	1	1		18.32	4.5				
CP	QPSK	1	1		21.29	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 OFDM	pi/2 BPSK	1	1		22.81	0	
				1	80		22.71	0	
				1	158		22.81	0	
				80	0		22.31	0.5	
				80	40		22.79	0	
				80	80		22.33	0.5	
				160	0		22.35	0.5	
			QPSK	1	1		22.70	0	
				1	80		22.61	0	
				1	158		22.73	0	
				80	0		21.95	1	
				80	40		22.82	0	
				80	80		21.95	1	
				160	0		21.98	1	
			16QAM	1	1		22.09	1	
			64QAM	1	1		20.67	2.5	
256QAM	1	1		18.40	4.5				
CP	QPSK	1	1		21.34	1.5			

**NR Band n66 \_ 35 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
							1745 MHz		
35 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		22.78		0
				1	108		22.65		0
				1	214		22.73		0
				108	0		22.26		0.5
				108	54		22.79		0
				108	108		22.27		0.5
				216	0		22.29		0.5
			QPSK	1	1		22.70		0
				1	108		22.54		0
				1	214		22.67		0
				108	0		21.93		1
				108	54		22.77		0
				108	108		21.90		1
				216	0		21.91		1
			16QAM	1	1		22.05		1
			64QAM	1	1		20.63		2.5
			256QAM	1	1		18.34		4.5
			CP	QPSK	1	1		21.33	

**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 OFDM	pi/2 BPSK	1	1		22.81		0
				1	108		22.72		0
				1	214		22.87		0
				108	0		22.29		0.5
				108	54		22.79		0
				108	108		22.37		0.5
				216	0		22.30		0.5
			QPSK	1	1		22.71		0
				1	108		22.63		0
				1	214		22.75		0
				108	0		21.97		1
				108	54		22.83		0
				108	108		21.99		1
				216	0		21.95		1
			16QAM	1	1		22.15		1
			64QAM	1	1		20.73		2.5
			256QAM	1	1		18.45		4.5
			CP	QPSK	1	1		21.37	

**[NR Band n71 Conducted Power\_ Main 1 Ant. Pmax, ECI=1,2,3]**

**NR Band n71 \_ 5 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						133100	136100	139100	
						665.5 MHz	680.5 MHz	695.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.92	23.23	23.32	0
				1	13	22.90	23.28	23.33	0
				1	23	22.95	23.35	23.28	0
				12	0	22.51	22.80	22.83	0.5
				12	7	23.03	23.29	23.31	0
				12	13	22.54	22.82	22.80	0.5
				25	0	22.54	22.79	22.82	0.5
			QPSK	1	1	22.90	23.13	23.22	0
				1	13	22.88	23.20	23.20	0
				1	23	22.93	23.22	23.19	0
				12	0	22.05	22.29	22.35	1
				12	7	23.08	23.34	23.37	0
				12	13	22.05	22.30	22.32	1
				25	0	22.04	22.28	22.33	1
			16QAM	1	1	22.00	21.70	22.26	1
			64QAM	1	1	20.57	20.81	20.85	2.5
			256QAM	1	1	18.12	18.35	18.41	4.5
CP	QPSK	1	1	21.32	21.55	21.64	1.5		

**NR Band n71 \_ 10 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						133600	136100	138600	
						668 MHz	680.5 MHz	693 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.05	23.27	23.40	0
				1	26	23.05	23.31	23.30	0
				1	50	23.14	23.31	23.25	0
				25	0	22.55	22.75	22.82	0.5
				25	14	23.08	23.25	23.27	0
				25	27	22.59	22.83	22.76	0.5
				50	0	22.59	22.82	22.77	0.5
			QPSK	1	1	22.47	23.15	23.29	0
				1	26	22.49	23.22	23.19	0
				1	50	22.56	23.23	23.14	0
				25	0	22.04	22.25	22.30	1
				25	14	23.09	23.27	23.26	0
				25	27	22.09	22.30	22.24	1
				50	0	22.07	22.29	22.28	1
			16QAM	1	1	22.05	22.19	22.32	1
			64QAM	1	1	20.68	20.80	20.90	2.5
			256QAM	1	1	18.18	18.34	18.50	4.5
CP	QPSK	1	1	21.36	21.56	21.70	1.5		

**NR Band n71 \_ 15 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						136100	680.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		23.12	0
				1	40		23.23	0
				1	77		23.34	0
				36	0		22.74	0.5
				36	22		23.27	0
				36	43		22.80	0.5
				75	0		22.79	0.5
			QPSK	1	1		23.06	0
				1	40		23.19	0
				1	77		23.18	0
				36	0		22.23	1
				36	22		23.26	0
				36	43		22.29	1
				75	0		22.26	1
			16QAM	1	1		22.15	1
			64QAM	1	1		20.79	2.5
			256QAM	1	1		18.31	4.5
CP	QPSK	1	1		21.51	1.5		

**NR Band n71 \_ 20 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						136100	680.5 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		23.04	0
				1	53		23.25	0
				1	104		23.22	0
				50	0		22.73	0.5
				50	28		23.27	0
				50	56		22.85	0.5
				100	0		22.77	0.5
			QPSK	1	1		23.04	0
				1	53		23.21	0
				1	104		23.22	0
				50	0		22.22	1
				50	28		23.26	0
				50	56		22.33	1
				100	0		22.23	1
			16QAM	1	1		22.12	1
			64QAM	1	1		20.72	2.5
			256QAM	1	1		18.28	4.5
CP	QPSK	1	1		21.45	1.5		

[NR Band n77 Conducted Power\_Power\_ Sub 3 Ant. Pmax]

NR Band n77\_ 10 MHz Bandwidth\_ Power Class 3

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	23.80	23.16	23.15	22.38	22.41	22.52	0
				1	12	23.69	23.25	23.22	22.24	22.41	22.51	0
				1	22	23.71	23.25	23.01	22.05	22.46	22.53	0
				12	0	23.30	22.86	22.76	21.90	21.96	22.07	0.5
				12	6	23.77	23.37	23.25	22.34	22.49	22.56	0
				12	12	23.23	22.87	22.68	21.71	21.98	22.03	0.5
			QPSK	24	0	23.27	22.86	22.73	21.80	22.00	22.10	0.5
				1	1	23.76	23.19	23.10	22.41	22.44	22.54	0
				1	12	23.68	23.29	23.20	22.27	22.42	22.53	0
				1	22	23.69	23.23	23.01	22.08	22.53	22.51	0
				12	0	22.79	22.35	22.33	21.42	21.51	21.59	1
				12	6	23.82	23.36	23.23	22.30	22.59	22.61	0
				12	12	22.77	22.32	22.12	21.19	21.55	21.58	1
				24	0	22.69	22.38	22.24	21.35	21.50	21.55	1
			16QAM	1	1	22.91	22.26	22.23	21.43	21.59	21.64	1
			64QAM	1	1	21.14	20.67	20.72	19.87	19.76	19.98	2.5
256QAM	1	1	19.10	18.54	18.37	17.57	17.66	17.80	4.5			
CP	QPSK	1	1	22.07	21.52	21.52	20.72	20.74	20.85	1.5		

NR Band n77\_ 15 MHz Bandwidth\_ Power Class 3

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]						MPR [dB]
						647168	650700	654232	657766	661300	664832	
						3707.52 MHz	3760.5 MHz	3813.49 MHz	3866.5 MHz	3919.5 MHz	3972.48 MHz	
15 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.70	23.19	23.16	22.34	22.31	22.50	0
				1	18	23.74	23.28	23.22	22.22	22.47	22.45	0
				1	36	23.65	23.29	23.04	22.02	22.51	22.50	0
				18	0	23.30	22.87	22.80	21.86	21.99	22.07	0.5
				18	9	23.81	23.37	23.29	22.30	22.55	22.53	0
				18	18	23.30	22.91	22.72	21.67	22.12	22.02	0.5
			QPSK	36	0	23.29	22.88	22.81	21.80	22.01	22.08	0.5
				1	1	23.73	23.23	23.15	22.35	22.36	22.53	0
				1	18	23.70	23.31	23.23	22.24	22.45	22.51	0
				1	36	23.62	23.29	23.02	22.04	22.51	22.48	0
				18	0	22.86	22.38	22.36	21.35	21.50	21.51	1
				18	9	23.83	23.38	23.27	22.23	22.55	22.55	0
				18	18	22.76	22.39	22.17	21.17	21.58	21.56	1
				36	0	22.81	22.39	22.31	21.28	21.51	21.54	1
			16QAM	1	1	22.78	22.30	22.26	21.40	21.41	21.64	1
			64QAM	1	1	21.26	20.72	20.77	19.82	19.75	19.98	2.5
256QAM	1	1	19.13	18.55	18.42	17.51	17.58	17.74	4.5			
CP	QPSK	1	1	22.03	21.54	21.55	20.70	20.64	20.83	1.5		

**NR Band n77\_ 20 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]						MPR [dB]
						647334	650800	654266	657734	661200	664666	
						3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz	
20 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.79	23.21	23.17	22.40	22.24	22.56	0
				1	26	23.65	23.31	23.25	22.29	22.40	22.59	0
				1	49	23.67	23.31	23.08	22.10	22.50	22.53	0
				25	0	23.25	22.87	22.83	21.95	21.98	22.17	0.5
				25	13	23.73	23.38	23.31	22.35	22.51	22.68	0
				25	26	23.22	22.89	22.75	21.71	22.07	22.17	0.5
			QPSK	50	0	23.21	22.89	22.82	21.84	21.95	22.17	0.5
				1	1	23.69	23.27	23.22	22.41	22.29	22.57	0
				1	26	23.68	23.34	23.26	22.33	22.43	22.60	0
				1	49	23.65	23.34	23.07	22.12	22.48	22.53	0
				25	0	22.79	22.38	22.38	21.45	21.44	21.71	1
				25	13	23.78	23.39	23.32	22.29	22.47	22.67	0
			16QAM	25	26	22.71	22.41	22.24	21.21	21.58	21.66	1
				50	0	22.68	22.38	22.31	21.33	21.50	21.67	1
				1	1	22.85	22.29	22.28	21.44	21.39	21.64	1
			64QAM	1	1	21.09	20.75	20.77	19.84	19.70	20.02	2.5
				1	1	19.09	18.53	18.46	17.57	17.56	17.84	4.5
CP	QPSK	1	1	22.06	21.53	21.56	20.73	20.62	20.90	1.5		

**NR Band n77\_ 25 MHz Bandwidth\_ Power Class 3**

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	
25 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.79	23.17	23.16	22.39	22.21	22.55	0
				1	32	23.61	23.29	23.21	22.26	22.35	22.58	0
				1	63	23.63	23.24	23.06	22.06	22.48	22.47	0
				32	0	23.25	22.87	22.76	21.90	21.94	22.17	0.5
				32	17	23.67	23.37	23.23	22.27	22.47	22.65	0
				32	33	23.18	22.88	22.68	21.67	22.02	22.14	0.5
			QPSK	64	0	23.15	22.84	22.78	21.78	21.92	22.12	0.5
				1	1	23.69	23.23	23.20	22.39	22.28	22.52	0
				1	32	23.67	23.33	23.22	22.33	22.37	22.56	0
				1	63	23.59	23.33	23.02	22.10	22.46	22.50	0
				32	0	22.76	22.31	22.32	21.40	21.37	21.65	1
				32	17	23.71	23.33	23.26	22.23	22.46	22.61	0
			16QAM	32	33	22.65	22.38	22.17	21.15	21.51	21.61	1
				64	0	22.65	22.37	22.29	21.33	21.49	21.62	1
				1	1	22.83	22.26	22.24	21.38	21.35	21.57	1
			64QAM	1	1	21.02	20.71	20.77	19.79	19.68	19.94	2.5
				1	1	19.03	18.52	18.41	17.53	17.53	17.79	4.5
CP	QPSK	1	1	22.06	21.45	21.53	20.65	20.60	20.83	1.5		



NR Band n77\_ 30 MHz Bandwidth\_ Power Class 3

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 OFDM	pi/2 BPSK	1	1	23.63	23.03	23.09	22.41	22.29	22.57	0
				1	39	23.59	23.25	23.27	22.30	22.48	22.66	0
				1	76	23.43	23.29	22.94	22.09	22.56	22.48	0
				36	0	23.21	22.68	22.79	21.97	22.02	22.14	0.5
				36	21	23.65	23.28	23.29	22.37	22.57	22.65	0
				36	42	23.10	22.83	22.64	21.76	22.16	22.10	0.5
				75	0	23.13	22.08	22.77	21.88	22.00	22.14	0.5
			QPSK	1	1	23.64	23.09	23.10	22.45	22.34	22.57	0
				1	39	23.58	23.24	23.21	22.30	22.52	22.62	0
				1	76	23.41	23.24	22.94	22.09	22.51	22.51	0
				36	0	22.71	22.21	22.30	21.48	21.53	21.67	1
				36	21	23.66	23.30	23.28	22.37	22.57	22.66	0
				36	42	22.60	22.30	22.16	21.27	21.65	21.61	1
				75	0	22.63	22.27	22.24	21.37	21.58	21.63	1
			16QAM	1	1	22.69	22.13	22.17	21.50	21.43	21.68	1
			64QAM	1	1	21.11	20.53	20.65	19.88	19.75	19.94	2.5
			256QAM	1	1	18.97	18.35	18.35	17.64	17.60	17.86	4.5
			CP	QPSK	1	1	21.93	21.38	21.42	20.76	20.69	20.91

**NR Band n77\_40 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]						MPR [dB]
						648000	651200	654400	657600	660800	664000	
						3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz	
40 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.76	23.15	23.11	22.37	22.25	22.46	0
				1	53	23.64	23.25	23.20	22.26	22.42	22.41	0
				1	104	23.64	23.19	22.99	22.04	22.51	22.46	0
				50	0	23.18	22.84	22.70	21.91	21.98	22.06	0.5
				50	28	23.67	23.34	23.20	22.35	22.50	22.48	0
				50	56	23.20	22.82	22.63	21.70	22.11	22.01	0.5
			100	0	23.17	22.86	22.67	21.83	21.99	22.05	0.5	
			QPSK	1	1	23.62	23.14	23.09	22.42	22.33	22.51	0
				1	53	23.62	23.29	23.14	22.26	22.46	22.49	0
				1	104	23.62	23.19	22.95	22.08	22.50	22.48	0
				50	0	22.74	22.33	22.25	21.41	21.51	21.44	1
				50	28	23.73	23.31	23.17	22.29	22.53	22.50	0
				50	56	22.64	22.29	22.06	21.23	21.59	21.50	1
			100	0	22.68	22.37	22.23	21.31	21.56	21.46	1	
			16QAM	1	1	22.85	22.22	22.19	21.45	21.39	21.63	1
			64QAM	1	1	21.02	20.59	20.66	19.82	19.69	19.93	2.5
			256QAM	1	1	19.07	18.53	18.34	17.62	17.52	17.70	4.5
CP	QPSK	1	1	22.03	21.48	21.47	20.70	20.62	20.79	1.5		

**NR Band n77\_50 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]						MPR [dB]
						648334	652166	656000		659834	663666	
						3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz	
50 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.59	23.11	23.07		22.34	22.47	0
				1	67	23.44	23.22	23.18		22.48	22.66	0
				1	131	23.16	23.15	22.95		22.56	22.47	0
				64	0	23.15	22.58	22.67		22.04	22.01	0.5
				64	35	23.53	23.30	23.14		22.53	22.74	0
				64	69	22.93	22.80	22.61		22.18	22.13	0.5
				128	0	22.08	22.81	22.62		22.08	22.14	0.5
			QPSK	1	1	23.61	23.15	23.04		22.39	22.49	0
				1	67	23.47	23.28	23.09		22.54	22.64	0
				1	131	23.19	23.19	22.89		22.54	22.43	0
				64	0	21.65	22.27	22.22		21.59	21.74	1
				64	35	23.53	23.30	23.11		22.55	22.74	0
				64	69	22.41	22.27	22.01		21.68	21.65	1
			128	0	22.58	22.29	22.16		21.62	21.66	1	
			16QAM	1	1	22.68	22.11	22.12		21.47	21.60	1
			64QAM	1	1	21.08	20.76	20.58		19.72	20.07	2.5
			256QAM	1	1	19.06	18.51	18.28		17.55	17.82	4.5
CP	QPSK	1	1	21.86	21.38	21.47		20.64	20.87	1.5		

**NR Band n77\_60 MHz Bandwidth \_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	23.72	23.15			22.49	22.46	0
				1	81	23.60	23.25			22.15	22.38	0
				1	160	23.63	23.19			22.29	22.46	0
				81	0	23.11	22.84			21.87	21.99	0.5
				81	41	23.64	23.34			22.26	22.43	0
				81	81	23.17	22.82			21.72	21.97	0.5
				162	0	23.16	22.86			21.78	21.98	0.5
			QPSK	1	1	23.58	23.14			22.57	22.49	0
				1	81	23.61	23.29			22.16	22.43	0
				1	160	23.62	23.19			22.32	22.45	0
				81	0	22.72	22.33			21.36	21.41	1
				81	41	23.66	23.31			22.27	22.47	0
				81	81	22.59	22.29			21.24	21.44	1
				162	0	22.60	22.37			21.30	21.44	1
			16QAM	1	1	22.83	22.22			21.64	21.58	1
			64QAM	1	1	20.98	20.59			19.98	19.86	2.5
			256QAM	1	1	19.02	18.53			17.81	17.68	4.5
CP	QPSK	1	1	22.02	21.48			20.84	20.74	1.5		

**NR Band n77\_70 MHz Bandwidth \_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]	
						649000	654336			658334		663000
						3735 MHz	3804.99 MHz			3875.01 MHz		3945 MHz
70 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.71	23.13			22.29	22.20	0
				1	95	23.54	23.23			22.46	22.58	0
				1	187	23.55	23.14			22.50	22.51	0
				90	0	23.09	22.79			21.97	22.02	0.5
				90	50	23.60	23.28			22.48	22.65	0
				90	99	23.10	22.74			22.15	22.14	0.5
				180	0	23.15	22.79			22.07	22.10	0.5
			QPSK	1	1	23.57	23.07			22.32	22.27	0
				1	95	23.56	23.23			22.52	22.62	0
				1	187	23.54	23.15			22.51	22.53	0
				90	0	22.69	22.29			21.54	21.53	1
				90	50	23.60	23.24			22.50	22.65	0
				90	99	22.53	22.23			21.66	21.65	1
				180	0	22.53	22.36			21.57	21.60	1
			16QAM	1	1	22.79	22.14			21.39	21.22	1
			64QAM	1	1	20.93	20.59			19.70	19.69	2.5
			256QAM	1	1	18.95	18.51			17.55	17.60	4.5
CP	QPSK	1	1	22.01	21.47			20.59	20.52	1.5		

**NR Band n77\_80 MHz Bandwidth \_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]	
						649334		656000		662666		
						3740.01 MHz		3840 MHz		3939.99 MHz		
80 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.71		23.00		22.22		0
				1	109	23.30		23.15		22.39		0
				1	215	23.17		22.93		22.50		0
				108	0	22.18		22.60		21.90		0.5
				108	55	23.49		23.09		22.46		0
				108	109	22.83		22.54		22.15		0.5
			216	0	23.01		22.59		22.00		0.5	
			QPSK	1	1	23.78		23.00		22.30		0
				1	109	23.38		23.03		22.49		0
				1	215	23.20		22.87		22.48		0
				108	0	22.67		22.18		21.47		1
				108	55	23.46		23.07		22.47		0
				108	109	22.32		21.98		21.63		1
			216	0	21.79		22.10		21.56		1	
			16QAM	1	1	22.79		22.08		21.33		1
64QAM	1	1	21.30		20.51		19.67		2.5			
256QAM	1	1	19.10		18.21		17.50		4.5			
CP	QPSK	1	1	22.07		21.40		20.56		1.5		

**NR Band n77\_90 MHz Bandwidth \_ Power Class 3**

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	23.70		22.98		22.29		0
				1	123	23.48		23.13		22.44		0
				1	243	23.51		22.92		22.53		0
				120	0	23.06		22.52		21.98		0.5
				120	63	23.57		23.07		22.51		0
				120	125	23.09		22.50		22.24		0.5
			243	0	23.09		22.59		22.08		0.5	
			QPSK	1	1	23.50		22.93		22.39		0
				1	123	23.53		22.99		22.57		0
				1	243	23.47		22.85		22.55		0
				120	0	22.63		22.14		21.52		1
				120	63	23.55		23.06		22.53		0
				120	125	22.53		21.93		21.71		1
			243	0	22.50		22.02		21.61		1	
			16QAM	1	1	22.73		22.02		21.40		1
64QAM	1	1	20.85		20.46		19.74		2.5			
256QAM	1	1	18.89		18.15		17.53		4.5			
CP	QPSK	1	1	21.96		21.37		20.59		1.5		

NR Band n77\_ 100 MHz Bandwidth \_ Power Class 3

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]	
						650000				662000		
						3750 MHz				3930 MHz		
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.63				22.24		0
				1	137	23.45				22.39		0
				1	271	23.49				22.45		0
				135	0	22.98				21.90		0.5
				135	69	23.50				22.43		0
				135	138	23.01				22.17		0.5
			270	0	23.02				22.03		0.5	
			QPSK	1	1	23.47				22.34		0
				1	137	23.52				22.49		0
				1	271	23.44				22.51		0
				135	0	22.57				21.46		1
				135	69	23.52				22.46		0
				135	138	22.51				21.65		1
			270	0	22.47				21.55		1	
			16QAM	1	1	22.66				21.40		1
			64QAM	1	1	20.84				19.67		2.5
			256QAM	1	1	18.84				17.51		4.5
			CP	QPSK	1	1	21.90				20.53	

[ NR Band n77 DOD Conducted Power Sub 3 Ant, Pmax]

NR Band n77\_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	23.24	23.61	23.52	0
				1	12	23.20	23.57	23.49	0
				1	22	23.33	23.60	23.52	0
				12	0	22.85	23.18	23.10	0
				12	6	23.34	23.65	23.55	0
				12	12	22.85	23.11	23.04	0
			QPSK	24	0	22.85	23.16	23.11	0
				1	1	23.33	23.62	23.57	0
				1	12	23.25	23.55	23.47	0
				1	22	23.35	23.60	23.54	0
				12	0	22.36	22.70	22.62	0
				12	6	23.39	23.70	23.61	0
			16QAM	12	12	22.41	22.70	22.58	0
				24	0	22.32	22.65	22.57	0
				1	1	22.47	22.77	22.74	0
			64QAM	1	1	20.66	21.00	20.93	0
				1	1	18.57	18.91	18.83	0
			256QAM	1	1	18.57	18.91	18.83	0
CP	QPSK	1	1	21.73	22.05	22.02	0		

NR Band n77\_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	23.29	23.62	23.53	0
				1	18	23.35	23.62	23.58	0
				1	36	23.36	23.59	23.54	0
				18	0	22.92	23.23	23.17	0
				18	9	23.46	23.77	23.54	0
				18	18	22.97	23.24	23.17	0
			QPSK	36	0	22.91	23.23	23.15	0
				1	1	23.31	23.64	23.56	0
				1	18	23.33	23.62	23.54	0
				1	36	23.34	23.59	23.53	0
				18	0	22.44	22.74	22.67	0
				18	9	23.44	23.75	23.69	0
			16QAM	18	18	22.48	22.68	22.60	0
				36	0	22.41	22.73	22.65	0
				1	1	22.37	22.69	22.62	0
			64QAM	1	1	20.78	21.06	21.06	0
				1	1	18.52	18.87	18.80	0
			256QAM	1	1	18.52	18.87	18.80	0
CP	QPSK	1	1	21.61	21.95	21.91	0		

NR Band n77\_20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]	
						630668	633334	636000		
						3460.02 MHz	3500.01 MHz	3540 MHz		
20 MHz	30	DFT-s	pi/2 BPSK	1	1	23.31	23.60	23.50	0	
				1	26	23.39	23.63	23.58	0	
				1	49	23.40	23.61	23.54	0	
				25	0	22.89	23.23	23.14	0	
				25	13	23.46	23.74	23.63	0	
				25	26	22.99	23.19	23.15	0	
			QPSK	50	0	22.96	23.18	23.14	0	
				1	1	23.32	23.59	23.53	0	
				1	26	23.38	23.62	23.58	0	
				1	49	23.39	23.61	23.52	0	
				25	0	22.45	22.73	22.64	0	
				25	13	23.46	23.73	23.66	0	
			16QAM	25	26	22.52	22.71	22.66	0	
				50	0	22.47	22.71	22.63	0	
				1	1	22.37	22.69	22.60	0	
			64QAM	1	1	20.79	21.11	21.02	0	
				1	1	18.53	18.91	18.88	0	
			CP	QPSK	1	1	21.58	21.96	21.88	0

NR Band n77\_25 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]	
						630866	633334	635800		
						3462.99 MHz	3500.01 MHz	3537 MHz		
25 MHz	30	DFT-s	pi/2 BPSK	1	1	23.28	23.59	23.44	0	
				1	32	23.35	23.58	23.51	0	
				1	63	23.34	23.54	23.47	0	
				32	0	22.82	23.17	23.12	0	
				32	17	23.40	23.71	23.60	0	
				32	33	22.92	23.16	23.13	0	
			QPSK	64	0	22.96	23.15	23.09	0	
				1	1	23.26	23.54	23.47	0	
				1	32	23.32	23.55	23.53	0	
				1	63	23.38	23.56	23.51	0	
				32	0	22.44	22.69	22.56	0	
				32	17	23.44	23.72	23.65	0	
			16QAM	32	33	22.52	22.69	22.66	0	
				64	0	22.43	22.65	22.62	0	
				1	1	22.33	22.62	22.57	0	
			64QAM	1	1	20.72	21.06	20.98	0	
				1	1	18.46	18.84	18.86	0	
			CP	QPSK	1	1	21.56	21.94	21.82	0

NR Band n77\_30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]	
						631000	633334	635666		
						3465 MHz	3500.01 MHz	3534.99 MHz		
30 MHz	30	DFT-s	pi/2 BPSK	1	1	23.18	23.39	23.40	0	
				1	39	23.39	23.52	23.45	0	
				1	76	23.37	23.40	23.36	0	
				36	0	22.85	23.05	23.03	0	
				36	21	23.45	23.60	23.52	0	
				36	42	22.93	23.07	23.01	0	
				75	0	22.90	23.04	23.01	0	
			QPSK	1	1	23.18	23.43	23.44	0	
				1	39	23.35	23.47	23.45	0	
				1	76	23.35	23.42	23.37	0	
				36	0	22.33	22.57	22.54	0	
				36	21	23.40	23.61	23.52	0	
				36	42	22.46	22.57	22.51	0	
				75	0	22.39	22.56	22.51	0	
			16QAM	1	1	22.22	22.49	22.48	0	
			64QAM	1	1	20.61	20.88	20.86	0	
			256QAM	1	1	18.54	18.78	18.77	0	
			CP	QPSK	1	1	21.47	21.76	21.74	0

NR Band n77\_40 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]	
						631334		635332		
						3470.01 MHz		3529.98 MHz		
40 MHz	30	DFT-s	pi/2 BPSK	1	1	23.15		23.37	0	
				1	53	23.35		23.44	0	
				1	104	23.32		23.38	0	
				50	0	22.82		23.02	0	
				50	28	23.41		23.52	0	
				50	56	22.86		23.00	0	
				100	0	22.83		23.03	0	
			QPSK	1	1	23.10		23.46	0	
				1	53	23.29		23.48	0	
				1	104	23.27		23.43	0	
				50	0	22.26		22.51	0	
				50	28	23.38		23.53	0	
				50	56	22.43		22.49	0	
				100	0	22.34		22.51	0	
			16QAM	1	1	22.18		22.49	0	
			64QAM	1	1	20.58		20.95	0	
			256QAM	1	1	18.53		18.79	0	
			CP	QPSK	1	1	21.45		21.78	0



NR Band n77\_50 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)		MPR [dB]	
						631668	635000		
						3475.02 MHz	3525 MHz		
50 MHz	30	DFT-s	pi/2 BPSK	1	1	23.07	23.37	0	
				1	67	23.27	23.43	0	
				1	131	23.29	23.41	0	
				64	0	22.81	23.02	0	
				64	35	23.39	23.55	0	
				64	69	22.82	23.09	0	
				128	0	22.76	23.07	0	
			QPSK	1	1	23.07	23.37	0	
				1	67	23.28	23.44	0	
				1	131	23.25	23.42	0	
				64	0	22.22	22.50	0	
				64	35	23.36	23.53	0	
				64	69	22.42	22.56	0	
			16QAM	128	0	22.28	22.55	0	
				16QAM	1	1	22.14	22.50	0
				64QAM	1	1	20.52	20.97	0
			256QAM	1	1	18.48	18.84	0	
CP	QPSK	1	1	21.40	21.76	0			

NR Band n77\_60 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)		MPR [dB]	
						633334	3500.01 MHz		
						60 MHz	30		DFT-s
1	81	23.47	23.47	0					
1	160	23.37	23.37	0					
81	0	23.00	23.00	0					
81	41	23.56	23.56	0					
81	81	23.06	23.06	0					
162	0	22.99	22.99	0					
QPSK	1	1	23.38	23.38	0				
	1	81	23.44	23.44	0				
	1	160	23.41	23.41	0				
	81	0	22.57	22.57	0				
	81	41	23.58	23.58	0				
	81	81	22.56	22.56	0				
16QAM	162	0	22.49	22.49	0				
	16QAM	1	1	22.48	22.48			0	
	64QAM	1	1	20.80	20.80			0	
256QAM	1	1	18.77	18.77	0				
CP	QPSK	1	1	21.74	21.74	0			

NR Band n77\_70 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
70 MHz	30	DFT-s	pi/2 BPSK	1	1		23.31		0
				1	95		23.53		0
				1	187		23.50		0
				90	0		23.05		0
				90	50		23.60		0
				90	99		23.12		0
			180	0		22.88		0	
			QPSK	1	1		23.37		0
				1	95		23.57		0
				1	187		23.51		0
				90	0		22.54		0
				90	50		23.62		0
				90	99		22.65		0
			180	0		22.59		0	
			16QAM	1	1		22.47		0
			64QAM	1	1		20.81		0
			256QAM	1	1		18.73		0
			CP	QPSK	1	1		21.78	

NR Band n77\_80 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
80 MHz	30	DFT-s	pi/2 BPSK	1	1		23.28		0
				1	109		23.57		0
				1	215		23.53		0
				108	0		23.01		0
				108	55		23.61		0
				108	109		23.17		0
				216	0		23.09		0
			QPSK	1	1		23.27		0
				1	109		23.50		0
				1	215		23.48		0
				108	0		22.52		0
				108	55		23.66		0
				108	109		22.66		0
				216	0		22.56		0
			16QAM	1	1		22.42		0
			64QAM	1	1		20.78		0
			256QAM	1	1		18.62		0
			CP	QPSK	1	1		21.62	

NR Band n77\_90 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
90 MHz	30	DFT-s	pi/2 BPSK	1	1		23.23		0
				1	123		23.52		0
				1	243		23.46		0
				120	0		22.53		0
				120	63		23.63		0
				120	125		23.16		0
				243	0		23.11		0
			QPSK	1	1		23.22		0
				1	123		23.51		0
				1	243		23.39		0
				120	0		22.50		0
				120	63		23.64		0
				120	125		22.21		0
				243	0		22.59		0
			16QAM	1	1		22.37		0
			64QAM	1	1		20.75		0
			256QAM	1	1		18.58		0
			CP	QPSK	1	1		21.59	

NR Band n77\_100 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1		23.18		0
				1	137		23.54		0
				1	271		23.45		0
				135	0		22.97		0
				135	69		23.64		0
				135	138		23.13		0
				270	0		23.07		0
			QPSK	1	1		23.17		0
				1	137		23.52		0
				1	271		23.41		0
				135	0		22.48		0
				135	69		23.62		0
				135	138		22.66		0
				270	0		22.56		0
			16QAM	1	1		22.26		0
			64QAM	1	1		20.73		0
			256QAM	1	1		18.61		0
			CP	QPSK	1	1		21.52	

[NR Band n78 Conducted Power\_Power Class 3 \_ Sub 3 Ant. Pmax]

NR TDD Band n78 \_10 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647000	650000	653000	
						3705 MHz	3750 MHz	3795 MHz	
10 MHz	30	DFT-s	pi/2 BPSK	1	1	22.94	22.79	22.77	0
				1	12	22.86	22.72	22.84	0
				1	22	22.91	22.84	22.87	0
				12	0	22.50	22.38	22.36	0.5
				12	6	22.89	22.98	22.79	0
				12	12	22.45	22.33	22.38	0.5
				24	0	22.50	22.36	22.36	0.5
			QPSK	1	1	22.98	22.83	22.82	0
				1	12	22.89	22.77	22.80	0
				1	22	22.96	22.88	22.89	0
				12	0	21.99	21.87	21.86	1
				12	6	22.98	22.96	22.86	0
				12	12	21.95	21.88	21.92	1
			16QAM	24	0	21.90	21.82	21.81	1
				1	1	22.12	21.94	21.97	1
				1	1	20.37	20.08	20.20	2.5
			256QAM	1	1	18.32	18.24	18.26	4.5
CP	QPSK	1	1	21.32	21.13	21.11	1.5		

NR TDD Band n78 \_15 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647166	650000	652832	
						3707.5 MHz	3750 MHz	3792.48 MHz	
15 MHz	30	DFT-s	pi/2 BPSK	1	1	22.95	22.77	22.79	0
				1	18	22.52	22.86	22.89	0
				1	36	22.89	22.86	22.86	0
				18	0	22.51	22.40	22.47	0.5
				18	10	23.04	22.99	23.00	0
				18	20	22.46	22.47	22.51	0.5
				36	0	22.51	22.41	22.47	0.5
			QPSK	1	1	22.97	22.77	22.85	0
				1	18	22.98	22.86	22.88	0
				1	36	22.90	22.85	22.88	0
				18	0	22.04	21.93	21.97	1
				18	10	23.04	22.91	22.99	0
				18	20	22.00	21.95	21.97	1
			16QAM	36	0	22.02	21.92	21.96	1
				1	1	22.01	21.81	21.89	1
				1	1	20.44	20.29	20.39	2.5
			256QAM	1	1	18.38	18.21	18.29	4.5
CP	QPSK	1	1	21.26	21.05	21.11	1.5		

**NR TDD Band n78 \_20 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647334	650000	652666	
						3710.01 MHz	3750 MHz	3789.99 MHz	
20 MHz	30	DFT-s	pi/2 BPSK	1	1	22.94	22.72	22.79	0
				1	26	22.95	22.79	22.84	0
				1	49	22.81	22.83	22.87	0
				25	0	22.51	22.34	22.48	0.5
				25	13	23.01	22.93	22.94	0
				25	26	22.45	22.41	22.45	0.5
			QPSK	50	0	22.48	22.36	22.44	0.5
				1	1	22.99	22.80	22.84	0
				1	26	23.00	22.88	22.90	0
				1	49	22.88	22.87	22.91	0
				25	0	22.05	21.89	21.96	1
				25	13	23.04	22.92	22.95	0
			16QAM	25	26	21.97	21.92	21.96	1
				50	0	21.95	21.86	21.94	1
				1	1	22.03	21.83	21.86	1
				1	1	20.49	20.24	20.38	2.5
256QAM	1	1	18.41	18.10	18.13	4.5			
	CP	QPSK	1	1	21.27	21.06	21.17	1.5	

**NR TDD Band n78 \_25 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647500	650000	652500	
						3712.5 MHz	3750 MHz	3787.5 MHz	
25 MHz	30	DFT-s	pi/2 BPSK	1	1	22.91	22.62	22.64	0
				1	32	23.05	22.87	22.86	0
				1	63	22.76	22.77	22.74	0
				32	0	22.48	22.31	22.47	0.5
				32	17	22.99	22.93	22.84	0
				32	33	22.41	22.40	22.32	0.5
			QPSK	64	0	22.45	22.35	22.32	0.5
				1	1	22.95	22.68	22.69	0
				1	32	22.89	22.85	22.79	0
				1	63	22.79	22.80	22.76	0
				32	0	21.96	21.77	21.77	1
				32	17	22.98	22.86	22.79	0
			16QAM	32	33	21.88	21.85	21.80	1
				64	0	21.94	21.79	21.73	1
				1	1	22.02	21.77	21.75	1
				1	1	20.37	20.15	20.16	2.5
256QAM	1	1	18.39	18.09	18.10	4.5			
	CP	QPSK	1	1	21.16	20.94	20.93	1.5	

**NR TDD Band n78\_30 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647666	650000	652332	
						3715 MHz	3750 MHz	3784.98 MHz	
30 MHz	30	DFT-s	pi/2 BPSK	1	1	22.90	22.68	22.67	0
				1	39	22.90	22.80	22.90	0
				1	76	22.70	22.79	22.71	0
				36	0	22.48	22.30	22.31	0.5
				36	21	22.95	22.91	22.84	0
				36	42	22.38	22.37	22.35	0.5
				75	0	22.40	22.36	22.36	0.5
			QPSK	1	1	22.95	22.70	22.75	0
				1	39	22.92	22.81	22.80	0
				1	76	22.71	22.81	22.77	0
				36	0	22.01	21.83	21.84	1
				36	21	22.95	22.86	22.84	0
				36	42	21.88	21.88	21.86	1
				75	0	21.93	21.85	21.87	1
			16QAM	1	1	21.99	21.72	21.76	1
			64QAM	1	1	20.41	20.15	20.21	2.5
			256QAM	1	1	18.38	18.10	18.18	4.5
			CP	QPSK	1	1	21.25	20.95	21.00

**NR TDD Band n78\_40 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647800		652000	
						3720 MHz		3780 MHz	
40 MHz	30	DFT-s	pi/2 BPSK	1	1	22.94		22.70	0
				1	53	22.89		22.88	0
				1	104	22.75		22.69	0
				50	0	22.46		22.31	0.5
				50	28	22.92		22.86	0
				50	56	22.34		22.33	0.5
				100	0	22.42		22.33	0.5
			QPSK	1	1	22.94		22.72	0
				1	53	22.88		22.79	0
				1	104	22.75		22.69	0
				50	0	21.94		21.84	1
				50	28	22.92		22.85	0
				50	56	21.85		21.84	1
				100	0	21.83		21.86	1
			16QAM	1	1	22.00		21.80	1
			64QAM	1	1	20.52		20.31	2.5
			256QAM	1	1	18.39		18.14	4.5
			CP	QPSK	1	1	21.32		21.10

**NR TDD Band n78 \_50 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]	
						648334		651666		
						3725.01 MHz		3774.99 MHz		
50 MHz	30	DFT-s	pi/2 BPSK	1	1	22.80		22.68	0	
				1	67	22.75		22.78	0	
				1	131	22.69		22.67	0	
				64	0	22.39		22.36	0.5	
				64	35	22.91		22.88	0	
				64	69	22.33		22.33	0.5	
				128	0	22.36		22.36	0.5	
			QPSK	1	1	22.87		22.75	0	
				1	67	22.77		22.85	0	
				1	131	22.72		22.68	0	
				64	0	21.88		21.85	1	
				64	35	22.83		22.85	0	
				64	69	21.81		21.82	1	
			16QAM	128	0	21.84		21.88	1	
				16QAM	1	1	21.91		21.78	1
				64QAM	1	1	20.46		20.34	2.5
				256QAM	1	1	18.30		18.14	4.5
CP	QPSK	1	1	21.12		21.01	1.5			

**NR TDD Band n78 \_60 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
60 MHz	30	DFT-s	pi/2 BPSK	1	1		22.69		0
				1	81		22.87		0
				1	160		22.74		0
				81	0		22.29		0.5
				81	41		22.85		0
				81	81		22.33		0.5
				162	0		22.29		0.5
			QPSK	1	1		22.77		0
				1	81		22.89		0
				1	160		22.73		0
				81	0		21.78		1
				81	41		22.85		0
				81	81		21.80		1
			16QAM	162	0		21.80		1
				16QAM	1	1	21.84		1
				64QAM	1	1	20.21		2.5
				256QAM	1	1	18.10		4.5
CP	QPSK	1	1	21.13		21.13	1.5		

**NR TDD Band n78 \_70 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
70 MHz	30	DFT-s	pi/2 BPSK	1	1		22.83		0
				1	95		22.85		0
				1	187		22.71		0
				90	0		22.43		0.5
				90	50		22.89		0
				90	99		22.38		0.5
			180	0		22.43		0.5	
			QPSK	1	1		22.86		0
				1	95		22.87		0
				1	187		22.73		0
				90	0		21.90		1
				90	50		22.88		0
				90	99		21.88		1
			180	0		21.92		1	
			16QAM	1	1		21.85		1
			64QAM	1	1		20.24		2.5
			256QAM	1	1		18.16		4.5
			CP	QPSK	1	1		21.15	

**NR TDD Band n78 \_80 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
80 MHz	30	DFT-s	pi/2 BPSK	1	1		22.90		0
				1	109		22.85		0
				1	215		22.72		0
				108	0		22.42		0.5
				108	55		22.91		0
				108	109		22.40		0.5
			216	0		22.42		0.5	
			QPSK	1	1		22.92		0
				1	109		22.89		0
				1	215		22.77		0
				108	0		21.92		1
				108	55		22.89		0
				108	109		21.91		1
			216	0		21.92		1	
			16QAM	1	1		21.97		1
			64QAM	1	1		20.47		2.5
			256QAM	1	1		18.15		4.5
			CP	QPSK	1	1		21.29	



**NR TDD Band n78\_90 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
90 MHz	30	DFT-s	pi/2 BPSK	1	1		22.95		0
				1	123		22.84		0
				1	243		22.70		0
				120	0		22.44		0.5
				120	63		22.94		0
				120	125		22.40		0.5
				243	0		22.45		0.5
			QPSK	1	1		22.97		0
				1	123		22.91		0
				1	243		22.72		0
				120	0		21.93		1
				120	63		22.92		0
				120	125		21.90		1
			243	0		21.91		1	
			16QAM	1	1		21.99		1
			64QAM	1	1		20.46		2.5
			256QAM	1	1		18.22		4.5
CP	QPSK	1	1		21.30		1.5		

**NR TDD Band n78\_100 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1		22.96		0
				1	137		22.85		0
				1	271		22.68		0
				135	0		22.43		0.5
				135	69		22.96		0
				135	138		22.39		0.5
				270	0		22.43		0.5
			QPSK	1	1		22.99		0
				1	137		22.92		0
				1	271		22.72		0
				135	0		21.95		1
				135	69		22.91		0
				135	138		21.90		1
			270	0		21.92		1	
			16QAM	1	1		22.04		1
			64QAM	1	1		20.49		2.5
			256QAM	1	1		18.28		4.5
CP	QPSK	1	1		21.31		1.5		

**[NR Band n78 DoD Conducted Power\_Power Class 3 \_ Sub 3 Ant. Pmax]**

**NR Band n78 DoD \_ 10 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						630334	633334	636332	
						3455.01 MHz	3500.01 MHz	3544.98 MHz	
10 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.06	23.60	23.55	0
				1	12	23.03	23.63	23.54	0
				1	22	23.16	23.67	23.53	0
				12	0	22.66	22.49	23.14	0.5
				12	6	23.16	23.69	23.57	0
				12	12	22.67	23.16	23.09	0.5
			QPSK	24	0	22.68	23.16	23.16	0.5
				1	1	23.10	23.59	23.61	0
				1	12	23.06	23.62	23.49	0
				1	22	23.19	23.64	23.55	0
				12	0	22.13	22.68	22.64	1
				12	6	23.22	23.75	23.68	0
			16QAM	12	12	22.22	22.72	22.63	1
				24	0	22.16	22.66	21.63	1
				1	1	22.27	22.72	22.78	1
				1	1	20.46	21.10	20.96	2.5
256QAM	1	1	18.40	18.92	18.97	4.5			
	CP	QPSK	1	1	21.43	21.94	21.96	1.5	

**NR Band n78 DoD \_ 15 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	23.14	23.59	23.61	0
				1	18	22.55	23.64	23.59	0
				1	36	23.23	23.71	23.53	0
				18	0	22.75	23.24	23.19	0.5
				18	9	23.31	23.68	23.71	0
				18	18	22.79	23.30	23.16	0.5
			QPSK	36	0	22.74	23.26	23.18	0.5
				1	1	23.09	23.58	23.62	0
				1	18	23.18	23.69	23.59	0
				1	36	23.20	23.70	23.55	0
				18	0	22.25	22.74	22.71	1
				18	9	23.29	23.74	23.63	0
			16QAM	18	18	22.27	22.79	22.64	1
				36	0	22.24	22.76	22.67	1
				1	1	22.19	22.63	22.71	1
				1	1	20.52	21.07	21.14	2.5
256QAM	1	1	18.42	18.91	18.94	4.5			
	CP	QPSK	1	1	21.44	21.90	21.96	1.5	

**NR Band n78 DoD \_ 20 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	23.08	23.52	23.53	0
				1	26	23.20	23.69	23.69	0
				1	49	23.22	23.73	23.73	0
				25	0	22.73	23.15	23.18	0.5
				25	13	23.27	23.65	23.76	0
				25	26	22.80	23.30	23.28	0.5
			50	0	22.75	23.24	23.24	0.5	
			QPSK	1	1	23.10	23.55	23.53	0
				1	26	23.19	23.69	23.68	0
				1	49	23.23	23.72	23.72	0
				25	0	22.25	22.70	22.70	1
				25	13	23.28	23.74	23.75	0
				25	26	22.30	22.80	22.80	1
			50	0	22.24	22.74	22.73	1	
			16QAM	1	1	22.18	22.65	22.64	1
			64QAM	1	1	20.59	21.04	21.03	2.5
			256QAM	1	1	18.43	18.83	18.83	4.5
CP	QPSK	1	1	21.41	21.87	21.87	1.5		

**NR Band n78 DoD \_ 25 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						630866	633334	635800	
						3462.99 MHz	3500.01 MHz	3537 MHz	
25 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	22.97	23.39	23.54	0
				1	32	23.23	23.68	23.60	0
				1	63	23.18	23.62	23.43	0
				32	0	22.65	23.07	23.16	0.5
				32	17	23.23	23.68	23.65	0
				32	33	22.77	23.22	23.11	0.5
				64	0	22.75	23.14	23.13	0.5
			QPSK	1	1	22.99	23.40	23.54	0
				1	32	23.23	23.62	23.59	0
				1	63	23.24	23.64	23.46	0
				32	0	22.13	22.56	22.65	1
				32	17	23.21	23.68	23.63	0
				32	33	22.26	22.68	22.58	1
			64	0	22.24	22.68	22.64	1	
			16QAM	1	1	22.10	22.55	22.70	1
			64QAM	1	1	20.43	20.87	21.02	2.5
			256QAM	1	1	18.37	18.78	18.96	4.5
CP	QPSK	1	1	21.35	21.72	21.93	1.5		

**NR Band n78 DoD \_ 30 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	22.98	23.40	23.58	0
				1	26	23.33	23.60	23.59	0
				1	49	23.27	23.66	23.41	0
				25	0	22.66	23.07	23.17	0.5
				25	13	23.26	23.67	23.62	0
				25	26	22.81	23.24	23.07	0.5
				50	0	22.74	23.17	23.15	0.5
			QPSK	1	1	23.02	23.38	23.63	0
				1	26	23.24	23.58	23.57	0
				1	49	23.28	23.66	23.41	0
				25	0	22.14	22.60	22.68	1
				25	13	23.24	23.67	23.63	0
				25	26	22.33	22.77	22.56	1
				50	0	22.25	22.69	22.67	1
			16QAM	1	1	22.07	22.45	22.68	1
			64QAM	1	1	20.44	20.86	21.09	2.5
			256QAM	1	1	18.32	18.74	18.94	4.5
CP	QPSK	1	1	21.34	21.74	21.95	1.5		

**NR Band n78 DoD \_ 40 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	22.98	23.61	0
				1	53	23.28	23.62	0
				1	104	23.43	23.45	0
				50	0	22.64	23.23	0.5
				50	28	23.28	23.69	0
				50	56	22.94	23.14	0.5
				100	0	22.77	23.17	0.5
			QPSK	1	1	23.00	23.66	0
				1	53	23.33	23.61	0
				1	104	23.44	23.46	0
				50	0	22.17	22.71	1
				50	28	23.32	23.68	0
				50	56	22.43	22.59	1
				100	0	22.30	22.70	1
			16QAM	1	1	22.05	22.71	1
			64QAM	1	1	20.49	21.17	2.5
			256QAM	1	1	18.33	18.99	4.5
CP	QPSK	1	1	21.35	22.02	1.5		

**NR Band n78 DoD \_ 50 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	22.94	23.50	0
				1	67	23.34	23.63	0
				1	131	23.54	23.49	0
				64	0	22.68	23.22	0.5
				64	35	23.38	23.73	0
				64	69	23.04	23.18	0.5
			128	0	22.87	23.24	0.5	
			QPSK	1	1	22.99	23.52	0
				1	67	23.36	23.63	0
				1	131	23.57	23.46	0
				64	0	22.20	22.73	1
				64	35	23.39	23.74	0
				64	69	22.54	22.68	1
			128	0	22.37	22.73	1	
			16QAM	1	1	22.04	22.62	1
			64QAM	1	1	20.51	21.10	2.5
			256QAM	1	1	18.35	18.88	4.5
CP	QPSK	1	1	21.33	21.91	1.5		

**NR Band n78 DoD \_ 60 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						633334	3500.01 MHz	
						60 MHz	30	
1	81	23.60	23.61	0				
1	160	23.61	23.61	0				
81	0	22.97	23.66	0.5				
81	41	23.66	23.23	0				
81	81	23.23	23.14	0.5				
162	0	23.14	23.23	0				
QPSK	1	1	23.23	23.71	0			
	1	81	23.71	23.64	0			
	1	160	23.64	22.50	1			
	81	0	22.50	23.68	0			
	81	41	23.68	22.73	1			
	81	81	22.73	22.64	1			
162	0	22.64	22.34	1				
16QAM	1	1	22.34	20.65	2.5			
64QAM	1	1	20.65	18.55	4.5			
256QAM	1	1	18.55	21.56	1.5			
CP	QPSK	1	1	21.56	21.56	1.5		

**NR Band n78 DoD \_ 70 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]	
							633334		
70 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		3500.01 MHz		
				1	95		23.18		0
				1	187		23.61		0
				90	0		23.60		0
				90	50		22.26		0.5
				90	99		23.69		0
			180	0		23.26		0.5	
			180	0		23.19		0.5	
			1	1		23.22		0	
			1	95		23.63		0	
			1	187		23.61		0	
			90	0		22.50		1	
			90	50		23.69		0	
			90	99		22.79		1	
			180	0		22.68		1	
			16QAM	1	1	22.21		1	
			64QAM	1	1	20.58		2.5	
			256QAM	1	1	18.55		4.5	
		CP	QPSK	1	1	21.59		1.5	

**NR Band n78 DoD \_ 80 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]	
							633334		
80 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		3500.01 MHz		
				1	109		23.17		0
				1	215		23.62		0
				108	0		23.60		0
				108	55		22.28		0.5
				108	109		23.72		0
			108	109		23.30		0.5	
			216	0		23.15		0.5	
			1	1		23.20		0	
			1	109		23.60		0	
			1	215		23.60		0	
			108	0		22.52		1	
			108	55		23.75		0	
			108	109		22.83		1	
			216	0		22.65		1	
			16QAM	1	1	22.27		1	
			64QAM	1	1	20.69		2.5	
			256QAM	1	1	18.52		4.5	
		CP	QPSK	1	1	21.50		1.5	

**NR Band n78 DoD \_ 90 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						633334	3500.01 MHz	
90 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		23.09	0
				1	123		23.64	0
				1	243		23.53	0
				120	0		22.25	0.5
				120	63		23.73	0
				120	125		23.32	0.5
			QPSK	243	0		23.15	0.5
				1	1		23.10	0
				1	123		23.61	0
				1	243		23.50	0
				120	0		22.48	1
				120	63		23.75	0
			16QAM	120	125		22.80	1
				243	0		22.59	1
				1	1		22.22	1
				1	1		20.60	2.5
			256QAM	1	1		18.44	4.5
				CP	QPSK	1	1	

**NR Band n78 DoD \_ 100 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						633334	3500.01 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		23.04	0
				1	137		23.62	0
				1	271		23.50	0
				135	0		22.92	0.5
				135	69		23.74	0
				135	138		23.28	0.5
			QPSK	270	0		23.10	0.5
				1	1		23.04	0
				1	137		23.61	0
				1	271		23.48	0
				135	0		22.41	1
				135	69		23.73	0
			16QAM	135	138		22.79	1
				270	0		22.58	1
				1	1		22.15	1
				1	1		20.59	2.5
			256QAM	1	1		18.39	4.5
				CP	QPSK	1	1	

### 11.3.4 NR Band Reduced Conducted Power

#### [NR Band n41 Conducted Power\_Power Class 3 \_ Main 2 Ant. ECI=1,2,3]

##### NR Band n41 \_10 MHz Bandwidth\_ (Power Class 3)

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	16.82	16.85	17.14	17.03	17.08	0
				1	12	16.83	16.92	17.27	17.18	17.26	0
				1	22	16.66	16.87	17.23	17.09	17.25	0
				12	0	16.88	16.80	17.18	17.16	17.23	0
				12	6	16.79	16.78	17.21	17.17	17.29	0
				12	12	16.73	16.80	17.20	17.14	17.25	0
				24	0	16.80	16.86	17.23	17.11	17.23	0
			QPSK	1	1	16.82	16.79	17.21	17.07	17.13	0
				1	12	16.84	16.81	17.33	17.15	17.14	0
				1	22	16.72	16.92	17.24	17.11	17.25	0
				12	0	16.86	16.84	17.21	17.16	17.25	0
				12	6	16.87	16.91	17.29	17.22	17.33	0
				12	12	16.82	16.93	17.28	17.17	17.32	0
				24	0	16.81	16.90	17.20	17.11	17.23	0
			16QAM	1	1	17.03	16.97	17.29	17.22	17.29	0
			64QAM	1	1	16.92	16.92	17.26	17.11	17.16	0
			256QAM	1	1	16.93	16.94	17.22	17.12	17.19	0
			CP	QPSK	1	1	16.64	16.72	17.08	16.89	16.95

##### NR Band n41 \_15 MHz Bandwidth\_ (Power Class 3)

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						500700	509664	518598	527562	536496	
						2503.5 MHz	2548.32 MHz	2592.99 MHz	2637.81 MHz	2682.48 MHz	
15 MHz	30	DFT-s	pi/2 BPSK	1	1	16.85	16.83	17.13	17.04	17.25	0
				1	18	16.81	16.92	17.25	17.08	17.36	0
				1	36	16.77	16.99	17.24	17.10	17.45	0
				18	0	16.91	16.96	17.27	17.15	17.41	0
				18	9	16.87	17.01	17.31	17.17	17.45	0
				18	18	16.87	17.02	17.32	17.15	17.50	0
				36	0	16.86	16.97	17.28	17.13	17.43	0
			QPSK	1	1	16.88	16.87	17.18	17.05	17.26	0
				1	18	16.78	16.89	17.30	17.12	17.36	0
				1	36	16.75	16.95	17.26	17.09	17.43	0
				18	0	16.93	16.98	17.28	17.11	17.38	0
				18	9	16.93	17.00	17.34	17.16	17.41	0
				18	18	16.84	17.01	17.29	17.15	17.45	0
				36	0	16.85	16.97	17.29	17.13	17.41	0
			16QAM	1	1	17.06	16.99	17.27	17.19	17.41	0
			64QAM	1	1	17.00	16.95	17.24	17.11	17.34	0
			256QAM	1	1	17.00	16.84	17.29	17.13	17.36	0
			CP	QPSK	1	1	16.73	16.75	16.97	16.84	17.05



**NR Band n41\_20 MHz Bandwidth\_ (Power Class 3)**

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	16.78	16.89	17.17	17.09	17.25	0
				1	26	16.63	16.96	17.26	17.08	17.31	0
				1	49	16.68	17.02	17.21	17.10	17.47	0
				25	0	16.73	17.00	17.29	17.11	17.34	0
				25	13	16.71	17.02	17.29	17.15	17.39	0
				25	26	16.74	17.08	17.29	17.12	17.43	0
			QPSK	50	0	16.74	17.03	17.30	17.13	17.37	0
				1	1	16.73	16.91	17.23	17.09	17.27	0
				1	26	16.62	16.99	17.31	17.07	17.30	0
				1	49	16.70	17.03	17.23	17.11	17.45	0
				25	0	16.74	17.02	17.30	17.13	17.36	0
				25	13	16.72	17.03	17.32	17.15	17.38	0
			16QAM	25	26	16.76	17.08	17.31	17.13	17.45	0
				50	0	16.74	17.04	17.28	17.12	17.37	0
				1	1	16.92	17.03	17.35	17.22	17.42	0
				1	1	16.87	17.05	17.33	17.14	17.36	0
64QAM	1	1	16.87	17.02	17.26	17.12	17.32	0			
	1	1	16.87	17.02	17.26	17.12	17.32	0			
256QAM	1	1	16.87	17.02	17.26	17.12	17.32	0			
	1	1	16.87	17.02	17.26	17.12	17.32	0			
CP	QPSK	1	1	16.67	16.69	17.10	16.88	17.06	0		

**NR Band n41\_25 MHz Bandwidth\_ (Power Class 3)**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]
						501696	510150	518598	527046	535500	
						2508.48 MHz	2550.75 MHz	2592.99 MHz	2635.23 MHz	2677.50 MHz	
25 MHz	30	DFT-s	pi/2 BPSK	1	1	16.77	16.88	17.09	17.01	17.20	0
				1	32	16.56	16.88	17.22	17.03	17.30	0
				1	63	16.65	17.02	17.20	17.08	17.43	0
				32	0	16.67	16.95	17.22	17.08	17.34	0
				32	17	16.65	16.99	17.29	17.11	17.32	0
				32	33	16.72	17.08	17.25	17.11	17.36	0
				64	0	16.73	17.00	17.26	17.06	17.37	0
			QPSK	1	1	16.66	16.88	17.22	17.03	17.22	0
				1	32	16.59	16.97	17.29	17.02	17.25	0
				1	63	16.67	16.96	17.19	17.08	17.37	0
				32	0	16.74	16.97	17.28	17.07	17.33	0
				32	17	16.67	16.98	17.27	17.09	17.32	0
				32	33	16.68	17.03	17.28	17.05	17.38	0
			16QAM	64	0	16.70	17.04	17.28	17.04	17.30	0
				1	1	16.87	16.99	17.34	17.18	17.40	0
				1	1	16.79	17.03	17.31	17.09	17.33	0
				1	1	16.84	16.98	17.24	17.05	17.31	0
			64QAM	1	1	16.84	16.98	17.24	17.05	17.31	0
				1	1	16.84	16.98	17.24	17.05	17.31	0
256QAM	1	1	16.84	16.98	17.24	17.05	17.31	0			
	1	1	16.84	16.98	17.24	17.05	17.31	0			
CP	QPSK	1	1	16.61	16.64	17.06	16.81	17.00	0		

NR Band n41\_30 MHz Bandwidth\_ (Power Class 3)

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	16.87	16.87	17.44	17.19	17.22	0
				1	39	16.79	17.11	17.31	17.26	17.35	0
				1	76	16.80	17.06	17.17	17.19	17.52	0
				36	0	16.80	17.00	17.21	17.22	17.34	0
				36	21	16.78	17.07	17.30	17.23	17.40	0
				36	42	16.84	17.07	17.26	17.23	17.47	0
			75	0	16.82	17.05	17.26	17.23	17.41	0	
			QPSK	1	1	16.85	16.90	17.19	17.19	17.27	0
				1	39	16.79	17.08	17.35	17.24	17.34	0
				1	76	16.83	17.14	17.20	17.21	17.48	0
				36	0	16.77	17.00	17.24	17.22	17.33	0
				36	21	16.82	17.06	17.26	17.23	17.38	0
				36	42	16.85	17.11	17.25	17.20	17.44	0
			75	0	16.82	17.06	17.25	17.24	17.38	0	
			16QAM	1	1	17.04	17.03	17.25	17.32	17.41	0
		64QAM	1	1	17.00	17.01	17.24	17.24	17.33	0	
256QAM	1	1	17.02	16.99	17.14	17.28	17.30	0			
CP	QPSK	1	1	16.68	16.66	16.93	16.98	17.08	0		

**NR Band n41\_40 MHz Bandwidth\_ (Power Class 3)**

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	16.77	16.88		17.12	17.10	0
				1	53	16.67	17.21		17.09	17.39	0
				1	104	16.79	17.12		17.10	17.48	0
				50	0	16.74	17.02		17.15	17.25	0
				50	28	16.72	17.07		17.15	17.27	0
				50	56	16.89	17.14		17.10	17.38	0
			100	0	16.78	17.10		17.15	17.30	0	
			QPSK	1	1	16.77	16.90		17.20	17.12	0
				1	53	16.69	17.07		17.10	17.28	0
				1	104	16.81	17.13		17.11	17.45	0
				50	0	16.72	17.02		17.15	17.24	0
				50	28	16.73	17.09		17.14	17.26	0
				50	56	16.88	17.13		17.13	17.36	0
			100	0	16.78	17.10		17.14	17.31	0	
			16QAM	1	1	16.94	17.02		17.29	17.26	0
			64QAM	1	1	16.91	17.00		17.27	17.21	0
			256QAM	1	1	16.89	16.97		17.19	17.18	0
			CP	QPSK	1	1	16.58	16.65		16.96	16.93

**NR Band n41\_50 MHz Bandwidth\_ (Power Class 3)**

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	16.84		17.00		17.14	0
				1	67	16.75		17.22		17.23	0
				1	131	16.93		17.08		17.40	0
				64	0	16.67		17.23		17.37	0
				64	35	16.87		17.28		17.37	0
				64	69	17.03		17.28		17.36	0
				128	0	16.93		17.27		17.34	0
			QPSK	1	1	16.83		17.07		17.15	0
				1	67	16.77		17.26		17.27	0
				1	131	16.92		17.07		17.41	0
				64	0	16.72		17.22		17.38	0
				64	35	16.86		17.28		17.38	0
				64	69	17.01		17.27		17.34	0
			128	0	16.91		17.25		17.35	0	
			16QAM	1	1	17.00		17.14		17.30	0
			64QAM	1	1	16.96		17.15		17.22	0
			256QAM	1	1	16.88		17.02		17.19	0
			CP	QPSK	1	1	16.63		16.84		16.95

**NR Band n41\_60 MHz Bandwidth\_ (Power Class 3)**

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	16.71		16.93		16.99	0
				1	81	16.70		17.37		17.22	0
				1	160	16.94		17.05		17.41	0
				81	0	16.65		17.14		17.15	0
				81	41	16.76		17.26		17.17	0
				81	81	16.91		17.21		17.25	0
			162	0	16.84		17.19		17.15	0	
			QPSK	1	1	16.71		16.97		16.98	0
				1	81	16.79		17.30		17.16	0
				1	160	16.96		17.06		17.37	0
				81	0	16.66		17.17		17.15	0
				81	41	16.78		17.27		17.19	0
				81	81	16.94		17.21		17.25	0
				162	0	16.83		17.19		17.17	0
				16QAM	1	1	16.89		17.07		17.12
			64QAM	1	1	16.83		17.09		17.06	0
			256QAM	1	1	16.81		17.04		17.06	0
CP	QPSK	1	1	16.50		16.77		16.79	0		

**NR Band n41\_70 MHz Bandwidth\_ (Power Class 3)**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]				MPR [dB]	
						506202					530100
						2531.01 MHz					2655 MHz
70 MHz	30	DFT-s	pi/2 BPSK	1	1	16.74				17.12	0
				1	81	16.78				17.18	0
				1	160	16.93				17.22	0
				81	0	16.77				17.28	0
				81	41	16.88				17.28	0
				81	81	16.97				17.28	0
			162	0	16.88				17.28	0	
			QPSK	1	1	16.78				17.12	0
				1	81	16.82				17.20	0
				1	160	16.96				17.22	0
				81	0	16.77				17.30	0
				81	41	16.86				17.27	0
				81	81	16.99				17.26	0
				162	0	16.89				17.28	0
				16QAM	1	1	16.96				17.28
			64QAM	1	1	16.90				17.20	0
			256QAM	1	1	16.88				17.19	0
CP	QPSK	1	1	16.54				16.92	0		

**NR Band n41\_80 MHz Bandwidth\_ (Power Class 3)**

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	16.76				17.11	0
				1	109	16.75				17.07	0
				1	215	17.10				17.39	0
				108	0	16.69				17.16	0
				108	55	16.85				17.18	0
				108	109	17.01				17.19	0
				216	0	16.85				17.17	0
			QPSK	1	1	16.75				17.14	0
				1	109	16.76				17.11	0
				1	215	17.12				17.37	0
				108	0	16.69				17.19	0
				108	55	16.85				17.15	0
				108	109	17.02				17.18	0
				216	0	16.80				17.20	0
			16QAM	1	1	16.92				17.25	0
			64QAM	1	1	16.88				17.22	0
			256QAM	1	1	16.87				17.17	0
CP	QPSK	1	1	16.54				16.94	0		

**NR Band n41\_90 MHz Bandwidth\_ (Power Class 3)**

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	16.79				17.15	0
				1	123	16.86				17.15	0
				1	243	17.09				17.33	0
				120	0	16.80				17.29	0
				120	63	16.98				17.26	0
				120	125	17.08				17.17	0
				243	0	16.94				17.21	0
			QPSK	1	1	16.79				17.19	0
				1	123	16.92				17.18	0
				1	243	17.11				17.32	0
				120	0	16.79				17.27	0
				120	63	16.97				17.24	0
				120	125	17.10				17.14	0
				243	0	16.95				17.26	0
			16QAM	1	1	16.95				17.29	0
			64QAM	1	1	16.90				17.30	0
			256QAM	1	1	16.88				17.19	0
CP	QPSK	1	1	16.58				16.98	0		

NR Band n41\_100 MHz Bandwidth\_ (Power Class 3)

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					16.89		0
				1	271					17.23		0
				135	0					17.00		0
				135	69					17.15		0
				135	138					17.25		0
				270	0					17.13		0
			1	1					17.17		0	
			1	137					16.90		0	
			1	271					17.21		0	
			135	0					16.99		0	
			135	69					17.19		0	
			135	138					17.25		0	
			270	0					17.13		0	
			16QAM	1	1					17.00		0
			64QAM	1	1					17.03		0
			256QAM	1	1					16.90		0
			CP	QPSK	1	1				16.66		0

**[NR Band n66 Conducted Power\_ Main 2 Ant. ECI=0,2,3]**

**NR Band n66 \_5 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						342500	349000	355500	
						1712.5 MHz	1745 MHz	1777.5 MHz	
5 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	21.13	21.06	20.69	0
				1	13	21.11	21.05	20.73	0
				1	23	21.03	20.94	20.70	0
				12	0	21.06	21.00	20.71	0
				12	7	21.12	20.97	20.70	0
				12	13	21.07	20.97	20.73	0
				25	0	21.11	20.97	20.70	0
			QPSK	1	1	21.02	20.96	20.59	0
				1	13	20.98	20.92	20.62	0
				1	23	20.97	20.86	20.67	0
				12	0	21.09	21.02	20.74	0
				12	7	21.12	20.97	20.70	0
				12	13	21.10	20.97	20.75	0
				25	0	21.10	20.97	20.74	0
			16QAM	1	1	21.15	21.07	20.72	0
			64QAM	1	1	21.30	21.15	20.78	0
			256QAM	1	1	19.01	18.93	18.53	2
CP	QPSK	1	1	20.97	20.91	20.54	0		

**NR Band n66 \_ 10 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343000	349000	355000	
						1715 MHz	1745 MHz	1775 MHz	
10 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	21.16	21.03	20.60	0
				1	26	21.12	20.92	20.62	0
				1	50	21.21	21.02	20.79	0
				25	0	21.14	20.99	20.64	0
				25	14	21.11	20.93	20.68	0
				25	27	21.17	20.95	20.70	0
				50	0	21.14	20.98	20.71	0
			QPSK	1	1	21.18	21.03	20.63	0
				1	26	21.02	20.89	20.59	0
				1	50	21.14	20.91	20.76	0
				25	0	21.14	20.99	20.66	0
				25	14	21.12	20.94	20.69	0
				25	27	21.18	20.98	20.75	0
				50	0	21.15	20.99	20.73	0
			16QAM	1	1	21.33	21.15	20.78	0
			64QAM	1	1	21.42	21.24	20.87	0
			256QAM	1	1	19.20	19.01	18.61	2
CP	QPSK	1	1	21.09	20.98	20.53	0		

**NR Band n66 \_ 15 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343500	349000	354500	
						1717.5 MHz	1745 MHz	1772.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	21.11	21.01	20.56	0
				1	40	21.08	20.96	20.52	0
				1	77	21.16	20.89	20.69	0
				36	0	21.12	21.06	20.59	0
				36	22	21.14	20.97	20.60	0
				36	43	21.13	20.94	20.63	0
				75	0	21.14	21.01	20.59	0
			QPSK	1	1	21.12	20.99	20.53	0
				1	40	21.07	20.95	20.50	0
				1	77	21.06	20.83	20.63	0
				36	0	21.14	21.04	20.58	0
				36	22	21.18	20.98	20.59	0
				36	43	21.14	20.93	20.64	0
				75	0	21.15	21.00	20.59	0
			16QAM	1	1	21.28	21.14	20.69	0
			64QAM	1	1	21.41	21.31	20.82	0
			256QAM	1	1	19.12	18.99	18.55	2
			CP	QPSK	1	1	21.05	20.95	20.49

**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 OFDM	pi/2 BPSK	1	1	21.12	21.14	20.78	0
				1	53	21.06	21.06	20.58	0
				1	104	21.10	20.91	20.78	0
				50	0	21.11	21.08	20.71	0
				50	28	21.15	21.01	20.63	0
				50	56	21.11	20.97	20.67	0
				100	0	21.11	21.05	20.68	0
			QPSK	1	1	21.10	21.05	20.71	0
				1	53	21.06	20.99	20.51	0
				1	104	21.01	20.83	20.70	0
				50	0	21.12	21.09	20.71	0
				50	28	21.15	21.00	20.64	0
				50	56	21.13	21.01	20.69	0
				100	0	21.12	21.05	20.67	0
			16QAM	1	1	21.28	21.23	20.86	0
			64QAM	1	1	21.39	21.31	20.99	0
			256QAM	1	1	19.14	19.04	18.71	2
			CP	QPSK	1	1	21.04	21.02	20.63



**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 OFDM	pi/2 BPSK	1	1		20.96	0
				1	80		20.95	0
				1	158		20.63	0
				80	0		21.04	0
				80	40		20.93	0
				80	80		20.84	0
				160	0		20.96	0
			QPSK	1	1		20.89	0
				1	80		20.93	0
				1	158		20.56	0
				80	0		20.99	0
				80	40		20.94	0
				80	80		20.82	0
				160	0		20.93	0
			16QAM	1	1		21.05	0
			64QAM	1	1		21.21	0
256QAM	1	1		18.88	2			
CP	QPSK	1	1		20.87	0		

**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 OFDM	pi/2 BPSK	1	1		20.99	0
				1	80		20.98	0
				1	158		20.66	0
				80	0		21.06	0
				80	40		20.99	0
				80	80		20.89	0
				160	0		20.98	0
			QPSK	1	1		20.96	0
				1	80		20.95	0
				1	158		20.64	0
				80	0		21.07	0
				80	40		20.98	0
				80	80		20.88	0
				160	0		21.00	0
			16QAM	1	1		21.12	0
			64QAM	1	1		21.25	0
256QAM	1	1		18.96	2			
CP	QPSK	1	1		20.91	0		

**NR Band n66 \_ 35 MHz Bandwidth**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						349000	1745 MHz	
35 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1		20.93	0
				1	108		20.88	0
				1	214		20.59	0
				108	0		20.96	0
				108	54		20.90	0
				108	108		20.78	0
				216	0		20.93	0
			QPSK	1	1		20.88	0
				1	108		20.89	0
				1	214		20.51	0
				108	0		20.95	0
				108	54		20.89	0
				108	108		20.78	0
				216	0		20.86	0
			16QAM	1	1		21.01	0
		64QAM	1	1		21.15	0	
		256QAM	1	1		18.85	2	
CP	QPSK	1	1		20.83	0		

**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 OFDM	pi/2 BPSK	1	1		21.05	0
				1	108		21.04	0
				1	214		20.61	0
				108	0		21.05	0
				108	54		20.99	0
				108	108		20.81	0
				216	0		20.92	0
			QPSK	1	1		20.98	0
				1	108		20.93	0
				1	214		20.52	0
				108	0		21.06	0
				108	54		20.98	0
				108	108		20.84	0
				216	0		20.90	0
			16QAM	1	1		21.13	0
		64QAM	1	1		21.26	0	
		256QAM	1	1		18.97	2	
CP	QPSK	1	1		20.93	0		

### 11.3.5 NR Band Reduced Conducted Power

#### [NR Band n77 Conducted Power\_Power Class 3 \_ Sub 3 Ant. ECI=1,2,3]

##### NR Band n77\_ 10 MHz Bandwidth\_ Power Class 3

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	16.93	17.36	17.66	18.05	18.01	16.73	0	
				1	12	16.95	17.47	17.77	18.04	18.12	16.83	0	
				1	22	16.83	17.40	17.67	17.97	18.06	16.79	0	
				12	0	16.89	17.43	17.72	18.05	18.10	16.74	0	
				12	6	16.87	17.43	17.73	18.01	18.09	16.73	0	
				12	12	16.82	17.45	17.70	17.95	18.12	16.72	0	
				24	0	16.83	17.42	17.73	18.01	18.08	16.73	0	
			QPSK	1	1	16.93	17.36	17.72	18.07	18.07	16.80	0	
				1	12	16.90	17.39	17.74	17.99	18.06	16.81	0	
				1	22	16.83	17.43	17.68	17.97	18.09	16.69	0	
				12	0	16.91	17.46	17.75	18.07	18.10	16.79	0	
				12	6	16.94	17.42	17.80	18.06	18.16	16.80	0	
				12	12	16.89	17.47	17.76	18.05	18.10	16.75	0	
			16QAM	1	1	17.05	17.53	17.85	18.18	18.22	16.91	0	
				1	1	16.88	17.40	17.71	18.06	17.99	16.71	0	
				1	1	17.05	17.38	17.73	18.06	18.02	16.75	0	
			CP	QPSK	1	1	16.83	17.29	17.58	17.98	18.01	16.64	0

##### NR Band n77\_ 15 MHz Bandwidth\_ Power Class 3

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]						MPR [dB]	
						647168	650700	654232	657766	661300	664832		
						3707.52 MHz	3760.5 MHz	3813.49 MHz	3866.5 MHz	3919.5 MHz	3972.48 MHz		
15 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.90	17.35	17.71	18.04	17.98	16.84	0	
				1	18	16.90	17.44	17.75	18.02	18.07	16.91	0	
				1	36	16.83	17.43	17.63	17.94	18.07	16.76	0	
				18	0	16.98	17.46	17.73	18.08	18.09	16.91	0	
				18	9	16.97	17.51	17.82	18.11	18.10	16.88	0	
				18	18	16.94	17.50	17.80	18.06	18.15	16.87	0	
				36	0	16.97	17.54	17.75	18.09	18.09	16.85	0	
			QPSK	1	1	16.91	17.38	17.68	18.05	18.01	16.87	0	
				1	18	16.91	17.43	17.85	18.03	18.09	16.92	0	
				1	36	16.82	17.42	17.65	17.97	18.07	16.76	0	
				18	0	17.00	17.49	17.76	18.10	18.10	16.90	0	
				18	9	17.00	17.53	17.82	18.10	18.13	16.90	0	
				18	18	16.99	17.59	17.75	18.05	18.12	16.78	0	
			16QAM	1	1	17.04	17.51	17.83	18.16	18.12	16.99	0	
				1	1	16.94	17.44	17.68	18.05	17.98	16.86	0	
				1	1	17.04	17.41	17.69	18.04	18.02	16.86	0	
			CP	QPSK	1	1	16.82	17.23	17.54	17.94	17.92	16.73	0

**NR Band n77\_ 20 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]						MPR [dB]
						647334	650800	654266	657734	661200	664666	
						3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz	
20 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.97	17.35	17.66	18.04	18.01	16.94	0
				1	26	16.90	17.43	17.75	18.04	18.08	16.87	0
				1	49	16.78	17.43	17.59	17.95	18.09	16.79	0
				25	0	16.98	17.52	17.75	18.12	18.07	16.92	0
				25	13	16.90	17.55	17.77	18.09	18.12	16.93	0
				25	26	16.92	17.59	17.70	18.05	18.14	16.87	0
			QPSK	50	0	16.91	17.47	17.78	18.08	18.12	16.91	0
				1	1	17.00	17.39	17.63	18.08	18.01	16.86	0
				1	26	16.91	17.48	17.75	18.08	18.11	16.83	0
				1	49	16.78	17.39	17.56	17.98	18.07	16.80	0
				25	0	17.00	17.56	17.81	18.12	18.12	16.93	0
				25	13	16.95	17.50	17.77	18.10	18.13	16.93	0
			16QAM	25	26	16.91	17.59	17.73	18.08	18.17	16.88	0
				50	0	16.96	17.53	17.78	18.08	18.12	16.88	0
				1	1	17.12	17.57	17.79	18.21	18.13	17.02	0
				1	1	17.07	17.47	17.72	18.08	18.02	16.88	0
256QAM	1	1	17.07	17.44	17.70	18.05	17.99	16.88	0			
	1	1	16.87	17.29	17.41	17.91	17.87	16.70	0			
CP	QPSK	1	1	16.87	17.29	17.41	17.91	17.87	16.70	0		

**NR Band n77\_ 25 MHz Bandwidth\_ Power Class 3**

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	
25 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.92	17.34	17.62	18.03	17.95	16.90	0
				1	32	16.86	17.41	17.72	17.96	18.02	16.80	0
				1	63	16.75	17.37	17.51	17.91	18.07	16.78	0
				32	0	16.95	17.51	17.70	18.12	18.03	16.90	0
				32	17	16.87	17.53	17.76	18.03	18.09	16.89	0
				32	33	16.91	17.51	17.66	17.99	18.10	16.87	0
			QPSK	64	0	16.87	17.41	17.76	18.07	18.05	16.87	0
				1	1	16.94	17.38	17.56	18.02	18.01	16.79	0
				1	32	16.87	17.40	17.73	18.03	18.07	16.78	0
				1	63	16.77	17.39	17.51	17.95	17.99	16.72	0
				32	0	16.99	17.54	17.77	18.11	18.06	16.89	0
				32	17	16.94	17.50	17.72	18.06	18.05	16.87	0
			16QAM	32	33	16.88	17.53	17.68	18.04	18.10	16.87	0
				64	0	16.89	17.50	17.73	18.06	18.09	16.82	0
				1	1	17.09	17.56	17.74	18.17	18.05	16.99	0
				1	1	17.02	17.46	17.67	18.05	17.98	16.84	0
256QAM	1	1	17.06	17.40	17.68	17.97	17.98	16.85	0			
	1	1	16.86	17.22	17.35	17.85	17.82	16.64	0			
CP	QPSK	1	1	16.86	17.22	17.35	17.85	17.82	16.64	0		

NR Band n77\_ 30 MHz Bandwidth\_ Power Class 3

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 OFDM	pi/2 BPSK	1	1	16.82	17.20	18.09	18.27	17.87	17.10	0
				1	39	16.73	17.38	18.34	18.23	18.07	17.11	0
				1	76	16.60	17.44	18.14	17.88	18.10	16.71	0
				36	0	16.81	17.32	18.27	18.23	17.98	16.99	0
				36	21	16.78	17.39	18.32	18.10	18.01	16.98	0
				36	42	16.72	17.47	18.24	17.96	18.08	16.82	0
				75	0	16.77	17.38	18.27	18.14	18.05	16.96	0
			QPSK	1	1	16.85	17.19	18.15	18.27	17.90	17.03	0
				1	39	16.77	17.38	18.33	18.15	18.11	16.86	0
				1	76	16.63	17.44	18.13	17.86	18.12	16.69	0
				36	0	16.84	17.31	18.26	18.21	17.97	17.00	0
				36	21	16.78	17.38	18.32	18.10	18.08	16.91	0
				36	42	16.72	17.47	18.24	18.00	18.11	16.79	0
				75	0	16.78	17.42	18.32	18.11	18.02	16.90	0
			16QAM	1	1	16.95	17.34	18.22	18.39	18.01	17.12	0
			64QAM	1	1	16.89	17.27	18.18	18.25	17.91	17.05	0
			256QAM	1	1	16.91	17.24	18.11	18.20	17.84	17.02	0
			CP	QPSK	1	1	16.67	17.02	17.94	18.06	17.70	16.85

**NR Band n77\_ 40 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]						MPR [dB]
						648000	651200	654400	657600	660800	664000	
						3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz	
40 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.90	17.24	18.08	18.23	17.91	17.03	0
				1	53	16.96	17.60	18.33	18.18	18.17	17.01	0
				1	104	16.46	17.44	18.08	17.80	18.06	16.73	0
				50	0	16.87	17.31	18.21	18.21	18.00	17.02	0
				50	28	16.77	17.41	18.30	18.10	18.06	16.93	0
				50	56	16.64	17.47	18.23	17.94	18.08	16.84	0
			100	0	16.76	17.42	18.24	18.09	18.04	16.89	0	
			QPSK	1	1	16.90	17.26	18.10	18.26	17.93	17.04	0
				1	53	16.75	17.49	18.31	18.18	18.13	16.88	0
				1	104	16.45	17.47	18.09	17.82	18.02	16.73	0
				50	0	16.87	17.32	18.23	18.22	18.02	17.00	0
				50	28	16.76	17.42	18.28	18.11	18.04	16.92	0
				50	56	16.65	17.50	18.22	17.93	18.06	16.81	0
			100	0	16.77	17.44	18.24	18.08	18.04	16.88	0	
			16QAM	1	1	17.04	17.40	18.19	18.39	18.04	17.15	0
			64QAM	1	1	16.95	17.30	18.14	18.29	17.94	17.05	0
256QAM	1	1	17.01	17.33	18.13	18.23	17.89	17.01	0			
CP	QPSK	1	1	16.76	17.07	17.93	18.12	17.78	16.85	0		

**NR Band n77\_ 50 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]						MPR [dB]
						648334	652166	656000		659834	663666	
						3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz	
50 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.77	17.30	18.35		17.74	17.07	0
				1	67	16.58	17.43	18.15		17.90	17.01	0
				1	131	16.38	17.58	17.83		18.03	16.63	0
				64	0	16.74	17.47	18.35		17.86	17.16	0
				64	35	16.64	17.51	18.20		17.97	17.03	0
				64	69	16.56	17.59	18.06		18.03	16.86	0
				128	0	16.68	17.53	18.23		17.94	17.00	0
			QPSK	1	1	16.80	17.31	18.38		17.76	17.09	0
				1	67	16.58	17.46	18.16		17.93	16.98	0
				1	131	16.37	17.56	17.86		18.06	16.63	0
				64	0	16.75	17.47	18.38		17.90	17.15	0
				64	35	16.65	17.54	18.22		17.99	17.05	0
			64	69	16.56	17.60	18.07		18.04	16.87	0	
			128	0	16.68	17.53	18.25		17.96	17.00	0	
			16QAM	1	1	16.90	17.43	18.42		17.89	17.20	0
			64QAM	1	1	16.84	17.37	18.43		17.78	17.10	0
256QAM	1	1	16.86	17.42	18.39		17.71	17.07	0			
CP	QPSK	1	1	16.66	17.15	18.24		17.59	16.88	0		

**NR Band n77\_60 MHz Bandwidth \_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	16.87	17.43			18.06	16.91	0
				1	81	16.80	17.66			17.95	17.02	0
				1	160	16.33	17.42			18.02	16.73	0
				81	0	16.78	17.60			17.95	17.05	0
				81	41	16.63	17.72			17.94	17.07	0
				81	81	16.46	17.68			17.96	16.88	0
				162	0	16.62	17.63			17.98	16.97	0
			QPSK	1	1	16.89	17.43			18.08	16.93	0
				1	81	16.77	17.68			17.83	17.07	0
				1	160	16.31	17.42			18.03	16.72	0
				81	0	16.80	17.64			18.01	17.05	0
				81	41	16.65	17.71			17.95	17.07	0
				81	81	16.44	17.68			17.96	16.90	0
				162	0	16.64	17.66			17.99	16.95	0
			16QAM	1	1	17.01	17.52			18.20	17.06	0
			64QAM	1	1	16.93	17.46			18.10	16.92	0
			256QAM	1	1	16.97	17.40			18.09	16.91	0
CP	QPSK	1	1	16.77	17.25			17.92	16.75	0		

**NR Band n77\_70 MHz Bandwidth \_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]	
						649000	654336			658334		663000
						3735 MHz	3804.99 MHz			3875.01 MHz		3945 MHz
70 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.84	17.50			18.14	16.82	0
				1	95	16.51	17.65			17.76	16.97	0
				1	187	16.46	17.23			18.02	16.90	0
				90	0	16.72	17.71			17.97	16.95	0
				90	50	16.57	17.68			17.88	16.97	0
				90	99	16.51	17.59			17.91	16.94	0
				180	0	16.63	17.69			18.02	17.00	0
			QPSK	1	1	16.89	17.55			18.11	16.83	0
				1	95	16.56	17.65			17.83	16.98	0
				1	187	16.47	17.24			18.02	16.84	0
				90	0	16.73	17.68			17.98	16.92	0
				90	50	16.60	17.68			17.86	17.02	0
				90	99	16.49	17.56			17.96	16.94	0
				180	0	16.65	17.68			17.97	16.98	0
			16QAM	1	1	16.97	17.64			18.29	16.94	0
			64QAM	1	1	16.89	17.57			18.20	16.84	0
			256QAM	1	1	16.95	17.63			18.17	16.84	0
CP	QPSK	1	1	16.80	17.36			18.06	16.66	0		

**NR Band n77\_80 MHz Bandwidth \_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]	
						649334		656000		662666		
						3740.01 MHz		3840 MHz		3939.99 MHz		
80 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.98		18.36		17.91		0
				1	109	16.48		18.08		18.08		0
				1	215	16.41		17.59		17.76		0
				108	0	16.76		18.42		18.06		0
				108	55	16.60		18.16		18.07		0
				108	109	16.50		17.91		17.97		0
			QPSK	216	0	16.66		18.16		17.98		0
				1	1	17.00		18.40		17.95		0
				1	109	16.52		18.14		18.06		0
				1	215	16.42		17.62		17.85		0
				108	0	16.80		18.43		18.08		0
				108	55	16.60		18.19		18.08		0
				108	109	16.45		17.90		18.08		0
				216	0	16.60		18.18		17.98		0
			16QAM	1	1	17.11		18.44		18.03		0
			64QAM	1	1	17.05		18.46		17.88		0
256QAM	1	1	17.12		18.40		17.91		0			
CP	QPSK	1	1	16.90		18.27		17.81		0		

**NR Band n77\_90 MHz Bandwidth \_ Power Class 3**

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	16.92		18.31		17.87		0
				1	123	16.43		18.10		18.10		0
				1	243	16.57		17.63		17.59		0
				120	0	16.70		18.46		18.11		0
				120	63	16.55		18.18		18.07		0
				120	125	16.60		17.88		17.90		0
			QPSK	243	0	16.64		18.17		17.99		0
				1	1	16.91		18.36		17.96		0
				1	123	16.41		18.13		18.10		0
				1	243	16.58		17.63		17.62		0
				120	0	16.70		18.45		18.17		0
				120	63	16.54		18.21		18.10		0
				120	125	16.60		17.92		17.98		0
				243	0	16.64		18.20		18.05		0
			16QAM	1	1	17.06		18.43		17.98		0
			64QAM	1	1	16.99		18.40		17.99		0
256QAM	1	1	17.06		18.34		17.92		0			
CP	QPSK	1	1	16.81		18.21		17.80		0		



NR Band n77\_ 100 MHz Bandwidth \_ Power Class

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR [dB]	
						650000				662000		
						3750 MHz				3930 MHz		
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.00				17.73		0
				1	137	16.40				18.05		0
				1	271	16.53				17.71		0
				135	0	16.76				17.99		0
				135	69	16.61				18.08		0
				135	138	16.57				18.01		0
			270	0	16.63				17.99		0	
			QPSK	1	1	17.01				17.78		0
				1	137	16.44				18.07		0
				1	271	16.53				17.74		0
				135	0	16.76				18.00		0
				135	69	16.65				18.09		0
				135	138	16.57				18.03		0
			270	0	16.64				18.00		0	
			16QAM	1	1	17.09				17.90		0
			64QAM	1	1	17.07				17.81		0
			256QAM	1	1	17.07				17.71		0
			CP	QPSK	1	1	16.87				17.61	

[NR Band n77 DoD Conducted Power\_Power Class 3 \_ Sub 3 Ant. ECI=1,2,3]

NR Band n77 DoD \_ 10 MHz Bandwidth\_ Power Class 3

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						630334	633334	636322	
						3445.01 MHz	3500.01 MHz	3544.98 MHz	
10 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.25	17.47	17.44	0
				1	12	17.52	17.46	17.54	0
				1	22	17.29	17.44	17.41	0
				12	0	17.28	17.50	17.45	0
				12	6	17.24	17.42	17.42	0
				12	12	17.30	17.48	17.41	0
				24	0	17.25	17.45	17.46	0
			QPSK	1	1	17.28	17.43	17.45	0
				1	12	17.24	17.45	17.48	0
				1	22	17.31	17.44	17.43	0
				12	0	17.29	17.48	17.48	0
				12	6	17.32	17.51	17.46	0
				12	12	17.33	17.47	17.49	0
				24	0	17.23	17.43	17.44	0
			16QAM	1	1	17.41	17.57	17.59	0
			64QAM	1	1	17.25	17.41	17.43	0
			256QAM	1	1	17.29	17.50	17.47	0
			CP	QPSK	1	1	17.18	17.33	17.35

NR Band n77 DoD \_ 15 MHz Bandwidth\_ Power Class 3

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 OFDM	pi/2 BPSK	1	1	17.37	17.52	17.47	0
				1	18	17.44	17.54	17.48	0
				1	36	17.44	17.56	17.48	0
				18	0	17.43	17.58	17.55	0
				18	9	17.46	17.60	17.58	0
				18	18	17.48	17.58	17.55	0
				36	0	17.42	17.60	17.56	0
			QPSK	1	1	17.37	17.51	17.45	0
				1	18	17.38	17.53	17.48	0
				1	36	17.37	17.50	17.47	0
				18	0	17.41	17.60	17.56	0
				18	9	17.52	17.62	17.61	0
				18	18	17.44	17.55	17.54	0
				36	0	17.43	17.57	17.55	0
			16QAM	1	1	17.49	17.64	17.60	0
			64QAM	1	1	17.40	17.50	17.45	0
			256QAM	1	1	17.34	17.50	17.44	0
			CP	QPSK	1	1	17.18	17.31	17.25

**NR Band n77 DoD \_ 20 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	17.45	17.51	17.37	0
				1	26	17.52	17.53	17.42	0
				1	49	17.51	17.54	17.42	0
				25	0	17.51	17.56	17.44	0
				25	13	17.58	17.61	17.45	0
				25	26	17.59	17.58	17.47	0
				50	0	17.55	17.55	17.45	0
			QPSK	1	1	17.44	17.48	17.35	0
				1	26	17.45	17.53	17.40	0
				1	49	17.51	17.49	17.38	0
				25	0	17.51	17.58	17.44	0
				25	13	17.57	17.61	17.46	0
				25	26	17.56	17.58	17.50	0
				50	0	17.49	17.55	17.44	0
			16QAM	1	1	17.56	17.64	17.48	0
			64QAM	1	1	17.49	17.52	17.39	0
			256QAM	1	1	17.42	17.49	17.39	0
CP	QPSK	1	1	17.23	17.30	17.19	0		

**NR Band n77 DoD \_ 25 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						630866	633334	635800	
						3462.99 MHz	3500.01 MHz	3537 MHz	
25 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.43	17.48	17.34	0
				1	32	17.48	17.52	17.39	0
				1	63	17.49	17.46	17.40	0
				32	0	17.44	17.52	17.40	0
				32	17	17.58	17.59	17.45	0
				32	33	17.53	17.53	17.43	0
				64	0	17.51	17.55	17.45	0
			QPSK	1	1	17.37	17.44	17.28	0
				1	32	17.40	17.51	17.40	0
				1	63	17.48	17.42	17.37	0
				32	0	17.47	17.57	17.40	0
				32	17	17.56	17.57	17.40	0
				32	33	17.51	17.57	17.46	0
				64	0	17.48	17.47	17.41	0
			16QAM	1	1	17.50	17.60	17.47	0
			64QAM	1	1	17.47	17.50	17.36	0
			256QAM	1	1	17.41	17.43	17.33	0
CP	QPSK	1	1	17.17	17.27	17.19	0		

**NR Band n77 DoD \_ 30 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	17.22	17.35	17.41	0
				1	26	17.41	17.53	17.61	0
				1	49	17.36	17.38	17.37	0
				25	0	17.34	17.45	17.45	0
				25	13	17.34	17.48	17.46	0
				25	26	17.38	17.45	17.47	0
				50	0	17.38	17.45	17.46	0
			QPSK	1	1	17.24	17.35	17.35	0
				1	26	17.36	17.44	17.53	0
				1	49	17.36	17.40	17.42	0
				25	0	17.30	17.46	17.48	0
				25	13	17.35	17.47	17.46	0
				25	26	17.41	17.48	17.47	0
				50	0	17.36	17.46	17.44	0
			16QAM	1	1	17.37	17.49	17.51	0
			64QAM	1	1	17.28	17.38	17.40	0
			256QAM	1	1	17.27	17.42	17.42	0
			CP	QPSK	1	1	17.07	17.19	17.23

**NR Band n77 DoD \_ 40 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	17.35	17.32	0
				1	53	17.52	17.40	0
				1	104	17.46	17.32	0
				50	0	17.39	17.37	0
				50	28	17.47	17.40	0
				50	56	17.53	17.38	0
				100	0	17.43	17.37	0
			QPSK	1	1	17.34	17.34	0
				1	53	17.46	17.42	0
				1	104	17.45	17.35	0
				50	0	17.40	17.37	0
				50	28	17.46	17.42	0
				50	56	17.51	17.40	0
				100	0	17.43	17.36	0
			16QAM	1	1	17.47	17.45	0
			64QAM	1	1	17.37	17.35	0
			256QAM	1	1	17.40	17.31	0
			CP	QPSK	1	1	17.17	17.15

**NR Band n77 DoD \_ 50 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	17.21		17.24	0
				1	67	17.30		17.23	0
				1	131	17.39		17.27	0
				64	0	17.33		17.29	0
				64	35	17.39		17.30	0
				64	69	17.47		17.33	0
			QPSK	128	0	17.37		17.33	0
				1	1	17.24		17.24	0
				1	67	17.31		17.24	0
				1	131	17.41		17.27	0
				64	0	17.34		17.29	0
				64	35	17.41		17.31	0
			16QAM	64	69	17.47		17.33	0
				128	0	17.40		17.30	0
				1	1	17.35		17.39	0
			64QAM	1	1	17.28		17.29	0
				1	1	17.25		17.23	0
				1	1	17.06		17.08	0
CP	QPSK	1	1	17.06		17.08	0		

**NR Band n77 DoD \_ 60 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							633334		
							3500.01 MHz		
60 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		17.27		0
				1	81		17.62		0
				1	160		17.34		0
				81	0		17.43		0
				81	41		17.43		0
				81	81		17.41		0
			QPSK	162	0		17.43		0
				1	1		17.31		0
				1	81		17.46		0
				1	160		17.35		0
				81	0		17.42		0
				81	41		17.46		0
			16QAM	81	81		17.43		0
				162	0		17.44		0
				1	1		17.42		0
			64QAM	1	1		17.33		0
				1	1		17.28		0
				1	1		17.13		0
CP	QPSK	1	1	17.13		17.13	0		

**NR Band n77 DoD \_ 70 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]		
							633334			
70 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		3500.01 MHz		0	
				1	95				17.26	0
				1	187				17.32	0
				90	0				17.27	0
				90	50				17.38	0
				90	99				17.41	0
			180	0				17.38	0	
			180	0				17.43	0	
			1	1				17.29	0	
			1	95				17.36	0	
			1	187				17.25	0	
			90	0				17.38	0	
			90	50				17.45	0	
			90	99				17.42	0	
			180	0				17.41	0	
			16QAM	1	1			17.40	0	
			64QAM	1	1			17.30	0	
			256QAM	1	1			17.38	0	
		CP	QPSK	1	1		17.33	0		

**NR Band n77 DoD \_ 80 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]		
							633334			
80 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		3500.01 MHz		0	
				1	109				17.27	0
				1	215				17.36	0
				108	0				17.32	0
				108	55				17.37	0
				108	109				17.46	0
				108	109				17.46	0
				216	0				17.46	0
			1	1				17.33	0	
			1	109				17.41	0	
			1	215				17.32	0	
			108	0				17.40	0	
			108	55				17.50	0	
			108	109				17.48	0	
			216	0				17.42	0	
			16QAM	1	1			17.43	0	
			64QAM	1	1			17.30	0	
			256QAM	1	1			17.37	0	
		CP	QPSK	1	1		17.21	0		

**NR Band n77 DoD \_ 90 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						633334	3500.01 MHz	
90 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		17.29	0
				1	123		17.43	0
				1	243		17.31	0
				120	0		17.37	0
				120	63		17.47	0
				120	125		17.44	0
				243	0		17.48	0
			QPSK	1	1		17.30	0
				1	123		17.40	0
				1	243		17.25	0
				120	0		17.41	0
				120	63		17.50	0
				120	125		17.46	0
				243	0		17.45	0
			16QAM	1	1		17.41	0
			64QAM	1	1		17.28	0
			256QAM	1	1		17.30	0
CP	QPSK	1	1		17.18	0		

**NR Band n77 DoD \_ 100 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						633334	3500.01 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		17.22	0
				1	137		17.39	0
				1	271		17.25	0
				135	0		17.38	0
				135	69		17.50	0
				135	138		17.49	0
				270	0		17.45	0
			QPSK	1	1		17.24	0
				1	137		17.39	0
				1	271		17.25	0
				135	0		17.40	0
				135	69		17.51	0
				135	138		17.50	0
				270	0		17.43	0
			16QAM	1	1		17.37	0
			64QAM	1	1		17.29	0
			256QAM	1	1		17.26	0
CP	QPSK	1	1		17.13	0		

[NR Band n78 Conducted Power\_Power Class 3 \_ Sub 3 Ant. ECI=1,2,3]

NR TDD Band n78 \_10 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647000	650000	653000	
						3705 MHz	3750 MHz	3795 MHz	
10 MHz	30	DFT-s	pi/2 BPSK	1	1	16.59	16.48	16.64	0
				1	12	16.73	16.53	16.72	0
				1	22	16.59	16.52	16.80	0
				12	0	16.64	16.53	16.69	0
				12	6	16.57	16.55	16.68	0
				12	12	16.59	16.54	16.75	0
			24	0	16.60	16.53	16.70	0	
			QPSK	1	1	16.65	16.52	16.67	0
				1	12	16.70	16.51	16.71	0
				1	22	16.61	16.54	16.79	0
				12	0	16.67	16.54	16.72	0
				12	6	16.67	16.55	16.74	0
				12	12	16.63	16.57	16.80	0
			24	0	16.57	16.51	16.70	0	
			16QAM	1	1	16.77	16.65	16.81	0
			64QAM	1	1	16.64	16.51	16.64	0
			256QAM	1	1	16.64	16.45	16.80	0
			CP	QPSK	1	1	16.55	16.42	16.56

NR TDD Band n78 \_15 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647166	650000	652832	
						3707.5 MHz	3750 MHz	3792.48 MHz	
15 MHz	30	DFT-s	pi/2 BPSK	1	1	16.63	16.45	16.70	0
				1	18	16.58	16.53	16.82	0
				1	36	16.58	16.55	16.82	0
				18	0	16.67	16.55	16.83	0
				18	10	16.73	16.60	16.85	0
				18	20	16.64	16.62	16.88	0
			36	0	16.66	16.60	16.84	0	
			QPSK	1	1	16.66	16.46	16.74	0
				1	18	16.68	16.56	16.83	0
				1	36	16.58	16.57	16.79	0
				18	0	16.71	16.57	16.80	0
				18	10	16.67	16.58	16.87	0
				18	20	16.67	16.61	16.85	0
			36	0	16.69	16.59	16.83	0	
			16QAM	1	1	16.77	16.60	16.85	0
			64QAM	1	1	16.69	16.51	16.74	0
			256QAM	1	1	16.66	16.58	16.69	0
			CP	QPSK	1	1	16.53	16.34	16.59



**NR TDD Band n78 \_20 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647334	650000	652666	
						3710.01 MHz	3750 MHz	3789.99 MHz	
20 MHz	30	DFT-s	pi/2 BPSK	1	1	16.67	16.47	16.65	0
				1	26	16.66	16.55	16.75	0
				1	49	16.56	16.57	16.85	0
				25	0	16.69	16.52	16.75	0
				25	13	16.70	16.59	16.81	0
				25	26	16.65	16.61	16.83	0
				50	0	16.65	16.55	16.78	0
			QPSK	1	1	16.70	16.49	16.68	0
				1	26	16.66	16.56	16.75	0
				1	49	16.56	16.53	16.81	0
				25	0	16.74	16.54	16.77	0
				25	13	16.74	16.59	16.79	0
				25	26	16.69	16.63	16.85	0
			16QAM	50	0	16.65	16.54	16.79	0
				1	1	16.83	16.61	16.79	0
				1	1	16.78	16.53	16.68	0
				1	1	16.89	16.56	16.72	0
CP	QPSK	1	1	16.58	16.35	16.54	0		

**NR TDD Band n78 \_25 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647500	650000	652500	
						3712.5 MHz	3750 MHz	3787.5 MHz	
25 MHz	30	DFT-s	pi/2 BPSK	1	1	16.69	16.38	16.46	0
				1	32	16.82	16.60	16.76	0
				1	63	16.46	16.54	16.69	0
				32	0	16.70	16.47	16.62	0
				32	17	16.68	16.55	16.65	0
				32	33	16.61	16.56	16.70	0
				64	0	16.66	16.55	16.66	0
			QPSK	1	1	16.70	16.42	16.49	0
				1	32	16.71	16.59	16.62	0
				1	63	16.47	16.46	16.69	0
				32	0	16.75	16.47	16.60	0
				32	17	16.65	16.54	16.65	0
				32	33	16.59	16.53	16.70	0
			16QAM	64	0	16.66	16.51	16.64	0
				1	1	16.83	16.53	16.64	0
				1	1	16.77	16.46	16.48	0
				1	1	16.79	16.44	16.51	0
CP	QPSK	1	1	16.60	16.30	16.33	0		

**NR TDD Band n78\_30 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647666	650000	652332	
						3715 MHz	3750 MHz	3784.98 MHz	
30 MHz	30	DFT-s	pi/2 BPSK	1	1	16.73	16.42	16.44	0
				1	39	16.64	16.78	16.75	0
				1	76	16.37	16.54	16.65	0
				36	0	16.71	16.49	16.65	0
				36	21	16.62	16.51	16.64	0
				36	42	16.53	16.54	16.67	0
				75	0	16.58	16.55	16.65	0
			QPSK	1	1	16.73	16.41	16.60	0
				1	39	16.65	16.67	16.65	0
				1	76	16.39	16.54	16.67	0
				36	0	16.73	16.50	16.64	0
				36	21	16.60	16.54	16.68	0
				36	42	16.54	16.57	16.66	0
				75	0	16.61	16.54	16.68	0
			16QAM	1	1	16.86	16.52	16.72	0
			64QAM	1	1	16.79	16.46	16.65	0
			256QAM	1	1	16.83	16.55	16.52	0
CP	QPSK	1	1	16.66	16.31	16.34	0		

**NR TDD Band n78\_40 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						647800		652000	
						3720 MHz		3780 MHz	
40 MHz	30	DFT-s	pi/2 BPSK	1	1	16.65		16.45	0
				1	53	16.65		16.76	0
				1	104	16.50		16.70	0
				50	0	16.60		16.55	0
				50	28	16.57		16.64	0
				50	56	16.53		16.72	0
				100	0	16.55		16.61	0
			QPSK	1	1	16.69		16.49	0
				1	53	16.59		16.62	0
				1	104	16.48		16.73	0
				50	0	16.61		16.54	0
				50	28	16.58		16.64	0
				50	56	16.52		16.68	0
				100	0	16.56		16.62	0
			16QAM	1	1	16.76		16.60	0
			64QAM	1	1	16.73		16.51	0
			256QAM	1	1	16.73		16.52	0
CP	QPSK	1	1	16.53		16.33	0		

**NR TDD Band n78\_50 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						648334		651666	
						3725.01 MHz		3774.99 MHz	
50 MHz	30	DFT-s	pi/2 BPSK	1	1	16.51		16.46	0
				1	67	16.43		16.58	0
				1	131	16.50		16.61	0
				64	0	16.52		16.61	0
				64	35	16.49		16.62	0
				64	69	16.54		16.67	0
			128	0	16.51		16.64	0	
			QPSK	1	1	16.55		16.52	0
				1	67	16.43		16.58	0
				1	131	16.54		16.63	0
				64	0	16.51		16.58	0
				64	35	16.51		16.63	0
				64	69	16.55		16.69	0
			128	0	16.52		16.62	0	
			16QAM	1	1	16.64		16.65	0
			64QAM	1	1	16.60		16.54	0
256QAM	1	1	16.61		16.54	0			
CP	QPSK	1	1	16.42		16.34	0		

**NR TDD Band n78\_60 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
60 MHz	30	DFT-s	pi/2 BPSK	1	1		16.41		0
				1	81		16.51		0
				1	160		16.59		0
				81	0		16.47		0
				81	41		16.55		0
				81	81		16.59		0
			162	0		16.53		0	
			QPSK	1	1		16.46		0
				1	81		16.54		0
				1	160		16.59		0
				81	0		16.48		0
				81	41		16.57		0
				81	81		16.59		0
			162	0		16.51		0	
			16QAM	1	1		16.59		0
			64QAM	1	1		16.48		0
256QAM	1	1		16.48		0			
CP	QPSK	1	1		16.32		0		

**NR TDD Band n78 \_70 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
70 MHz	30	DFT-s	pi/2 BPSK	1	1		16.56		0
				1	95		16.58		0
				1	187		16.64		0
				90	0		16.60		0
				90	50		16.60		0
				90	99		16.67		0
				180	0		16.63		0
			QPSK	1	1		16.59		0
				1	95		16.60		0
				1	187		16.64		0
				90	0		16.59		0
				90	50		16.62		0
				90	99		16.66		0
			16QAM	180	0		16.65		0
				1	1		16.71		0
				1	1		16.61		0
			256QAM	1	1		16.67		0
CP	QPSK	1	1		16.46		0		

**NR TDD Band n78 \_80 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
80 MHz	30	DFT-s	pi/2 BPSK	1	1		16.61		0
				1	109		16.57		0
				1	215		16.67		0
				108	0		16.61		0
				108	55		16.60		0
				108	109		16.70		0
				216	0		16.65		0
			QPSK	1	1		16.68		0
				1	109		16.59		0
				1	215		16.70		0
				108	0		16.61		0
				108	55		16.64		0
				108	109		16.71		0
			16QAM	216	0		16.63		0
				1	1		16.78		0
				1	1		16.69		0
			256QAM	1	1		16.74		0
CP	QPSK	1	1		16.54		0		

**NR TDD Band n78\_90 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
90 MHz	30	DFT-s	pi/2 BPSK	1	1		16.65		0
				1	123		16.57		0
				1	243		16.72		0
				120	0		16.60		0
				120	63		16.66		0
				120	125		16.73		0
				243	0		16.69		0
			QPSK	1	1		16.72		0
				1	123		16.60		0
				1	243		16.73		0
				120	0		16.62		0
				120	63		16.67		0
				120	125		16.77		0
			16QAM	243	0		16.70		0
				1	1		16.83		0
				1	1		16.79		0
				1	1		16.75		0
CP	QPSK	1	1		16.59		0		

**NR TDD Band n78\_100 MHz Bandwidth Conducted Power**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							650000		
							3750 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1		16.64		0
				1	137		16.49		0
				1	271		16.63		0
				135	0		16.57		0
				135	69		16.62		0
				135	138		16.70		0
				270	0		16.60		0
			QPSK	1	1		16.69		0
				1	137		16.54		0
				1	271		16.69		0
				135	0		16.56		0
				135	69		16.62		0
				135	138		16.69		0
			16QAM	270	0		16.62		0
				1	1		16.83		0
				1	1		16.74		0
				1	1		16.79		0
CP	QPSK	1	1		16.56		0		

[NR Band n78 DoD Conducted Power\_Power Class 3 \_ Sub 3 Ant. ECI=1,2,3]

NR Band n78 DoD \_ 10 MHz Bandwidth\_ Power Class 3

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						630334	633334	636332	
						3455.01 MHz	3500.01 MHz	3544.98 MHz	
10 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.08	17.32	17.48	0
				1	12	17.08	17.60	17.38	0
				1	22	17.16	17.52	17.47	0
				12	0	17.11	17.51	17.52	0
				12	6	17.12	17.55	17.50	0
				12	12	17.16	17.55	17.50	0
				24	0	17.14	17.50	17.50	0
			QPSK	1	1	17.13	17.48	17.54	0
				1	12	17.08	17.57	17.52	0
				1	22	17.20	17.55	17.50	0
				12	0	17.15	17.52	17.51	0
				12	6	17.20	17.59	17.57	0
				12	12	17.21	17.57	17.55	0
				24	0	17.13	17.49	17.52	0
			16QAM	1	1	17.29	17.65	17.70	0
			64QAM	1	1	17.13	17.47	17.50	0
256QAM	1	1	17.07	17.69	17.56	0			
CP	QPSK	1	1	16.99	17.06	17.34	0		

NR Band n78 DoD \_ 15 MHz Bandwidth\_ Power Class 3

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 OFDM	pi/2 BPSK	1	1	17.15	17.36	17.46	0
				1	18	17.27	17.50	17.44	0
				1	36	17.27	17.58	17.41	0
				18	0	17.27	17.57	17.51	0
				18	9	17.37	17.63	17.56	0
				18	18	17.29	17.66	17.51	0
				36	0	17.29	17.58	17.54	0
			QPSK	1	1	17.17	17.45	17.49	0
				1	18	17.26	17.55	17.47	0
				1	36	17.23	17.57	17.44	0
				18	0	17.28	17.57	17.55	0
				18	9	17.31	17.62	17.56	0
				18	18	17.30	17.64	17.49	0
				36	0	17.27	17.60	17.53	0
			16QAM	1	1	17.27	17.57	17.61	0
			64QAM	1	1	17.18	17.48	17.51	0
256QAM	1	1	17.21	17.48	17.56	0			
CP	QPSK	1	1	17.00	17.08	17.34	0		

**NR Band n78 DoD \_ 20 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	17.23	17.35	17.47	0
				1	26	17.35	17.58	17.59	0
				1	49	17.35	17.64	17.65	0
				25	0	17.30	17.54	17.56	0
				25	13	17.35	17.66	17.66	0
				25	26	17.38	17.67	17.66	0
			50	0	17.36	17.62	17.62	0	
			QPSK	1	1	17.23	17.46	17.44	0
				1	26	17.30	17.57	17.57	0
				1	49	17.36	17.60	17.63	0
				25	0	17.35	17.56	17.58	0
				25	13	17.38	17.64	17.67	0
				25	26	17.41	17.67	17.68	0
			50	0	17.35	17.62	17.62	0	
			16QAM	1	1	17.36	17.57	17.59	0
			64QAM	1	1	17.26	17.47	17.47	0
			256QAM	1	1	17.25	17.56	17.46	0
CP	QPSK	1	1	17.04	17.05	17.30	0		

**NR Band n78 DoD \_ 25 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						630866	633334	635800	
						3462.99 MHz	3500.01 MHz	3537 MHz	
25 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	17.21	17.34	17.36	0
				1	32	17.49	17.68	17.53	0
				1	63	17.39	17.56	17.30	0
				32	0	17.31	17.45	17.44	0
				32	17	17.38	17.55	17.41	0
				32	33	17.42	17.61	17.39	0
				64	0	17.37	17.51	17.40	0
			QPSK	1	1	17.20	17.36	17.39	0
				1	32	17.38	17.59	17.37	0
				1	63	17.37	17.51	17.29	0
				32	0	17.32	17.46	17.42	0
				32	17	17.37	17.53	17.40	0
				32	33	17.39	17.57	17.39	0
			64	0	17.38	17.50	17.40	0	
			16QAM	1	1	17.33	17.48	17.50	0
			64QAM	1	1	17.24	17.38	17.42	0
			256QAM	1	1	17.26	17.38	17.43	0
CP	QPSK	1	1	17.09	17.20	17.24	0		

**NR Band n78 DoD \_ 30 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	17.06	17.35	17.48	0
				1	26	17.26	17.54	17.61	0
				1	49	17.29	17.62	17.41	0
				25	0	17.13	17.47	17.60	0
				25	13	17.19	17.53	17.54	0
				25	26	17.28	17.62	17.49	0
				50	0	17.21	17.55	17.60	0
			QPSK	1	1	17.06	17.34	17.60	0
				1	26	17.25	17.51	17.64	0
				1	49	17.30	17.61	17.44	0
				25	0	17.14	17.45	17.59	0
				25	13	17.20	17.54	17.54	0
				25	26	17.27	17.62	17.47	0
				50	0	17.20	17.54	17.59	0
			16QAM	1	1	17.17	17.47	17.72	0
			64QAM	1	1	17.11	17.38	17.63	0
			256QAM	1	1	17.11	17.37	17.73	0
			CP	QPSK	1	1	16.91	17.08	17.25

**NR Band n78 DoD \_ 40 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	17.14	17.44	0
				1	53	17.54	17.53	0
				1	104	17.47	17.35	0
				50	0	17.26	17.53	0
				50	28	17.35	17.54	0
				50	56	17.47	17.47	0
				100	0	17.33	17.49	0
			QPSK	1	1	17.18	17.54	0
				1	53	17.43	17.54	0
				1	104	17.48	17.39	0
				50	0	17.25	17.54	0
				50	28	17.38	17.55	0
				50	56	17.45	17.45	0
				100	0	17.33	17.52	0
			16QAM	1	1	17.30	17.64	0
			64QAM	1	1	17.20	17.53	0
			256QAM	1	1	17.29	17.58	0
			CP	QPSK	1	1	17.04	17.26



**NR Band n78 DoD \_ 50 MHz Bandwidth\_ Power Class 3**

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 OFDM	pi/2 BPSK	1	1	17.04	17.33	0
				1	67	17.25	17.40	0
				1	131	17.49	17.31	0
				64	0	17.20	17.47	0
				64	35	17.30	17.44	0
				64	69	17.45	17.45	0
			QPSK	128	0	17.30	17.49	0
				1	1	17.08	17.37	0
				1	67	17.27	17.42	0
				1	131	17.48	17.31	0
				64	0	17.20	17.49	0
				64	35	17.30	17.44	0
			16QAM	64	69	17.44	17.44	0
				128	0	17.31	17.47	0
				16QAM	1	1	17.18	17.48
			64QAM	1	1	17.10	17.40	0
			256QAM	1	1	17.14	17.33	0
			CP	QPSK	1	1	16.90	17.21

**NR Band n78 DoD \_ 60 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
						633334	3500.01 MHz	
						60 MHz	30	
1	81	17.62	0					
1	160	17.50	0					
81	0	17.37	0					
81	41	17.55	0					
81	81	17.59	0					
QPSK	162	0	17.54	0				
	1	1	17.20	0				
	1	81	17.56	0				
	1	160	17.49	0				
	81	0	17.39	0				
	81	41	17.55	0				
16QAM	81	81	17.60	0				
	162	0	17.53	0				
	16QAM	1	1	17.32	0			
64QAM	1	1	17.24	0				
256QAM	1	1	17.21	0				
CP	QPSK	1	1	17.08	0			

**NR Band n78 DoD \_ 70 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]
							633334	
70 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		3500.01 MHz	0
				1	95			0
				1	187			0
				90	0			0
				90	50			0
				90	99			0
			180	0			0	
			1	95			0	
			1	187			0	
			90	0			0	
			90	50			0	
			90	99			0	
			180	0			0	
			1	1			0	
			1	1			0	
			64QAM	1	1			0
			256QAM	1	1			0
			CP	QPSK	1	1		

**NR Band n78 DoD \_ 80 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]	
							633334		
80 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		3500.01 MHz	0	
				1	109			0	
				1	215			0	
				108	0			0	
				108	55			0	
				108	109			0	
			216	0			0		
			1	109			0		
			1	215			0		
			108	0			0		
			108	55			0		
			108	109			0		
			216	0			0		
			16QAM	1	1			0	
			64QAM	1	1			0	
			256QAM	1	1			0	
			CP	QPSK	1	1			0

**NR Band n78 DoD \_ 90 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]		
							633334			
90 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		3500.01 MHz		0	
				1	123				17.16	0
				1	243				17.51	0
				120	0				17.37	0
				120	63				17.40	0
				120	125				17.59	0
				243	0				17.66	0
			QPSK	1	1				17.54	0
				1	123				17.19	0
				1	243				17.52	0
				120	0				17.38	0
				120	63				17.41	0
				120	125				17.60	0
				243	0				17.68	0
			16QAM	1	1				17.55	0
			64QAM	1	1				17.33	0
			256QAM	1	1				17.21	0
			CP	QPSK	1	1			17.25	0
									17.06	0

**NR Band n78 DoD \_ 100 MHz Bandwidth\_ Power Class 3**

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]		MPR [dB]		
							633334			
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1		3500.01 MHz		0	
				1	137				17.19	0
				1	271				17.50	0
				135	0				17.36	0
				135	69				17.35	0
				135	138				17.61	0
				270	0				17.65	0
			QPSK	1	1				17.47	0
				1	137				17.14	0
				1	271				17.51	0
				135	0				17.37	0
				135	69				17.34	0
				135	138				17.61	0
				270	0				17.68	0
			16QAM	1	1				17.49	0
			64QAM	1	1				17.27	0
			256QAM	1	1				17.14	0
			CP	QPSK	1	1			17.25	0
									17.04	0

**11.3.6 NR Band SRS Conducted Power**  
**[NR TDD Band n41 SRS Conducted Power]**

**Maximum Power**

**NR TDD Band n41\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Sub1 Ant, SRS1, Pmax]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			518598	2592.99 MHz	
100 MHz	30	CW	16.47		0

**NR TDD Band n41\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main3 Ant, SRS2, Pmax]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			518598	2592.99 MHz	
100 MHz	30	CW	18.96		0

**NR TDD Band n41\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Sub5 Ant, SRS3 , Pmax]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			518598	2592.99 MHz	
100 MHz	30	CW	20.77		0

**Reduced Power**

**NR TDD Band n41\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Sub1 Ant, SRS1, ECI=1,2,3]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			518598	2592.99 MHz	
100 MHz	30	CW	13.50		0

**NR TDD Band n41\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main3 Ant, SRS2, ECI=1,2,3]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			518598	2592.99 MHz	
100 MHz	30	CW	14.97		0

**NR TDD Band n41\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Sub5 Ant, SRS3, ECI=1,2,3]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			518598	2592.99 MHz	
100 MHz	30	CW	17.29		0

**NR TDD Band n78 SRS Conducted Power]**

**Maximum Power**

**NR TDD Band n78\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Sub5 Ant, SRS1, Pmax]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			650000	3750 MHz	
100 MHz	30	CW	16.57		0

**NR TDD Band n78\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main2 Ant, SRS2, Pmax]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			650000	3750 MHz	
100 MHz	30	CW	22.90		0

**NR TDD Band n78\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main3 Ant, SRS3, Pmax]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			650000	3750 MHz	
100 MHz	30	CW	18.43		0

**Reduced Power**

**NR TDD Band n78\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Sub5 Ant, SRS1, ECI=1,2,3]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			650000	3750 MHz	
100 MHz	30	CW	11.30		0

**NR TDD Band n78\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main2 Ant, SRS2, ECI=1,2,3]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			650000	3750 MHz	
100 MHz	30	CW	17.83		0

**NR TDD Band n78\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main3 Ant, SRS3, ECI=1,2,3]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			650000	3750 MHz	
100 MHz	30	CW	13.31		0

**NR TDD Band n78 DoD SRS Conducted Power]**

**Maximum Power**

**NR TDD Band n78 DoD\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Sub5 Ant, SRS1, Pmax]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			633334	3500.01 MHz	
100 MHz	30	CW	17.42		0

**NR TDD Band n78 DoD\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main2 Ant, SRS2, Pmax]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			633334	3500.01 MHz	
100 MHz	30	CW	22.88		0

**NR TDD Band n78 DoD\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main3 Ant, SRS3, Pmax]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			633334	3500.01 MHz	
100 MHz	30	CW	16.83		0

**Reduced Power**

**NR TDD Band n78 DoD\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Sub5 Ant, SRS1, ECI=1,2,3]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			633334	3500.01 MHz	
100 MHz	30	CW	11.91		0

**NR TDD Band n78 DoD\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main2 Ant, SRS2, ECI=1,2,3]**

Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
			633334	3500.01 MHz	
100 MHz	30	CW	17.83		0

**NR TDD Band n78 DoD\_ 100 MHz Bandwidth Conducted Power\_ Antenna: Main3 Ant, SRS3, ECI=1,2,3]**

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

## 11.4 WIFI Conducted Power measurement method

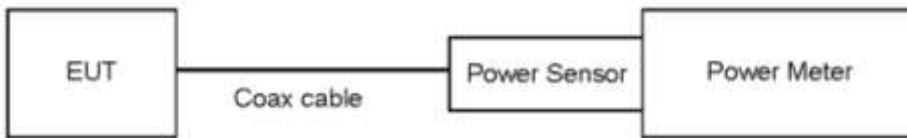
### Un-Licensed Bands (DTS Band)

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



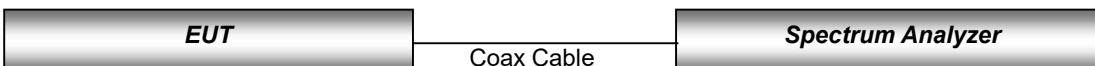
### Un-Licensed Bands (NII Band)

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



**11.4.1 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	
			WIFI 1	
802.11b	2 412	1	16.90	
	2 437	6	17.65	
	2 462	11	16.81	
	2 467	12	4.29	
	2 472	13	0.58	
802.11g	2 412	1	14.65	
	2 437	6	15.47	
	2 462	11	14.73	
	2 467	12	4.79	
	2 472	13	1.20	
802.11n (HT20)	2 412	1	14.63	
	2 437	6	15.34	
	2 462	11	14.60	
	2 467	12	4.83	
	2 472	13	1.46	

**11.4.2 IEEE 802.11 (2.4 GHz) Reduced Conducted Power**

Mode	Frequency [MHz]	Channel	IEEE 802.11 (2.4 GHz) Average RF Conducted Power [dBm]	
			SISO	
			WIFI 1	
802.11b	2 412	1	13.14	
	2 437	6	13.82	
	2 462	11	13.19	



**11.4.3 IEEE 802.11 (5 GHz) Maximum Conducted Power**

Mode	Frequency [MHz]	Channel	IEEE 802.11 (5 GHz) Average RF Conducted Power [dBm]	
			SISO	
			WIFI 1	
802.11a (20 MHz BW)	5 180	36	15.32	
	5 200	40	15.52	
	5 220	44	15.43	
	5 240	48	15.91	
	5 260	52	15.14	
	5 280	56	15.37	
	5 300	60	15.52	
	5 320	64	15.41	
	5 500	100	12.70	
	5 580	116	12.95	
	5 600	120	12.39	
	5 620	124	12.48	
	5 660	132	12.33	
	5 720	144	12.17	
	5 745	149	13.05	
	5 785	157	12.71	
5 825	165	12.37		

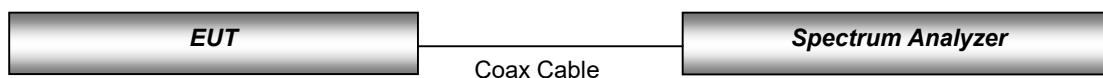
**11.4.4 IEEE 802.11 (5 GHz) Reduced Conducted Power**

Mode	Frequency [MHz]	Channel	IEEE 802.11 (5 GHz) Average RF Conducted Power [dBm]	
			SISO	
			WIFI 1	
802.11ac (80 MHz BW)	5 210	42	10.19	
	5 290	58	10.14	
	5 530	106	10.46	
	5 610	122	10.38	
	5 690	138	9.82	
	5 775	155	10.28	

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

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission mode with the same maximum output power specification, powers were measured for the largest channel Bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel Bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-Band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-Band channels, due to an even number of channels, both channels were measured.

**Test Configuration**



## 11.5 Bluetooth

### Maximum Conducted Power

The Burst averaged-conducted power

Mode	Frequency [MHz]	Channel	Bluetooth Power [dBm]
DH5	2 402	0	14.69
	2 441	39	14.56
	2 480	78	14.58
2-DH5	2 402	0	11.46
	2 441	39	11.37
	2 480	78	11.49
3-DH5	2 402	0	11.47
	2 441	39	11.38
	2 480	78	11.51

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.

### Bluetooth DH 5 Mode



### Bluetooth Duty Cycle [BDR]

Duty Cycle = (BT-On time /BT-Full time) = (2.876/3.746) = 0.768 (DH5)

### BT DH5 Maximum Duty Factor:

The theoretical maximum duty cycle defined by chipset manufacturer is 77.00 % In the ideal theory Duty Cycle, the test error tolerance [1%] of the test equipment was considered and applied to the measurement results. The duty cycle of DH5 measured by DUT was 76.80 %, and the duty cycle was compensated by applying test error tolerance 1 %.

## 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.	Tissue Type	Freq. (MHz)	Measured Conductivity	Measured Dielectric Constant, $\epsilon$	Target Conductivity	Target Dielectric Constant, $\epsilon$	dev $\sigma$	dev $\epsilon$
	(°C)			$\sigma$ (S/m)		$\sigma$ (S/m)		(%)	(%)
10/23/2023	21.3	13H	12	0.744	54.318	0.750	55.000	- 0.80	- 1.24
			13	0.724	54.401	0.750	55.000	- 3.47	- 1.09
			14	0.756	54.290	0.750	55.000	+ 0.80	- 1.29
10/16/2023	21.0	750H	705	0.877	42.438	0.889	42.174	- 1.35	+ 0.63
			710	0.882	42.361	0.890	42.148	- 0.90	+ 0.51
			750	0.927	41.749	0.893	41.940	+ 3.81	-0.46
10/17/2023	20.1	750H	705	0.849	42.524	0.889	42.174	- 4.50	+ 0.83
			710	0.854	42.450	0.890	42.148	- 4.04	+ 0.72
			750	0.897	41.859	0.893	41.940	+ 0.45	- 0.19
10/26/2023	21.3	750H	705	0.866	41.835	0.889	42.174	- 2.59	- 0.80
			710	0.872	41.753	0.890	42.148	- 2.02	- 0.94
			750	0.922	41.106	0.893	41.940	+ 3.25	- 1.99
10/23/2023	23.0	835H	820	0.896	42.156	0.899	41.577	- 0.33	+ 1.39
			835	0.914	41.922	0.900	41.500	+ 1.56	+ 1.02
			850	0.929	41.695	0.916	41.500	+ 1.42	+ 0.47
10/24/2023	23.4	835H	820	0.905	40.471	0.899	41.577	+ 0.67	- 2.66
			835	0.923	40.241	0.900	41.500	+ 2.56	- 3.03
			850	0.938	40.015	0.916	41.500	+ 2.40	- 3.58
10/18/2023	20.0	835H	820	0.905	41.474	0.899	41.577	+ 0.67	- 0.25
			835	0.923	41.242	0.900	41.500	+ 2.56	- 0.62
			850	0.938	41.016	0.916	41.500	+ 2.40	- 1.17
10/19/2023	21.6	835H	820	0.905	41.960	0.899	41.577	+ 0.67	+ 0.92
			835	0.923	41.724	0.900	41.500	+ 2.56	+ 0.54
			850	0.938	41.496	0.916	41.500	+ 2.40	- 0.01
10/26/2023	19.6	835H	820	0.905	41.470	0.899	41.577	+ 0.67	- 0.26
			835	0.923	41.236	0.900	41.500	+ 2.56	- 0.64
			850	0.938	41.008	0.916	41.500	+ 2.40	- 1.19
10/13/2023	21.2	1800H	1710	1.308	39.774	1.348	40.144	- 2.97	- 0.92
			1750	1.351	39.632	1.371	40.080	- 1.46	- 1.12
			1800	1.350	39.396	1.400	40.000	- 3.57	- 1.51
10/27/2023	20.0	1800H	1710	1.298	41.691	1.348	40.144	- 3.71	+ 3.85
			1750	1.342	41.506	1.371	40.080	- 2.12	+ 3.56
			1800	1.400	41.261	1.400	40.000	+ 0.00	+ 3.15
11/08/2023	22.6	1800H	1710	1.341	40.732	1.348	40.144	- 0.52	+ 1.46
			1750	1.383	40.578	1.371	40.080	+ 0.88	+ 1.24
			1800	1.439	40.350	1.400	40.000	+ 2.79	+ 0.88
10/20/2023	23.4	1800H	1710	1.298	41.660	1.348	40.144	- 3.71	+ 3.78
			1750	1.343	41.502	1.371	40.080	- 2.04	+ 3.55
			1800	1.401	41.255	1.400	40.000	+ 0.07	+ 3.14
10/11/2023	22.2	1900H	1850	1.378	39.606	1.400	40.000	- 1.57	- 0.98
			1900	1.426	39.376	1.400	40.000	+ 1.86	- 1.56
			1910	1.432	39.326	1.400	40.000	+ 2.29	- 1.69

10/12/2023	21.8	1900H	1850	1.338	38.854	1.400	40.000	- 4.43	- 2.87
			1900	1.384	38.622	1.400	40.000	- 1.14	- 3.44
			1910	1.391	38.572	1.400	40.000	- 0.64	- 3.57
10/26/2023	20.0	1900H	1850	1.420	40.070	1.400	40.000	+ 1.43	+ 0.17
			1900	1.385	39.842	1.400	40.000	- 1.07	- 0.39
			1910	1.391	39.792	1.400	40.000	- 0.64	- 0.52
11/14/2023	23.2	1900H	1850	1.368	40.194	1.400	40.000	- 2.29	+ 0.48
			1900	1.416	39.966	1.400	40.000	+ 1.14	- 0.09
			1910	1.422	39.915	1.400	40.000	+ 1.57	- 0.21
11/07/2023	20.1	2450H	2400	1.766	39.218	1.756	39.290	+ 0.57	- 0.18
			2450	1.829	39.042	1.800	39.200	+ 1.61	- 0.40
			2500	1.884	38.874	1.855	39.140	+ 1.56	- 0.68
11/06/2023	20.5	2450H	2400	1.781	39.386	1.756	39.290	+ 1.42	+ 0.24
			2450	1.845	39.192	1.800	39.200	+ 2.50	- 0.02
			2500	1.896	39.015	1.855	39.140	+ 2.21	- 0.32
10/31/2023	20.1	2600H	2500	1.916	38.460	1.855	39.140	+ 3.29	- 1.74
			2550	1.970	38.266	1.909	39.070	+ 3.20	- 2.06
			2600	2.029	38.057	1.964	39.010	+ 3.31	- 2.44
11/06/2023	20.3	2600H	2500	1.891	39.245	1.855	39.140	+ 1.94	+ 0.27
			2550	1.944	39.063	1.909	39.070	+ 1.83	- 0.02
			2600	2.003	38.849	1.964	39.010	+ 1.99	- 0.41
11/07/2023	20.3	2600H	2500	1.838	39.746	1.855	39.140	- 0.92	+ 1.55
			2550	1.890	39.563	1.909	39.070	- 1.00	+ 1.26
			2600	1.947	39.351	1.964	39.010	- 0.87	+ 0.87
11/03/2023	20.0	2600H	2500	1.900	39.443	1.855	39.140	+ 2.43	+ 0.77
			2550	1.953	39.259	1.909	39.070	+ 2.30	+ 0.48
			2600	2.011	39.044	1.964	39.010	+ 2.39	+ 0.09
11/02/2023	21.2	3500H	3500	2.938	38.715	2.913	37.930	+ 0.86	+ 2.07
			3550	2.976	38.641	2.964	37.870	+ 0.40	+ 2.04
			3650	3.063	38.535	3.066	37.760	- 0.10	+ 2.05
			3700	3.113	38.486	3.118	37.770	- 0.16	+ 1.90
			3900	3.259	38.270	3.233	37.470	+ 0.80	+ 2.14
11/08/2023	20.3	3500H	3500	2.920	38.200	2.913	37.930	+ 0.24	+ 0.71
			3550	2.961	38.119	2.964	37.870	- 0.10	+ 0.66
			3650	3.046	38.016	3.066	37.760	- 0.65	+ 0.68
			3700	3.090	38.000	3.118	37.770	- 0.90	+ 0.61
			3900	3.240	37.700	3.233	37.470	+ 0.22	+ 0.61
11/09/2023	22.4	3500H	3500	2.930	38.300	2.913	37.930	+ 0.58	+ 0.98
			3550	2.963	38.198	2.964	37.870	- 0.03	+ 0.87
			3650	3.049	38.093	3.066	37.760	- 0.55	+ 0.88
			3700	3.100	38.000	3.118	37.770	- 0.58	+ 0.61
			3900	3.240	37.800	3.233	37.470	+ 0.22	+ 0.88
11/08/2023	23.6	5250H	5180	4.470	36.988	4.635	36.010	- 3.56	+ 2.72
			5250	4.602	36.792	4.706	35.930	- 2.21	+ 2.40
			5280	4.649	36.756	4.737	35.894	- 1.86	+ 2.40
			5320	4.705	36.779	4.778	35.846	- 1.53	+ 2.60
11/09/2023	24.0	5600H	5500	4.843	36.700	4.963	35.640	- 2.42	+ 2.97
			5600	4.914	36.464	5.065	35.530	- 2.98	+ 2.63
11/10/2023	23.0	5750H	5750	5.118	36.294	5.219	35.360	- 1.94	+ 2.64
			5800	5.068	36.274	5.270	35.300	- 3.83	+ 2.76
			5825	5.056	36.231	5.296	35.270	- 4.53	+ 2.72



11/08/2023	20.2	5600H 5750H	5500	4.824	35.692	4.963	35.640	- 2.80	+ 0.15
			5600	4.886	35.446	5.065	35.530	- 3.53	- 0.24
			5750	5.091	35.248	5.219	35.360	- 2.45	- 0.32
11/10/2023	20.7	2450H	2400	1.742	40.260	1.756	39.290	- 0.80	+ 2.47
			2450	1.802	40.04	1.800	39.200	+ 0.11	+ 2.14
			2500	1.854	39.869	1.855	39.140	- 0.05	+ 1.86

## 12.2 System Verification

Input Power: 50 mW

Freq.	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR <sub>1g</sub> (SPEAG)	50 mW Measured SAR <sub>1g</sub>	1 W Normalized SAR <sub>1g</sub>	Deviation	Limit
[MHz]					[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
750	10/16/2023	3076	1014	Head	21.0	21.0	8.59	0.414	8.28	- 3.61	± 10
750	10/17/2023	3076		Head	20.3	20.1	8.59	0.403	8.06	- 6.17	± 10
750	10/26/2023	7732		Head	21.3	21.3	8.59	0.415	8.30	- 3.38	± 10
835	10/23/2023	7654	4d165	Head	23.1	23.0	9.74	0.469	9.38	- 3.70	± 10
835	10/18/2023	3076		Head	20.1	20.0	9.74	0.494	9.88	+ 1.44	± 10
835	10/24/2023	7654		Head	23.5	23.4	9.74	0.473	9.46	- 2.87	± 10
835	10/19/2023	7732		Head	21.8	21.6	9.74	0.491	9.82	+ 0.82	± 10
835	10/26/2023	7370		Head	19.8	19.6	9.74	0.477	9.54	- 2.05	± 10
1800	11/08/2023	7680	2d015	Head	22.7	22.6	37.8	1.78	35.6	- 5.82	± 10
1800	10/13/2023	7702		Head	21.3	21.2	37.8	1.95	39.0	+ 3.17	± 10
1800	10/27/2023	7655		Head	20.2	20.0	37.8	1.80	36.0	- 4.76	± 10
1800	10/20/2023	3903		Head	23.5	23.4	37.8	1.78	35.6	- 5.82	± 10
1900	11/14/2023	7680	5d061	Head	23.2	23.2	38.9	2.03	40.6	+ 4.37	± 10
1900	10/11/2023	7702		Head	22.3	22.2	38.9	1.94	38.8	- 0.26	± 10
1900	10/12/2023	7702		Head	21.9	21.8	38.9	1.88	37.6	- 3.34	± 10
1900	10/26/2023	7655		Head	20.1	20.0	38.9	2.02	40.4	+ 3.86	± 10
2 450	11/06/2023	7702	1049	Head	20.6	20.5	52.7	2.81	56.2	+ 6.64	± 10
2 450	11/13/2023	7654		Head	20.6	20.5	52.7	2.66	53.2	+ 0.95	± 10
2 450	11/10/2023	7370		Head	20.7	20.7	52.7	2.60	52.0	- 1.33	± 10
2 600	10/31/2023	3076	1106	Head	20.3	20.1	55.6	2.82	56.4	+ 1.44	± 10
2 600	11/06/2023	7370		Head	20.3	20.3	55.6	2.73	54.6	- 1.80	± 10
2 600	11/07/2023	7370		Head	20.4	20.3	55.6	2.66	53.2	- 4.32	± 10
2 600	11/03/2023	7370		Head	20.1	20.0	55.6	2.61	52.2	- 6.12	± 10
3 500	11/02/2023	7732	1040	Head	21.4	21.2	66.5	3.23	64.6	- 2.86	± 10
3 500	11/08/2023	7751		Head	20.3	20.3	66.5	3.28	65.6	-1.35	± 10
3 500	11/09/2023	7751		Head	22.4	22.4	66.5	3.34	66.8	+ 0.45	± 10
3 700	11/02/2023	7732	1066	Head	21.4	21.2	67.9	3.29	65.8	- 3.09	± 10
3 700	11/08/2023	7751		Head	20.3	20.3	67.9	3.32	66.4	-2.21	± 10
3 700	11/09/2023	7751		Head	22.4	22.4	67.9	3.32	66.4	-2.21	± 10
3 900	11/02/2023	7732	1019	Head	21.4	21.2	69.7	3.30	66.0	- 5.31	± 10
3 900	11/08/2023	7751		Head	20.3	20.3	69.7	3.39	67.8	-2.73	± 10
3 900	11/09/2023	7751		Head	22.4	22.4	69.7	3.39	67.8	-2.73	± 10
5 250	11/08/2023	3797	1317	Head	23.8	23.6	78.8	3.75	75.0	- 4.82	± 10
5 250	11/08/2023	7370		Head	20.3	20.2	78.8	4.08	81.6	+ 3.55	± 10
5 600	11/09/2023	3797		Head	24.1	24.0	81.2	3.80	76.0	- 6.40	± 10
5 750	11/10/2023	3797		Head	23.0	23.0	77.4	3.60	72.0	- 6.98	± 10
5 600	11/08/2023	7370		Head	20.3	20.2	81.2	4.28	85.6	+ 5.42	± 10
5 750	11/08/2023	7370		Head	20.3	20.2	77.4	4.01	80.2	+ 3.62	± 10

**System Verification Results – Phablet SAR**

Input Power: 50 mW

Freq.	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR <sub>10g</sub> (SPEAG)	50 mW Measured SAR <sub>10g</sub>	1 W Normalized SAR <sub>10g</sub>	Deviation	Limit
[MHz]					[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
13	10/23/2023	3076	1016	Head	21.5	21.3	0.353	0.018	0.36	+ 1.98	± 10
5 250	11/08/2023	7370	1317	Head	23.8	23.6	22.6	1.06	21.2	- 6.19	± 10
5 600	11/08/2023	7370		Head	20.3	20.2	23.0	1.22	24.4	+ 6.09	± 10

**12.3 System Verification Procedure**

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

- Cabling the system, using the verification kit equipment.
- 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 SAR Measurement Results

GSM 850 Head SAR											
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.										
836.6	190	GSM	34.0	33.73	0.14	Left Cheek	1:8.3	0.212	1.064	0.226	-
836.6	190	GSM	34.0	33.73	-0.13	Left Tilt	1:8.3	0.146	1.064	0.155	-
836.6	190	GSM	34.0	33.73	-0.16	Right Cheek	1:8.3	0.270	1.064	<b>0.287</b>	A1
836.6	190	GSM	34.0	33.73	-0.15	Right Tilt	1:8.3	0.134	1.064	0.143	-
836.6	190	GPRS 4TX	28.5	28.02	0.12	Left Cheek	1:2.07	0.229	1.117	0.256	-
836.6	190	GPRS 4TX	28.5	28.02	-0.04	Left Tilt	1:2.07	0.110	1.117	0.123	-
836.6	190	GPRS 4TX	28.5	28.02	0.05	Right Cheek	1:2.07	0.241	1.117	0.269	-
836.6	190	GPRS 4TX	28.5	28.02	-0.11	Right Tilt	1:2.07	0.118	1.117	0.132	-
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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.										
1 880	661	GSM	31.0	30.17	0.14	Left Cheek	1:8.3	0.193	1.211	<b>0.234</b>	A2
1 880	661	GSM	31.0	30.17	0.12	Left Tilt	1:8.3	0.097	1.211	0.117	-
1 880	661	GSM	31.0	30.17	-0.05	Right Cheek	1:8.3	0.155	1.211	0.188	-
1 880	661	GSM	31.0	30.17	0.05	Right Tilt	1:8.3	0.084	1.211	0.102	-
1 880	661	GPRS 4TX	26.0	24.97	-0.11	Left Cheek	1:2.07	0.182	1.268	0.231	-
1 880	661	GPRS 4TX	26.0	24.97	0.11	Left Tilt	1:2.07	0.094	1.268	0.119	-
1 880	661	GPRS 4TX	26.0	24.97	-0.07	Right Cheek	1:2.07	0.140	1.268	0.178	-
1 880	661	GPRS 4TX	26.0	24.97	0.12	Right Tilt	1:2.07	0.071	1.268	0.090	-
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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.										
1880	9400	RMC	24.6	23.51	0.16	Left Cheek	1:1	0.301	1.285	<b>0.387</b>	A3
1880	9400	RMC	24.6	23.51	0.05	Left Tilt	1:1	0.241	1.285	0.310	-
1880	9400	RMC	24.6	23.51	0.12	Right Cheek	1:1	0.258	1.285	0.332	-
1880	9400	RMC	24.6	23.51	0.13	Right Tilt	1:1	0.136	1.285	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 4 Head SAR**

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)			(W/kg)		(W/kg)	
1732.4	1412	RMC	24.0	23.84	0.14	Left Cheek	1:1	0.445	1.038	<b>0.462</b>	A4
1732.4	1412	RMC	24.0	23.84	0.11	Left Tilt	1:1	0.298	1.038	0.309	-
1732.4	1412	RMC	24.0	23.84	-0.04	Right Cheek	1:1	0.363	1.038	0.377	-
1732.4	1412	RMC	24.0	23.84	0.07	Right Tilt	1:1	0.212	1.038	0.220	-
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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)			(W/kg)		(W/kg)	
826.4	4132	RMC	25.5	24.43	0.02	Left Cheek	1:1	0.236	1.279	0.302	-
826.4	4132	RMC	25.5	24.43	0.05	Left Tilt	1:1	0.119	1.279	0.152	-
826.4	4132	RMC	25.5	24.43	0.14	Right Cheek	1:1	0.248	1.279	<b>0.317</b>	A5
826.4	4132	RMC	25.5	24.43	0.15	Right Tilt	1:1	0.127	1.279	0.162	-
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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.														
1 860	18700	QPSK	20	24.0	22.97	-0.10	Left Cheek	0	1	49	1:1	0.289	1.268	<b>0.366</b>	A6
1 860	18700	QPSK	20	23.0	22.34	0.04	Left Cheek	1	50	0	1:1	0.217	1.164	0.253	-
1 860	18700	QPSK	20	24.0	22.97	0.02	Left Tilt	0	1	49	1:1	0.178	1.268	0.226	-
1 860	18700	QPSK	20	23.0	22.34	0.15	Left Tilt	1	50	0	1:1	0.138	1.164	0.161	-
1 860	18700	QPSK	20	24.0	22.97	-0.12	Right Cheek	0	1	49	1:1	0.220	1.268	0.279	-
1 860	18700	QPSK	20	23.0	22.34	0.06	Right Cheek	1	50	0	1:1	0.174	1.164	0.203	-
1 860	18700	QPSK	20	24.0	22.97	-0.10	Right Tilt	0	1	49	1:1	0.121	1.268	0.153	-
1 860	18700	QPSK	20	23.0	22.34	-0.14	Right Tilt	1	50	0	1:1	0.085	1.164	0.099	-
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 Upper Ant. Head SAR															
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.														
1860	18700	QPSK	20	17.50	16.40	0.18	Left Cheek	0	1	0	1:1	0.786	1.288	<b>1.012</b>	A7
1880	18900	QPSK	20	17.50	16.26	0.18	Left Cheek	0	1	0	1:1	0.748	1.330	0.995	-
1900	19100	QPSK	20	17.50	16.57	0.09	Left Cheek	0	1	0	1:1	0.767	1.239	0.950	-
1860	18700	QPSK	20	17.50	16.37	0.13	Left Cheek	0	50	25	1:1	0.775	1.297	1.005	-
1880	18900	QPSK	20	17.50	16.24	-0.11	Left Cheek	0	50	49	1:1	0.722	1.337	0.965	-
1900	19100	QPSK	20	17.50	16.55	0.16	Left Cheek	0	50	0	1:1	0.740	1.245	0.921	-
18700	18700	QPSK	20	17.50	16.30	-0.10	Left Cheek	0	100	0	1:1	0.762	1.318	1.004	-
1900	19100	QPSK	20	17.50	16.57	-0.10	Left Tilt	0	1	0	1:1	0.600	1.239	0.743	-
1900	19100	QPSK	20	17.50	16.55	-0.05	Left Tilt	0	50	0	1:1	0.534	1.245	0.665	-
1900	19100	QPSK	20	17.50	16.57	0.11	Right Cheek	0	1	0	1:1	0.473	1.239	0.586	-
1900	19100	QPSK	20	17.50	16.55	0.13	Right Cheek	0	50	0	1:1	0.460	1.245	0.573	-
1900	19100	QPSK	20	17.50	16.57	0.19	Right Tilt	0	1	0	1:1	0.382	1.239	0.473	-
1900	19100	QPSK	20	17.50	16.55	-0.08	Right Tilt	0	50	0	1:1	0.379	1.245	0.472	-
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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.														
707.5	23095	QPSK	10	25.5	23.72	-0.09	Left Cheek	0	1	0	1:1	0.174	1.507	<b>0.262</b>	A8
707.5	23095	QPSK	10	24.5	22.70	0.05	Left Cheek	1	25	0	1:1	0.137	1.514	0.207	-
707.5	23095	QPSK	10	25.5	23.72	-0.04	Left Tilt	0	1	0	1:1	0.083	1.507	0.125	-
707.5	23095	QPSK	10	24.5	22.70	0.02	Left Tilt	1	25	0	1:1	0.064	1.514	0.097	-
707.5	23095	QPSK	10	25.5	23.72	-0.10	Right Cheek	0	1	0	1:1	0.173	1.507	0.261	-
707.5	23095	QPSK	10	24.5	22.70	-0.06	Right Cheek	1	25	0	1:1	0.135	1.514	0.204	-
707.5	23095	QPSK	10	25.5	23.72	0.05	Right Tilt	0	1	0	1:1	0.116	1.507	0.175	-
707.5	23095	QPSK	10	24.5	22.70	-0.11	Right Tilt	1	25	0	1:1	0.087	1.514	0.132	-
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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.														
782	23230	QPSK	10	25.0	23.71	-0.02	Left Cheek	0	1	49	1:1	0.206	1.346	0.277	-
782	23230	QPSK	10	24.0	22.64	0.05	Left Cheek	1	25	24	1:1	0.159	1.368	0.218	-
782	23230	QPSK	10	25.0	23.71	-0.02	Left Tilt	0	1	49	1:1	0.094	1.346	0.127	-
782	23230	QPSK	10	24.0	22.64	0.04	Left Tilt	1	25	24	1:1	0.070	1.368	0.096	-
782	23230	QPSK	10	25.0	23.71	0.04	Right Cheek	0	1	49	1:1	0.236	1.346	<b>0.318</b>	A9
782	23230	QPSK	10	24.0	22.64	-0.06	Right Cheek	1	25	24	1:1	0.185	1.368	0.253	-
782	23230	QPSK	10	25.0	23.71	0.08	Right Tilt	0	1	49	1:1	0.159	1.346	0.214	-
782	23230	QPSK	10	24.0	22.64	0.04	Right Tilt	1	25	24	1:1	0.132	1.368	0.181	-
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	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.														
831.5	26865	QPSK	15	25.5	24.18	0.16	Left Cheek	0	1	36	1:1	0.221	1.355	<b>0.299</b>	A10
831.5	26865	QPSK	15	24.5	23.30	0.02	Left Cheek	1	36	18	1:1	0.172	1.318	0.227	-
831.5	26865	QPSK	15	25.5	24.18	-0.02	Left Tilt	0	1	36	1:1	0.123	1.355	0.167	-
831.5	26865	QPSK	15	24.5	23.30	0.11	Left Tilt	1	36	18	1:1	0.096	1.318	0.127	-
831.5	26865	QPSK	15	25.5	24.18	-0.05	Right Cheek	0	1	36	1:1	0.136	1.355	0.184	-
831.5	26865	QPSK	15	24.5	23.30	0.04	Right Cheek	1	36	18	1:1	0.107	1.318	0.141	-
831.5	26865	QPSK	15	25.5	24.18	0.07	Right Tilt	0	1	36	1:1	0.156	1.355	0.211	-
831.5	26865	QPSK	15	24.5	23.30	-0.08	Right Tilt	1	36	18	1:1	0.117	1.318	0.154	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram							

**LTE TDD Band 41 Head SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.														
2593	40620	QPSK	20	24.0	23.34	0.06	Left Cheek	0	1	49	1:1.58	0.265	1.164	<b>0.308</b>	A11
2549.5	40185	QPSK	20	23.0	22.45	-0.05	Left Cheek	1	50	0	1:1.58	0.213	1.135	0.242	-
2593	40620	QPSK	20	24.0	23.34	-0.14	Left Tilt	0	1	49	1:1.58	0.153	1.164	0.178	-
2549.5	40185	QPSK	20	23.0	22.45	0.05	Left Tilt	1	50	0	1:1.58	0.120	1.135	0.136	-
2593	40620	QPSK	20	24.0	23.34	0.02	Right Cheek	0	1	49	1:1.58	0.166	1.164	0.193	-
2549.5	40185	QPSK	20	23.0	22.45	0.10	Right Cheek	1	50	0	1:1.58	0.155	1.135	0.176	-
2593	40620	QPSK	20	24.0	23.34	-0.04	Right Tilt	0	1	49	1:1.58	0.190	1.164	0.221	-
2549.5	40185	QPSK	20	23.0	22.45	-0.08	Right Tilt	1	50	0	1:1.58	0.155	1.135	0.176	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram							

**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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.														
1745	132322	QPSK	20	24.0	23.18	0.06	Left Cheek	0	1	99	1:1	0.407	1.208	<b>0.492</b>	A12
1720	132072	QPSK	20	23.0	22.41	-0.15	Left Cheek	1	50	0	1:1	0.300	1.146	0.344	-
1745	132322	QPSK	20	24.0	23.18	-0.12	Left Tilt	0	1	99	1:1	0.248	1.208	0.300	-
1720	132072	QPSK	20	23.0	22.41	0.08	Left Tilt	1	50	0	1:1	0.204	1.146	0.234	-
1745	132322	QPSK	20	24.0	23.18	0.11	Right Cheek	0	1	99	1:1	0.298	1.208	0.360	-
1720	132072	QPSK	20	23.0	22.41	0.16	Right Cheek	1	50	0	1:1	0.197	1.146	0.226	-
1745	132322	QPSK	20	24.0	23.18	-0.04	Right Tilt	0	1	99	1:1	0.148	1.208	0.179	-
1720	132072	QPSK	20	23.0	22.41	-0.05	Right Tilt	1	50	0	1:1	0.127	1.146	0.145	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram							

**LTE Band 66 Upper Ant. Head SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.														
1720	132072	QPSK	20	19.5	18.86	0.12	Left Cheek	0	1	0	1:1	0.567	1.159	0.657	-
1720	132072	QPSK	20	19.5	18.84	0.14	Left Cheek	0	50	0	1:1	0.586	1.164	<b>0.682</b>	A13
1720	132072	QPSK	20	19.5	18.86	-0.05	Left Tilt	0	1	0	1:1	0.400	1.159	0.464	-
1720	132072	QPSK	20	19.5	18.84	0.14	Left Tilt	0	50	0	1:1	0.415	1.164	0.483	-
1720	132072	QPSK	20	19.5	18.86	0.11	Right Cheek	0	1	0	1:1	0.345	1.159	0.400	-
1720	132072	QPSK	20	19.5	18.84	0.05	Right Cheek	0	50	0	1:1	0.342	1.164	0.398	-
1720	132072	QPSK	20	19.5	18.86	-0.07	Right Tilt	0	1	0	1:1	0.284	1.159	0.329	-
1720	132072	QPSK	20	19.5	18.84	0.12	Right Tilt	0	50	0	1:1	0.292	1.164	0.340	-
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 Head SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.														
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.39	0.04	Left Cheek	0	1	104	1:1	0.162	1.449	0.235	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.38	0.15	Left Cheek	0	50	28	1:1	0.194	1.452	0.282	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.39	-0.02	Left Tilt	0	1	104	1:1	0.103	1.449	0.149	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.38	0.08	Left Tilt	0	50	28	1:1	0.110	1.452	0.160	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.39	0.15	Right Cheek	0	1	104	1:1	0.208	1.449	0.301	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.38	-0.09	Right Cheek	0	50	28	1:1	0.232	1.452	<b>0.337</b>	A14
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.39	-0.07	Right Tilt	0	1	104	1:1	0.114	1.449	0.165	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.38	0.08	Right Tilt	0	50	28	1:1	0.125	1.452	0.182	-
836.5	167300	CP OFDM QPSK	20	23.5	21.64	-0.14	Right Cheek	1.5	1	1	1:1	0.138	1.535	0.212	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram							

**NR Band n26 Head SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.														
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.44	-0.14	Left Cheek	0	1	104	1:1	0.157	1.432	0.225	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.45	0.12	Left Cheek	0	50	28	1:1	0.160	1.429	0.229	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.44	-0.04	Left Tilt	0	1	104	1:1	0.090	1.432	0.129	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.45	0.11	Left Tilt	0	50	28	1:1	0.093	1.429	0.133	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.44	-0.05	Right Cheek	0	1	104	1:1	0.212	1.432	0.304	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.45	-0.04	Right Cheek	0	50	28	1:1	0.213	1.429	<b>0.304</b>	A15
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.44	-0.16	Right Tilt	0	1	104	1:1	0.124	1.432	0.178	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.45	0.14	Right Tilt	0	50	28	1:1	0.120	1.429	0.171	-
831.5	166300	CP OFDM QPSK	20	23.5	21.83	-0.11	Right Cheek	1.5	1	1	1:1	0.144	1.469	0.212	-
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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.														
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.21	-0.06	Left Cheek	0	1	137	1:1	0.281	1.199	0.337	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.25	0.14	Left Cheek	0	135	69	1:1	0.288	1.189	<b>0.342</b>	A16
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.21	0.01	Left Tilt	0	1	137	1:1	0.128	1.199	0.153	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.25	0.05	Left Tilt	0	135	69	1:1	0.131	1.189	0.156	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.21	-0.11	Right Cheek	0	1	137	1:1	0.227	1.199	0.272	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.25	-0.15	Right Cheek	0	135	69	1:1	0.213	1.189	0.253	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.21	0.16	Right Tilt	0	1	137	1:1	0.234	1.199	0.281	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.25	0.05	Right Tilt	0	135	69	1:1	0.236	1.189	0.281	-
2592.99	518598	CP OFDM QPSK	100	18.0	16.66	-0.04	Left Cheek	0	1	1	1:1	0.238	1.361	0.324	-
NR Band n41 Head SAR Sub1 Ant. SRS 1															
2592.99	518598	CW	100	15.0	13.50	0.00	Left Cheek	0	-	-	1:1	0	1.413	0	-
2592.99	518598	CW	100	15.0	13.50	0.06	Left Tilt	0	-	-	1:1	0.00178	1.413	0.003	-
2592.99	518598	CW	100	15.0	13.50	0.00	Right Cheek	0	-	-	1:1	0	1.413	0	-
2592.99	518598	CW	100	15.0	13.50	0.00	Right Tilt	0	-	-	1:1	0	1.413	0	-
NR Band n41 Head SAR Main 3 Ant. SRS 2															
2592.99	518598	CW	100	16.0	14.97	0.00	Left Cheek	0	-	-	1:1	0	1.268	0	-
2592.99	518598	CW	100	16.0	14.97	0.00	Left Tilt	0	-	-	1:1	0	1.268	0	-
2592.99	518598	CW	100	16.0	14.97	0.00	Right Cheek	0	-	-	1:1	0	1.268	0	-
2592.99	518598	CW	100	16.0	14.97	0.00	Right Tilt	0	-	-	1:1	0	1.268	0	-
NR Band n41 Head SAR Sub5 Ant. SRS 3															
2592.99	518598	CW	100	18.0	17.29	0.09	Left Cheek	0	-	-	1:1	0.013	1.178	0.015	-
2592.99	518598	CW	100	18.0	17.29	-0.01	Left Tilt	0	-	-	1:1	0.00463	1.178	0.005	-
2592.99	518598	CW	100	18.0	17.29	-0.01	Right Cheek	0	-	-	1:1	0.00526	1.178	0.006	-
2592.99	518598	CW	100	18.0	17.29	0.06	Right Tilt	0	-	-	1:1	0.00207	1.178	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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.														
1745	349000	DFT-s OFDM QPSK	40	24.0	22.75	0.01	Left Cheek	0	1	214	1:1	0.373	1.334	<b>0.498</b>	A17
1745	349000	DFT-s OFDM QPSK	40	24.0	22.83	0.04	Left Cheek	0	108	54	1:1	0.360	1.309	0.471	-
1745	349000	DFT-s OFDM QPSK	40	24.0	22.75	0.14	Left Tilt	0	1	214	1:1	0.140	1.334	0.187	-
1745	349000	DFT-s OFDM QPSK	40	24.0	22.83	-0.02	Left Tilt	0	108	54	1:1	0.165	1.309	0.216	-
1745	349000	DFT-s OFDM QPSK	40	24.0	22.75	0.15	Right Cheek	0	1	214	1:1	0.233	1.334	0.311	-
1745	349000	DFT-s OFDM QPSK	40	24.0	22.83	0.14	Right Cheek	0	108	54	1:1	0.283	1.309	0.370	-
1745	349000	DFT-s OFDM QPSK	40	24.0	22.75	-0.05	Right Tilt	0	1	214	1:1	0.102	1.334	0.136	-
1745	349000	DFT-s OFDM QPSK	40	24.0	22.83	-0.11	Right Tilt	0	108	54	1:1	0.112	1.309	0.147	-
1745	349000	CP OFDM QPSK	40	22.5	21.37	-0.08	Right Tilt	1.5	1	1	1:1	0.217	1.297	0.281	-
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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)	(dB)				(W/kg)		
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.22	0.08	Left Cheek	0	1	104	1:1	0.158	1.197	0.189	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.26	-0.05	Left Cheek	0	50	28	1:1	0.146	1.186	0.173	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.22	-0.12	Left Tilt	0	1	104	1:1	0.080	1.197	0.096	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.26	0.04	Left Tilt	0	50	28	1:1	0.062	1.186	0.074	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.22	-0.09	Right Cheek	0	1	104	1:1	0.167	1.197	<b>0.200</b>	A18
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.26	0.12	Right Cheek	0	50	28	1:1	0.161	1.186	0.191	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.22	0.04	Right Tilt	0	1	104	1:1	0.074	1.197	0.089	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.26	-0.07	Right Tilt	0	50	28	1:1	0.066	1.186	0.078	-
680.5	136100	CP OFDM QPSK	20	22.5	21.45	0.14	Right Cheek	1.5	1	1	1:1	0.102	1.274	0.130	-
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	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)	(dB)				(W/kg)		
3930	662000	DFT-s OFDM QPSK	100	18.5	18.07	0.12	Left Cheek	0	1	137	1:1	0.087	1.104	0.096	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.09	-0.05	Left Cheek	0	135	69	1:1	0.083	1.099	0.091	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.07	-0.01	Left Tilt	0	1	137	1:1	0.059	1.104	0.065	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.09	0.08	Left Tilt	0	135	69	1:1	0.064	1.099	0.070	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.07	-0.17	Right Cheek	0	1	137	1:1	0.149	1.104	0.164	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.09	0.15	Right Cheek	0	135	69	1:1	0.137	1.099	0.151	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.07	-0.09	Right Tilt	0	1	137	1:1	0.102	1.104	0.113	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.09	0.04	Right Tilt	0	135	69	1:1	0.106	1.099	0.116	-
3930	662000	CP OFDM QPSK	100	18.5	17.61	-0.12	Right Cheek	0	1	137	1:1	0.102	1.227	0.125	-
3500.01	633334	DFT-s OFDM QPSK	100	18.5	17.39	0.13	Right Cheek	0	135	69	1:1	0.219	1.291	<b>0.283</b>	A19
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram								



**NR Band n78 Head SAR Sub5 Ant. SRS 1**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(Mhz)	(dBm)	(dBm)	(dB)		(dB)	(dB)	(W/kg)		(W/kg)			
3750	650000	CW	100	12.0	11.30	0.01	Left Cheek	0	-	-	1:1	0.172	1.175	0.202	-
3750	650000	CW	100	12.0	11.30	0.14	Left Tilt	0	-	-	1:1	0.208	1.175	<b>0.244</b>	A20
3750	650000	CW	100	12.0	11.30	-0.12	Right Cheek	0	-	-	1:1	0.116	1.175	0.136	-
3750	650000	CW	100	12.0	11.30	0.08	Right Tilt	0	-	-	1:1	0.118	1.175	0.139	-
3500.01	633334	CW	100	12.0	11.91	0.05	Left Tilt	0	-	-	1:1	0.072	1.021	0.074	-

**NR Band n78 Head SAR Main2 Ant. SRS 2**

3750	650000	CW	100	18.0	17.83	0.19	Left Cheek	0	-	-	1:1	0.019	1.040	0.020	-
3750	650000	CW	100	18.0	17.83	-0.11	Left Tilt	0	-	-	1:1	0.006	1.040	0.006	-
3750	650000	CW	100	18.0	17.83	0.07	Right Cheek	0	-	-	1:1	0.006	1.040	0.006	-
3750	650000	CW	100	18.0	17.83	0.05	Right Tilt	0	-	-	1:1	0.002	1.040	0.002	-
3500.01	633334	CW	100	18.0	17.83	-0.13	Left Cheek	0	-	-	1:1	0.133	1.040	0.138	-

**NR Band n78 Head SAR Main3 Ant. SRS 3**

3750	650000	CW	100	13.5	13.31	0.11	Left Cheek	0	-	-	1:1	0.000	1.045	0.000	-
3750	650000	CW	100	13.5	13.31	0.10	Left Tilt	0	-	-	1:1	0.000	1.045	0.000	-
3750	650000	CW	100	13.5	13.31	0.08	Right Cheek	0	-	-	1:1	0.000	1.045	0.000	-
3750	650000	CW	100	13.5	13.31	-0.14	Right Tilt	0	-	-	1:1	0.000	1.045	0.000	-
3500.01	633334	CW	100	13.5	11.58	0.17	Left Tilt	0	-	-	1:1	0.002	1.556	0.003	-

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 - RCV-ON**

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.		(Mhz)	(Mbps)	(dBm)	(dBm)	(dB)				(W/kg)	(W/kg)		(Duty)	(W/kg)	
2 437	6	802.11b	20	1	14.0	13.82	-0.12	Left Cheek	Ant.1	99.5	0.0931	0.034	1.042	1.005	0.036	-
2 437	6	802.11b	20	1	14.0	13.82	0.04	Left Tilt	Ant.1	99.5	0.0932	0.016	1.042	1.005	0.017	-
2 437	6	802.11b	20	1	14.0	13.82	-0.11	Right Cheek	Ant.1	99.5	0.151	0.085	1.042	1.005	<b>0.089</b>	A21
2 437	6	802.11b	20	1	14.0	13.82	0.14	Right Tilt	Ant.1	99.5	0.0797	0.050	1.042	1.005	0.052	-
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 – RCV-ON**

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.		(Mhz)	(Mbps)	(dBm)	(dBm)	(dB)				(W/kg)	(W/kg)		(Duty)	(W/kg)	
5 290	58	802.11ac	80	MCS0	11.0	10.14	0.10	Left Cheek	Ant.1	95.8	0.123	0.055	1.219	1.173	0.079	-
5 290	58	802.11ac	80	MCS0	11.0	10.14	-0.04	Left Tilt	Ant.1	95.8	0.12	0.058	1.219	1.173	0.083	-
5 290	58	802.11ac	80	MCS0	11.0	10.14	-0.15	Right Cheek	Ant.1	95.8	0.133	0.047	1.219	1.173	0.067	-
5 290	58	802.11ac	80	MCS0	11.0	10.14	0.12	Right Tilt	Ant.1	95.8	0.111	0.044	1.219	1.173	0.063	-
5 530	106	802.11ac	80	MCS0	11.0	10.46	0.14	Left Cheek	Ant.1	95.8	0.173	0.054	1.132	1.173	0.072	-
5 530	106	802.11ac	80	MCS0	11.0	10.46	0.08	Left Tilt	Ant.1	95.8	0.183	0.063	1.132	1.173	0.084	-
5 530	106	802.11ac	80	MCS0	11.0	10.46	-0.14	Right Cheek	Ant.1	95.8	0.204	0.079	1.132	1.173	<b>0.105</b>	A22
5 530	106	802.11ac	80	MCS0	11.0	10.46	0.12	Right Tilt	Ant.1	95.8	0.154	0.065	1.132	1.173	0.086	-
5 775	155	802.11ac	80	MCS0	11.0	10.28	-0.01	Left Cheek	Ant.1	95.8	0.191	0.055	1.18	1.173	0.076	-
5 775	155	802.11ac	80	MCS0	11.0	10.28	0.13	Left Tilt	Ant.1	95.8	0.161	0.059	1.18	1.173	0.082	-
5 775	155	802.11ac	80	MCS0	11.0	10.28	-0.07	Right Cheek	Ant.1	95.8	0.19	0.074	1.18	1.173	0.102	-
5 775	155	802.11ac	80	MCS0	11.0	10.28	0.02	Right Tilt	Ant.1	95.8	0.172	0.071	1.18	1.173	0.098	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Head 1.6 W/kg Averaged over 1 gram						

**DSS / DTS 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)	(dBm)	(dB)			(W/kg)		(Duty)	(W/kg)	
2 402	0	Bluetooth DH5	15.0	14.69	0.12	Left Cheek	Ant.1	0.033	1.074	1.010	0.036	-
2 402	0	Bluetooth DH5	15.0	14.69	-0.04	Left Tilt	Ant.1	0.030	1.074	1.010	0.033	-
2 402	0	Bluetooth DH5	15.0	14.69	0.19	Right Cheek	Ant.1	0.118	1.074	1.010	<b>0.128</b>	A23
2 402	0	Bluetooth DH5	15.0	14.69	-0.05	Right Tilt	Ant.1	0.063	1.074	1.010	0.068	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram				

### 13.3 Hotspot/Body SAR Measurement Results

GSM 850 Hotspot/Body SAR												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
836.6	190	GPRS 4TX	28.5	28.14	-0.18	Rear	1:2.07	10	0.714	1.086	<b>0.776</b>	C1
836.6	190	GPRS 4TX	28.5	28.14	0.14	Front	1:2.07	10	0.278	1.086	0.302	-
836.6	190	GPRS 4TX	28.5	28.14	-0.02	Left	1:2.07	10	0.109	1.086	0.118	-
836.6	190	GPRS 4TX	28.5	28.14	0.01	Right	1:2.07	10	0.278	1.086	0.302	-
836.6	190	GPRS 4TX	28.5	28.14	0.12	Bottom	1:2.07	10	0.410	1.086	0.445	-
836.6	190	Voice	30.5	29.96	-0.15	Rear	1:8.3	10	0.328	1.132	0.371	-
836.6	190	Voice	30.5	29.96	-0.07	Front	1:8.3	10	0.135	1.132	0.153	-
836.6	190	GPRS 1TX	30.5	29.97	-0.05	Rear	1:8.3	10	0.297	1.130	0.336	***
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram						

Note: \*\*\* Additional Test for Part2 Test

GSM 1900 Hotspot/Body SAR												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1 880	661	GPRS 4TX	26.0	24.98	0.01	Rear	1:2.07	10	0.371	1.265	<b>0.469</b>	C2
1 880	661	GPRS 4TX	26.0	24.98	0.04	Front	1:2.07	10	0.344	1.265	0.435	-
1 880	661	GPRS 4TX	26.0	24.98	0.12	Left	1:2.07	10	0.132	1.265	0.167	-
1 880	661	GPRS 4TX	26.0	24.98	-0.14	Bottom	1:2.07	10	0.324	1.265	0.410	-
1 880	661	Voice	28.5	27.51	-0.01	Rear	1:8.3	10	0.297	1.256	0.373	-
1 880	661	Voice	28.5	27.51	0.12	Front	1:8.3	10	0.282	1.256	0.354	-
1 880	661	GPRS 1TX	28.5	27.64	-0.12	Rear	1:8.3	10	0.126	1.219	0.154	***
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram						

Note: \*\*\* Additional Test for Part2 Test

UMTS Band 2 Hotspot/Body SAR												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance (mm)	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1 880	9400	RMC	22.6	21.5	-0.14	Rear	1:1	10	0.446	1.288	<b>0.574</b>	C3
1 880	9400	RMC	22.6	21.5	0.05	Front	1:1	10	0.425	1.288	0.547	-
1 880	9400	RMC	22.6	21.5	-0.10	Left	1:1	10	0.193	1.288	0.249	-
1 880	9400	RMC	22.6	21.5	0.04	Bottom	1:1	10	0.410	1.288	0.528	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram						

**UMTS Band 4 Hotspot/Body SAR**

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)						(W/kg)	
1732.4	1412	RMC	21.0	20.83	0.08	Rear	1:1	10	0.423	1.040	<b>0.440</b>	C4
1732.4	1412	RMC	21.0	20.83	-0.12	Front	1:1	10	0.378	1.040	0.393	-
1732.4	1412	RMC	21.0	20.83	0.06	Left	1:1	10	0.214	1.040	0.223	-
1732.4	1412	RMC	21.0	20.83	-0.02	Bottom	1:1	10	0.311	1.040	0.323	-
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/Body SAR**

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)						(W/kg)	
836.6	4183	RMC	24.5	23.38	-0.03	Rear	1:1	10	0.375	1.294	<b>0.485</b>	C5
836.6	4183	RMC	24.5	23.38	0.06	Front	1:1	10	0.324	1.294	0.419	-
836.6	4183	RMC	24.5	23.38	0.07	Left	1:1	10	0.147	1.294	0.190	-
836.6	4183	RMC	24.5	23.38	-0.11	Right	1:1	10	0.250	1.294	0.324	-
836.6	4183	RMC	24.5	23.38	0.10	Bottom	1:1	10	0.360	1.294	0.466	-
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/Body SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(dBm)	(dBm)	(dB)									(dB)	
1 860	18700	QPSK	20	21.0	20.77	0.12	Rear	0	1	49	1:1	10	0.240	1.054	0.253	-
1 860	18700	QPSK	20	21.0	20.78	-0.08	Rear	1	50	0	1:1	10	0.239	1.052	0.251	-
1 860	18700	QPSK	20	21.0	20.77	0.11	Front	0	1	49	1:1	10	0.267	1.054	0.282	-
1 860	18700	QPSK	20	21.0	20.78	-0.15	Front	1	50	0	1:1	10	0.242	1.052	0.255	-
1 860	18700	QPSK	20	21.0	20.77	0.04	Left	0	1	49	1:1	10	0.116	1.054	0.122	-
1 860	18700	QPSK	20	21.0	20.78	0.18	Left	1	50	0	1:1	10	0.171	1.052	0.180	-
1 860	18700	QPSK	20	21.0	20.77	0.10	Bottom	0	1	49	1:1	10	0.284	1.054	<b>0.299</b>	C6
1 860	18700	QPSK	20	21.0	20.78	-0.03	Bottom	1	50	0	1:1	10	0.281	1.052	0.296	-
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 Upper Ant. Hotspot/Body SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
1 900	19100	QPSK	20	17.5	16.57	-0.17	Rear	0	1	0	1:1	10	0.202	1.239	<b>0.250</b>	C7
1 900	19100	QPSK	20	17.5	16.55	0.05	Rear	0	50	0	1:1	10	0.198	1.245	0.247	-
1 900	19100	QPSK	20	17.5	16.57	0.01	Front	0	1	0	1:1	10	0.132	1.239	0.164	-
1 900	19100	QPSK	20	17.5	16.55	0.16	Front	0	50	0	1:1	10	0.132	1.245	0.164	-
1 900	19100	QPSK	20	17.5	16.57	-0.05	Right	0	1	0	1:1	10	0.084	1.239	0.104	-
1 900	19100	QPSK	20	17.5	16.55	-0.18	Right	0	50	0	1:1	10	0.082	1.245	0.102	-
1 900	19100	QPSK	20	17.5	16.57	0.05	Top	0	1	0	1:1	10	0.072	1.239	0.089	-
1 900	19100	QPSK	20	17.5	16.55	-0.07	Top	0	50	0	1:1	10	0.071	1.245	0.088	-
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/Body SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
707.5	23095	QPSK	10	25.5	23.72	-0.09	Rear	0	1	0	1:1	10	0.249	1.507	<b>0.375</b>	C8
707.5	23095	QPSK	10	24.5	22.70	-0.02	Rear	1	25	0	1:1	10	0.199	1.514	0.301	-
707.5	23095	QPSK	10	25.5	23.72	0.04	Front	0	1	0	1:1	10	0.136	1.507	0.205	-
707.5	23095	QPSK	10	24.5	22.70	0.09	Front	1	25	0	1:1	10	0.106	1.514	0.160	-
707.5	23095	QPSK	10	25.5	23.72	0.12	Left	0	1	0	1:1	10	0.074	1.507	0.112	-
707.5	23095	QPSK	10	24.5	22.70	0.10	Left	1	25	0	1:1	10	0.056	1.514	0.085	-
707.5	23095	QPSK	10	25.5	23.72	0.15	Right	0	1	0	1:1	10	0.132	1.507	0.199	-
707.5	23095	QPSK	10	24.5	22.70	0.14	Right	1	25	0	1:1	10	0.104	1.514	0.157	-
707.5	23095	QPSK	10	25.5	23.72	-0.11	Bottom	0	1	0	1:1	10	0.191	1.507	0.288	-
707.5	23095	QPSK	10	24.5	22.70	0.07	Bottom	1	25	0	1:1	10	0.151	1.514	0.229	-
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/Body SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
782	23230	QPSK	10	25.0	23.71	0.15	Rear	0	1	49	1:1	10	0.358	1.346	<b>0.482</b>	C9
782	23230	QPSK	10	24.0	22.64	0.11	Rear	1	25	24	1:1	10	0.286	1.368	0.391	-
782	23230	QPSK	10	25.0	23.71	-0.03	Front	0	1	49	1:1	10	0.212	1.346	0.285	-
782	23230	QPSK	10	24.0	22.64	-0.07	Front	1	25	24	1:1	10	0.168	1.368	0.230	-
782	23230	QPSK	10	25.0	23.71	-0.03	Left	0	1	49	1:1	10	0.107	1.346	0.144	-
782	23230	QPSK	10	24.0	22.64	-0.07	Left	1	25	24	1:1	10	0.079	1.368	0.108	-
782	23230	QPSK	10	25.0	23.71	-0.07	Right	0	1	49	1:1	10	0.186	1.346	0.250	-
782	23230	QPSK	10	24.0	22.64	0.13	Right	1	25	24	1:1	10	0.156	1.368	0.213	-
782	23230	QPSK	10	25.0	23.71	-0.04	Bottom	0	1	49	1:1	10	0.284	1.346	0.382	-
782	23230	QPSK	10	24.0	22.64	0.18	Bottom	1	25	24	1:1	10	0.224	1.368	0.306	-
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/Body 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	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
831.5	26865	QPSK	15	25.5	24.18	0.17	Rear	0	1	36	1:1	10	0.444	1.355	<b>0.602</b>	C10
831.5	26865	QPSK	15	24.5	23.30	0.12	Rear	1	36	18	1:1	10	0.351	1.318	0.463	-
831.5	26865	QPSK	15	25.5	24.18	0.05	Front	0	1	36	1:1	10	0.177	1.355	0.240	-
831.5	26865	QPSK	15	24.5	23.30	-0.11	Front	1	36	18	1:1	10	0.139	1.318	0.183	-
831.5	26865	QPSK	15	25.5	24.18	0.04	Left	0	1	36	1:1	10	0.095	1.355	0.129	-
831.5	26865	QPSK	15	24.5	23.30	0.11	Left	1	36	18	1:1	10	0.075	1.318	0.099	-
831.5	26865	QPSK	15	25.5	24.18	0.13	Right	0	1	36	1:1	10	0.205	1.355	0.278	-
831.5	26865	QPSK	15	24.5	23.30	-0.05	Right	1	36	18	1:1	10	0.163	1.318	0.215	-
831.5	26865	QPSK	15	25.5	24.18	0.06	Bottom	0	1	36	1:1	10	0.349	1.355	0.473	-
831.5	26865	QPSK	15	24.5	23.30	0.11	Bottom	1	36	18	1:1	10	0.279	1.318	0.368	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Body 1.6 W/kg Averaged over 1 gram						

**LTE TDD Band 41 Hotspot/Body 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	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
2593	40620	QPSK	20	24.0	23.34	0.14	Rear	0	1	49	1:1.58	10	0.406	1.164	0.473	-
2549.5	40185	QPSK	20	23.0	22.45	0.05	Rear	1	50	0	1:1.58	10	0.317	1.135	0.360	-
2593	40620	QPSK	20	24.0	23.34	0.13	Front	0	1	49	1:1.58	10	0.506	1.164	<b>0.589</b>	C11
2549.5	40185	QPSK	20	23.0	22.45	0.11	Front	1	50	0	1:1.58	10	0.395	1.135	0.448	-
2593	40620	QPSK	20	24.0	23.34	-0.12	Left	0	1	49	1:1.58	10	0.224	1.164	0.261	-
2549.5	40185	QPSK	20	23.0	22.45	0.17	Left	1	50	0	1:1.58	10	0.201	1.135	0.228	-
2593	40620	QPSK	20	24.0	23.34	0.04	Bottom	0	1	49	1:1.58	10	0.386	1.164	0.449	-
2549.5	40185	QPSK	20	23.0	22.45	0.12	Bottom	1	50	0	1:1.58	10	0.357	1.135	0.405	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Body 1.6 W/kg Averaged over 1 gram						

**LTE Band 66 Hotspot/Body 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	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
1745	132322	QPSK	20	20.5	20.14	-0.12	Rear	0	1	0	1:1	10	0.264	1.086	0.287	-
1720	132072	QPSK	20	20.5	20.06	0.04	Rear	0	50	25	1:1	10	0.268	1.107	0.297	-
1745	132322	QPSK	20	20.5	20.14	0.11	Front	0	1	0	1:1	10	0.290	1.086	0.315	-
1720	132072	QPSK	20	20.5	20.06	-0.17	Front	0	50	25	1:1	10	0.282	1.107	0.312	-
1745	132322	QPSK	20	20.5	20.14	0.05	Left	0	1	0	1:1	10	0.197	1.086	0.214	-
1720	132072	QPSK	20	20.5	20.06	-0.11	Left	0	50	25	1:1	10	0.154	1.107	0.170	-
1745	132322	QPSK	20	20.5	20.14	0.03	Bottom	0	1	0	1:1	10	0.337	1.086	<b>0.366</b>	C12
1720	132072	QPSK	20	20.5	20.06	0.05	Bottom	0	50	25	1:1	10	0.302	1.107	0.334	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Body 1.6 W/kg Averaged over 1 gram						

LTE Band 66 Upper Ant. Hotspot/Body SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
1720	132072	QPSK	20	19.5	18.86	0.06	Rear	0	1	0	1:1	10	0.204	1.159	0.236	-
1720	132072	QPSK	20	19.5	18.84	0.01	Rear	0	50	0	1:1	10	0.207	1.164	<b>0.241</b>	C13
1720	132072	QPSK	20	19.5	18.86	-0.12	Front	0	1	0	1:1	10	0.108	1.159	0.125	-
1720	132072	QPSK	20	19.5	18.84	0.18	Front	0	50	0	1:1	10	0.112	1.164	0.130	-
1720	132072	QPSK	20	19.5	18.86	-0.14	Right	0	1	0	1:1	10	0.085	1.159	0.099	-
1720	132072	QPSK	20	19.5	18.84	0.08	Right	0	50	0	1:1	10	0.087	1.164	0.101	-
1720	132072	QPSK	20	19.5	18.86	0.01	Top	0	1	0	1:1	10	0.082	1.159	0.095	-
1720	132072	QPSK	20	19.5	18.84	0.11	Top	0	50	0	1:1	10	0.075	1.164	0.087	-
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 Hotspot/Body SAR																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.39	0.05	Rear	0	1	104	1:1	10	0.413	1.449	0.598	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.38	0.02	Rear	0	50	28	1:1	10	0.420	1.452	<b>0.610</b>	C14
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.39	0.12	Front	0	1	104	1:1	10	0.162	1.449	0.235	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.38	0.13	Front	0	50	28	1:1	10	0.172	1.452	0.250	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.39	0.09	Left	0	1	104	1:1	10	0.095	1.449	0.138	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.38	-0.19	Left	0	50	28	1:1	10	0.115	1.452	0.167	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.39	0.01	Right	0	1	104	1:1	10	0.185	1.449	0.268	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.38	0.04	Right	0	50	28	1:1	10	0.223	1.452	0.324	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.39	-0.05	Bottom	0	1	104	1:1	10	0.300	1.449	0.435	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.38	0.09	Bottom	0	50	28	1:1	10	0.313	1.452	0.454	-
836.5	167300	CP OFDM QPSK	20	23.5	21.64	0.12	Rear	1.5	1	1	1:1	10	0.270	1.535	0.414	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram								



**NR Band n26 Hotspot/Body SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.44	-0.18	Rear	0	1	104	1:1	10	0.424	1.432	0.607	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.45	0.06	Rear	0	50	28	1:1	10	0.462	1.429	<b>0.660</b>	C15
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.44	0.12	Front	0	1	104	1:1	10	0.179	1.432	0.256	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.45	0.05	Front	0	50	28	1:1	10	0.181	1.429	0.259	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.44	-0.04	Left	0	1	104	1:1	10	0.096	1.432	0.137	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.45	0.06	Left	0	50	28	1:1	10	0.105	1.429	0.150	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.44	0.12	Right	0	1	104	1:1	10	0.181	1.432	0.259	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.45	0.11	Right	0	50	28	1:1	10	0.179	1.429	0.256	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.44	-0.15	Bottom	0	1	104	1:1	10	0.306	1.432	0.438	-
831.5	166300	DFT-s OFDM QPSK	20	25.0	23.45	0.14	Bottom	0	50	28	1:1	10	0.302	1.429	0.432	-
831.5	166300	CP OFDM QPSK	20	23.5	21.83	0.08	Rear	1.5	1	1	1:1	10	0.311	1.469	0.457	-
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/Body SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.															
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.21	0.12	Rear	0	1	137	1:1	10	0.116	1.199	0.139	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.25	0.13	Rear	0	135	69	1:1	10	0.117	1.189	0.139	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.21	-0.09	Front	0	1	137	1:1	10	0.193	1.199	0.231	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.25	0.05	Front	0	135	69	1:1	10	0.195	1.189	0.232	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.21	-0.04	Left	0	1	137	1:1	10	0.065	1.199	0.078	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.25	0.05	Left	0	135	69	1:1	10	0.065	1.189	0.077	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.21	0.11	Bottom	0	1	137	1:1	10	0.138	1.199	0.165	-
2592.99	518598	DFT-s OFDM QPSK	100	18.0	17.25	0.10	Bottom	0	135	69	1:1	10	0.142	1.189	0.169	-
2592.99	518598	CP OFDM QPSK	100	18.0	16.66	0.16	Front	0	1	1	1:1	10	0.233	1.361	0.317	-
<b>NR Band n41 Hotspot/Body SAR Sub1 Ant. SRS 1</b>																
2592.99	518598	CW	100	15.0	13.50	0.00	Rear	0	-	-	1:1	10	0.00308	1.413	0.004	-
2592.99	518598	CW	100	15.0	13.50	0.00	Front	0	-	-	1:1	10	0.00212	1.413	0.003	-
2592.99	518598	CW	100	15.0	13.50	0.01	Right	0	-	-	1:1	10	0.000127	1.413	0.000	-
2592.99	518598	CW	100	15.0	13.50	0.01	Top	0	-	-	1:1	10	0.0000457	1.413	0.000	-
<b>NR Band n41 Hotspot/Body SAR Sub3 Ant. SRS 2</b>																
2592.99	518598	CW	100	16.0	14.97	-0.09	Rear	0	-	-	1:1	10	0.192	1.268	0.243	-
2592.99	518598	CW	100	16.0	14.97	0.00	Front	0	-	-	1:1	10	0	1.268	0.000	-
2592.99	518598	CW	100	16.0	14.97	0.00	Right	0	-	-	1:1	10	0	1.268	0.000	-
2592.99	518598	CW	100	16.0	14.97	0.00	Bottom	0	-	-	1:1	10	0.00445	1.268	0.006	-
<b>NR Band n41 Hotspot/Body SAR Sub5 Ant. SRS 3</b>																
2592.99	518598	CW	100	18.0	17.29	0.18	Rear	0	-	-	1:1	10	0.366	1.178	<b>0.431</b>	C16
2592.99	518598	CW	100	18.0	17.29	-0.06	Front	0	-	-	1:1	10	0.085	1.178	0.100	-
2592.99	518598	CW	100	18.0	17.29	0.04	Right	0	-	-	1:1	10	0.329	1.178	0.388	-
2592.99	518598	CW	100	18.0	17.29	-0.05	Top	0	-	-	1:1	10	0.067	1.178	0.079	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram									

**NR Band n66 Hotspot/Body SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)	(dB)	(mm)		(W/kg)	(W/kg)			
1745	349000	DFT-s OFDM QPSK	40	21.5	20.98	0.12	Rear	0	1	1	1:1	10	0.389	1.127	0.438	-
1745	349000	DFT-s OFDM QPSK	40	21.5	21.06	-0.14	Rear	0	108	0	1:1	10	0.376	1.107	0.416	-
1745	349000	DFT-s OFDM QPSK	40	21.5	20.98	0.05	Front	0	1	1	1:1	10	0.484	1.127	0.545	-
1745	349000	DFT-s OFDM QPSK	40	21.5	21.06	0.10	Front	0	108	0	1:1	10	0.482	1.107	0.534	-
1745	349000	DFT-s OFDM QPSK	40	21.5	20.98	0.04	Left	0	1	1	1:1	10	0.249	1.127	0.281	-
1745	349000	DFT-s OFDM QPSK	40	21.5	21.06	0.12	Left	0	108	0	1:1	10	0.250	1.107	0.277	-
1745	349000	DFT-s OFDM QPSK	40	21.5	20.98	-0.08	Bottom	0	1	1	1:1	10	0.322	1.127	0.363	-
1745	349000	DFT-s OFDM QPSK	40	21.5	21.06	0.10	Bottom	0	108	0	1:1	10	0.326	1.107	0.361	-
1745	349000	CP OFDM QPSK	40	21.5	20.93	0.03	Front	0	1	1	1:1	10	0.492	1.140	<b>0.561</b>	C17

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/Body SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)	(dB)	(mm)		(W/kg)	(W/kg)			
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.22	0.06	Rear	0	1	104	1:1	10	0.213	1.197	0.255	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.26	0.00	Rear	0	50	28	1:1	10	0.241	1.186	<b>0.286</b>	C18
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.22	0.19	Front	0	1	104	1:1	10	0.164	1.197	0.196	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.26	-0.11	Front	0	50	28	1:1	10	0.187	1.186	0.222	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.22	0.05	Left	0	1	104	1:1	10	0.096	1.197	0.115	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.26	0.07	Left	0	50	28	1:1	10	0.103	1.186	0.122	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.22	-0.18	Right	0	1	104	1:1	10	0.175	1.197	0.209	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.26	0.10	Right	0	50	28	1:1	10	0.200	1.186	0.237	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.22	0.06	Bottom	0	1	104	1:1	10	0.124	1.197	0.148	-
680.5	136100	DFT-s OFDM QPSK	20	24.0	23.26	0.09	Bottom	0	50	28	1:1	10	0.124	1.186	0.147	-
680.5	136100	CP OFDM QPSK	20	22.5	21.45	0.12	Rear	1.5	1	104	1:1	10	0.149	1.274	0.190	-

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/Body SAR**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.		(MHz)	(dBm)	(dBm)	(dB)										
3930	662000	DFT-s OFDM QPSK	100	18.5	18.07	0.10	Rear	0	1	137	1:1	10	0.057	1.104	0.063	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.09	0.12	Rear	0	135	69	1:1	10	0.056	1.099	0.062	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.07	-0.10	Front	0	1	137	1:1	10	0.044	1.104	0.049	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.09	0.05	Front	0	135	69	1:1	10	0.044	1.099	0.048	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.07	0.04	Left	0	1	137	1:1	10	0.059	1.104	0.065	-
3930	662000	DFT-s OFDM QPSK	100	18.5	18.09	-0.07	Left	0	135	69	1:1	10	0.061	1.099	0.067	-
3930	662000	CP OFDM QPSK	100	18.5	17.61	0.09	Left	0	1	1	1:1	10	0.038	1.227	0.047	-
3500.01	633334	DFT-s OFDM QPSK	100	18.5	17.51	-0.10	Left	0	135	69	1:1	10	0.068	1.256	<b>0.085</b>	C19
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram								

**NR Band n78 Hotspot/Body SAR Sub5 Ant. SRS 1**

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR (dB)	RB Size	RB Offset	Duty Cycle	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.		(MHz)	(dBm)	(dBm)	(dB)									
3750	650000	CW	100	12.0	11.30	0.04	Rear	0	-	-	1:1	0.084	1.175	0.099	-
3750	650000	CW	100	12.0	11.30	-0.01	Front	0	-	-	1:1	0.035	1.175	0.041	-
3750	650000	CW	100	12.0	11.30	0.12	Right	0	-	-	1:1	0.080	1.175	0.094	-
3750	650000	CW	100	12.0	11.30	-0.17	Top	0	-	-	1:1	0.084	1.175	0.099	-
3500.01	633334	CW	100	12.0	11.30	0.15	Rear	0	-	-	1:1	0.099	1.021	0.101	-

**NR Band n78 Hotspot/Body SAR Main2 Ant. SRS 2**

3750	650000	CW	100	18.0	17.83	-0.01	Rear	0	-	-	1:1	0.287	1.040	<b>0.298</b>	C20
3750	650000	CW	100	18.0	17.83	0.11	Front	0	-	-	1:1	0.133	1.040	0.138	-
3750	650000	CW	100	18.0	17.83	0.14	Left	0	-	-	1:1	0.070	1.040	0.073	-
3750	650000	CW	100	18.0	17.83	-0.05	Bottom	0	-	-	1:1	0.106	1.040	0.110	-
3500.01	633334	CW	100	18.0	17.83	0.02	Rear	0	-	-	1:1	0.212	1.040	0.220	-

**NR Band n78 Hotspot/Body SAR Main3 Ant. SRS 3**

3750	650000	CW	100	13.5	13.31	0.01	Rear	0	-	-	1:1	0.029	1.045	0.030	-
3750	650000	CW	100	13.5	13.31	0.11	Front	0	-	-	1:1	0.000	1.045	0.000	-
3750	650000	CW	100	13.5	13.31	0.10	Right	0	-	-	1:1	0.000	1.045	0.000	-
3750	650000	CW	100	13.5	13.31	-0.17	Bottom	0	-	-	1:1	0.005	1.045	0.005	-
3500.01	633334	CW	100	13.5	11.58	0.12	Rear	0	-	-	1:1	0.000	1.556	0.000	-

ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population	Head 1.6 W/kg Averaged over 1 gram
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**DTS Hotspot/Body 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	Reported SAR	Plot No.
Mhz	Ch.		(Mhz)	(Mbps)	(dBm)	(dBm)	(dB)										
2 437	6	802.11b	20	1	18.0	17.65	-0.16	Rear	Ant. 1	99.5	10	1.77	1.06	1.084	1.005	<b>1.155</b>	C21
2 437	6	802.11b	20	1	18.0	17.65	0.12	Front	Ant. 1	99.5	10	0.0933	0.061	1.084	1.005	0.066	-
2 437	6	802.11b	20	1	18.0	17.65	-0.08	Left	Ant. 1	99.5	10	0.245	0.157	1.084	1.005	0.171	-
2 437	6	802.11b	20	1	18.0	17.65	0.10	Top	Ant. 1	99.5	10	0.103	0.067	1.084	1.005	0.073	-
2 412	1	802.11b	20	1	18.0	16.90	0.10	Rear	Ant. 1	99.5	10	1.58	0.881	1.288	1.005	1.140	-
2 437	6	802.11b	20	1	18.0	17.65	0.10	Rear	Ant. 1	99.5	10	1.74	0.996	1.084	1.005	1.085	*
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Body 1.6 W/kg Averaged over 1 gram					

**5 GHz WLAN Hotspot/Body 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	Reported SAR	Plot No.
Mhz	Ch.		(Mhz)	(Mbps)	(dBm)	(dBm)	(dB)										
5 745	149	802.11a	20	6	14.0	13.05	0.12	Rear	Ant. 1	96.9	10	1.57	0.734	1.245	1.032	0.943	-
5 785	157	802.11a	20	6	14.0	12.71	0.15	Rear	Ant. 1	96.9	10	1.84	0.770	1.346	1.032	1.070	-
5 745	149	802.11a	20	6	14.0	13.05	0.05	Front	Ant. 1	96.9	10	0.126	0.038	1.245	1.032	0.049	-
5 745	149	802.11a	20	6	14.0	13.05	-0.14	Left	Ant. 1	96.9	10	0.415	0.175	1.245	1.032	0.225	-
5 745	149	802.11a	20	6	14.0	13.05	0.18	Top	Ant. 1	96.9	10	0.287	0.119	1.245	1.032	0.153	-
5 300	60	802.11a	20	6	16.0	15.52	0.15	Rear	Ant. 1	96.9	10	2.16	0.944	1.117	1.032	1.088	-
5 320	64	802.11a	20	6	16.0	15.41	-0.11	Rear	Ant. 1	96.9	10	2.18	0.944	1.146	1.032	<b>1.116</b>	C22
5 300	60	802.11a	20	6	16.0	15.52	-0.08	Front	Ant. 1	96.9	10	0.15	0.045	1.117	1.032	0.052	-
5 300	60	802.11a	20	6	16.0	15.52	0.02	Rear	Ant. 1	96.9	10	2.09	0.913	1.117	1.032	1.052	*
5 580	116	802.11a	20	6	13.0	12.95	-0.05	Rear	Ant. 1	96.9	10	2.00	0.805	1.012	1.032	0.841	-
5 500	100	802.11a	20	6	13.0	12.33	0.18	Rear	Ant. 1	96.9	10	1.41	0.580	1.167	1.032	0.699	-
5 580	116	802.11a	20	6	13.0	12.95	0.10	Front	Ant. 1	96.9	10	0.124	0.035	1.012	1.032	0.037	-
5 580	116	802.11a	20	6	13.0	12.95	0.11	Rear	Ant. 1	96.9	10	1.93	0.806	1.012	1.032	0.842	-
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.



**DSS / DTS Tethering SAR**

Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant Config.	Distance	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dBm)	(dBm)	(dB)			(mm)	(W/kg)		(Duty)	(W/kg)	
2 402	0	Bluetooth DH5	15.0	14.69	-0.12	Rear	Ant.1	10	0.255	1.074	1.010	<b>0.277</b>	C23
2 402	0	Bluetooth DH5	15.0	14.69	-0.12	Front	Ant.1	10	0.022	1.074	1.010	0.024	-
2 402	0	Bluetooth DH5	15.0	14.69	0.05	Left	Ant.1	10	0.069	1.074	1.010	0.075	-
2 402	0	Bluetooth DH5	15.0	14.69	-0.18	Top	Ant.1	10	0.032	1.074	1.010	0.035	-
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

#### 5 GHz WLAN Phablet SAR \_10g

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	Scaled SAR	Plot No.
Mhz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)				(mm)	(W/kg)	(W/kg)		(Duty)	(W/kg)	
5 300	60	802.11a	20	6	16.0	15.52	-0.10	Rear	Ant.1	96.9	0	13.8	1.14	1.117	1.032	<b>1.314</b>	C24
5 300	60	802.11a	20	6	16.0	15.52	0.05	Front	Ant.1	96.9	0	0.71	0.101	1.117	1.032	0.116	-
5 300	60	802.11a	20	6	16.0	15.52	0.14	Left	Ant.1	96.9	0	1.46	0.196	1.117	1.032	0.226	-
5 300	60	802.11a	20	6	16.0	15.52	-0.18	Top	Ant.1	96.9	0	0.725	0.127	1.117	1.032	0.146	-
5 580	116	802.11a	20	6	13.0	12.95	-0.05	Rear	Ant.1	96.9	0	13.9	0.872	1.012	1.032	0.911	-
5 580	116	802.11a	20	6	13.0	12.95	0.12	Front	Ant.1	96.9	0	0.454	0.074	1.012	1.032	0.077	-
5 580	116	802.11a	20	6	13.0	12.95	0.17	Left	Ant.1	96.9	0	1.46	0.172	1.012	1.032	0.180	-
5 580	116	802.11a	20	6	13.0	12.95	-0.15	Top	Ant.1	96.9	0	0.388	0.166	1.012	1.032	0.173	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population											Hand 4.0 W/kg Averaged over 10 gram						

#### NFC Phablet SAR \_10g

Frequency		Mode	Data Rate	Power Drift	Test Position	Distance	Meas. SAR	Plot No.
Mhz	(Kbps)		(dB)	(mm)		(W/kg)		
13.56	NFC (Type A)	106	0.12	Rear	0	0	-	
13.56	NFC (Type B)	106	0.02	Rear	0	<b>0.038</b>	C25	
13.56	NFC (Type F)	106	-0.18	Rear	0	0	-	
13.56	NFC (Type B)	106	0.09	Front	0	0	-	
13.56	NFC (Type B)	106	0.15	Left	0	0		
13.56	NFC (Type B)	106	0.14	Right	0	0		
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 10 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.
7. Per FCC KDB 648474 D04v01r03, SAR was evaluated without a headset connected to the device. Since the standalone reported SAR was 1.2 W/kg, no additional SAR evaluation using a headset cable were required.
8. Per KDB 648474 D04v01r03, this device is considered a "Phablet" since the diagonal dimension is > 160 mm and < 200 mm. When hotspot mode applies, extremity SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (with tolerance) is 1 g SAR > 1.2 W/kg.
9. Per FCC KDB 865664 D01v01r04, variability SAR measurement were performed when the measured SAR results for a frequency Band were greater than or equal to 0.8 W/kg for 1g SAR and >2 for 10g SAR Please see Section 15 for variability analysis.
10. This device utilizes power reduction for some wireless mode and technologies, as outlined in sec. 4 The maximum output power allowed for each transmitter and exposure condition was evaluated for SAR compliance based on expected use conditions and simultaneous scenarios.
11. During SAR testing for the Hotspot conditions per KDB 941225 D06v02r01, the actual portable hotspotoperation (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. 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 Sub Ant2 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. This device supports SA and NSA mode for NR implementation. In EN-DC Mode, NR operate with the LTE Bands shown in the NR FR1 checklist acting as anchor Bands.
2. 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 was evaluated for SAR tests.
5. For final implementation, NR Band n41, n77 slot configuration is synchronized using maximum duty cycle of 100%. SAR testing was performed using FTM(Factory Test Mode) with 100% duty cycle applied to match final duty cycle.

**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  $\leq 0.4$  W/kg for 1g SAR and  $\leq 1.0$  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  $\leq 0.8$  W/kg for 1g SAR and  $\leq 2.0$  W/kg for 10g SAR or all test position are measured.
2. Per KDB 248227 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 248227 D01v02r02 justification for test configurations of 5 GHz WiFi Single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission mode was not investigated since the highest reported SAR for initial test configuration adjusted by the ration of maximum output powers is less than 1.2 W/kg for 1g SAR and less than 3.0 W/kg for 10 g SAR.
4. When the maximum reported 1g averaged SAR is  $\leq 0.8$  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  $\leq 1.20$  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 Bluetooth [BDR] 77.0% transmission duty factor to determine compliance. Please see sec.11.6 for the time-domain plot and calculation for duty factor of the device
2. Head and Bluetooth tethering SAR were evaluated for tethering applications.



## 14. Simultaneous SAR Analysis

This device is containing 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 a physical test configuration is  $\leq 1.6W/kg$  for 1g SAR and  $\leq 4 W/kg$  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.

In 5G NR + LTE + WLAN + BT simultaneous transmission, 5G NR, LTE transmission are managed and controlled by MediaTek WWAN TA-SAR.

$$x * LTE + y * 5G NR + WLAN + BT \leq 1.6$$

Where, for a total of 100% exposure margin, LTE uses x, then the exposure margin left for 5G NR is capped to y.

$$x * LTE + y * 5G NR \leq x * \text{Max}(LTE, 5G NR) + y * \text{Max}(LTE, 5G NR) \leq \text{Max}(LTE, 5G NR)$$

$$x * LTE + y * 5G NR + WLAN + BT \leq \text{Max}(LTE, 5G NR) + WLAN + BT \leq 1.6$$

If  $LTE + WLAN + BT \leq 1.6$  and  $5G NR + WLAN + BT \leq 1.6$  can be proven, then  $x * LTE + y * 5G NR + WLAN + BT \leq 1.6$ .

Therefore, simultaneous transmission analysis for 5G NR + LTE + WLAN + BT can be performed in two steps

Step 1: Prove SAR Limit of  $LTE + WLAN + BT < 1.6$

Step 2: Prove SAR Limit of  $5G NR + WLAN + BT < 1.6$

$x * LTE + y * 5G NR \leq 1.6$  analysis is covered in Part 2 report. and analysis is also applied to LTE/NR inter inter-band uplink,  $LTE(NR)1 + LTE(NR)2 + WLAN + BT$  simultaneous transmission, so inter-band uplink CA no need to do additional simultaneously analysis again.

### 14.1 Head SAR Simultaneous Transmission Analysis.

Simultaneous Transmission Summation Scenario (Head SAR)											
Band		Main SAR	2.4 GHz WLAN SAR	5 GHz WLAN SAR	Bluetooth	$\Sigma$ 1-g SAR	$\Sigma$ 1-g SAR	$\Sigma$ 1-g SAR	$\Sigma$ 1-g SAR	SPLSR	
		(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
		1	2	3	4	1+2	1+3	1+4	1+3+4		
GSM 850	Left Touch	0.256	0.036	0.079	0.036	0.292	0.335	0.292	0.371	No	
	Left Tilt	0.155	0.017	0.084	0.033	0.172	0.239	0.188	0.272	No	
	Right Touch	0.287	0.089	0.105	0.128	0.376	0.392	0.415	0.520	No	
	Right Tilt	0.143	0.052	0.098	0.068	0.195	0.241	0.211	0.309	No	
GSM 1900	Left Touch	0.234	0.036	0.079	0.036	0.270	0.313	0.270	0.349	No	
	Left Tilt	0.119	0.017	0.084	0.033	0.136	0.203	0.152	0.236	No	
	Right Touch	0.188	0.089	0.105	0.128	0.277	0.293	0.316	0.421	No	
	Right Tilt	0.102	0.052	0.098	0.068	0.154	0.200	0.170	0.268	No	
UMTS Band 2	Left Touch	0.387	0.036	0.079	0.036	0.423	0.466	0.423	0.502	No	
	Left Tilt	0.310	0.017	0.084	0.033	0.327	0.394	0.343	0.427	No	
	Right Touch	0.332	0.089	0.105	0.128	0.421	0.437	0.460	0.565	No	
	Right Tilt	0.175	0.052	0.098	0.068	0.227	0.273	0.243	0.341	No	
UMTS Band 4	Left Touch	0.462	0.036	0.079	0.036	0.498	0.541	0.498	0.577	No	
	Left Tilt	0.309	0.017	0.084	0.033	0.326	0.393	0.342	0.426	No	
	Right Touch	0.377	0.089	0.105	0.128	0.466	0.482	0.505	0.610	No	
	Right Tilt	0.220	0.052	0.098	0.068	0.272	0.318	0.288	0.386	No	



Simultaneous Transmission Summation Scenario (Head SAR)										
Band		Main SAR	2.4 GHz WLAN SAR	5 GHz WLAN SAR	Bluetooth	$\Sigma$ 1-g SAR	$\Sigma$ 1-g SAR	$\Sigma$ 1-g SAR	$\Sigma$ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
		1	2	3	4	1+2	1+3	1+4	1+3+4	
UMTS Band 5	Left Touch	0.302	0.036	0.079	0.036	0.338	0.381	0.338	0.417	No
	Left Tilt	0.152	0.017	0.084	0.033	0.169	0.236	0.185	0.269	No
	Right Touch	0.317	0.089	0.105	0.128	0.406	0.422	0.445	0.550	No
	Right Tilt	0.162	0.052	0.098	0.068	0.214	0.260	0.230	0.328	No
LTE Band 2 Lower	Left Touch	0.366	0.036	0.079	0.036	0.402	0.445	0.402	0.481	No
	Left Tilt	0.226	0.017	0.084	0.033	0.243	0.310	0.259	0.343	No
	Right Touch	0.279	0.089	0.105	0.128	0.368	0.384	0.407	0.512	No
	Right Tilt	0.153	0.052	0.098	0.068	0.205	0.251	0.221	0.319	No
LTE Band 2 Upper	Left Touch	1.012	0.036	0.079	0.036	1.048	1.091	1.048	1.127	No
	Left Tilt	0.743	0.017	0.084	0.033	0.760	0.827	0.776	0.860	No
	Right Touch	0.586	0.089	0.105	0.128	0.675	0.691	0.714	0.819	No
	Right Tilt	0.473	0.052	0.098	0.068	0.525	0.571	0.541	0.639	No
LTE Band 12	Left Touch	0.262	0.036	0.079	0.036	0.298	0.341	0.298	0.377	No
	Left Tilt	0.125	0.017	0.084	0.033	0.142	0.209	0.158	0.242	No
	Right Touch	0.261	0.089	0.105	0.128	0.350	0.366	0.389	0.494	No
	Right Tilt	0.175	0.052	0.098	0.068	0.227	0.273	0.243	0.341	No
LTE Band 13	Left Touch	0.277	0.036	0.079	0.036	0.313	0.356	0.313	0.392	No
	Left Tilt	0.127	0.017	0.084	0.033	0.144	0.211	0.160	0.244	No
	Right Touch	0.318	0.089	0.105	0.128	0.407	0.423	0.446	0.551	No
	Right Tilt	0.214	0.052	0.098	0.068	0.266	0.312	0.282	0.380	No
LTE Band 26	Left Touch	0.299	0.036	0.079	0.036	0.335	0.378	0.335	0.414	No
	Left Tilt	0.167	0.017	0.084	0.033	0.184	0.251	0.200	0.284	No
	Right Touch	0.184	0.089	0.105	0.128	0.273	0.289	0.312	0.417	No
	Right Tilt	0.211	0.052	0.098	0.068	0.263	0.309	0.279	0.377	No
LTE Band 41	Left Touch	0.308	0.036	0.079	0.036	0.344	0.387	0.344	0.423	No
	Left Tilt	0.178	0.017	0.084	0.033	0.195	0.262	0.211	0.295	No
	Right Touch	0.193	0.089	0.105	0.128	0.282	0.298	0.321	0.426	No
	Right Tilt	0.221	0.052	0.098	0.068	0.273	0.319	0.289	0.387	No
LTE Band 66 Lower	Left Touch	0.492	0.036	0.079	0.036	0.528	0.571	0.528	0.607	No
	Left Tilt	0.300	0.017	0.084	0.033	0.317	0.384	0.333	0.417	No
	Right Touch	0.360	0.089	0.105	0.128	0.449	0.465	0.488	0.593	No
	Right Tilt	0.179	0.052	0.098	0.068	0.231	0.277	0.247	0.345	No
LTE Band 66 Upper	Left Touch	0.682	0.036	0.079	0.036	0.718	0.761	0.718	0.797	No
	Left Tilt	0.483	0.017	0.084	0.033	0.500	0.567	0.516	0.600	No
	Right Touch	0.400	0.089	0.105	0.128	0.489	0.505	0.528	0.633	No
	Right Tilt	0.340	0.052	0.098	0.068	0.392	0.438	0.408	0.506	No
NR Band n5	Left Touch	0.282	0.036	0.079	0.036	0.318	0.361	0.318	0.397	No
	Left Tilt	0.160	0.017	0.084	0.033	0.177	0.244	0.193	0.277	No
	Right Touch	0.337	0.089	0.105	0.128	0.426	0.442	0.465	0.570	No
	Right Tilt	0.182	0.052	0.098	0.068	0.234	0.280	0.250	0.348	No
NR Band n26	Left Touch	0.229	0.036	0.079	0.036	0.265	0.308	0.265	0.344	No
	Left Tilt	0.133	0.017	0.084	0.033	0.150	0.217	0.166	0.250	No
	Right Touch	0.304	0.089	0.105	0.128	0.393	0.409	0.432	0.537	No
	Right Tilt	0.178	0.052	0.098	0.068	0.230	0.276	0.246	0.344	No

Simultaneous Transmission Summation Scenario (Head SAR)											
Band		Main SAR	2.4 GHz WLAN SAR	5 GHz WLAN SAR	Bluetooth	$\Sigma$ 1-g SAR	$\Sigma$ 1-g SAR	$\Sigma$ 1-g SAR	$\Sigma$ 1-g SAR	SPLSR	
		(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
		1	2	3	4	1+2	1+3	1+4	1+3+4		
NR Band n41	Left Touch	0.342	0.036	0.079	0.036	0.378	0.421	0.378	0.457	No	
	Left Tilt	0.156	0.017	0.084	0.033	0.173	0.240	0.189	0.273	No	
	Right Touch	0.272	0.089	0.105	0.128	0.361	0.377	0.400	0.505	No	
	Right Tilt	0.281	0.052	0.098	0.068	0.333	0.379	0.349	0.447	No	
NR Band n41 SRS1	Left Touch	0.000	0.036	0.079	0.036	0.036	0.079	0.036	0.115	No	
	Left Tilt	0.003	0.017	0.084	0.033	0.019	0.087	0.036	0.120	No	
	Right Touch	0.000	0.089	0.105	0.128	0.089	0.105	0.128	0.233	No	
	Right Tilt	0.000	0.052	0.098	0.068	0.052	0.098	0.068	0.166	No	
NR Band n41 SRS2	Left Touch	0.000	0.036	0.079	0.036	0.036	0.079	0.036	0.115	No	
	Left Tilt	0.000	0.017	0.084	0.033	0.017	0.084	0.033	0.117	No	
	Right Touch	0.000	0.089	0.105	0.128	0.089	0.105	0.128	0.233	No	
	Right Tilt	0.000	0.052	0.098	0.068	0.052	0.098	0.068	0.166	No	
NR Band n41 SRS3	Left Touch	0.015	0.036	0.079	0.036	0.051	0.094	0.051	0.130	No	
	Left Tilt	0.005	0.017	0.084	0.033	0.022	0.089	0.038	0.122	No	
	Right Touch	0.006	0.089	0.105	0.128	0.095	0.111	0.134	0.239	No	
	Right Tilt	0.002	0.052	0.098	0.068	0.054	0.100	0.070	0.168	No	
NR Band n66	Left Touch	0.498	0.036	0.079	0.036	0.534	0.577	0.534	0.613	No	
	Left Tilt	0.216	0.017	0.084	0.033	0.233	0.300	0.249	0.333	No	
	Right Touch	0.370	0.089	0.105	0.128	0.459	0.475	0.498	0.603	No	
	Right Tilt	0.281	0.052	0.098	0.068	0.333	0.379	0.349	0.447	No	
NR Band n71	Left Touch	0.189	0.036	0.079	0.036	0.225	0.268	0.225	0.304	No	
	Left Tilt	0.096	0.017	0.084	0.033	0.113	0.180	0.129	0.213	No	
	Right Touch	0.200	0.089	0.105	0.128	0.289	0.305	0.328	0.433	No	
	Right Tilt	0.089	0.052	0.098	0.068	0.141	0.187	0.157	0.255	No	
NR Band n77	Left Touch	0.096	0.036	0.079	0.036	0.132	0.175	0.132	0.211	No	
	Left Tilt	0.070	0.017	0.084	0.033	0.087	0.154	0.103	0.187	No	
	Right Touch	0.283	0.089	0.105	0.128	0.372	0.388	0.411	0.516	No	
	Right Tilt	0.116	0.052	0.098	0.068	0.168	0.214	0.184	0.282	No	
NR Band n78 SRS1	Left Touch	0.202	0.036	0.079	0.036	0.238	0.281	0.238	0.317	No	
	Left Tilt	0.244	0.017	0.084	0.033	0.261	0.328	0.277	0.361	No	
	Right Touch	0.136	0.089	0.105	0.128	0.225	0.241	0.264	0.369	No	
	Right Tilt	0.139	0.052	0.098	0.068	0.191	0.237	0.207	0.305	No	
NR Band n78 SRS2	Left Touch	0.138	0.036	0.079	0.036	0.174	0.217	0.174	0.253	No	
	Left Tilt	0.006	0.017	0.084	0.033	0.023	0.090	0.039	0.123	No	
	Right Touch	0.006	0.089	0.105	0.128	0.095	0.111	0.134	0.239	No	
	Right Tilt	0.002	0.052	0.098	0.068	0.054	0.100	0.070	0.168	No	
NR Band n78 SRS3	Left Touch	0.000	0.036	0.079	0.036	0.036	0.079	0.036	0.115	No	
	Left Tilt	0.003	0.017	0.084	0.033	0.020	0.087	0.036	0.120	No	
	Right Touch	0.000	0.089	0.105	0.128	0.089	0.105	0.128	0.233	No	
	Right Tilt	0.000	0.052	0.098	0.068	0.052	0.098	0.068	0.166	No	

### 14.2 Hotspot/Body SAR Simultaneous Transmission Analysis.

Simultaneous Transmission Summation Scenario (Hotspot SAR)										
Band		Main SAR	2.4 GHz WLAN SAR	5 GHz WLAN SAR	Bluetooth	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
		1	2	3	4	1+2	1+3	1+4	1+3+4	
GSM 850	Rear	0.776	1.155	1.116	0.277	1.931	1.892	1.053	2.169	Yes
	Front	0.302	0.066	0.052	0.024	0.368	0.354	0.326	0.378	No
	Left	0.118	0.171	0.225	0.075	0.289	0.343	0.193	0.418	No
	Right	0.302				0.302	0.302	0.302	0.302	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.445				0.445	0.445	0.445	0.445	No
GSM 1900	Rear	0.469	1.155	1.116	0.277	1.624	1.585	0.746	1.862	Yes
	Front	0.435	0.066	0.052	0.024	0.501	0.487	0.459	0.511	No
	Left	0.167	0.171	0.225	0.075	0.338	0.392	0.242	0.467	No
	Right					0.072	0.072	0.072	0.072	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.410				0.410	0.410	0.410	0.410	No
UMTS Band 2	Rear	0.574	1.155	1.116	0.277	1.729	1.690	0.851	1.967	Yes
	Front	0.547	0.066	0.052	0.024	0.613	0.599	0.571	0.623	No
	Left	0.249	0.171	0.225	0.075	0.420	0.474	0.324	0.549	No
	Right					0.111	0.111	0.111	0.111	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.528				0.528	0.528	0.528	0.528	No
UMTS Band 4	Rear	0.440	1.155	1.116	0.277	1.595	1.556	0.717	1.833	Yes
	Front	0.393	0.066	0.052	0.024	0.459	0.445	0.417	0.469	No
	Left	0.223	0.171	0.225	0.075	0.394	0.448	0.298	0.523	No
	Right					0.079	0.079	0.079	0.079	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.323				0.323	0.323	0.323	0.323	No
UMTS Band 5	Rear	0.485	1.155	1.116	0.277	1.640	1.601	0.762	1.878	Yes
	Front	0.419	0.066	0.052	0.024	0.485	0.471	0.443	0.495	No
	Left	0.190	0.171	0.225	0.075	0.361	0.415	0.265	0.490	No
	Right	0.324				0.324	0.324	0.324	0.324	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.466				0.466	0.466	0.466	0.466	No
LTE Band 2 Lower	Rear	0.253	1.155	1.116	0.277	1.408	1.369	0.530	1.646	Yes
	Front	0.282	0.066	0.052	0.024	0.348	0.334	0.306	0.358	No
	Left	0.180	0.171	0.225	0.075	0.351	0.405	0.255	0.480	No
	Right					0.000	0.000	0.000	0.000	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.299				0.299	0.299	0.299	0.299	No
LTE Band 2 Upper	Rear	0.250	1.155	1.116	0.277	1.405	1.366	0.527	1.643	Yes
	Front	0.164	0.066	0.052	0.024	0.230	0.216	0.188	0.240	No
	Left		0.171	0.225	0.075	0.171	0.225	0.075	0.300	No
	Right	0.104				0.104	0.104	0.104	0.104	No
	Top	0.089	0.073		0.035	0.162	0.089	0.124	0.124	No
	Bottom					0.000	0.000	0.000	0.000	No

Simultaneous Transmission Summation Scenario (Hotspot SAR)										
Band		Main SAR	2.4 GHz WLAN SAR	5 GHz WLAN SAR	Bluetooth	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
		1	2	3	4	1+2	1+3	1+4	1+3+4	
LTE Band 12	Rear	0.375	1.155	1.116	0.277	1.530	1.491	0.652	1.768	Yes
	Front	0.205	0.066	0.052	0.024	0.271	0.257	0.229	0.281	No
	Left	0.112	0.171	0.225	0.075	0.283	0.337	0.187	0.412	No
	Right	0.199				0.199	0.199	0.199	0.199	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.288				0.288	0.288	0.288	0.288	No
LTE Band 13	Rear	0.482	1.155	1.116	0.277	1.637	1.598	0.759	1.875	Yes
	Front	0.285	0.066	0.052	0.024	0.351	0.337	0.309	0.361	No
	Left	0.144	0.171	0.225	0.075	0.315	0.369	0.219	0.444	No
	Right	0.250				0.250	0.250	0.250	0.250	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.382				0.382	0.382	0.382	0.382	No
LTE Band 26	Rear	0.602	1.155	1.116	0.277	1.757	1.718	0.879	1.995	Yes
	Front	0.240	0.066	0.052	0.024	0.306	0.292	0.264	0.316	No
	Left	0.129	0.171	0.225	0.075	0.300	0.354	0.204	0.429	No
	Right	0.278				0.278	0.278	0.278	0.278	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.473				0.473	0.473	0.473	0.473	No
LTE Band 41	Rear	0.473	1.155	1.116	0.277	1.628	1.589	0.750	1.866	Yes
	Front	0.589	0.066	0.052	0.024	0.655	0.641	0.613	0.665	No
	Left	0.261	0.171	0.225	0.075	0.432	0.486	0.336	0.561	No
	Right					0.000	0.000	0.000	0.000	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.449				0.449	0.449	0.449	0.449	No
LTE Band 66 Lower	Rear	0.297	1.155	1.116	0.277	1.452	1.413	0.574	1.690	Yes
	Front	0.315	0.066	0.052	0.024	0.381	0.367	0.339	0.391	No
	Left	0.214	0.171	0.225	0.075	0.385	0.439	0.289	0.514	No
	Right					0.000	0.000	0.000	0.000	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.366				0.366	0.366	0.366	0.366	No
LTE Band 66 Upper	Rear	0.241	1.155	1.116	0.277	1.396	1.357	0.518	1.634	Yes
	Front	0.130	0.066	0.052	0.024	0.196	0.182	0.154	0.206	No
	Left		0.171	0.225	0.075	0.171	0.225	0.075	0.300	No
	Right	0.101				0.101	0.101	0.101	0.101	No
	Top	0.095	0.073		0.035	0.168	0.095	0.130	0.130	No
	Bottom					0.000	0.000	0.000	0.000	No
NR Band n5 Lower	Rear	0.610	1.155	1.116	0.277	1.765	1.726	0.887	2.003	Yes
	Front	0.250	0.066	0.052	0.024	0.316	0.302	0.274	0.326	No
	Left	0.167	0.171	0.225	0.075	0.338	0.392	0.242	0.467	No
	Right	0.324				0.324	0.324	0.324	0.324	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.454				0.454	0.454	0.454	0.454	No

Simultaneous Transmission Summation Scenario (Hotspot SAR)										
Band		Main SAR	2.4 GHz WLAN SAR	5 GHz WLAN SAR	Bluetooth	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
		1	2	3	4	1+2	1+3	1+4	1+3+4	
NR Band n26	Rear	0.660	1.155	1.116	0.277	1.815	1.776	0.937	2.053	Yes
	Front	0.259	0.066	0.052	0.024	0.325	0.311	0.283	0.335	No
	Left	0.150	0.171	0.225	0.075	0.321	0.375	0.225	0.450	No
	Right	0.259				0.259	0.259	0.259	0.259	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.438				0.438	0.438	0.438	0.438	No
NR Band n41	Rear	0.139	1.155	1.116	0.277	1.294	1.255	0.416	1.532	No
	Front	0.232	0.066	0.052	0.024	0.298	0.284	0.256	0.308	No
	Left	0.078	0.171	0.225	0.075	0.249	0.303	0.153	0.378	No
	Right					0.000	0.000	0.000	0.000	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.169				0.169	0.169	0.169	0.169	No
NR Band n41 SRS1	Rear	0.004	1.155	1.116	0.277	1.159	1.120	0.281	1.397	No
	Front	0.003	0.066	0.052	0.024	0.069	0.055	0.027	0.079	No
	Left		0.171	0.225	0.075	0.171	0.225	0.075	0.300	No
	Right	0.000				0.000	0.000	0.000	0.000	No
	Top	0.000	0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom					0.000	0.000	0.000	0.000	No
NR Band n41 SRS2	Rear	0.243	1.155	1.116	0.277	1.398	1.359	0.520	1.636	Yes
	Front	0.000	0.066	0.052	0.024	0.066	0.052	0.024	0.076	No
	Left		0.171	0.225	0.075	0.171	0.225	0.075	0.300	No
	Right	0.000				0.000	0.000	0.000	0.000	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.006				0.006	0.006	0.006	0.006	No
NR Band n41 SRS3	Rear	0.431	1.155	1.116	0.277	1.586	1.547	0.708	1.824	Yes
	Front	0.100	0.066	0.052	0.024	0.166	0.152	0.124	0.176	No
	Left		0.171	0.225	0.075	0.171	0.225	0.075	0.300	No
	Right	0.388				0.388	0.388	0.388	0.388	No
	Top	0.079	0.073		0.035	0.152	0.079	0.114	0.114	No
	Bottom					0.000	0.000	0.000	0.000	No
NR Band n66	Rear	0.438	1.155	1.116	0.277	1.593	1.554	0.715	1.831	Yes
	Front	0.545	0.066	0.052	0.024	0.611	0.597	0.569	0.621	No
	Left	0.281	0.171	0.225	0.075	0.452	0.506	0.356	0.581	No
	Right	0.089				0.089	0.089	0.089	0.089	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.363				0.363	0.363	0.363	0.363	No
NR Band n71	Rear	0.286	1.155	1.116	0.277	1.441	1.402	0.563	1.679	Yes
	Front	0.222	0.066	0.052	0.024	0.288	0.274	0.246	0.298	No
	Left	0.122	0.171	0.225	0.075	0.293	0.347	0.197	0.422	No
	Right	0.237				0.237	0.237	0.237	0.237	No
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No
	Bottom	0.148				0.148	0.148	0.148	0.148	No

Simultaneous Transmission Summation Scenario (Hotspot SAR)											
Band		Main SAR	2.4 GHz WLAN SAR	5 GHz WLAN SAR	Bluetooth	$\sum$ 1-g SAR	$\sum$ 1-g SAR	$\sum$ 1-g SAR	$\sum$ 1-g SAR	SPLSR	
		(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(Yes/No)
		1	2	3	4	1+2	1+3	1+4	1+3+4		
NR Band n77	Rear	0.063	1.155	1.116	0.277	1.218	1.179	0.340	1.456	No	
	Front	0.049	0.066	0.052	0.024	0.115	0.101	0.073	0.125	No	
	Left	0.067	0.171	0.225	0.075	0.238	0.292	0.142	0.367	No	
	Right					0.000	0.000	0.000	0.000	No	
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No	
	Bottom					0.000	0.000	0.000	0.000	No	
NR Band n78 SRS1	Rear	0.101	1.155	1.116	0.277	1.256	1.217	0.378	1.494	No	
	Front	0.041	0.066	0.052	0.024	0.107	0.093	0.065	0.117	No	
	Left		0.171	0.225	0.075	0.171	0.225	0.075	0.300	No	
	Right	0.094				0.094	0.094	0.094	0.094	No	
	Top	0.099	0.073		0.035	0.172	0.099	0.134	0.134	No	
	Bottom					0.000	0.000	0.000	0.000	No	
NR Band n78 SRS2	Rear	0.298	1.155	1.116	0.277	1.453	1.414	0.575	1.691	Yes	
	Front	0.138	0.066	0.052	0.024	0.204	0.190	0.162	0.214	No	
	Left	0.073	0.171	0.225	0.075	0.244	0.298	0.148	0.373	No	
	Right					0.000	0.000	0.000	0.000	No	
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No	
	Bottom	0.110				0.110	0.110	0.110	0.110	No	
NR Band n78 SRS3	Rear	0.030	1.155	1.116	0.277	1.185	1.146	0.307	1.423	No	
	Front	0.000	0.066	0.052	0.024	0.066	0.052	0.024	0.076	No	
	Left		0.171	0.225	0.075	0.171	0.225	0.075	0.300	No	
	Right	0.000				0.000	0.000	0.000	0.000	No	
	Top		0.073		0.035	0.073	0.000	0.035	0.035	No	
	Bottom	0.005				0.005	0.005	0.005	0.005	No	

### 14.3 Phablet SAR Simultaneous Transmission Analysis.

Simultaneous Transmission Summation Scenario (Phablet SAR)					
Band		NFC SAR	5 GHz WLAN SISO Ant.2	$\Sigma$ 10-g SAR	SPLSR
		(W/kg)	(W/kg)	(W/kg)	(Yes/No)
		1	2	1+2	
NFC	Rear	0.038	1.314	1.352	No
	Front	0	0.116	0.116	No
	Left	0	0.226	0.226	No
	Right	0		0	No
	Top		0.173	0.173	No
	Bottom				No

### 14.4 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 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  $\geq 0.80$  W/kg or 10g SAR  $\geq 2.0$ 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  $\geq 1.45$  W/kg for 1g SAR or  $\geq 3.625$  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  $\geq 1.5$  W/kg for 1g SAR or  $\geq 3.75$  W/kg for 10g SAR and the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $> 1.20$ .

Body/Hotspot SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
Mhz	Channel					
2 437	6	WLAN 2.4GHz	Rear	1.06	0.996	1.06
5 300	60	WLAN 5GHz	Rear	0.944	0.913	1.03



### 15.1 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<sub>1</sub>** 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<sub>2</sub>** is the highest measured of 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<sub>i</sub>** 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:

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

#### SPLSR Evaluation

Mode/Band	X(mm)	Y(mm)	Z(mm)	Reported SAR [W/kg]
GSM 850	-0.034	-0.082	-0.206	0.797
GSM 1900	-0.001	-0.0685	-0.209	0.469
UMTS Band 2	-0.001	-0.0685	-0.208	0.574
UMTS Band 4	-0.001	-0.0705	-0.208	0.471
UMTS Band 5	-0.046	-0.077	-0.206	0.485
LTE Band 2 Lower	-0.013	-0.066	-0.207	0.299
LTE Band 2 Upper	-0.0335	0.0675	-0.207	0.250
LTE Band 12	-0.0305	-0.0885	-0.203	0.375
LTE Band 13	-0.032	-0.0885	-0.203	0.482
LTE Band 26	-0.032	-0.0885	-0.203	0.602
LTE Band 41	0.0166	-0.0736	-0.203	0.473
LTE Band 66 Lower	-0.01	-0.0645	-0.207	0.297
LTE Band 66 Upper	-0.0395	0.0745	-0.207	0.241
NR Band n5	-0.0275	-0.083	-0.204	0.610
NR Band n26	-0.0415	-0.087	-0.209	0.660
NR Band n41 SRS2	-0.025	-0.0636	-0.209	0.243
NR Band n41 SRS3	-0.0694	0.0468	-0.209	0.431
NR Band n66	0.0055	-0.067	-0.206	0.438
NR Band n71	-0.032	-0.0795	-0.205	0.286
NR Band n78 SRS2	0.0055	-0.075	-0.207	0.298
Bluetooth	-0.0034	0.0458	-0.207	0.277
WLAN 2.4GHz	0.0034	0.048	-0.209	1.155
WLAN 5GHz	0.001	0.049	-0.204	1.116
WLAN 5GHz+Bluetooth	-0.002	0.062	-0.211	1.340

Postion	Max Mode			Sum 1g SAR	1+2 Peak SAR Separation	1+3 Peak SAR Separation	2+3 Peak SAR Separation	SPLSR			Hybrid SPLSR
				[W/kg]	Distance	Distance	Distance	1+2	1+3	1+(2+3)	
	1	2	3	1+2+3	[mm]	[mm]	[mm]				
Rear	GSM 850	5GHz WLAN	Bluetooth	2.190	135.610	131.416	6.213	0.024	0.025	0.024	No
	GSM 1900			1.862	117.623	114.343	6.213	0.022	0.022	0.022	No
	UMTS Band 2			1.967	117.585	114.330	6.213	0.023	0.007	0.024	No
	UMTS Band 4			1.864	119.584	116.329	6.213	0.021	0.006	0.022	No
	UMTS Band 5			1.878	134.495	129.983	6.213	0.019	0.005	0.020	No
	LTE Band 2 Lower			1.692	115.888	112.211	6.213	0.019	0.004	0.020	No
	LTE Band 2 Upper			1.643	39.262	37.107	6.213	0.054	0.010	0.057	Yes
	LTE Band 12			1.768	141.066	137.065	6.213	0.017	0.004	0.017	No
	LTE Band 13			1.875	141.408	137.370	6.213	0.018	0.005	0.019	No
	LTE Band 26			1.995	141.408	137.370	6.213	0.020	0.006	0.021	No
	LTE Band 41			1.866	123.593	121.130	6.213	0.021	0.005	0.021	No
	LTE Band 66 Lower			1.690	114.071	110.497	6.213	0.019	0.004	0.020	No
	LTE Band 66 Upper			1.634	47.953	46.118	6.213	0.044	0.008	0.045	Yes
	NR Band n5			2.003	135.042	131.070	6.213	0.021	0.006	0.022	No
	NR Band n26			2.053	142.574	138.172	6.213	0.021	0.007	0.021	No
	NR Band n41 SRS2			1.636	115.671	111.530	6.213	0.018	0.003	0.019	No
	NR Band n41 SRS3			1.824	70.612	66.038	6.213	0.035	0.009	0.037	No
NR Band n66	1.831	116.104	113.155	6.213	0.021	0.005	0.022	No			
NR Band n71	1.679	132.673	128.538	6.213	0.016	0.003	0.017	No			
NR Band n78 SRS2	1.691	124.118	121.127	6.213	0.018	0.004	0.018	No			

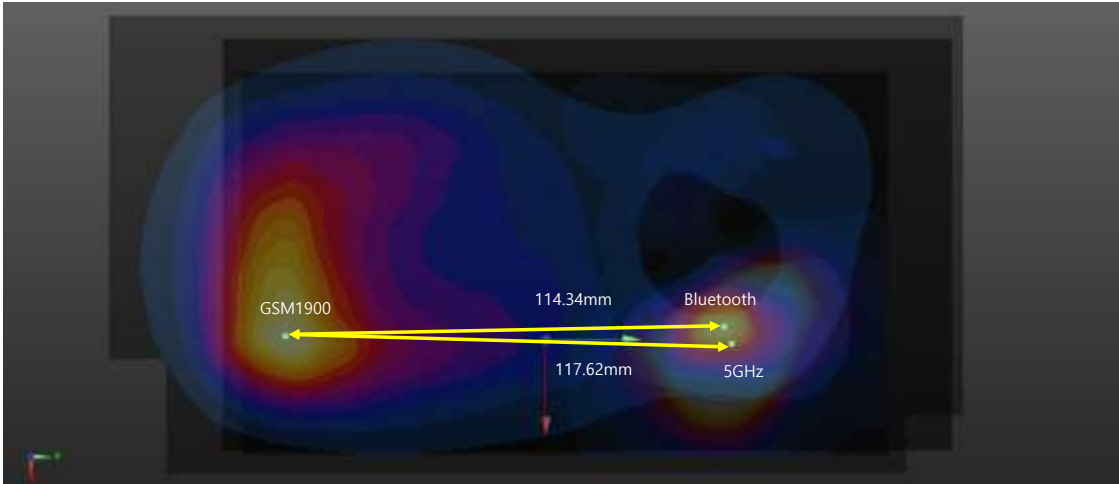
Position	Max Mode		Sum 1g SAR	1+2 Peak SAR Separation Distance	SPLSR	Hybrid SPLSR
			[W/kg]			
	1	2	1+2	[mm]	1+2	
Rear	GSM 850	2.4GHz WLAN	1.931	135.306	0.020	No
	GSM 1900		1.624	116.583	0.018	No
	UMTS Band 2		1.729	116.587	0.020	No
	UMTS Band 5		1.640	134.441	0.016	No
	LTE Band 13		1.637	141.143	0.015	No
	LTE Band 26		1.757	141.143	0.017	No
	LTE Band 41		1.628	122.461	0.017	No
	NR Band n5		1.765	134.688	0.017	No
	NR Band n26		1.815	142.271	0.017	No

Position	Max Mode	Hybrid Volume Sum 1g SAR	Combined factor	Plot
		[W/kg]		
	1	1+2		
Rear	5GHz WLAN	1.340	1.182	#1
	Bluetooth		1.085	

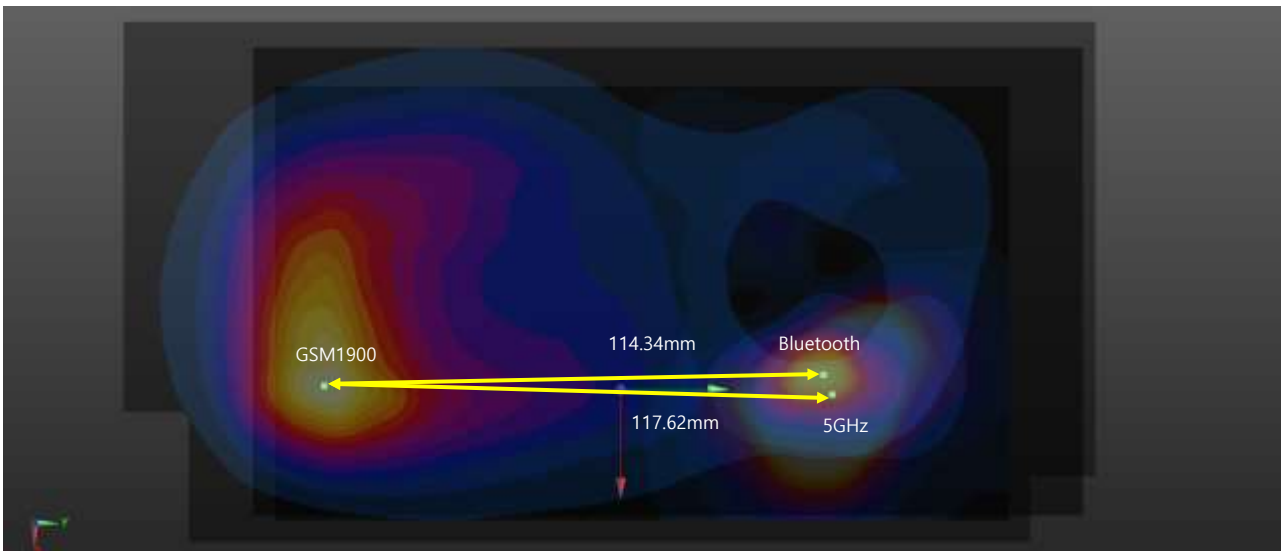
Position	Max Mode		Sum 1g SAR	Hybrid SPLSR
			[W/kg]	
	1	2	1+2	
Rear	LTE Band 66 Upper	5GHz MIMO WLAN + Bluetooth	1.581	No
	LTE Band 2 Upper	5GHz MIMO WLAN + Bluetooth	1.590	No

**SPLSR Plot**

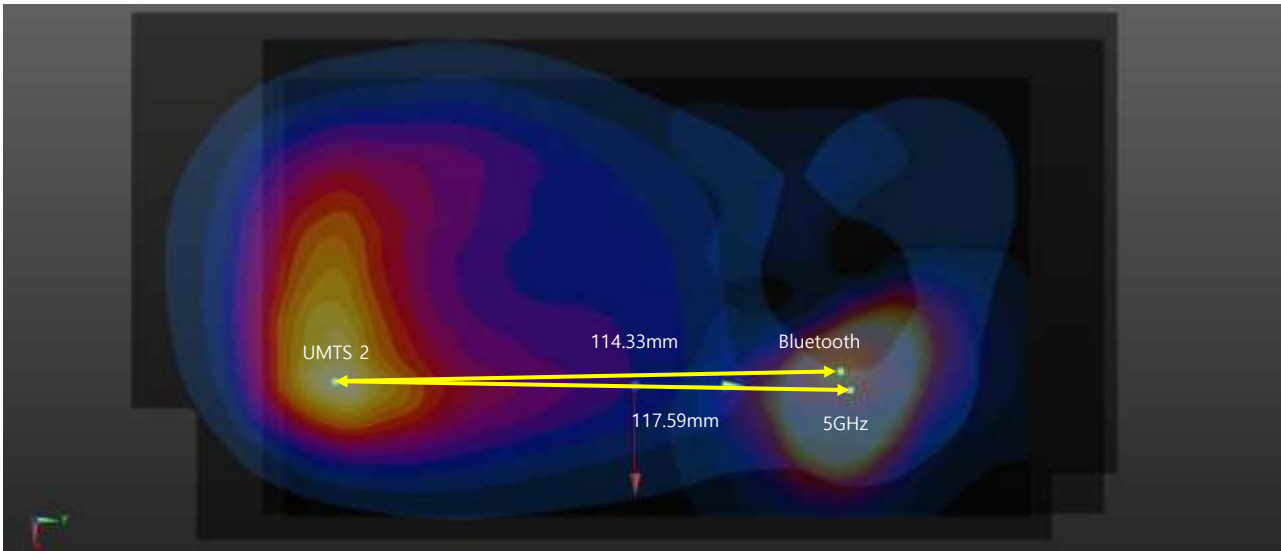
**GSM850 + WLAN 5GHz + Bluetooth**



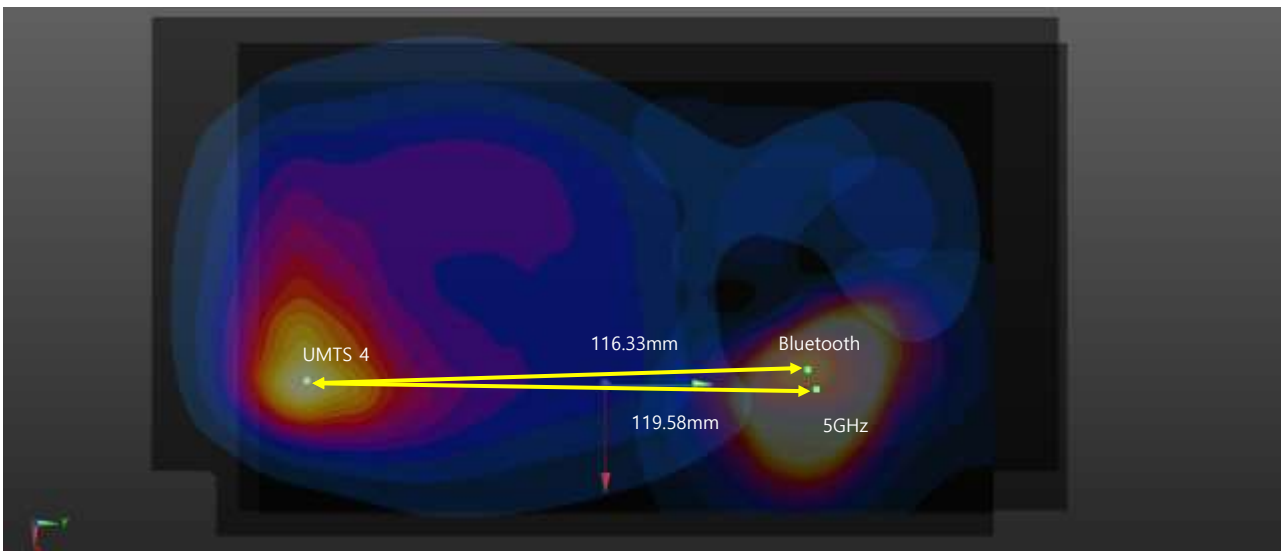
**GSM1900 + WLAN 5GHz + Bluetooth**



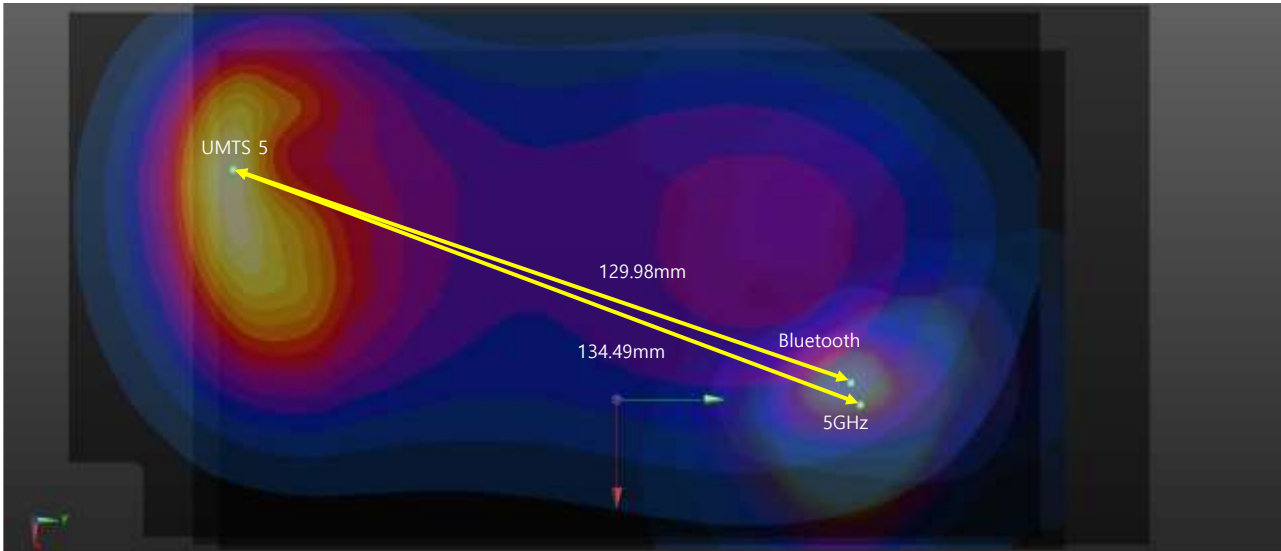
**UMTS Band 2 + WLAN 5GHz + Bluetooth**



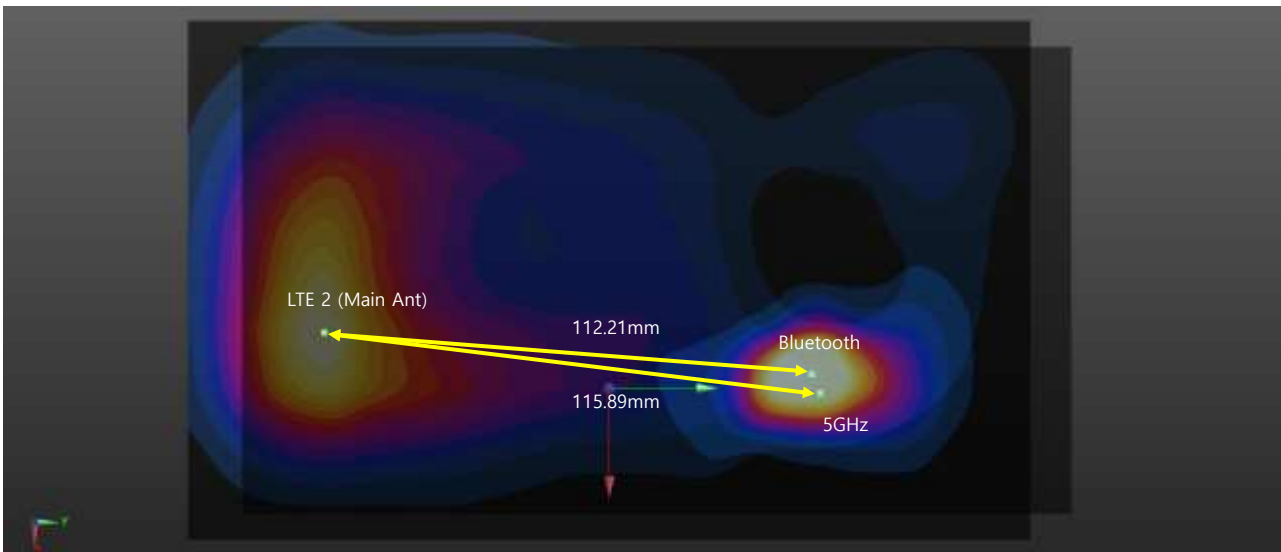
**UMTS Band 4 + WLAN 5GHz + Bluetooth**



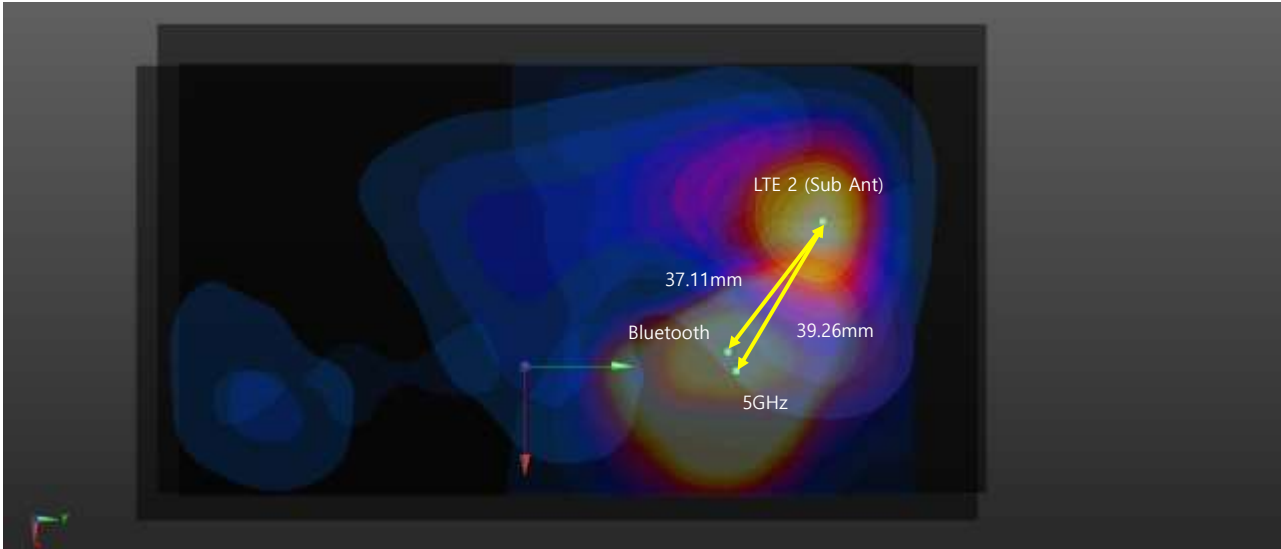
**UMTS Band 5 + WLAN 5GHz + Bluetooth**



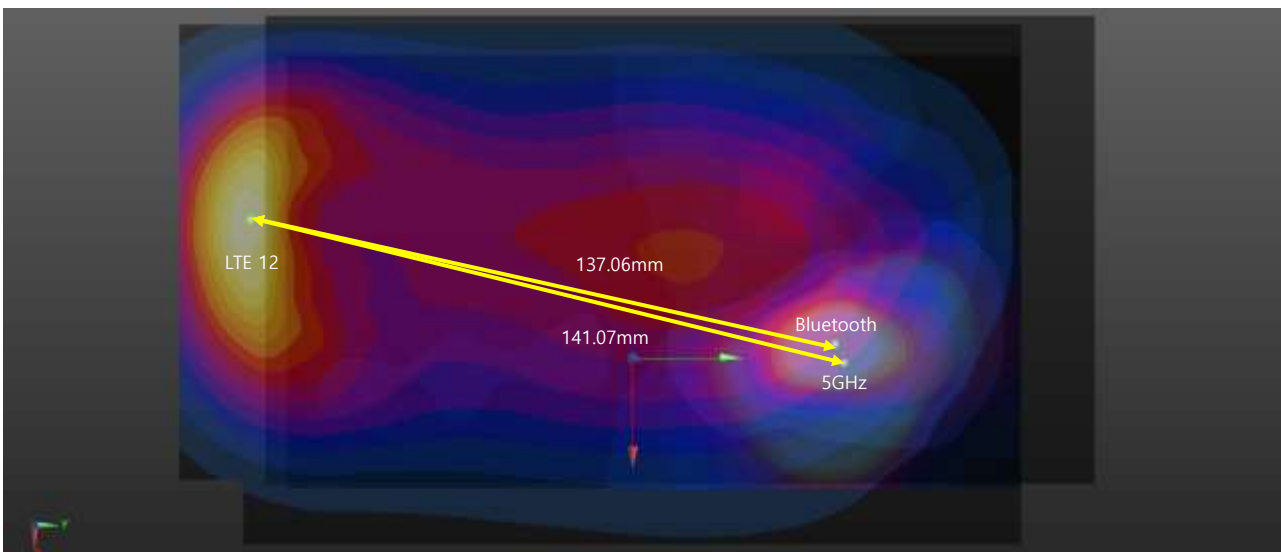
**LTE Band 2 Lower + WLAN 5GHz + Bluetooth**



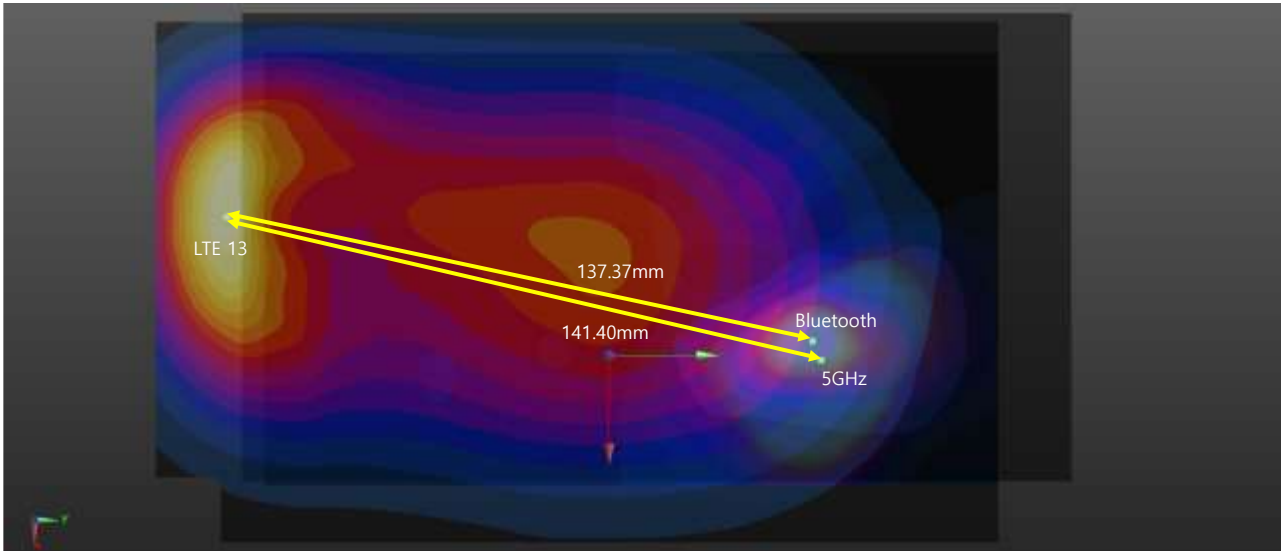
**LTE Band 2 Upper + WLAN 5GHz + Bluetooth**



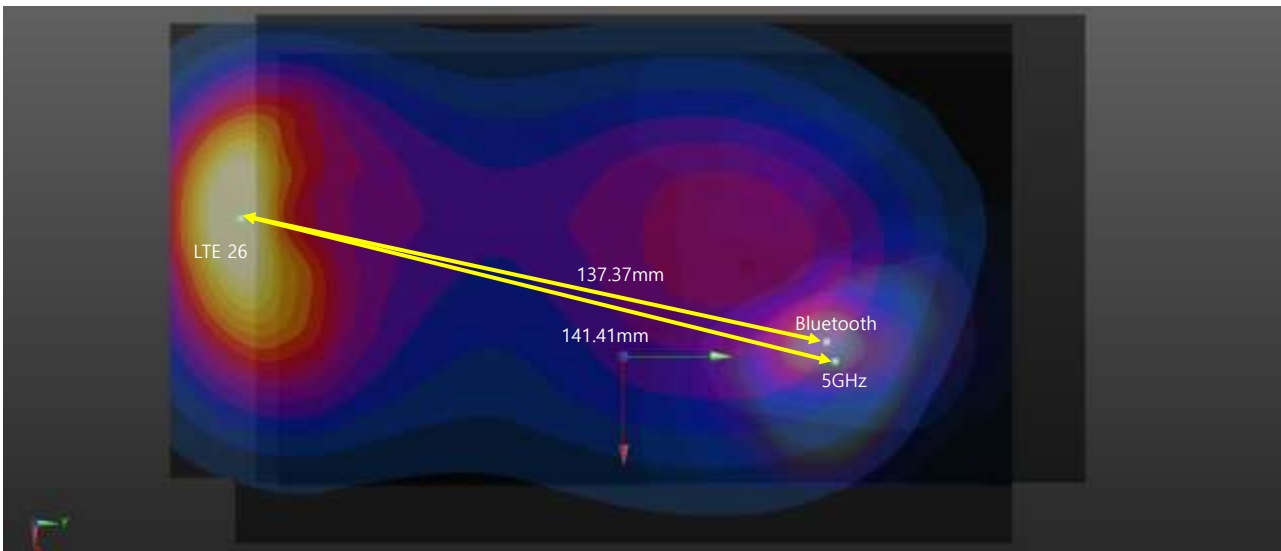
**LTE Band 12 + WLAN 5GHz + Bluetooth**



**LTE Band 13 + WLAN 5GHz + Bluetooth**

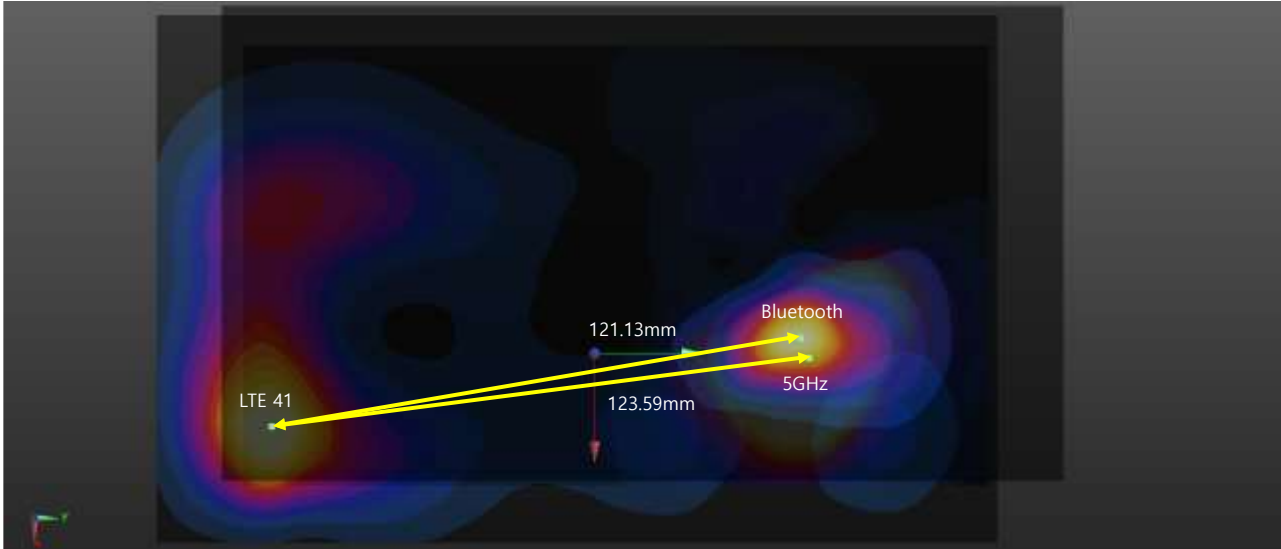


**LTE Band 26 + WLAN 5GHz + Bluetooth**

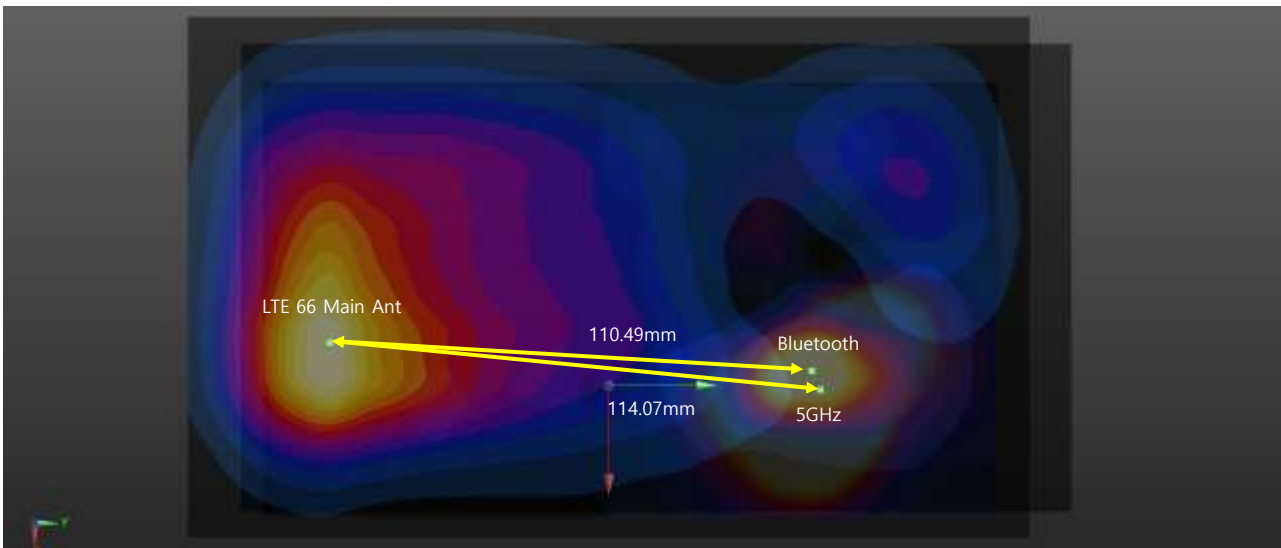




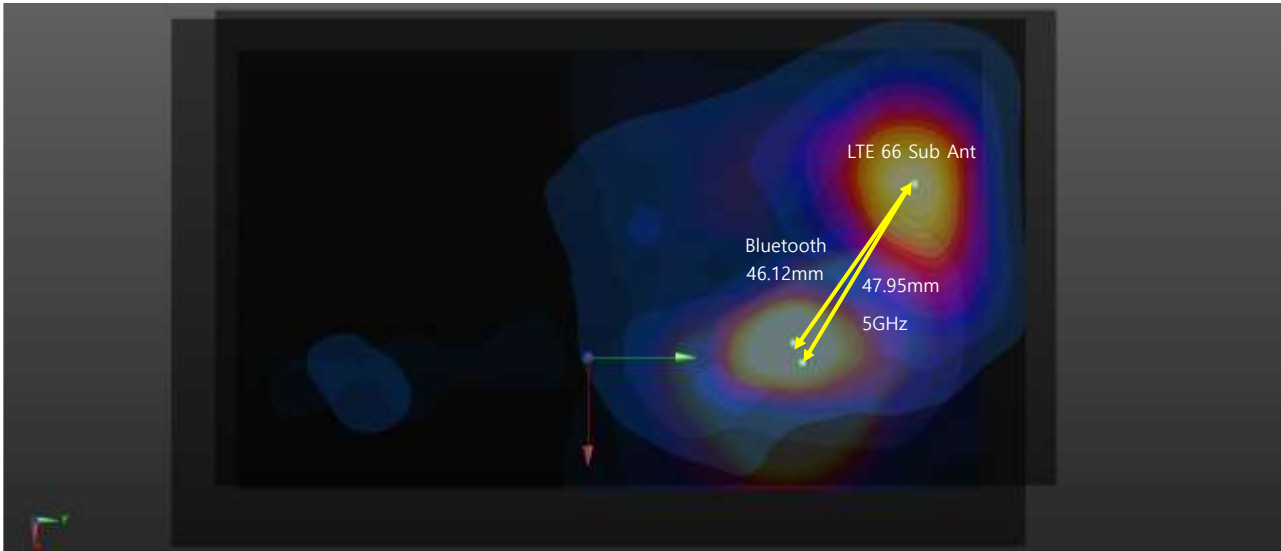
**LTE Band 41 + WLAN 5GHz + Bluetooth**



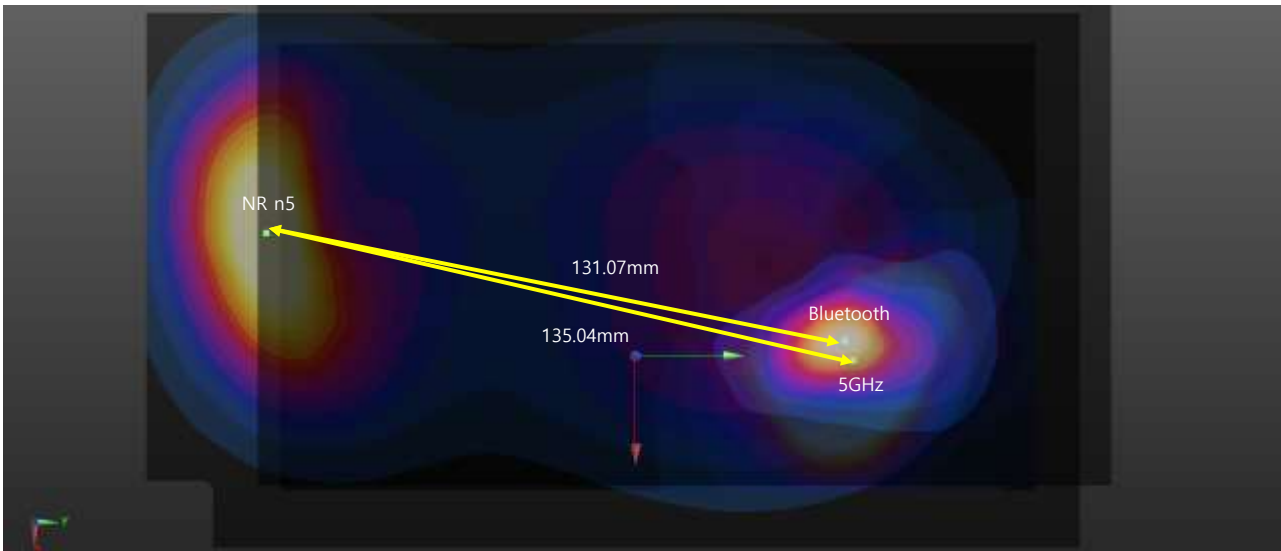
**LTE Band 66 Lower + WLAN 5GHz + Bluetooth**



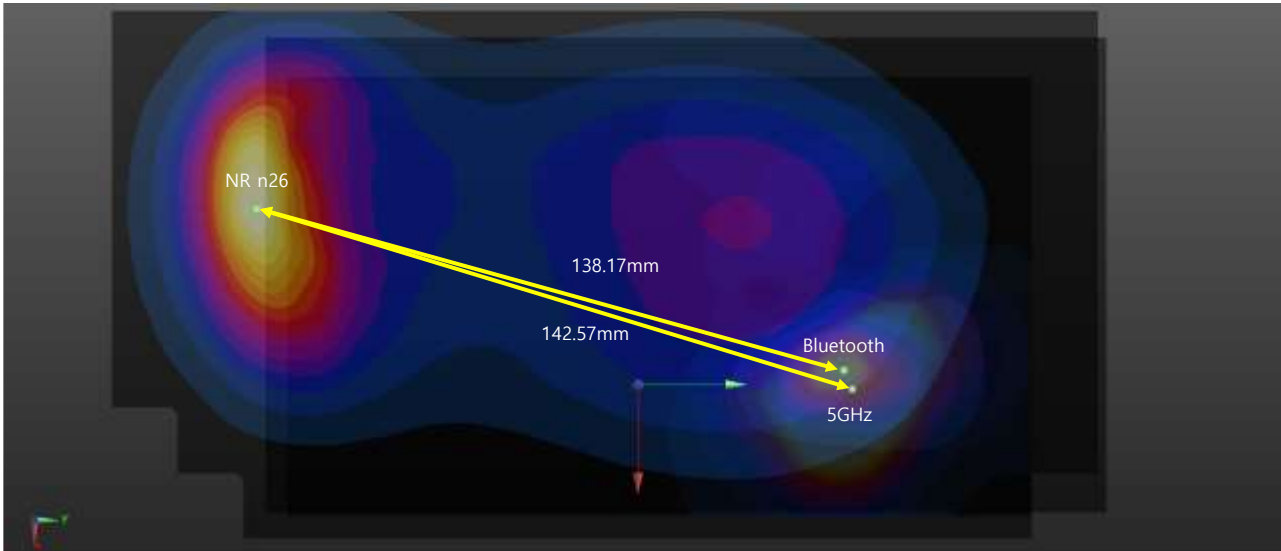
**LTE Band 66 Upper + WLAN 5GHz + Bluetooth**



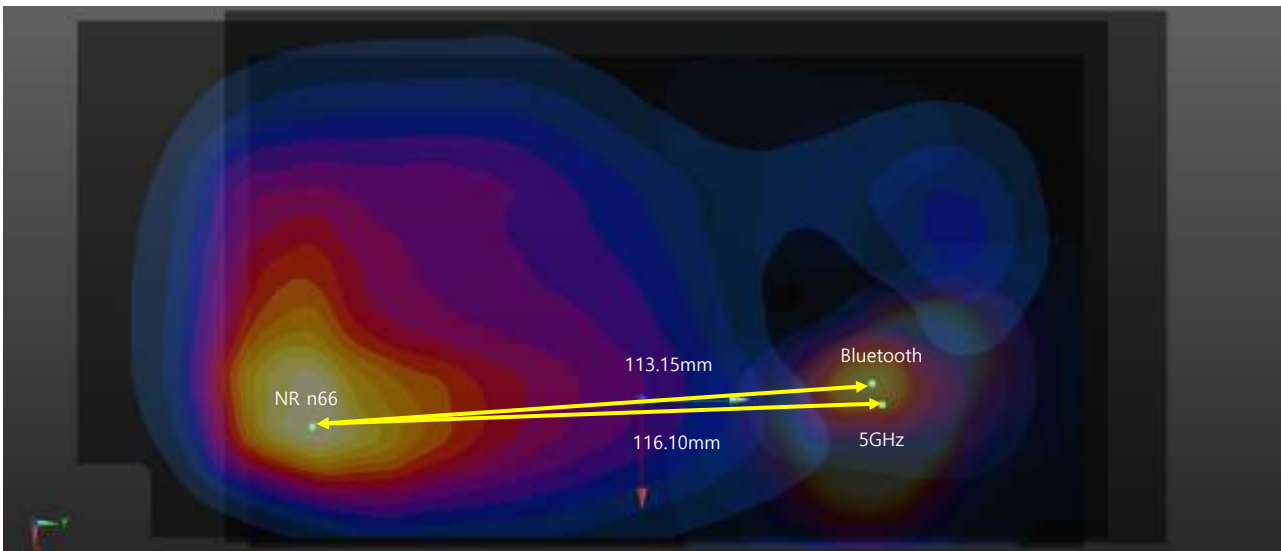
**NR Band n5 + WLAN 5GHz + Bluetooth**



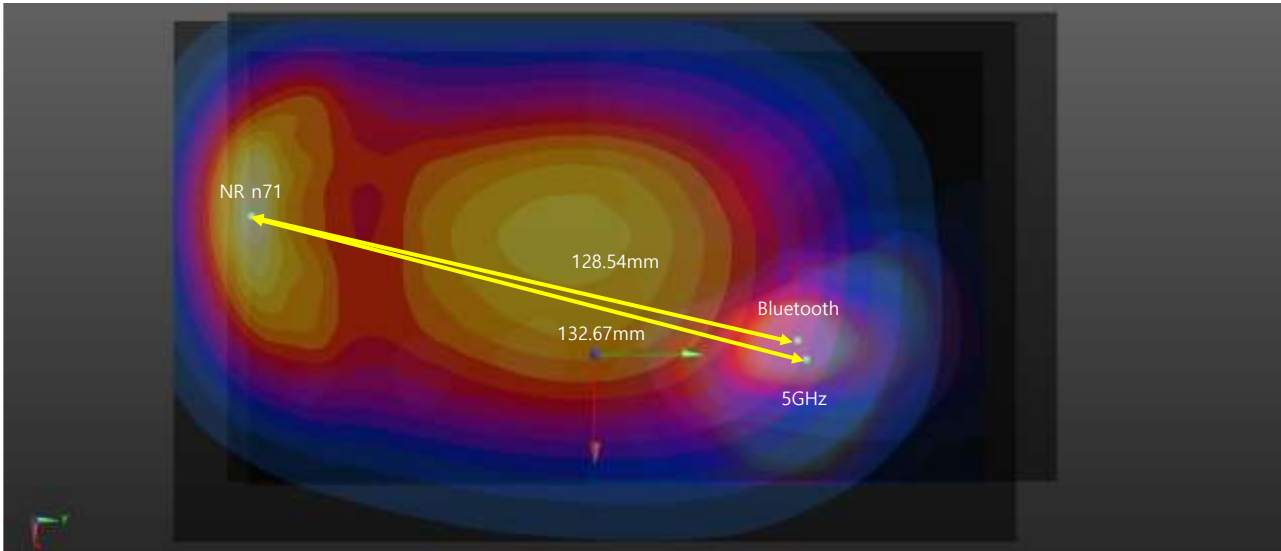
**NR Band n26 + WLAN 5GHz + Bluetooth**



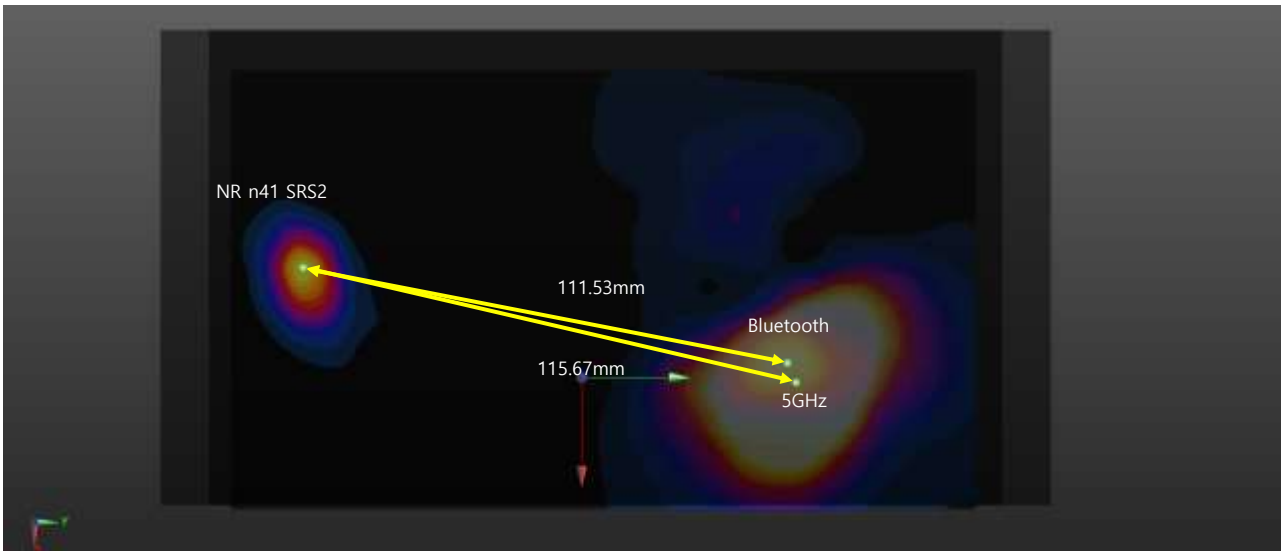
**NR Band n66 + WLAN 5GHz + Bluetooth**



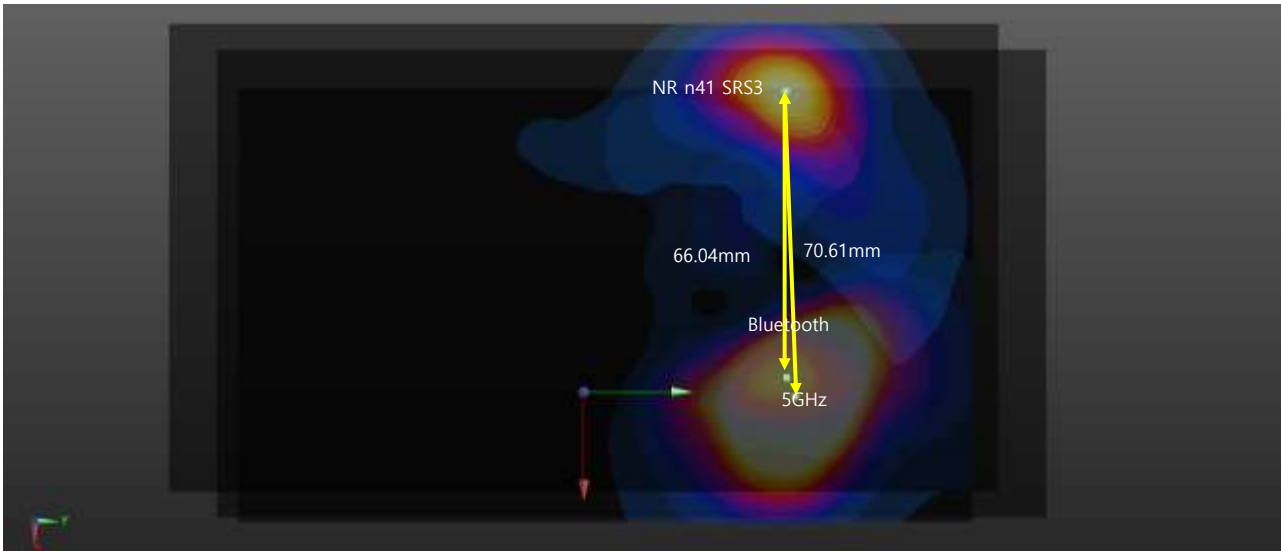
**NR Band n71 + WLAN 5GHz + Bluetooth**



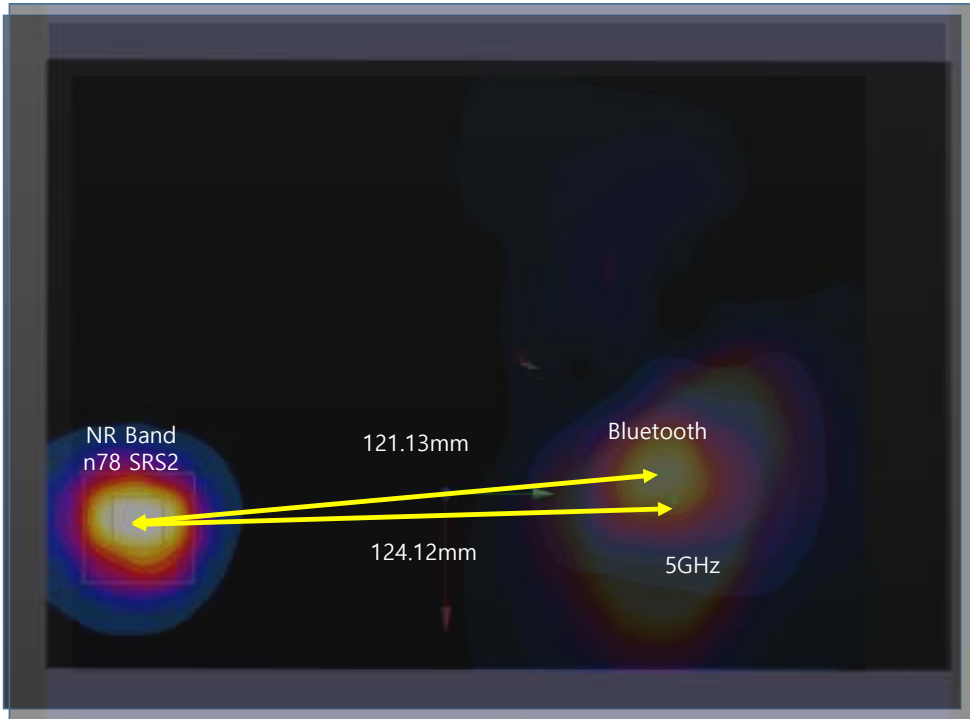
**NR Band n41 SRS2 + WLAN 5GHz + Bluetooth**



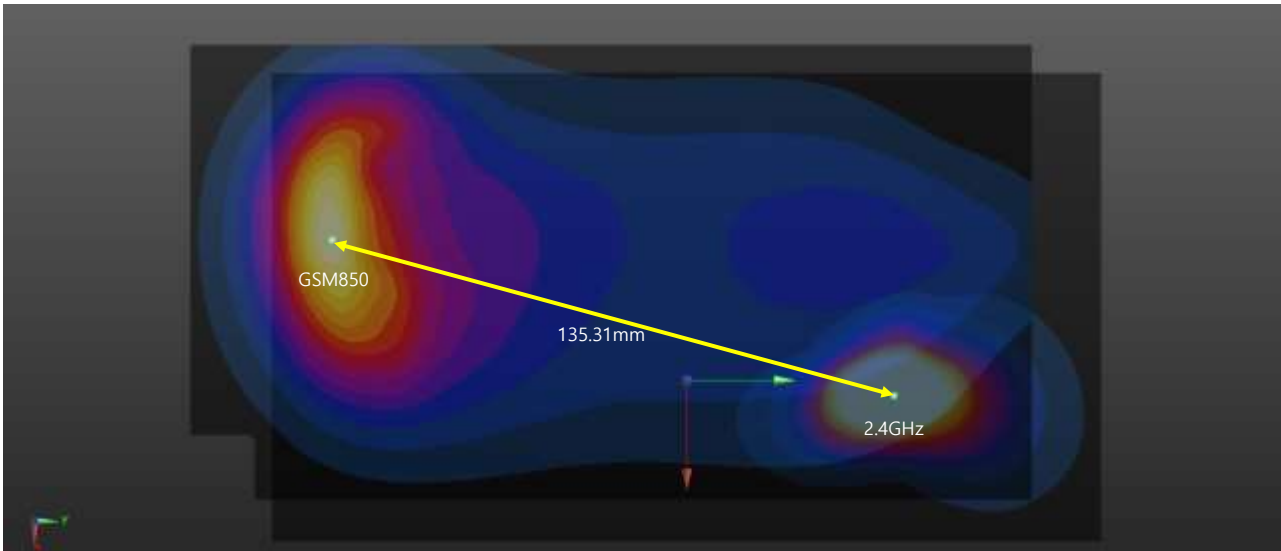
**NR Band n41 SRS3 + WLAN 5GHz + Bluetooth**



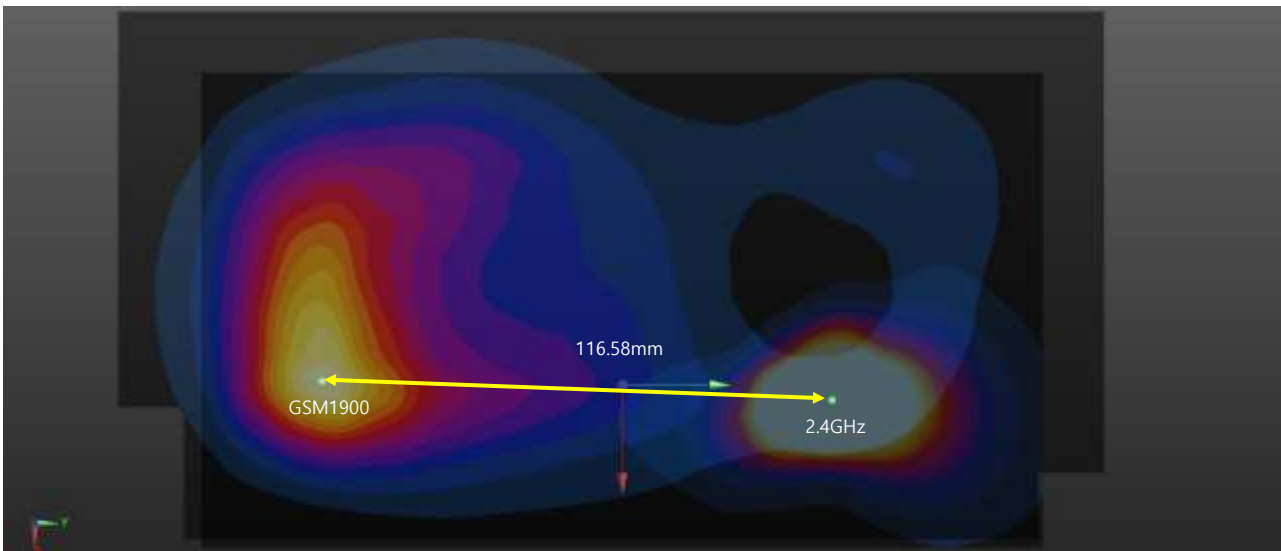
**NR Band n78 SRS2 + WLAN 5GHz + Bluetooth**



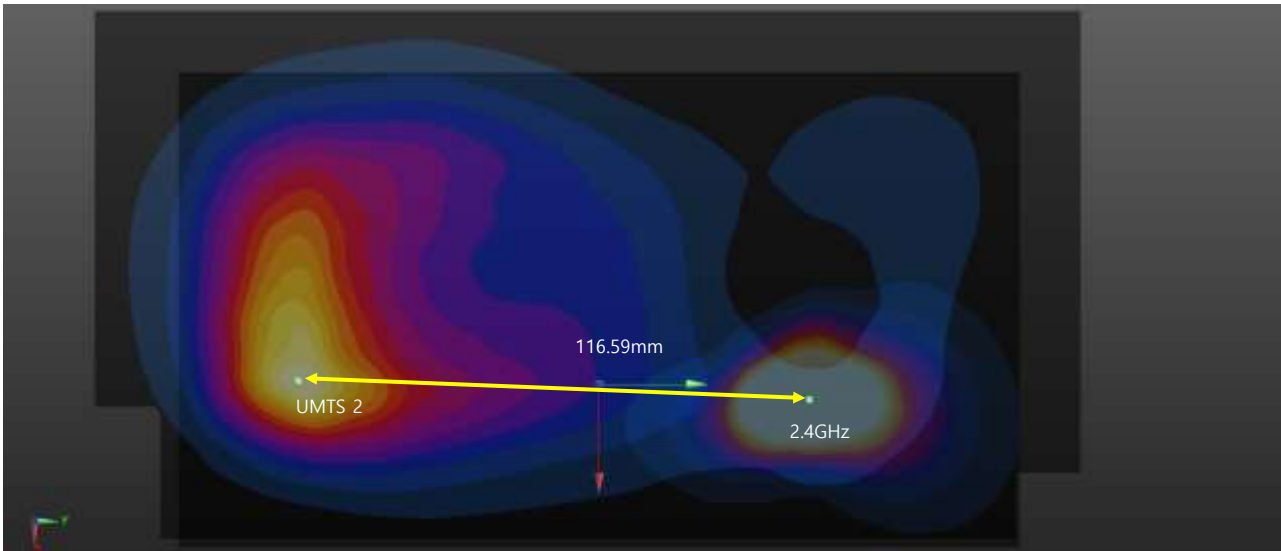
**GSM850 + WLAN 2.4GHz**



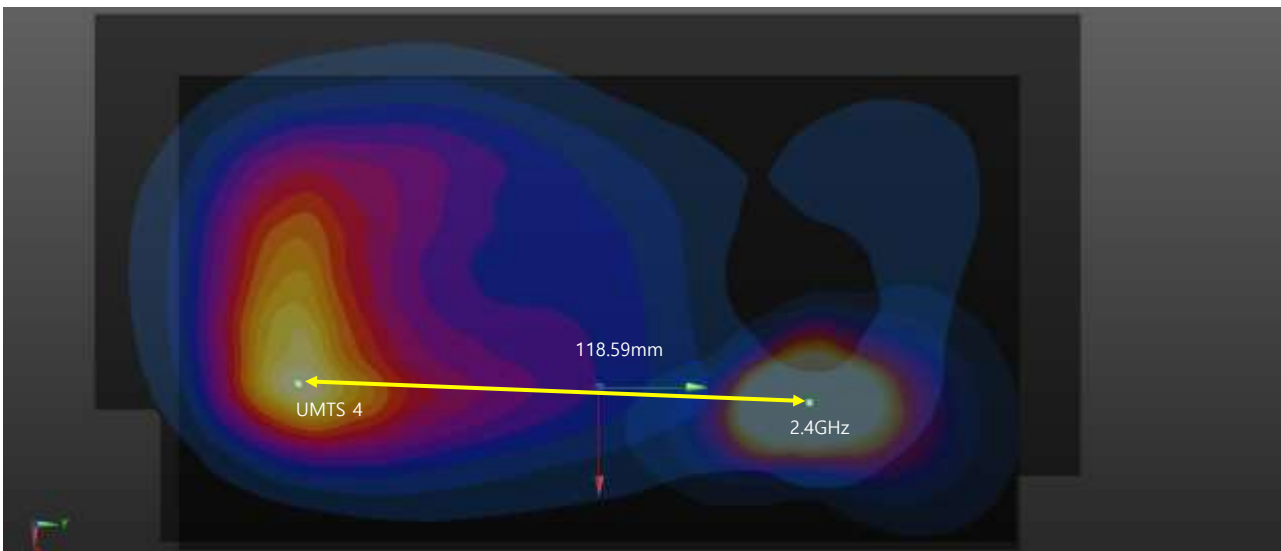
**GSM1900 + WLAN 2.4GHz**



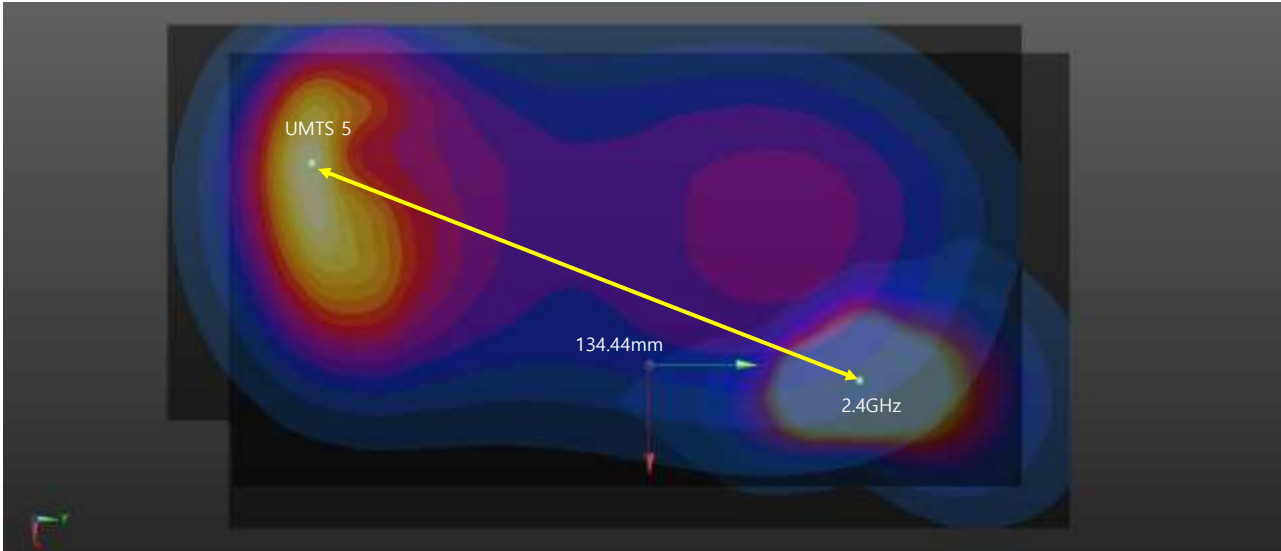
**UMTS Band 2 + WLAN 2.4GHz**



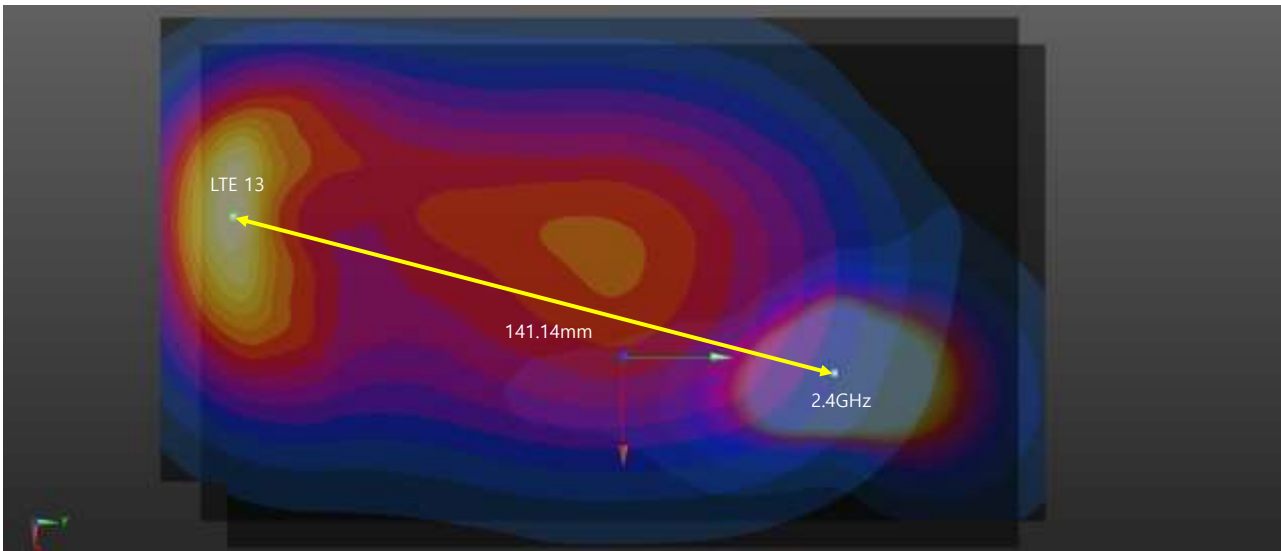
**UMTS Band 4 + WLAN 2.4GHz**



**UMTS Band 5 + WLAN 2.4GHz**

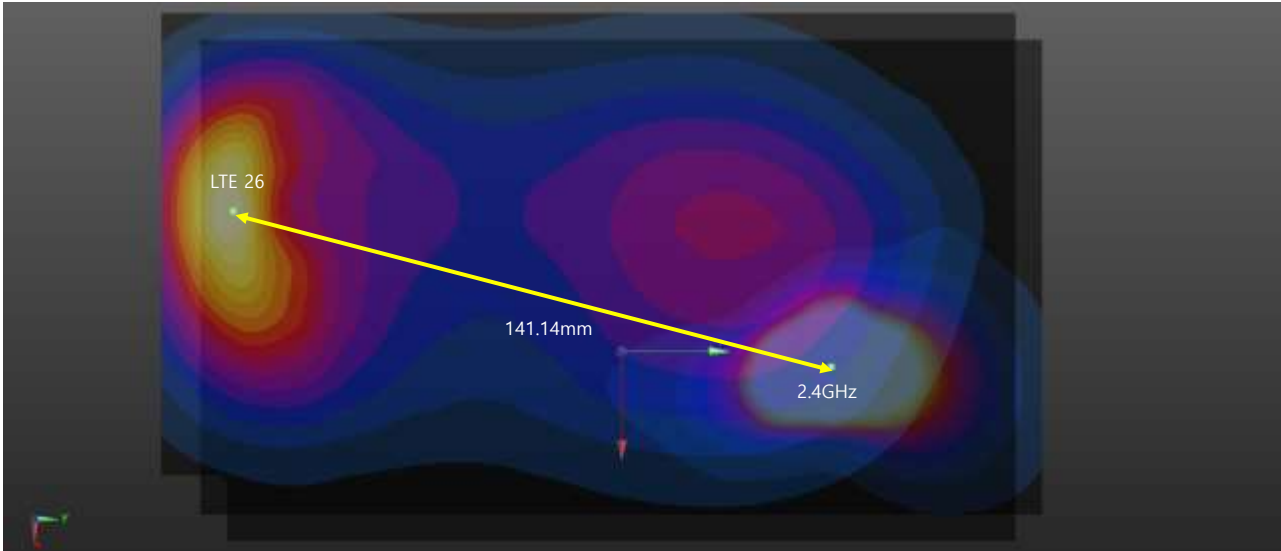


**LTE Band 13 + WLAN 2.4GHz**

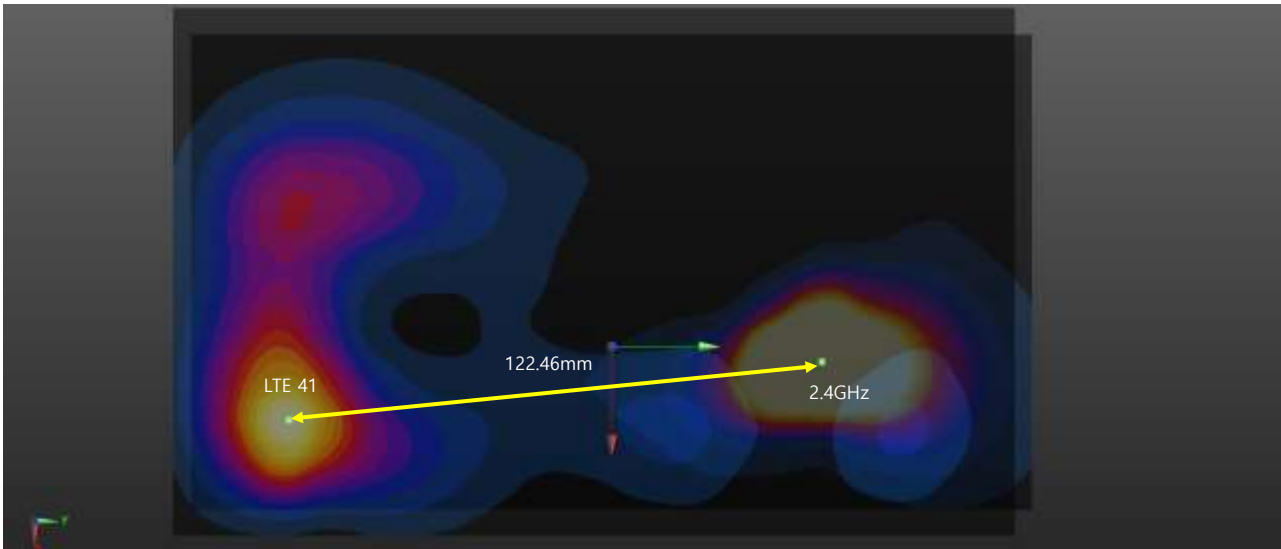




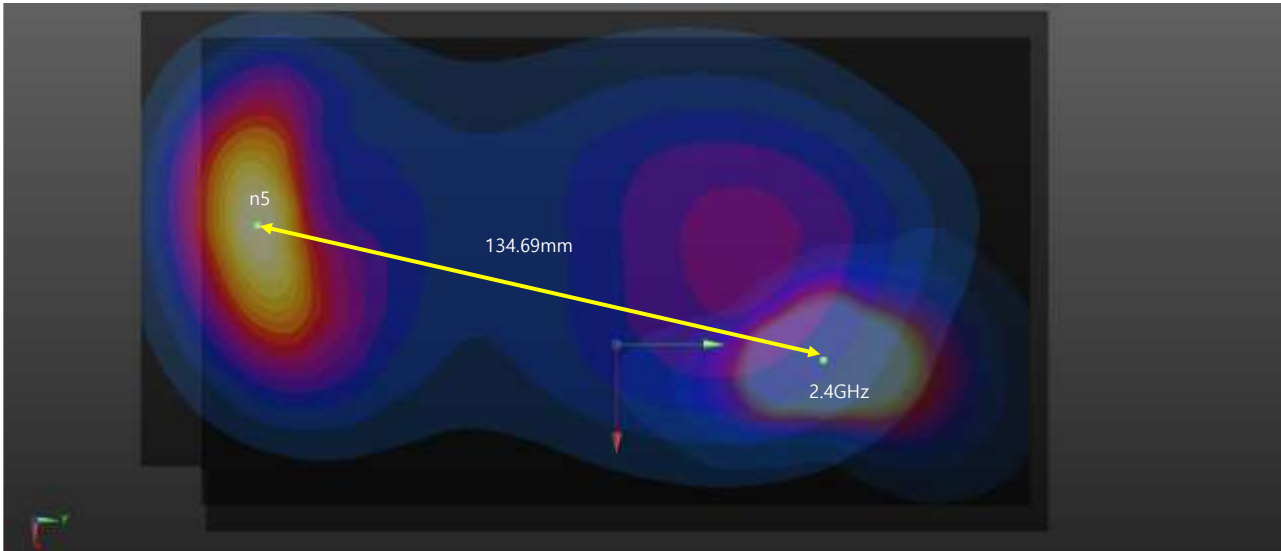
**LTE Band 26 + WLAN 2.4GHz**



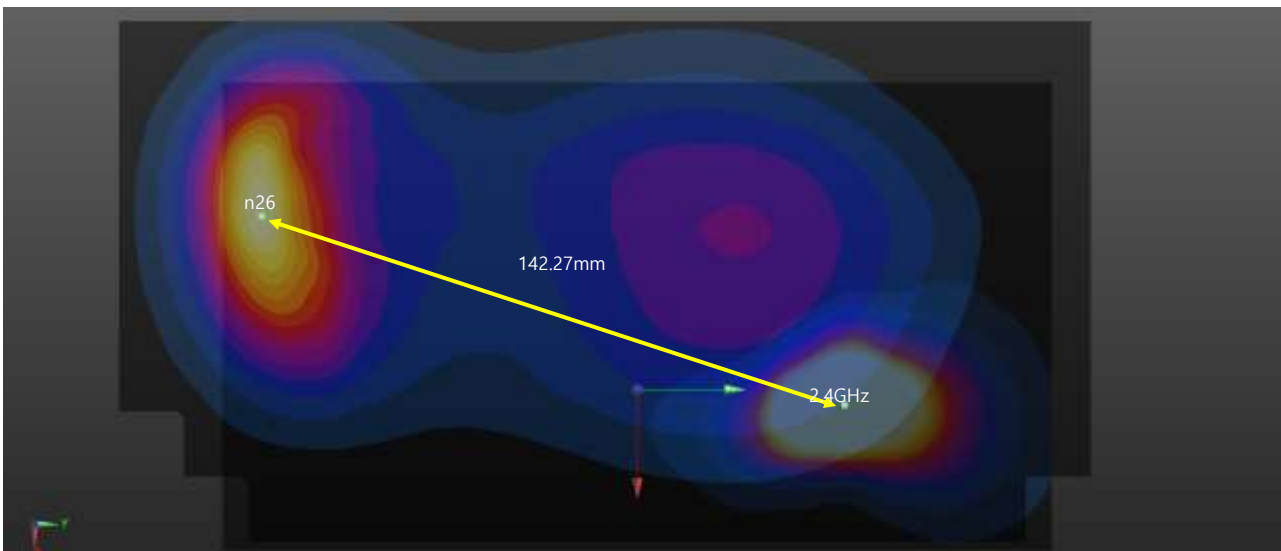
**LTE Band 41 + WLAN 2.4GHz**



**NR Band n5 + WLAN 2.4GHz**



**NR Band n26 + WLAN 2.4GHz**



## Hybrid Volume Plot

### #1 WLAN 5 GHz + Bluetooth

Communication System: UID 0, WIFI 5GHz (0); Frequency: 5320 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 5320$  MHz;  $\sigma = 4.702$  S/m;  $\epsilon_r = 35.735$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(5.24, 5.24, 5.24) @ 5320 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1225; Calibrated: 2023-03-06
- Phantom: Twin-SAM V8.0 (Right-Left)
- Measurement SW: DASY52, Version 52.10 (4);

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Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.747$  S/m;  $\epsilon_r = 40.251$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

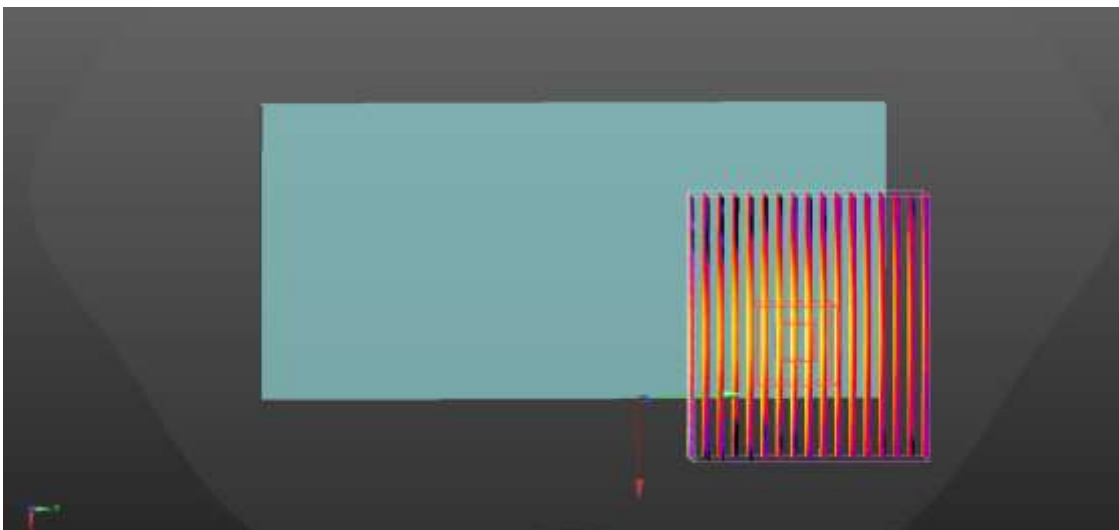
DASY5 Configuration:

- Probe: EX3DV4 - SN7370; ConvF(7.71, 7.71, 7.71) @ 2402 MHz; Calibrated: 2023-08-24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1225; Calibrated: 2023-03-06
- Phantom: Twin-SAM V8.0 (Right-Left);
- Measurement SW: DASY52, Version 52.10 (4);

### Multi Band Result:

**SAR(1 g) = 1.34 W/kg; SAR(10 g) = 0.521 W/kg**

Maximum value of SAR (interpolated) = 4.37 W/kg



## 16. 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.

### 17. SAR Test Equipment

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	SAM Phantom	-	N/A	N/A	N/A
Staubli #1	CS8Cspeag-TX90	F11/ 5K3RA1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F12/ 5K9GA1/ C/ 01	N/A	N/A	N/A
Staubli #4	CS8Cspeag-TX90	F17/ 59CHA1/ C/ 01	N/A	N/A	N/A
Staubli #5	CS8Cspeag-TX90	F17/ 59RAA1/ C/ 01	N/A	N/A	N/A
Staubli #7	CS8Cspeag-TX90	F08/5AJ0A1/C/01	N/A	N/A	N/A
Staubli #10	CS8Cspeag-TX90	F13/ 5SD0A1/ C/ 01	N/A	N/A	N/A
Staubli #11	CS8Cspeag-TX60L	F10/5FN3A1/C/01	N/A	N/A	N/A
Staubli#13	CS9spe-TX2-60	F/21/0029145/C/001	N/A	N/A	N/A
Staubli #14	CS8Cspeag-TX90	F07/55B8A1/C/01	N/A	N/A	N/A
Staubli #15	CS8Cspeag-TX90	F07/56W9A1/C/01	N/A	N/A	N/A
Staubli #1	TX90 Lspeag	F11/ 5K3RA1/ A/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F12/ 5K9GA1/ A/ 01	N/A	N/A	N/A
Staubli #4	TX90 XLspeag	F17/ 59CHA1/ A/ 01	N/A	N/A	N/A
Staubli #5	TX90 XLspeag	F17/ 59RAA1/ A/ 01	N/A	N/A	N/A
Staubli #7	CS8Cspeag-TX90	F08/5AJ0A1/C/01	N/A	N/A	N/A
Staubli #10	TX90 XI speag	F13/ 5SD0A1/ A/ 01	N/A	N/A	N/A
Staubli #11	TX-60 L spe	F10/5FN3A1/A/01	N/A	N/A	N/A
Staubli#13	TX2-60 Lspe	F/21/0029145/A/001	N/A	N/A	N/A
Staubli #14	TX90 XL speag	F07/55B8A1/A/01	N/A	N/A	N/A
Staubli #15	TX90 XLspeag	F07/56W9A1/A/01	N/A	N/A	N/A
Staubli #1	Teach Pendant (Joystick)	S-1203 0309	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-1206 0513	N/A	N/A	N/A
Staubli #4	Teach Pendant (Joystick)	010963	N/A	N/A	N/A
Staubli #5	Teach Pendant (Joystick)	011578	N/A	N/A	N/A
Staubli #7	Teach Pendant (Joystick)	S-0008	N/A	N/A	N/A
Staubli #10	Teach Pendant (Joystick)	001729	N/A	N/A	N/A
Staubli #11	Teach Pendant (Joystick)	D21142602	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	D21144507C	N/A	N/A	N/A
Staubli #14	Teach Pendant (Joystick)	S-0306	N/A	N/A	N/A
Staubli #15	Teach Pendant (Joystick)	S-0602	N/A	N/A	N/A
TESTO	175-H1/Thermometer	40331936309	12/29/2022	Annual	12/29/2023
TESTO	175-H1/Thermometer	40331939309	12/29/2022	Annual	12/29/2023
TESTO	175-H1/Thermometer	40331915309	12/29/2022	Annual	12/29/2023
TESTO	175-H1/Thermometer	40331922309	12/29/2022	Annual	12/29/2023
TESTO	175-H1/Thermometer	40331949309	12/29/2022	Annual	12/29/2023
TESTO	608-H1/Thermometer	83348029	03/27/2023	Annual	03/27/2024
TESTO	608-H1/Thermometer	2183499992	11/29/2022	Annual	11/29/2023
TESTO	608-H1/Thermometer	2183499992	11/29/2022	Annual	11/29/2023
TESTO	608-H1/Thermometer	83348021	03/27/2023	Annual	03/27/2024
TESTO	608-H1/Thermometer	83406789	03/27/2023	Annual	03/27/2024
SPEAG	DAE4	466	04/25/2023	Annual	04/25/2024
SPEAG	DAE4	504	01/10/2023	Annual	01/10/2024
SPEAG	DAE4	648	04/25/2023	Annual	04/25/2024
SPEAG	DAE4	652	01/20/2023	Annual	01/20/2024
SPEAG	DAE4	780	07/04/2023	Annual	07/04/2024
SPEAG	DAE4	869	03/23/2023	Annual	03/23/2024
SPEAG	DAE4	1225	03/06/2023	Annual	03/06/2024
SPEAG	DAE4	1686	05/23/2023	Annual	05/23/2024
SPEAG	DAE4	1687	07/18/2023	Annual	07/18/2024
SPEAG	E-Field Probe ES3DV3	3076	07/18/2023	Annual	07/18/2024
SPEAG	E-Field Probe EX3DV4	3797	01/24/2023	Annual	01/24/2024
SPEAG	E-Field Probe EX3DV4	3903	07/19/2023	Annual	07/19/2024
SPEAG	E-Field Probe EX3DV4	7370	08/24/2023	Annual	08/24/2024
SPEAG	E-Field Probe EX3DV4	7654	05/24/2023	Annual	05/24/2024
SPEAG	E-Field Probe EX3DV4	7655	05/25/2023	Annual	05/25/2024

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	E-Field Probe EX3DV4	7702	01/26/2023	Annual	01/26/2024
SPEAG	E-Field Probe EX3DV4	7732	06/20/2023	Annual	06/20/2024
SPEAG	E-Field Probe EX3DV4	7751	10/06/2023	Annual	10/06/2024
SPEAG	E-Field Probe EX3DV4	7680	05/24/2023	Annual	05/24/2024
SPEAG	Dipole CLA13	1016	09/21/2023	Annual	09/21/2024
SPEAG	Dipole D750V3	1014	05/23/2023	Annual	05/23/2024
SPEAG	Dipole D835V2	4d165	05/23/2023	Annual	05/23/2024
SPEAG	Dipole D1800V2	2d015	05/17/2023	Annual	05/17/2024
SPEAG	Dipole D1900V2	5d061	01/23/2023	Annual	01/23/2024
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 D5 GHz V2	1317	05/17/2023	Annual	05/17/2024
Agilent	Power Meter E4419B	MY41291386	09/21/2023	Annual	09/21/2024
Agilent	Power Meter N1911A	MY45101406	05/26/2023	Annual	05/26/2024
Agilent	Power Sensor 8481A	SG1091286	09/21/2023	Annual	09/21/2024
H.P	Power Sensor 8481A	MY41090675	09/21/2023	Annual	09/21/2024
Agilent	Wideband Power Sensor N1921A	MY55220026	07/28/2023	Annual	07/28/2024
Agilent	11636B/Power Divider	58698	01/26/2023	Annual	01/26/2024
SPEAG	DAKS 3.5	1038	01/25/2023	Annual	01/25/2024
SPEAG	Vector Reflectometer	00141013	02/13/2023	Annual	02/13/2024
SPEAG	MXA Signal Analyzer	MY49100108	01/13/2023	Annual	01/13/2024
H.P	Network Analyzer /8753ES	JP39240221	01/02/2023	Annual	01/02/2024
Agilent	WIRELESS COMMUNICATION E5515C	MY48361100	09/21/2023	Annual	09/21/2024
Agilent	WIRELESS COMMUNICATION E5515C	MY48360252	07/27/2023	Annual	07/27/2024
R&S	Wireless Communication Test Set CMW500	115733	03/23/2023	Annual	03/23/2024
Agilent	SIGNAL GENERATOR N5182A	MY47070230	03/23/2023	Annual	03/23/2024
EMPOWER	RF Power Amplifier	1084	05/26/2023	Annual	05/26/2024
EMPOWER	RF Power Amplifier	1011	09/21/2023	Annual	09/21/2024
MICRO LAB	LP Filter / LA-15N	10453	09/21/2023	Annual	09/21/2024
MICRO LAB	LP Filter / LA-30N	-	09/21/2023	Annual	09/21/2024
MICRO LAB	LP Filter / LA-60N	32011	09/21/2023	Annual	09/21/2024
Agilent	Attenuator (3dB) 8693B	MY39260298	08/22/2023	Annual	08/22/2024
HP	Attenuator (3dB) 33340A	02427	08/22/2023	Annual	08/22/2024
HP	Attenuator (20dB) 8493C	09271	08/22/2023	Annual	08/22/2024
Agilent	Directional Bridge 86205A	3140A04581	04/25/2023	Annual	04/25/2024
OSI	Power Divider	#3	05/26/2023	Annual	05/26/2024
Agilent	MXA Signal Analyzer N9020A	MY50510407	06/07/2023	Annual	06/07/2024
HP	Dual Directional Coupler	16072	09/21/2023	Annual	09/21/2024
Anritsu	Radio Communication Test Station MT8000A	6262036812	12/07/2022	Annual	12/07/2023
Anritsu	Radio Communication Tester MT8820C	6201074225	01/25/2023	Annual	01/25/2024
Anritsu	Radio Communication Tester MT8820C	6200695605	03/23/2023	Annual	03/23/2024
Anritsu	Radio Communication Tester MT8821C	6201502997	05/26/2023	Annual	05/26/2024
Anritsu	Radio Communication Tester MT8821C	6201664725	01/25/2023	Annual	01/25/2024
Agilent	WIRELESS COMMUNICATION E5515C	MY50260992	05/26/2023	Annual	05/26/2024
Anritsu	Radio Communication Test Station MT8000A	6262036812	12/07/2022	Annual	12/07/2023
Anritsu	Radio Communication Tester MT8820C	6201074225	01/25/2023	Annual	01/25/2024
Anritsu	Radio Communication Tester MT8820C	6200695605	03/23/2023	Annual	03/23/2024
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	6201664725	01/25/2023	Annual	01/25/2024
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.

## 18. 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-2311-FC002-P