HCT Co., Ltd.
74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA
Tel. +82 31 634 6300 Fax. +82 31 645 6401

SAR TEST REPORT

Applicant Name: **SAMSUNG Electronics Co., Ltd.** 129, Samsung-ro, Yeongtong-gu, Suwon-Si, Gyeonggi-do, 16677 Rep. of Korea	**Date of Issue:** Nov. 08, 2022 **Test Report No.:** HCT-SR-2210-FC004-R2 **Test Site: HCT CO., LTD.**

FCC ID: A3LSMS911B

Equipment Type:	**Mobile Phone**
Application Type	**Certification**
FCC Rule Part(s):	**CFR §2.1093**
Model Name:	**SM-S911B/DS**
Additional Model Name:	**SM-S911B**
Date of Test:	**Sep. 05, 2022 ~ Nov. 07, 2022**

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

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

Tested By

Jung Hun, Park
Test Engineer
SAR Team
Certification Division

Reviewed By

Yun-jeang, Heo
Technical Manager
SAR Team
Certification Division

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	Nov. 01, 2022	Initial Release
1	Nov. 07, 2022	Revised Sec.4, Sec.11, Sec.14, Sec.16, Appendix H
2	Nov. 08, 2022	Revised Sec.4

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.

Table of Contents

1. Test Regulations

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

- FCC KDB Publication 941225 D01 3G SAR Procedures v03r01
- FCC KDB Publication 941225 D06 Hot Spot SAR v02r01
- FCC KDB Publication 941225 D05 SAR for LTE Devices v02r05
- FCC KDB Publication 941225 D05A LTE Rel.10 KDB Inquiry sheet v01r02
- FCC KDB Publication 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB Publication 447498 D01 General SAR Guidance v06
- FCC KDB Publication 648474 D04 Handset SAR v01r03
- FCC KDB Publication 616217 D04 v01r02 (Proximity Sensor)
- FCC KDB Publication 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
- FCC KDB Publication 865664 D02 SAR Reporting v01r02
- FCC KDB Publication 690783 D01 SAR Listings on Grants v01r03
- FCC KDB Publication 971168 D01 Power Meas License Digital Systems v03r01

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

- October 2013 TCB Workshop Notes (GPRS testing criteria)
- October 2014 TCB Workshop Notes (Overlapping LTE Bands)
- April 2015 TCB Workshop Notes (Overlapping LTE Bands Test exclusion)
- April 2015 TCB Workshop Notes (Simultaneous transmission summation clarified)
- October 2016 TCB Workshop Notes (Bluetooth Duty Factor)
- November 2017 TCBC Workshop Notes (LTE Carrier Aggregation)
- May 2017 TCBC Workshop Notes (LTE Band 41 Power Class 2)
- April 2019 TCBC Workshop Notes (IEEE 802.11 ax)
- April 2018 TCBC Workshop Notes (LTE UL CA, DL CA SAR Test Exclusion)
- November 2019 TCBC Workshop Notes (SPLSR Hotspot Combination)
- April 2019 and Oct 2020 TCBC Workshop Notes (Dynamic Antenna tuning)

2. Test Location

2.1 Test Laboratory

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

2.2 Test Facilities

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

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

3. Information of the EUT

3.1 General Information of the EUT

Model Name	SM-S911B/DS
Additional Model Name	SM-S911B
Equipment Type	Mobile Phone
FCC ID	A3LSMS911B
Application Type	Certification
Applicant	SAMSUNG Electronics Co., Ltd.

3.2 Attestation of test result of device under test

The Highest Reported SAR						
Band	Tx. Frequency	Equipment Class	Reported SAR (W/kg)			
			1g Head	1g Body-Worn	1g Hotspot	10g Extremity
GSM/GPRS/EDGE 850	824.2 MHz ~ 848.8 MHz	PCE	0.37	0.49	0.86	N/A
GSM/GPRS/EDGE 1900	1 850.2 MHz ~ 1 909.8 MHz	PCE	0.21	0.38	0.92	1.11
UMTS Band 5	826.4 MHz ~ 846.6 MHz	PCE	0.30	0.37	0.75	N/A
UMTS Band 4	1 712.4 MHz ~ 1 752.6 MHz	PCE	0.25	0.66	0.85	1.74
UMTS Band 2	1 852.4 MHz ~ 1 907.6 MHz	PCE	0.26	0.56	0.97	1.37
LTE Band 2 (PCS)	1 850.7 MHz ~ 1 909.3 MHz	PCE	N/A	N/A	N/A	N/A
LTE Band 4 (AWS)	1 710.7 MHz ~ 1 754.3 MHz	PCE	N/A	N/A	N/A	N/A
LTE Band 4 (AWS) ULCA	1 710.7 MHz ~ 1 754.3 MHz	PCE	0.67	0.25	0.60	N/A
LTE Band 5 (Cell)	824.7 MHz ~ 848.3 MHz	PCE	0.37	0.48	0.75	N/A
LTE Band 12	699.7 MHz ~ 715.3 MHz	PCE	0.17	0.24	0.38	N/A
LTE Band 13	779.5 MHz ~ 784.5 MHz	PCE	0.28	0.49	0.67	N/A
LTE Band 17	706.5 MHz ~ 713.5 MHz	PCE	N/A	N/A	N/A	N/A
LTE Band 25 (PCS)	1 850.7 MHz ~ 1 914.3 MHz	PCE	0.29	0.61	**1.09**	**1.99**
LTE Band 26 (Cell)	814.7 MHz ~ 848.3 MHz	PCE	0.36	0.43	0.94	N/A
LTE TDD Band 41 (PC3)	2 498.5 MHz ~ 2 687.5 MHz	PCE	0.15	0.30	0.60	N/A
LTE TDD Band 41 (PC2)	2 498.5 MHz ~ 2 687.5 MHz	PCE	0.15	0.30	0.57	N/A
LTE Band 66 (AWS)	1 710.7 MHz ~ 1 779.3 MHz	PCE	0.21	0.65	0.80	1.59
NR Band n2 (PCS)	1 852.5 MHz~ 1 907.5 MHz	PCE	N/A	N/A	N/A	N/A
NR Band n5	826.5 MHz ~ 846.5 MHz	PCE	0.36	0.42	0.62	N/A
NR Band n25 (PCS)	1 852.5 MHz ~ 1 912.5 MHz	PCE	0.31	0.56	0.78	1.36
NR Band n41 (PC3)	2 506.02 MHz ~ 2 679.99 MHz	PCE	0.67	0.20	0.30	1.72
NR Band n41 SRS	2 506.02 MHz ~ 2 679.99 MHz	PCE	0.34	<0.10	0.20	0.40
NR Band n66 (Lower)	1 712.5 MHz ~ 1 777.5 MHz	PCE	0.32	**0.70**	1.05	1.96
NR Band n66 (Upper)	1 712.5 MHz ~ 1 777.5 MHz	PCE	0.69	0.28	0.62	N/A
NR Band n77	3 705 MHz ~ 3 975 MHz	PCE	0.67	0.12	0.11	N/A
NR Band n77 DoD	3 455.04 MHz ~ 3 544.98 MHz	PCE	**0.75**	0.14	0.14	1.98
NR Band n77 SRS	3 705 MHz ~ 3 975 MHz	PCE	**0.55**	<0.10	<0.10	0.60
NR Band n77 DoD SRS	3 455.04 MHz ~ 3 544.98 MHz	PCE	0.57	0.13	0.27	0.72
802.11b	2 412 MHz ~ 2 472 MHz	DTS	**0.69**	0.37	**0.60**	N/A
U-NII-1	5 180 MHz ~ 5 240 MHz	NII	N/A	N/A	N/A	N/A
U-NII-2A	5 260 MHz ~ 5 320 MHz	NII	**0.67**	**0.17**	N/A	**2.44**
U-NII-2C	5 500 MHz ~ 5 720 MHz	NII	0.57	0.13	N/A	1.61
U-NII-3	5 745 MHz ~ 5 825 MHz	NII	0.54	0.17	**0.58**	N/A
U-NII-4	5 845 MHz ~ 5 885 MHz	NII	0.60	0.28	N/A	2.50
Bluetooth	2 402 MHz ~ 2 480 MHz	DSS	**0.45**	<0.10	**0.17**	N/A
Simultaneous SAR per KDB 690783 D01v01r03			**1.578**	**1.352**	**1.355**	**3.950**
Date(s) of Tests:	Sep. 05, 2022 ~ Nov. 01, 2022					

4. Device Under Test Description

4.1 DUT specification

Device Wireless specification overview		
Band & Mode	**Operating Mode**	**Tx Frequency**
GSM850	Voice / Data	824.2 ㎒ ~ 848.8 ㎒
GSM1900	Voice / Data	1 850.2 ㎒ ~ 1 909.8 ㎒
UMTS Band 5	Voice / Data	826.4 ㎒ ~ 846.6 ㎒
UMTS Band 4	Voice / Data	1 712.4 ㎒ ~ 1 752.6 ㎒
UMTS Band 2	Voice / Data	1 852.4 ㎒ ~ 1 907.6 ㎒
LTE Band 2 (PCS)	Voice / Data	1 850.7 ㎒ ~ 1 909.3 ㎒
LTE Band 4 (AWS)	Voice / Data	1 710.7 ㎒ ~ 1 754.3 ㎒
LTE Band 5 (Cell)	Voice / Data	824.7 ㎒ ~ 848.3 ㎒
LTE Band 12	Voice / Data	699.7 ㎒ ~ 715.3 ㎒
LTE Band 13	Voice / Data	779.5 ㎒ ~ 784.5 ㎒
LTE Band 17	Voice / Data	706.5 ㎒ ~ 713.5 ㎒
LTE Band 25	Voice / Data	1 850.7 ㎒ ~ 1 914.3 ㎒
LTE Band 26	Voice / Data	814.7 ㎒ ~ 848.3 ㎒
LTE TDD Band 41	Voice / Data	2 498.5 ㎒ ~ 2 687.5 ㎒
LTE Band 66 (AWS)	Voice / Data	1 710.7 ㎒ ~ 1 779.3 ㎒
NR Band n2 (PCS)	Voice / Data	1 852.5 ㎒ ~ 1 907.5 ㎒
NR Band n5	Voice / Data	826.5 ㎒ ~ 846.5 ㎒
NR Band n25 (PCS)	Voice / Data	1 852.5 ㎒ ~ 1 912.5 ㎒
NR Band n41	Voice / Data	2 506.02 ㎒ ~ 2 679.99 ㎒
NR Band n66	Voice / Data	1 712.5 ㎒ ~ 1 777.5 ㎒
NR Band n77	Voice / Data	3 705 ㎒ ~ 3 975 ㎒
NR Band n77 DoD	Voice / Data	3 455.04 ㎒ ~ 3 544.98 ㎒
U-NII-1	Voice / Data	5 180 ㎒ ~ 5 240 ㎒
U-NII-2A	Voice / Data	5 260 ㎒ ~ 5 320 ㎒
U-NII-2C	Voice / Data	5 500 ㎒ ~ 5 720 ㎒
U-NII-3	Voice / Data	5 745 ㎒ ~ 5 825 ㎒
U-NII-4	Voice / Data	5 845 ㎒ ~ 5 885 ㎒
U-NII-5	Voice / Data	5 955 ㎒ – 6 425 ㎒
U-NII-6	Voice / Data	6 425 ㎒ – 6 525 ㎒
U-NII-7	Voice / Data	6 525 ㎒ – 6 875 ㎒
U-NII-8	Voice / Data	6 875 ㎒ – 7 115 ㎒
2.4 ㎓ WLAN	Voice / Data	2 412 ㎒ ~ 2 472 ㎒
Bluetooth / LE 5.2	Data	2 402 ㎒ ~ 2 480 ㎒
NFC	Data	13.56 ㎒
WPC	Data	110 ㎑ ~ 148 ㎑

Device Description		
S/W Version	S911B.001	
H/W Version	REV0.1	
Device Serial Numbers	**Mode**	**Serial Number**
	GSM850, GSM 1900 Phablet, UMTS B2/B4/B5 LTE 4 ULCA, LTE B5/B12/B13, NR n41	VHQ0373M VI20042M
	LTE 25/ 26/41/66, NR n5, NR n77, NR n77 DoD, NR n77 DoD SRS 3	VHQ0377M
	NR 25, NR n41 SRS2, SRS3, SRS4, NR 66, NR n77 SRS 2, SRS3, SRS4	VI20113M, VI20063M, VI20042M
	NR n66 Phablet, NR n77 DoD SRS 4	VI20128M
	NR n77 DoD SRS 2,	VHQ0063M
	WLAN 2.4GHz , Bluetooth	VIF1952M, VI20134M
	WLAN 5GHz, WLAN 6 GHz	VI20041M, VI20134M VJL1244M, VJL1231M, VJL1292M
	The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics are within operational tolerances expected for production units.	

4.2 Time-Averaging Algorithm for RF Exposure Compliance

This equipment contains the Qualcomm modem supporting 2G/3G/4G WWAN technologies and Sub6 5G NR bands. This modems are enabled with Qualcomm Smart Transmit feature to control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is incompliance with the FCC requirement. This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit feature.

This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is incompliance with FCC requirements all the time. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit feature.

WLAN/BT operations are not enabled with Smart Transmit.

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

The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC SAR limits when transmitting instatic transmission scenario at maximum allowable time-averaged power levels.

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

Plim values in green indicate Plimt < Pmax				Plim values in grey indicate Plim > Pmax				
Plimt corresponding to 1 W/kg (1g) 2.5W/kg(10g) SAR_Design_target								Pmax
SAR Exposure Position			Maximum Tune-up Output Power (Frame Averaged Power) [dBm]	Phablet (Grip On)	Head (RCV ON)	Hotspot	EarJack	Maximum Tune-up Output Power [dBm]
Averaging volume			1g/10g	10g	1g	1g	10g	
seperation Distance			15/0,7,9,12 mm	0 mm	0 mm	10 mm	0 mm	
Mode	Band	Antenna	DSI = 0	DSI = 1	DSI = 2	DSI = 3	DSI = 4	
GSM/GPRS/EDGE	850	MAIN 1	29.1	25.7	30.3	26.7	25.7	25.0
GSM/GPRS/EDGE	1900	MAIN 1	26.5	19.0	29.8	19.0	19.0	22.0
UMTS	5	MAIN 1	29.8	26.3	30.8	26.8	26.3	24.5
UMTS	4	MAIN 1	25.8	20.0	30.0	20.0	20.0	23.0
UMTS	2	MAIN 1	26.5	19.5	29.8	17.5	19.5	23.0
LTE FDD	4	SUB 2	20.0	20.0	15.5	20.0	20.0	23.0
LTE FDD	5	MAIN 1	28.2	26.5	29.3	26.2	26.5	24.5
LTE FDD	12	MAIN 1	31.3	26.5	32.7	29.2	26.5	24.0
LTE FDD	13	MAIN 1	28.1	26.2	30.6	26.7	26.2	24.0
LTE FDD	25	MAIN 1	26.2	19.0	29.5	18.5	19.0	23.0
LTE FDD	26	MAIN 1	28.7	26.6	29.4	25.3	26.6	24.0
LTE TDD PC3	41 P3	MAIN 2	25.1	20.0	31.2	20.0	20.0	22.0
LTE TDD PC2	41 P2	MAIN 2	25.1	19.9	31.4	19.9	19.9	21.9
LTE FDD	66	MAIN 1	25.9	19.5	30.9	19.5	19.5	23.0
NR FDD	5	MAIN 1	28.7	24.9	29.5	27.1	24.9	24.0
NR FDD	25	MAIN 1	26.5	19.0	29.1	18.5	19.0	23.0
NR TDD PC3	41	SUB 2	18.5	18.5	16.5	16.5	18.5	24.0
NR TDD SRS1(PC3)	41	MAIN 2	14.5	14.5	14.5	14.5	14.5	24.0
NR TDD SRS2(PC3)	41	SUB 1	13.0	13.0	13.0	13.0	13.0	24.0
NR TDD SRS3(PC3)	41	MAIN 4	11.5	11.5	11.5	11.5	11.5	24.0
NR FDD	66	MAIN 1	25.5	19.5	29.0	19.5	19.5	23.0
NR FDD	66	SUB 2	20.0	20.0	16.0	20.0	20.0	23.0
NR TDD PC3	77	SUB 2	18.0	18.0	15.0	15.0	18.0	24.5
NR TDD SRS1(PC3)	77	MAIN 3	13.0	13.0	13.0	13.0	13.0	24.5
NR TDD SRS2(PC3)	77	SUB 5	13.5	13.5	13.5	13.5	13.5	24.5
NR TDD SRS3(PC3)	77	MAIN 4	12.5	12.5	12.5	12.5	12.5	24.5
NR TDD PC3	77 DOD	SUB 2	18.0	18.0	15.0	15.0	18.0	24.5
NR TDD SRS1(PC3)	77 DOD	MAIN 3	13.0	13.0	13.0	13.0	13.0	24.5
NR TDD SRS2(PC3)	77 DOD	SUB 5	13.5	13.5	13.5	13.5	13.5	24.5
NR TDD SRS3(PC3)	77 DOD	MAIN 4	12.5	12.5	12.5	12.5	12.5	24.5

*Note all P_{limit} EFS and maximum tune up output power P_{max} levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of 2G/4G TDD modulation schemes (for e.g., GSM,TDD).
*Maximum tune up output power Pmax is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum Tune up output power + 1dB device design uncertainty.
The maximum time-averaged output power (dBm) for any 2G/3G/4G/5G WWAN technology, band, and DSI = minimum of "Plimit EFS" and "Maximum tune up output power Pmax" + 1dB device uncertainty. SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB Publication447498 D01v06.

4.3 Power Reduction for SAR

This device utilizes a power reduction mechanism for some wireless modes and Bands for SAR compliance under some conditions when the device is being used in close proximity to the user's Body. FCC KDB.
This device uses an independent fixed level power reduction mechanism for 5G NR n66 of upper antenna and 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 3G/4G/5G Nominal and Maximum Output Power

A. GSM Modes

(Tolerance: -1.5 dB ~ +1.0 dB)

GSM/GPRS/EDGE 850									
Power Level	Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
	1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	32.7	32.7	31.0	29.0	27.0	26.5	24.7	22.7	21.5
DSI = 0 (free)	32.7	32.7	31.0	29.0	27.0	26.5	24.7	22.7	21.5
DSI = 1 (Grip sensor)	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSI = 2 (RCV)	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSI = 3 (Hotspot)	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSI = 4 (Earjack)	NA	NA	NA	NA	NA	NA	NA	NA	NA
GSM/GPRS/EDGE 1900									
Power Level	Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
	1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	30.0	30.0	28.0	26.0	24.5	25.5	23.5	21.5	20.5
DSI = 0 (free)	30.0	30.0	28.0	26.0	24.5	25.5	23.5	21.5	20.5
DSI = 1 (Grip sensor)	28.0	28.0	25.0	22.2	21.0	NA	NA	NA	NA
DSI = 2 (RCV)	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSI = 3 (Hotspot)	28.0	28.0	25.0	22.2	21.0	NA	NA	NA	NA
DSI = 4 (Earjack)	28.0	28.0	25.0	22.2	21.0	NA	NA	NA	NA

B. UMTS Modes

(Tolerance: -1.5 dB ~ +1.0 dB)

UMTS Band 5 (850 MHz)						
Mode / Band	Modulated Average Output Power (in dBm)					
	Pmax	DSI 0 (free)	DSI = 1 (Grip sensor)	DSI = 2 (RCV)	DSI = 3 (Hotspot)	DSI = 4 (Earjack)
3GPP WCDMA Rel 99	24.5	24.5	NA	NA	NA	NA
3GPP HSDPA Rel 5	23.5	23.5	NA	NA	NA	NA
3GPP HSUPA Rel 6	23.5	23.5	NA	NA	NA	NA
3GPP DC-HSDPA Rel 8	23.5	23.5	NA	NA	NA	NA
UMTS Band 4 (1750 MHz)						
Mode / Band	Modulated Average Output Power (in dBm)					
	Pmax	DSI 0 (free)	DSI = 1 (Grip sensor)	DSI = 2 (RCV)	DSI = 3 (Hotspot)	DSI = 4 (Earjack)
3GPP WCDMA Rel 99	23.0	23.0	20.0	NA	20.0	20.0
3GPP HSDPA Rel 5	22.0	22.0	19.0	NA	19.0	19.0
3GPP HSUPA Rel 6	22.0	22.0	19.0	NA	19.0	19.0
3GPP DC-HSDPA Rel 8	22.0	22.0	19.0	NA	19.0	19.0
UMTS Band 2 (1900 MHz)						
Mode / Band	Modulated Average Output Power (in dBm)					
	Pmax	DSI 0 (free)	DSI = 1 (Grip sensor)	DSI = 2 (RCV)	DSI = 3 (Hotspot)	DSI = 4 (Earjack)
3GPP WCDMA Rel 99	23.0	23.0	19.5	NA	17.5	19.5
3GPP HSDPA Rel 5	22.0	22.0	18.5	NA	16.5	18.5
3GPP HSUPA Rel 6	22.0	22.0	18.5	NA	16.5	18.5
3GPP DC-HSDPA Rel 8	22.0	22.0	18.5	NA	16.5	18.5

C. LTE Modes

(Tolerance: -1.5 dB ~ +1.0 dB)

Mode / Band	Modulated Average Output Power (in dBm)					
	Pmax	DSI 0 (free)	DSI = 1 (Grip sensor)	DSI = 2 (RCV)	DSI = 3 (Hotspot)	DSI = 4 (Earjack)
LTE FDD Band 12	24.0	24.0	NA	NA	NA	NA
LTE FDD Band 17	24.0	24.0	NA	NA	NA	NA
LTE FDD Band 13	24.0	24.0	NA	NA	NA	NA
LTE FDD Band 26	24.0	24.0	NA	NA	NA	NA
LTE FDD Band 5	24.5	24.5	NA	NA	NA	NA
LTE FDD Band 66	23.0	23.0	19.5	NA	19.5	19.5
LTE FDD Band 4	23.0	23.0	19.5	NA	19.5	19.5
LTE FDD Band 4 (ULCA, Upper)	23.0	20.0	20.0	15.5	20.0	20.0
LTE FDD Band 25	23.0	23.0	19.0	NA	18.5	19.0
LTE FDD Band 2	23.0	23.0	19.0	NA	18.5	19.0
LTE TDD Band 41	24.0	24.0	22.0	NA	22.0	22.0
LTE TDD Band 41 (PC2)	25.5	25.5	23.5	NA	23.5	23.5

D. 5G NR SUB 6

(Tolerance: -1.5 dB ~ +1.0 dB)

Mode / Band	Modulated Average Output Power (in dBm)					
	Pmax	DSI 0 (free)	DSI = 1 (Grip sensor)	DSI = 2 (RCV)	DSI = 3 (Hotspot)	DSI = 4 (Earjack)
NR FDD Band 5	24.0	24.0	NA	NA	NA	NA
NR FDD Band 66 (SA)	23.0	23.0	19.5	NA	19.5	19.5
NR FDD Band 66 (ENDC, Upper)	23.0	20.0	20.0	16.0	20.0	20.0
NR FDD Band 2	23.0	23.0	19.0	NA	18.5	19.0
NR FDD Band 25	23.0	23.0	19.0	NA	18.5	19.0
NR TDD Band 41 (Ant. Sub 2)	24.0	18.5	18.5	16.5	16.5	18.5
NR TDD Band 41 (Ant. Main 2)	24.0	14.5	14.5	14.5	14.5	14.5
NR TDD Band 41 (Ant. Sub 1)	24.0	13.0	13.0	13.0	13.0	13.0
NR TDD Band 41 (Ant. Main 4)	24.0	11.5	11.5	11.5	11.5	11.5
NR TDD Band 77 (Ant. Sub 2)	24.5	18.0	18.0	15.0	15.0	18.0
NR TDD Band 77 (Ant. Main 3)	24.5	13.0	13.0	13.0	13.0	13.0
NR TDD Band 77 (Ant. Sub 5)	24.5	13.5	13.5	13.5	13.5	13.5
NR TDD Band 77 (Ant. Main 4)	24.5	12.5	12.5	12.5	12.5	12.5

4.4.2 Maximum 2.4 GHz, 5 GHz, 6 GHz WIFI output power

Maximum Power
():Power to 6E Standard AP

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax(SU)
2.4GHz	1~11ch								17	16	16		16		20	19	19		19
	12ch								5	5	5		5		8	8	8		8
	13ch								-1	-1	-1		-1		2	2	2		2
5GHZ (20MHz)	5200MHz	16												19			19	19	19 Ch36 : 18
	5300MHz	16 Ch64 : 15.5												19 Ch64 : 18.5			19	19	19 Ch64 : 17
	5500MHz	16 Ch100: 15.5												19 Ch100 : 18.5			19	19	19 Ch100 : 17
	5800MHz	16												19			19	19	19
	5900MHz	16												19			19	19	19
5GHZ (40MHz)	5200MHz																18	18	18
	5300MHz																18	18	18 Ch62 : 17
	5500MHz																18	18	18 Ch102:17
	5800MHz																18	18	18
	5900MHz																18	18	18
5GHZ (80MHz)	5200MHz																	17	17
	5300MHz																	17	17
	5500MHz																	17	17
	5800MHz																	17	17
	5900MHz																	17	17
5GHZ (160MHz)	5200MHz																	16	16
	5500MHz																	16	16
	5900MHz																	16	16
6GHZ (20MHz)	UNII5													10 (14)					10 (14)
	UNII6													10					10
	UNII7													10(14)					10 (14)
	UNII8													10					10
6GHZ (40MHz)	UNII5																		12 (14)
	UNII6																		12
	UNII7																		12 (14)
	UNII8																		12
6GHZ (80MHz)	UNII5																		12 (14)
	UNII6																		12
	UNII7																		12 (14)
	UNII8																		12
6GHZ (160MHz)	UNII5																		12 (14)
	UNII6																		12
	UNII7																		12 (14)
	UNII8																		12

(Upper tolerance: target+1.0dB)

Receiver Active(RCV-ON)

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax(SU)
2.4GHz	1~11ch								13	13	13		13		16	16	16		16
	12ch								5	5	5		5		8	8	8		8
	13ch								-1	-1	-1		-1		2	2	2		2
5GHZ (20MHz)	5200MHz	12												15			15	15	15
	5300MHz	12												15			15	15	15
	5500MHz	12												15			15	15	15
	5800MHz	12												15			15	15	15
	5900MHz	12												15			15	15	15
5GHZ (40MHz)	5200MHz																15	15	15
	5300MHz																15	15	15
	5500MHz																15	15	15
	5800MHz																15	15	15
	5900MHz																15	15	15
5GHZ (80MHz)	5200MHz																	15	15
	5300MHz																	15	15
	5500MHz																	15	15
	5800MHz																	15	15
	5900MHz																	15	15
5GHZ (160MHz)	5200MHz																	15	15
	5500MHz																	15	15
	5900MHz																	15	15
6GHZ (20MHz)	UNII5													10 (12)					10 (12)
	UNII6													10					10
	UNII7													10 (12)					10 (12)
	UNII8													10					10
6GHZ (40MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12
6GHZ (80MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12
6GHZ (160MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12

(Upper tolerance: target+1.0 dB)

RSDB Mode and RSDB with receiver Active (RCV-ON)

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax(SU)
2.4GHz	1~11ch								6	12	12		12		9	15	15		15
	12ch								5	5	5		5		8	8	8		8
	13ch								-1	-1	-1		-1		2	2	2		2
5GHZ (20MHz)	5200MHz	12												15			15	15	15
	5300MHz	12												15			15	15	15
	5500MHz	12												15			15	15	15
	5800MHz	12												15			15	15	15
	5900MHz	12												15			15	15	15
5GHZ (40MHz)	5200MHz																15	15	15
	5300MHz																15	15	15
	5500MHz																15	15	15
	5800MHz																15	15	15
	5900MHz																15	15	15
5GHZ (80MHz)	5200MHz																	15	15
	5300MHz																	15	15
	5500MHz																	15	15
	5800MHz																	15	15
	5900MHz																	15	15
5GHZ (160MHz)	5200MHz																	15	15
	5500MHz																	15	15
	5900MHz																	15	15
6GHZ (20MHz)	UNII5													10 (12)					10 (12)
	UNII6													10					10
	UNII7													10 (12)					10 (12)
	UNII8													10					10
6GHZ (40MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12
6GHZ (80MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12
6GHZ (160MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12

(Upper tolerance: target+1.0 dB)

NR Active

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax(SU)
2.4GHz	1~11ch								13	13	13		13		16	16	16		16
	12ch								5	5	5		5		8	8	8		8
	13ch								-1	-1	-1		-1		2	2	2		2
5GHZ (20MHz)	5200MHz	12												15			15	15	15
	5300MHz	12												15			15	15	15
	5500MHz	12												15			15	15	15
	5800MHz	12												15			15	15	15
	5900MHz	12												15			15	15	15
5GHZ (40MHz)	5200MHz																15	15	15
	5300MHz																15	15	15
	5500MHz																15	15	15
	5800MHz																15	15	15
	5900MHz																15	15	15
5GHZ (80MHz)	5200MHz																	15	15
	5300MHz																	15	15
	5500MHz																	15	15
	5800MHz																	15	15
	5900MHz																	15	15
5GHZ (160MHz)	5200MHz																	15	15
	5500MHz																	15	15
	5900MHz																	15	15
6GHZ (20MHz)	UNII5													10 (12)					10 (12)
	UNII6													10					10
	UNII7													10 (12)					10 (12)
	UNII8													10					10
6GHZ (40MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12
6GHZ (80MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12
6GHZ (160MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12

(Upper tolerance: target+1.0 dB)

NR + RSDB+ RCV active

Mode	Band	SISO(ANT 1)						SISO(ANT 2)						MIMO					
		a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)	a	b	g	n	ac	ax (SU)
2.4GHz	1~11ch								6	12	12		12		9	15	15		15
	12ch								5	5	5		5		8	8	8		8
	13ch								-1	-1	-1		-1		2	2	2		2
5GHZ (20MHz)	5200MHz	12												15			15	15	15
	5300MHz	12												15			15	15	15
	5500MHz	12												15			15	15	15
	5800MHz	12												15			15	15	15
	5900MHz	12												15			15	15	15
5GHZ (40MHz)	5200MHz																15	15	15
	5300MHz																15	15	15
	5500MHz																15	15	15
	5800MHz																15	15	15
	5900MHz																15	15	15
5GHZ (80MHz)	5200MHz																	15	15
	5300MHz																	15	15
	5500MHz																	15	15
	5800MHz																	15	15
	5900MHz																	15	15
5GHZ (160MHz)	5200MHz																	15	15
	5500MHz																	15	15
	5900MHz																	15	15
6GHZ (20MHz)	UNII5													10 (12)					10 (12)
	UNII6													10					10
	UNII7													10 (12)					10 (12)
	UNII8													10					10
6GHZ (40MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12
6GHZ (80MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12
6GHZ (160MHz)	UNII5																		12
	UNII6																		12
	UNII7																		12
	UNII8																		12

(Upper tolerance: target+1.0 dB)

802.11ax RU Tx power Tables

Mode	Band	SISO (ANT2)						MIMO					
		26T	52T	106T	242T	484T	996T	26T	52T	106T	242T	484T	996T
2.4GHz	2.45GHz	13	14	15	16			16	17	18	19		
	12ch	5	5	5	5			8	8	8	8		
	13ch	-1	-1	-1	-1			2	2	2	2		
5GHZ (20MHz)	5200MHz							12	15	17 36, 40ch : 16	19 36ch : 16, 40ch : 18		
	5300MHz							12	15	17 60ch:16 64ch:14	19 56ch:18 60ch:16 64ch:14		
	5500MHz							12	15	17 100ch:16	19 100ch:13 104ch:16 108ch:18		
	5800MHz							12	15	17	19		
5GHZ (40MHz)	5200MHz							12	15	17 38ch : 16	18 38ch:16	18 38ch:15	
	5300MHz							12	15	54ch : 16 62ch : 14	54ch : 17 62ch:13	54ch : 17 62ch:14	
	5500MHz							12	15	17 102, 110ch : 15	18 102ch:15 110ch:16	18 102ch:15 110ch:16	
	5800MHz							12	15	17	18	18	
5GHZ (80MHz)	5200MHz							12	15	15	15	17	16
	5300MHz							12	15	17	15	17	16
	5500MHz							12	15	17	17 106ch:15	17 106ch:15	17 106ch:14
	5800MHz							12	15	15	15	17	16
5GHz 160MHz	5200MHz							12	14	14	14	14	14
	5300MHz							12	14	14	14	14	14
	5500MHz							12	15	14.5	14.5	14	14
	5800MHz							12	15	16	16	16	16
6GHz 20MHz	UNII5							1 (13, ch2:5)	4 (14. ch2:9)	7 (14, ch2:11)	10 (14)		
	UNII6							1	4	7	10		
	UNII7							1 (13)	4 (14)	7 (14)	10 (14)		
	UNII8							1	4	7	10		
6GHz 40MHz	UNII5							1 (13)	4 (14)	7 (14)	10 (14)	12 (14)	
	UNII6							1	4	7	10	12	
	UNII7							1 (13)	4 (14)	7 (14)	10 (14)	12 (14)	
	UNII8							1	4	7	10	12	
6Ghz 80MHz	UNII5							1 (13)	4 (14)	7 (14)	10 (14)	12 (14)	12 (14)
	UNII6							1	4	7	10	12	12
	UNII7							1 (13)	4 (14)	7 (14)	10 (14)	12 (14)	12 (14)
	UNII8							1	4	7	10	12	12
6GHz 160MHz	UNII5							1 (13)	4 (14)	7 (14)	10 (14)	12 (14)	12 (14)
	UNII6							1	4	7	10	12	12
	UNII7							1 (13)	4 (14)	7 (14)	10 (14)	12 (14)	12 (14)
	UNII8							1	4	7	10	12	12

(Upper tolerance: target+1.0 dB)

11ax RU Tx power Tables (RCV-ON)

Mode	Band	SISO (ANT2)						MIMO					
		26T	52T	106T	242T	484T	996T	26T	52T	106T	242T	484T	996T
2.4GHz	2.45GHz	13	13	13	13			16	16	16	16		
5GHZ (20MHz)	5200MHz							12	15	15	15		
	5300MHz							12	15	15	15		
	5500MHz							12	15	15	15		
	5800MHz							12	15	15	15		
5GHZ (40MHz)	5200MHz							12	15	15	15	15	
	5300MHz							12	15	15	15	15	
	5500MHz							12	15	15	15	15	
	5800MHz							12	15	15	15	15	
5GHZ (80MHz)	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
5GHz 160MHz	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
6GHz 20MHz	UNII5							1	4	7	10		
	UNII6							1	4	7	10		
	UNII7							1	4	7	10		
	UNII8							1	4	7	10		
6GHz 40MHz	UNII5							1	4	7	10	12	
	UNII6							1	4	7	10	12	
	UNII7							1	4	7	10	12	
	UNII8							1	4	7	10	12	
6Ghz 80MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12
6GHz 160MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12

(Upper tolerance: target+1.0 dB)

11ax RU Tx power Tables –RSDB

Mode	Band	SISO (ANT2)						MIMO					
		26T	52T	106T	242T	484T	996T	26T	52T	106T	242T	484T	996T
2.4GHz	2.45GHz	6	6	6	12			9	9	9	15		
5GHZ (20MHz)	5200MHz							12	15	15	15		
	5300MHz							12	15	15	15		
	5500MHz							12	15	15	15		
	5800MHz							12	15	15	15		
5GHZ (40MHz)	5200MHz							12	15	15	15	15	
	5300MHz							12	15	15	15	15	
	5500MHz							12	15	15	15	15	
	5800MHz							12	15	15	15	15	
5GHZ (80MHz)	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
5GHz 160MHz	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
6GHz 20MHz	UNII5							1	4	7	10		
	UNII6							1	4	7	10		
	UNII7							1	4	7	10		
	UNII8							1	4	7	10		
6GHz 40MHz	UNII5							1	4	7	10	12	
	UNII6							1	4	7	10	12	
	UNII7							1	4	7	10	12	
	UNII8							1	4	7	10	12	
6Ghz 80MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12
6GHz 160MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12

(Upper tolerance: target+1.0 dB)

11ax RU Tx power Tables –RSDB with receiver Active (RCV-ON)

Mode	Band	SISO (ANT2)						MIMO					
		26T	52T	106T	242T	484T	996T	26T	52T	106T	242T	484T	996T
2.4GHz	2.45GHz	6	6	6	12			9	9	9	15		
5GHZ (20MHz)	5200MHz							12	15	15	15		
	5300MHz							12	15	15	15		
	5500MHz							12	15	15	15		
	5800MHz							12	15	15	15		
5GHZ (40MHz)	5200MHz							12	15	15	15	15	
	5300MHz							12	15	15	15	15	
	5500MHz							12	15	15	15	15	
	5800MHz							12	15	15	15	15	
5GHZ (80MHz)	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
5GHz 160MHz	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
6GHz 20MHz	UNII5							1	4	7	10		
	UNII6							1	4	7	10		
	UNII7							1	4	7	10		
	UNII8							1	4	7	10		
6GHz 40MHz	UNII5							1	4	7	10	12	
	UNII6							1	4	7	10	12	
	UNII7							1	4	7	10	12	
	UNII8							1	4	7	10	12	
6Ghz 80MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12
6GHz 160MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12

(Upper tolerance: target+1.0 dB)

11ax RU Tx power Tables in SUB6 Active

Mode	Band	SISO (ANT2)						MIMO					
		26T	52T	106T	242T	484T	996T	26T	52T	106T	242T	484T	996T
2.4GHz	2.45GHz	13	13	13	13			16	16	16	16		
5GHZ (20MHz)	5200MHz							12	15	15	15		
	5300MHz							12	15	15	15		
	5500MHz							12	15	15	15		
	5800MHz							12	15	15	15		
5GHZ (40MHz)	5200MHz							12	15	15	15	15	
	5300MHz							12	15	15	15	15	
	5500MHz							12	15	15	15	15	
	5800MHz							12	15	15	15	15	
5GHZ (80MHz)	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
5GHz 160MHz	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
6GHz 20MHz	UNII5							1	4	7	10		
	UNII6							1	4	7	10		
	UNII7							1	4	7	10		
	UNII8							1	4	7	10		
6GHz 40MHz	UNII5							1	4	7	10	12	
	UNII6							1	4	7	10	12	
	UNII7							1	4	7	10	12	
	UNII8							1	4	7	10	12	
6Ghz 80MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12
6GHz 160MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12

(Upper tolerance: target+1.0 dB)

11ax RU Tx power Tables in SUB6 Active with RCV

Mode	Band	SISO (ANT2)						MIMO					
		26T	52T	106T	242T	484T	996T	26T	52T	106T	242T	484T	996T
2.4GHz	2.45GHz	13	13	13	13			16	16	16	16		
5GHZ (20MHz)	5200MHz							12	15	15	15		
	5300MHz							12	15	15	15		
	5500MHz							12	15	15	15		
	5800MHz							12	15	15	15		
5GHZ (40MHz)	5200MHz							12	15	15	15	15	
	5300MHz							12	15	15	15	15	
	5500MHz							12	15	15	15	15	
	5800MHz							12	15	15	15	15	
5GHZ (80MHz)	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
5GHz 160MHz	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
6GHz 20MHz	UNII5							1	4	7	10		
	UNII6							1	4	7	10		
	UNII7							1	4	7	10		
	UNII8							1	4	7	10		
6GHz 40MHz	UNII5							1	4	7	10	12	
	UNII6							1	4	7	10	12	
	UNII7							1	4	7	10	12	
	UNII8							1	4	7	10	12	
6Ghz 80MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12
6GHz 160MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12

(Upper tolerance: target+1.0 dB)

11ax RU Tx power Tables in SUB6 Active RSDB with receiver Active

Mode	Band	SISO (ANT2)						MIMO					
		26T	52T	106T	242T	484T	996T	26T	52T	106T	242T	484T	996T
2.4GHz	2.45GHz	6	6	6	12			9	9	9	15		
5GHZ (20MHz)	5200MHz							12	15	15	15		
	5300MHz							12	15	15	15		
	5500MHz							12	15	15	15		
	5800MHz							12	15	15	15		
5GHZ (40MHz)	5200MHz							12	15	15	15	15	
	5300MHz							12	15	15	15	15	
	5500MHz							12	15	15	15	15	
	5800MHz							12	15	15	15	15	
5GHZ (80MHz)	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
5GHz 160MHz	5200MHz							12	15	15	15	15	15
	5300MHz							12	15	15	15	15	15
	5500MHz							12	15	15	15	15	15
	5800MHz							12	15	15	15	15	15
6GHz 20MHz	UNII5							1	4	7	10		
	UNII6							1	4	7	10		
	UNII7							1	4	7	10		
	UNII8							1	4	7	10		
6GHz 40MHz	UNII5							1	4	7	10	12	
	UNII6							1	4	7	10	12	
	UNII7							1	4	7	10	12	
	UNII8							1	4	7	10	12	
6Ghz 80MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12
6GHz 160MHz	UNII5							1	4	7	10	12	12
	UNII6							1	4	7	10	12	12
	UNII7							1	4	7	10	12	12
	UNII8							1	4	7	10	12	12

(Upper tolerance: target+1.0 dB)

Legacy(11b/g/n/a/ac) Real Simultaneous Dual Band (RSDB) Power with RCV On

() : power for 6E standard AP

	# TX	5GHz/6GHz WIFI [dBm]		2.4GHz WIFI [dBm]		802.11 Modes
		Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5/6 GHz RSDB MIMO	4	BW20: 12 / 7 (9) BW40: 12 / 7 (9) BW80: 12 / 7 (9) BW160: 12 / 7(9)	BW20: 12 / 7 (9) BW40: 12 / 7 (9) BW80: 12 / 7 (9) BW160: 12 / 7 (9)	b : 6 g,n : 12	b : 6 g,n : 12	2.4 GHz: b, g, n 5 GHz: a, n, ac, ax 6GHz : a

(Upper tolerance: target+1.0 dB)

Legacy(11b/g/n/a/ac) Real Simultaneous Dual Band (RSDB) Power with RCV On

() : power for 6E standard AP

	# TX	5 / 6 GHz WIFI [dBm]		2.4GHz WIFI [dBm]		802.11 Modes
		Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 / 6 GHz RSDB MIMO	4	BW20: 12 / 7 (9) BW40: 12 / 7 (9) BW80: 12 / 7 (9) BW160: 12 /7(9)	BW20: 12 / 7 (9) BW40: 12 / 7 (9) BW80: 12 / 7 (9) BW160: 12 /7(9)	12	12	2.4 GHz: 11ax 5 GHz: 11ax 6GHz : 11ax

(Upper tolerance: target+1.0 dB)

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

() : power for 6E standard AP

	# TX	5GHz WIFI [dBm]		2.4GHz WIFI [dBm]		802.11 Modes
		Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 GHz RSDB MIMO	4	BW20: 12 BW40: 12 BW80: 12 BW160: 12	BW20: 12 BW40: 12 BW80: 12 BW160: 12	12	12	2.4 GHz: 11ax 5 GHz: 11ax

(Upper tolerance: target+1.0 dB)

4.4.3 Maximum Bluetooth Power

Bluetooth (1Mbps) (in dBm)
15

(Upper tolerance: target+1.0 dB)

Bluetooth (EDR) (in dBm)
13

(Upper tolerance: target+1.0 dB)

BT Reduced Conducted Power - Bluetooth (1Mbps) (in dBm)
12

(Upper tolerance: target+1.0 dB)

Bluetooth LE 125/500 kbps (in dBm)	Bluetooth LE 1/2Mbps (in dBm)
9	15

(Upper tolerance: target+1.0 dB)

4.5 LTE Information

Item.		Description
Frequency Range	LTE Band 2 (PCS)	1 850.7 ㎒ ~ 1 909.3 ㎒
	LTE Band 4 (AWS)	1 710.7 ㎒ ~ 1 754.3 ㎒
	LTE Band 5 (Cell)	824.7 ㎒ ~ 848.3 ㎒
	LTE Band 12	699.7 ㎒ ~ 715.3 ㎒
	LTE Band 13	779.5 ㎒ ~ 784.5 ㎒
	LTE Band 17	706.5 ㎒ ~ 713.5 ㎒
	LTE Band 25(PCS)	1 850.7 ㎒ ~ 1 914.3 ㎒
	LTE Band 26 (Cell)	814.7 ㎒ ~ 848.3 ㎒
	LTE TDD Band 41	2 498.5 ㎒ ~ 2 687.5 ㎒
	LTE Band 66 (AWS)	1 710.7 ㎒ ~ 1 779.3 ㎒
Channel Bandwidths	LTE Band 2 (PCS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE Band 4 (AWS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE Band 5 (Cell)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒
	LTE Band 12	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒
	LTE Band 13	5 ㎒, 10 ㎒
	LTE Band 17	5 ㎒, 10 ㎒
	LTE Band 25 (PCS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE Band 26 (Cell)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒
	LTE TDD Band 41	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	LTE Band 66 (AWS)	1.4 ㎒, 3 ㎒, 5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒

Ch. No.& Freq.(㎒)		Low	Mid	High
LTE Band 2 (PCS)	1.4 ㎒	1 850.7 (18607)	1 880.0 (18900)	1 909.3 (19193)
	3 ㎒	1 851.5 (18615)	1 880.0 (18900)	1 908.5 (19185)
	5 ㎒	1 852.5 (18625)	1 880.0 (18900)	1 907.5 (19175)
	10 ㎒	1 855.0 (18650)	1 880.0 (18900)	1 905.0 (19150)
	15 ㎒	1 857.5 (18675)	1 880.0 (18900)	1 902.5 (19125)
	20 ㎒	1 860.0 (18700)	1 880.0 (18900)	1 900.0 (19100)
LTE Band 4 (AWS)	1.4 ㎒	1 710.7 (19957)	1 732.5 (20175)	1 754.3 (20393)
	3 ㎒	1 711.5 (19965)	1 732.5 (20175)	1 753.5 (20385)
	5 ㎒	1 712.5 (19975)	1 732.5 (20175)	1 752.5 (20375)
	10 ㎒	1 715.0 (20000)	1 732.5 (20175)	1 750.0 (20350)
	15 ㎒	1 717.5 (20025)	1 732.5 (20175)	1 747.5 (20325)
	20 ㎒		1 732.5 (20175)	
LTE Band 5 (Cell)	1.4 ㎒	824.7 (20407)	836.5 (20525)	848.3 (20643)
	3 ㎒	825.5 (20415)	836.5 (20525)	847.5 (20635)
	5 ㎒	826.5 (20425)	836.5 (20525)	846.5 (20625)
	10 ㎒		836.5 (20525)	
LTE Band 12	1.4 ㎒	699.7 (23017)	707.5 (23095)	715.3 (23173)
	3 ㎒	700.5 (23025)	707.5 (23095)	714.5 (23165)
	5 ㎒	701.5 (23035)	707.5 (23095)	713.5 (23155)
	10 ㎒		707.5 (23095)	
LTE Band 13	5 ㎒	779.5 (23205)	782 (23230)	784.5 (23255)
	10 ㎒		782 (23230)	
LTE Band 17	5 ㎒		710.0(23790)	
	10 ㎒		710.0(23790)	

Ch. No.& Freq.(㎒)		Low / Low-Mid		Mid	Mid-High / High	
LTE Band 25 (PCS)	1.4 ㎒	1 850.7 (26047)		1 882.5 (26365)	1 914.3 (26683)	
	3 ㎒	1 851.5 (26055)		1 882.5 (26365)	1 913.5 (26675)	
	5 ㎒	1 852.5 (26065)		1 882.5 (26365)	1 912.5 (26665)	
	10 ㎒	1 855 (26090)		1 882.5 (26365)	1 910 (26640)	
	15 ㎒	1 857.5 (26115)		1 882.5 (26365)	1 907.5 (26615)	
	20 ㎒	1 860 (26140)		1 882.5 (26365)	1 905 (26590)	
LTE Band 26 (Cell)	1.4 ㎒	814.7 (26697)		831.5 (26865)	848.3 (27033)	
	3 ㎒	815.5 (26705)		831.5 (26865)	847.5 (27025)	
	5 ㎒	816.5 (26715)		831.5 (26865)	846.5 (27015)	
	10 ㎒	819.0 (26740)		831.5 (26865)	844.0 (26990)	
	15 ㎒			831.5 (26865)		
LTE Band 66 (AWS)	1.4 ㎒	1 710.7 (131979)		1 745 (132322)	1 779.3 (132665)	
	3 ㎒	1 711.5 (131987)		1 745 (132322)	1 778.5 (132657)	
	5 ㎒	1 712.5 (131997)		1 745 (132322)	1 777.5 (132647)	
	10 ㎒	1 715.0 (132022)		1 745 (132322)	1 775.0 (132622)	
	15 ㎒	1 717.5 (132047)		1 745 (132322)	1 772.5 (132597)	
	20 ㎒	1 720.0 (132072)		1 745 (132322)	1 770.0 (132572)	
LTE TDD Band 41	5 ㎒	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)
	10 ㎒	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)
	15 ㎒	2 506.0(39750)	2 549.5(40185)	2 593.0(40620)	2 636.5(41055)	2 680.0(41490)
	20 ㎒	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 20, UL: Category 18
HPUE Power Class	LTE TDD 41 Power Class 3 :(Duty: 63.3%) Power Class 2 : (Duty:43.3%)
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256 QAM
Uplink Inter-band Carrier Aggregation(2CC)	2A-4A, 4A-5A, 4A-12A, 5A-66A, 12A-66A
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3	Yes
A-MPR disabled for SAR Testing.	Yes
LTE Carrier Aggregation	This device supports Inter-Band & Intra-Band DL-link Carrier aggregations and intra-Band UL-link Carrier aggregations. Detaled information of Down-Link CA are included in the Appendix.I and Technical Description document.
LTE Release information	This device does not support full CA features on 3GPP Release 15. It supports carrieraggregation, downlink MIMO. All other uplink communications are identical to the release 8 specifications. The following LTE Release 15 Features are not supported: Relay, Hetnet, Enhanced elCI, MDH, cross-carrier Scheduling, Enhanced SC-FDMA.

4.6 5G NR SUB 6 Information

Item.		Description
Frequency Range	NR Band n2	1 852.5 ㎒ ~ 1 907.5 ㎒
	NR Band n5 (Cell)	826.5 ㎒ ~ 846.5 ㎒
	NR Band n25	1 852.5 ㎒ ~ 1 912.5 ㎒
	NR Band n41	2 506.02 ㎒ ~ 2 679.99 ㎒
	NR Band n66 (AWS)	1 712.5 ㎒ ~ 1 777.5 ㎒
	NR Band n77	3 705 ㎒ ~ 3 975 ㎒
	NR Band n77DoD	3 445.01 ㎒ ~ 3 544.98 ㎒
Channel Bandwidths	NR Band n2	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	NR Band n5 (Cell)	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	NR Band n25	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒
	NR Band n41	10 ㎒, 15 ㎒, 20 ㎒, 30 ㎒, 40 ㎒, 50 ㎒, 60 ㎒, 70 ㎒, 80 ㎒, 90 ㎒, 100 ㎒
	NR Band n66 (AWS)	5 ㎒, 10 ㎒, 15 ㎒, 20 ㎒, 30 ㎒, 40 ㎒
	NR Band n77	10 ㎒, 15 ㎒, 20 ㎒, 30 ㎒, 40 ㎒, 50 ㎒, 60 ㎒, 70 ㎒, 80 ㎒, 90 ㎒, 100 ㎒
	NR Band n77DoD	10 ㎒, 15 ㎒, 20 ㎒, 30 ㎒, 40 ㎒, 50 ㎒, 60 ㎒, 70 ㎒, 80 ㎒, 90 ㎒, 100 ㎒

Ch. No.& Freq.(㎒)		Low / Low-Mid		Mid	Mid-High / High	
NR Band n2	5 ㎒	1 852.5 (370500)		1 880 (376000)	1 907.5 (381500)	
	10 ㎒	1 855 (371000)		1 880 (376000)	1 905 (381000)	
	15 ㎒	1 857.5 (371500)		1 880 (376000)	1 902.5 (380500)	
	20 ㎒	1 860 (372000)		1 880 (376000)	1 900 (380000)	
NR Band n5 (Cell)	5 ㎒	826.5 (165300)		836.5 (167300)	846.5 (169300)	
	10 ㎒			836.5 (167300)		
	15 ㎒			836.5 (167300)		
	20 ㎒			836.5 (167300)		
NR Band n25	5 ㎒	1 852.5 (370500)		1 882.5 (376500)	1 912.5 (382500)	
	10 ㎒	1 855 (371000)		1 882.5 (376500)	1 910 (382000)	
	15 ㎒	1 857.5 (371500)		1 882.5 (376500)	1 907.5 (381500)	
	20 ㎒	1 860 (372000)		1 882.5 (376500)	1 905 (381000)	
NR Band n66 (AWS)	5 ㎒	1 712.5 (342500)		1 745 (349000)	1 777.5 (355500)	
	10 ㎒	1 715 (343000)		1 745 (349000)	1 775 (355000)	
	15 ㎒	1 717.5 (343500)		1 745 (349000)	1 772.5 (354500)	
	20 ㎒	1 720 (344000)		1 745 (349000)	1 770 (354000)	
	30 ㎒			1 745(349000)		
	40 ㎒			1 745(349000)		
NR Band n41	10 ㎒	2 501.01 (500202)	2 547.00 (509400)	2 592.99 (518598)	2 639.01 (527802)	2 685.00 (537000)
	15 ㎒	2 503.50 (500700)	2 548.32 (509664)	2 592.99 (518598)	2 637.81 (527562)	2 682.48 (536496)
	20 ㎒	2 506.02 (501204)	2 549.49 (509898)	2 592.99 (518598)	2 636.49 (527298)	2 679.99 (535998)
	30 ㎒	2 511.00 (502200)	2 552.01 (510402)	2 592.99 (518598)	2 634.00 (526800)	2 674.98 (534996)
	40 ㎒	2 516.01 (503202)	2 567.34 (513468)		2 618.67 (523734)	2 670.00 (534000)
	50 ㎒	2 521.02 (504204)		2 592.99 (518598)		2 664.99 (532998)
	60 ㎒	2 526.00 (505200)		2 592.99 (518598)		2 659.98 (531996)
	70 ㎒	2 531.04 (506208)				2 654.97 (530994)
	80 ㎒	2 536.02 (507204)				2 649.99 (529998)
	90 ㎒	2 541.00 (508200)				2 644.98 (528996)
	100 ㎒			2 592.99 (518598)		

Ch. No.&Freq.(㎒)		Low / Low-Mid		Mid		Mid-High / High	
NR Band n77	10 ㎒	3 705 (647000)	3 759 (650600)	3 813(654200)	3 867 (657800)	3 921 (661400)	3 975(665000)
	15 ㎒	3 707.52(647168)	3 760.5(650700)	3 813.49(654232)	3 866.5(657766)	3 919.5(661300)	3 972.48(664832)
	20 ㎒	3 710.01(647334)	3 762 (650800)	3 813.99(654266)	3 866.01(657734)	3 918 (661200)	3 969.99(664666)
	30 ㎒	3 715.02(647668)	3 765 (651000)	3 815.01(654334)	3 864.99(657666)	3 915 (661000)	3 964.98(664232)
	40 ㎒	3 720 (648000)	3 768 (651200)	3 816 (654400)	3 864 (657600)	3 912 (660800)	3 960 (664000)
	50 ㎒	3 725.01(648334)	3 782.49(652166)	3 840 (656000)		3 897.51 (659834)	3 954.99(663666)
	60 ㎒	3 730.02(648668)	3 803.34(653556)			3 876.66(658444)	3 949.98(663332)
	70 ㎒	3 735 (649000)	3 804.99(654336)			3 875.01(658334)	3 945(663000)
	80 ㎒	3 740.01(649334)		3 840 (656000)		3 939.99 (662666)	
	90 ㎒	3 745.02(649668)		3 840 (656000)		3 934.98 (662332)	
	100 ㎒	3 750 (650000)				3 930 (662000)	
NR Band n77 DoD	10 ㎒	3445.01(630334)		3500.01(633334)		3544.98(636332)	
	15 ㎒	3457.5(630500)		3500.01(633334)		3542.49(636166)	
	20 ㎒	3460.02(630668)		3500.01(633334)		3540(636000)	
	30 ㎒	3465(631000)		3500.01(633334)		3534.99(635666)	
	40 ㎒	3470.01(631334)				3529.98(635332)	
	50 ㎒	3475.02(631668)				3525(635000)	
	60 ㎒			3500.01(633334)			
	70 ㎒			3500.01(633334)			
	80 ㎒			3500.01(633334)			
	90 ㎒			3500.01(633334)			
	100 ㎒			3500.01(633334)			

Item.	Description
NR Band n2/n5/n25/n66	15 ㎑
NR Band n41/n77 SCS	30 ㎑
3GPP Rel.	Rel.16
A-MPR disabled for SAR Testing.	Yes
5G NR UL/DL FR1	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM DFT-s-OFDM: π/2-BPSK(UL Only), QPSK, 16QAM, 64QAM, 256QAM
Non-Standalone & Standalone are supported. More detailed specifications of the 5G NR Bands are contained in the Technical description document. n66 Lower(SA/NSA),n66 Upper(NSA). When the lower antenna Main Ant#1 is an EN-DC combination of the LTE B2 anchor band of the 5G sub6 n66 is switched to the upper antenna Sub Ant#2.	
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations
LTE Anchor Bands for NR Band n2, n25	LTE Band 5/12/13
LTE Anchor Bands for NR Band n25	LTE Band 12/13
LTE Anchor Bands for NR Band n5(Cell)	LTE Band 2/66
LTE Anchor Bands for NR Band n41	LTE Band 4/12/66
LTE Anchor Bands for NR Band n66(AWS) Lower Main Ant #1	LTE Band 5/12/13
LTE Anchor Bands for NR Band n66(AWS) Upper Sub Ant #2	NSA only, LTE Band 2(Man Ant #1)
LTE Anchor Bands for NR Band n77,n77 DoD	LTE Band 2/5/12/13/25/66

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 BR tethering applications.

Mode	Ant.	Rear	Front	Left	Right	Bottom	Top
GSM/GPRS/EDGE 850	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
GSM/GPRS/EDGE 1900	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 5	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 4	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
UMTS Band 2	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 2 (PCS)	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 4 (AWS)	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 5 (Cell)	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 12	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 13	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 17	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 25	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 26	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE TDD Band 41	Ant.#2	Yes	Yes	Yes	No	Yes	No
LTE Band 66 (AWS)	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
LTE Band 4 ULCA(SCC),Upper	SUB Ant.#2	Yes	Yes	Yes	No	No	Yes
NR Band n2	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
NR Band n5	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
NR Band n25	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
NR Band n41	SUB Ant.#2	Yes	Yes	Yes	No	No	Yes
NR Band n41 SRS2	Ant.#2	Yes	Yes	Yes	No	Yes	No
NR Band n41 SRS3	SUB Ant.#1	Yes	Yes	No	Yes	No	No
NR Band n41 SRS4	Ant.#4	Yes	Yes	Yes	Yes	Yes	No
NR Band n66 (ENDC) Upper	SUB Ant.#2	Yes	Yes	Yes	No	No	Yes
NR Band n66 Lower	Ant.#1	Yes	Yes	Yes	Yes	Yes	No
NR Band n77	SUB Ant.#2	Yes	Yes	Yes	No	No	Yes
NR Band n77 SRS2	Ant.#3	Yes	Yes	Yes	No	Yes	No
NR Band n77 SRS3	SUB Ant.#5	Yes	Yes	Yes	No	No	No
NR Band n77 SRS4	Ant.#4	Yes	Yes	Yes	Yes	Yes	No
NR Band n77 DoD	SUB Ant.#2	Yes	Yes	Yes	No	No	Yes
NR Band n77 DoD SRS2	Ant.#3	Yes	Yes	Yes	No	Yes	No
NR Band n77 DoD SRS3	SUB Ant.#5	Yes	Yes	Yes	No	No	No
NR Band n77 DoD SRS4	Ant.#4	Yes	Yes	Yes	Yes	Yes	No
2.4 GHz WLAN	SUB Ant.#6	Yes	Yes	No	Yes	No	Yes
2.4 GHz WLAN	SUB Ant.#4	Yes	Yes	Yes	No	No	Yes
Bluetooth	SUB Ant.#6	Yes	Yes	No	Yes	No	Yes
5 GHz WLAN	SUB Ant.#4	Yes	Yes	Yes	No	No	Yes
6 GHz WLAN	SUB Ant.#4	Yes	Yes	Yes	No	No	Yes
5 GHz WLAN	SUB Ant.#1	Yes	Yes	No	Yes	No	Yes
6 GHz WLAN	SUB Ant.#1	Yes	Yes	No	Yes	No	Yes

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

4.8 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.

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

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

Simultaneous Transmission Scenarios of Inter-Band UL CA

Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Phablet
Inter band ULCA Main Ant #1 from LTE B4 + Sub Ant #2 from LTE B4	Yes	Yes	Yes	Yes
Inter band ULCA Main Ant #1 from B4/B5/B12/B26/B66	Yes	Yes	Yes	Yes

The Technical description includes all the possible inter-band UL-CA combinations.

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

Note:
1. 2.4GHz WLAN and 2.4GHz Bluetoothcannot transmit simultaneously
2. The device does not support licensed Bands simultaneously transmitting except LTE ULCA.n66 NSA EN-DC configuration.
3. UMTS +WLAN scenario also represents the UMTS Voice/DATA + WLAN hotspot scenario.
4. VoIP is supported in GPRS/EDGE
5. The highest reported SAR for each exposure condition is used for SAR summation purpose.
6. Wi-Fi Hotspot is supported for 2.4 GHz/ UNII-3 of 5 GHz WLAN.
7. This device supports Bluetooth tethering. ^ BluetoothTetheringis considered.
8. * Pre-installedVOIP applications areconsidered
9. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held to ear or Body worn accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFi Direct beyond that listed in the above table.
10. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac/ax. 802.11a/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM. Each WLAN antenna can transmit independentlyor together when operating with MIMO.
11. This device supports VOLTE.
12. This device supports VOWIFI
13. LTE + 5G NR FR1 Scenarios are supported NSA and SA Connectivity.

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 and U-NII-4 WiFi, WiFi Hotspot SAR test and combinations are considered only 2.4 GHz and U-NII-3 for SAR with respected to wireless router configurations according to FCC KDB 941225 D06v02r01.

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

This device supports IEEE 802.11ax with the following features:

a) Up to 160 MHz Bandwidth only for 5 GHz
b)Up to 20 MHz Bandwidth only for 2.4 GHz
c)No aggregate channel configurations
d)2 Tx antenna output
e)Up to 1024 QAM is supported
f) TDWR and Band gap channels are supported for 5 GHz
g)MU-MIMO UL Operations are not supported

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

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

4.8.2Licensed 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 17(706.5 ㎒~ 713.5 ㎒) is covered by LTE Band 12(699.7 ㎒~ 715.3 ㎒), LTE Band 4 (1 712.4 ㎒~ 1 752.6 ㎒) is coverd by LTE Band 66(1 712.5 ㎒~ 1 777.5 ㎒), LTE Band 2(1 850.7 ㎒~ 1 909.3 ㎒) is coverd by LTE Band 25(1 850.7 ㎒ ~ 1 914.3 ㎒) of this model each both LTE bands have the same target powers.

NR capabilities with overlapping transmission frequency ranges were applied to n2(1 852.5 ㎒ ~ 1 907.5 ㎒) is coverd by n25(1 852.5 ㎒ ~ 1 912.5 ㎒)of this model each both NR bands have the same target powers.

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

This product supported Inter-band LTE Carrier Aggregation for 2A-4A / 4A-5A /4A-12A / 5A-66A / 12A-66A with two component carriers in the uplink. SAR Measurement and conducted Powers were measured according to Oct,2018 TCBC Workshop guide.

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

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

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

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

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

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 ㎓. 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York 10017. The measurement procedure described in IEEE/ANSI C95.3-1992 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave is used for guidance in measuring SAR due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in Biological Effects and Exposure Criteria for Radio Frequency Electromagnetic Fields," NCRP Report No. 86 NCRP, 1986, Bethesda, MD 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

SAR Definition

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

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

Figure 1. SAR Mathematical Equation
SAR is expressed in units of Watts per Kilogram (W/kg)

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

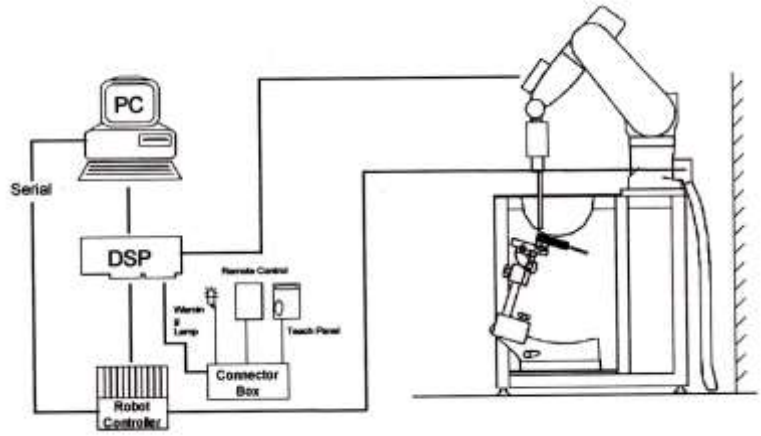


Figure 2. HCT SAR Lab. Test Measurement Set-up

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.

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

8. Description of Test Position

8.1 EAR REFERENCE POINT

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

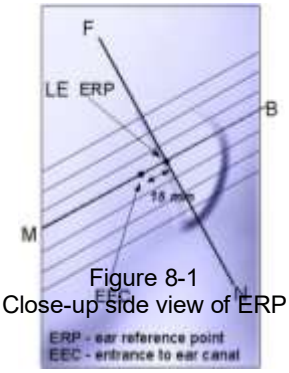


Figure 8-1
Close-up side view of ERP

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 than located at the same level as the center of the ear reference point. The device under test was positioned so that the “vertical centerline” was bisecting the front surface of the handset at its top and bottom edges, positioning the “ear reference point” on the outer surface of the both the left and right head phantoms on the ear reference point.

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

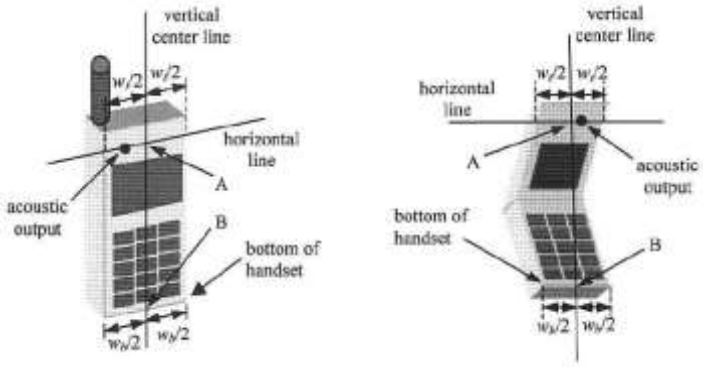


Figure 6-3. Handset vertical and horizontal reference lines

8.3 Device Holder

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

8.4 Position for cheek

Figure 6.4. shows cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

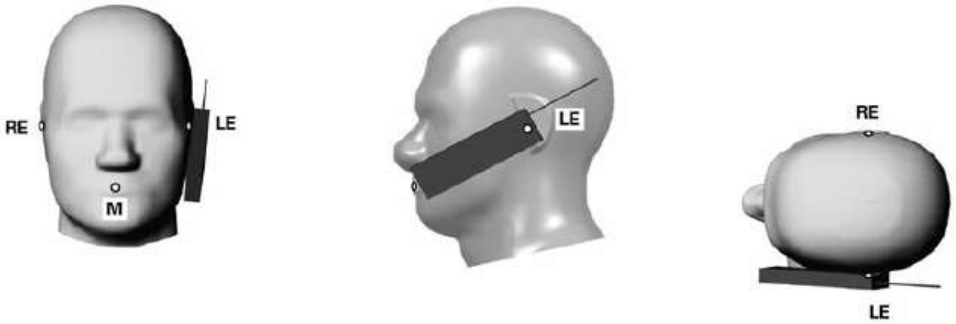


Figure 8.4 Cheek/ Touch position of the wireless device

8.5 Definition of the “tilted” position

Figure 6.5. shows tilted position. Place the device in the cheek position. Then while maintaining the orientation of the device, retract the device parallel to the reference plane far enough away from the phantom to enable a rotation of the device by 15°.

Figure 8.5. Tilt 15°position of the wireless device

8.6 Body-Worn Accessory Configurations

Body-worn operating configurations are tested with the belt-dips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 6-6). Per FCC KDB Publication 648474 D04v01r03 Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in Body-worn accessories. The Body-worn accessory procedures in FCC KDB Publication 447498 D01v06 should be used to test for Body-worn accessory SAR compliance, without a headset connected to it.. When the reported SAR for a body- worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency Band should be repeated for that body-worn accessory with a headset attached to the handset.

Figure 8-6
Sample Body-Worn Diagram

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

8.7 Wireless Router Configurations

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

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

8.8 Extremity Exposure Configurations

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

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

8.9 Additional Test Positions due to Proximity Conditions

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

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

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

Wireless technologies	Position	§6.2 Triggering Distance	§6.3 Coverage	§6.4 Tilt Angle	Worst case distance for Phablet SAR
GSM1900, UMTS B2/B4, LTE B2/B4/B25/B41/B66(Lower), NR n2/n25/n41/n66(Lower)	Rear	9	N/A	N/A	8
	Front	7	N/A	N/A	6
	Bottom	12	N/A	N/A	11

8.10 Bluetooth tethering Configurations

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

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

9. RF Exposure Limits

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

NOTES:

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

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

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

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be mad fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

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

10. FCC SAR General Measurement Procedures

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

10.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D01v06, when SAR is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance. For simultaneous transmission, the measured aggregate SAR must be scaled according to the sum of the differences between the maximum tune-up tolerance and actual power used to test each transmitter. When SAR is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as Reported SAR. The highest reported SAR results are identified on the grant of equipment authorization according to procedures in KDB 690783 D01v01r03.

10.2 3G SAR Test Reduction Procedure

10.2.1 GSM, GPRS AND EDGE

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

10.2.2 SAR Test Reduction

In FCC KDB 941225 D01v03r01, certain transmission modes within a frequency Band and wireless mode evaluated for SAR are defined as primary modes. The equivalent modes considered for SAR test reduction are denoted as secondary modes. When the maximum output power including tune-up tolerance specified for production units in a secondary mode is ≤ 0.25 dB higher than the primary mode or when the highest reported SAR of the primary mode, scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode, is ≤ 1.2 W/kg, SAR measurements are not required for the secondary mode. These criteria are referred to as the 3G SAR test reduction procedure. When the 3G SAR test reduction procedure is not satisfied, SAR measurements are additionally required for the secondary mode.
SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested

10.2.3 Procedures Used to Establish RF Signal for SAR

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

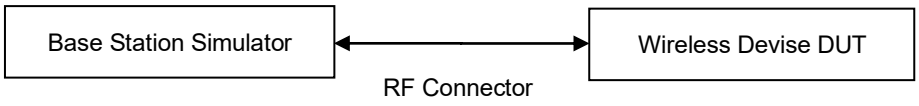
The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control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

10.3.5DC-HSDPA

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

DC-HSDPA Configurations

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



10.4 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r05publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluation SAR [4]. The R&S CMW500 or Anritsu MT8820C simulators are used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

10.4.1 Spectrum Plots for RB Configurations

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

10.4.2 MPR

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

10.4.3 A-MPR

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

10.4.4 Required RB Size and RB offsets for SAR testing

According to FCC KDB 941225 D05v02r05

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

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	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

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

Table 4.2-2: Uplink-downlink configurations.

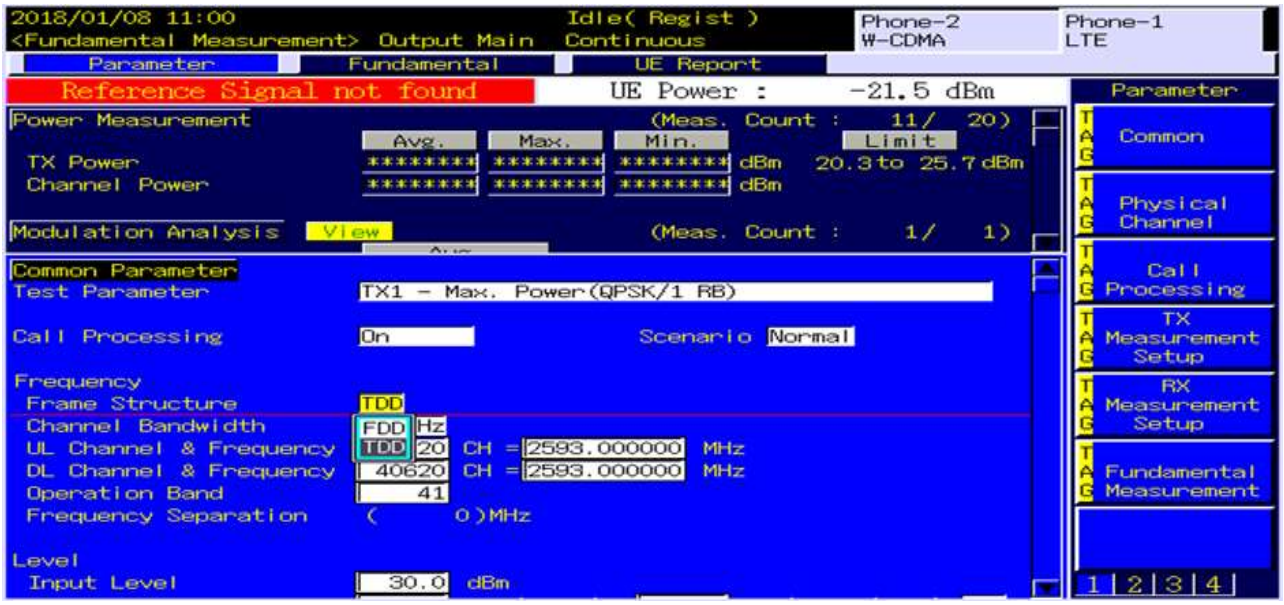
Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U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

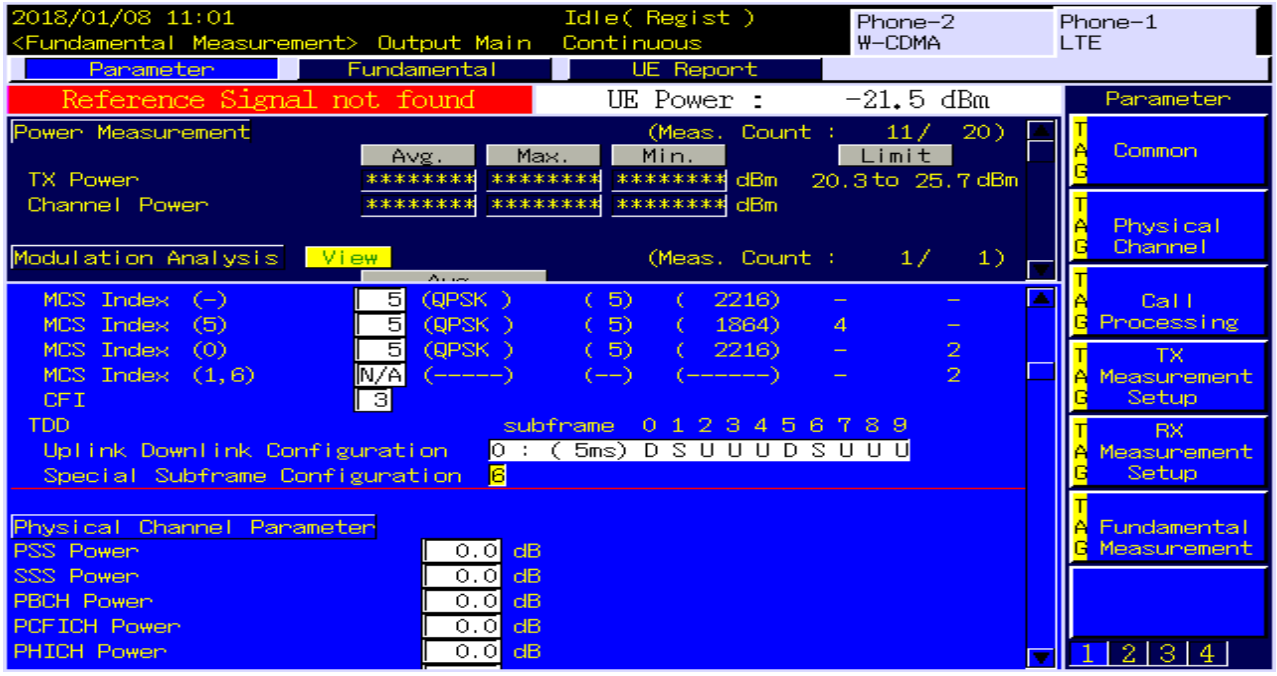
Example for calculated Duty Cycle for Uplink-Downlink Configuration 0:
Calculated Duty Cycle = (5120 x (1/(15000 x 2048)) x 2 + 0.006)/0.01 = 63.33 %
Where
T_s = 1/(15000 x 2048) seconds

HPUE :
Calculated Duty Cycle for Uplink-Downlink Configuration 1:
Calculated Duty Cycle =5120*(1/(15000*2048))*2+0.004)/0.01 = 43.33 %

10.4.7 The Call Box Setup for LTE(TDD)

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





10.5 SAR Testing with 802.11 Transmitters

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

10.5.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters.
A periodic duty factor is required for current generation SAR system to measure SAR. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92-96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR is scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

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

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

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

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

10.5.4 Initial Test Position Procedure

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

10.5.5 2.4 GHz SAR test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either the fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:
1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS is that exposure configuration.
2) When the reported SAR is > 0.8 W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

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

10.5.6 OFDM Transmission Mode and SAR Test Channel Selection

For the 2.4 GHz and 5 GHz Bands, when the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency Band or aggregated Band, SAR is measured using the configuration with the largest channel Bandwidth, lowest order modulation and lowest data rate and lowest order 802.11 a/g/n/ac mode. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11 ac or 802.11g and 802.11n with the same channel Bandwidth, modulation and data rate etc., the lower order 802.11 mode i.2., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency Band or aggregated Band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

10.5.7 Initial Test Configuration Procedure

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

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

10.5.8 Subsequent Test Configuration Procedures

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

11. Output Power Specifications

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

Licensed Bands

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

Test Overview

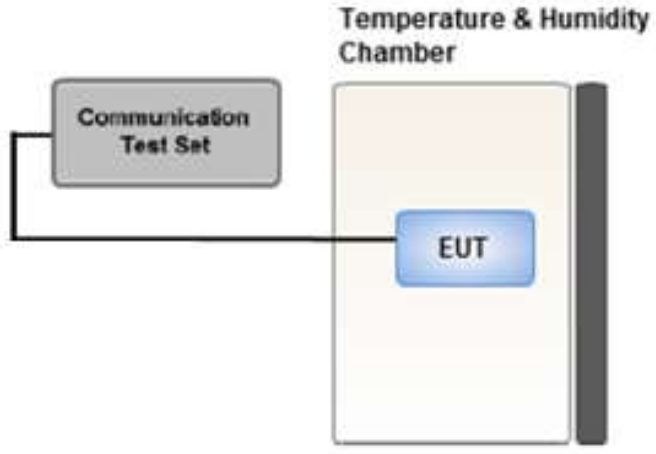
According to ANSI C63.26-2015 Section 5.2.1 when measuring the maximum RF output power from such devices, control over the EUT must be provided either through special test software (provided by manufacturer specifically for compliance testing, but not accessible by an end user) or through use of a base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

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

Test Procedure

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

Test setup



11.1 GSM

11.1.1 GSM Maximum Conducted Output Power

GSM850

***P*max, All DSI *P*Limit Calculations**

Measured *P*max, *P*Limit Calculations

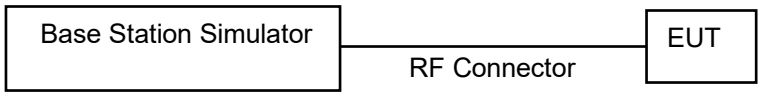
Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**33.70**	**33.70**	**32.00**	**30.00**	**28.00**	**27.50**	**25.70**	**23.70**	**22.50**
Nominal		**32.70**	**32.70**	**31.00**	**29.00**	**27.00**	**26.50**	**24.70**	**22.70**	**21.50**
GSM 850	128	32.48	32.45	30.64	29.15	27.22	26.55	25.10	23.00	22.02
	190	32.87	32.83	31.26	29.28	26.59	26.89	25.44	23.35	22.32
	251	33.21	33.18	31.23	29.40	27.49	27.11	25.67	23.44	22.33

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**24.67**	**24.67**	**25.98**	**25.74**	**24.99**	**18.47**	**19.68**	**19.44**	**19.49**
Nominal		**23.67**	**23.67**	**24.98**	**24.74**	**23.99**	**17.47**	**18.68**	**18.44**	**18.49**
GSM 850	128	23.45	23.42	24.62	24.89	24.21	17.52	19.08	18.74	19.01
	190	23.84	23.80	25.24	25.02	23.58	17.86	19.42	19.09	19.31
	251	24.18	24.15	25.21	25.14	24.48	18.08	19.65	19.18	19.32

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



GSM1900

P_{max}, DSI = 0, 2 P_{Limit} Calculations

Measured P_{max}, DSI = 0, 2 Calculations

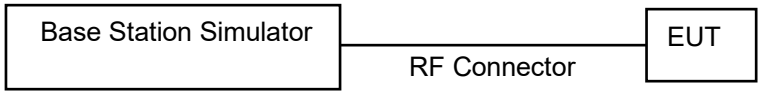
Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**31.00**	**31.00**	**29.00**	**27.00**	**25.50**	**26.50**	**24.50**	**22.50**	**21.50**
Nominal		**30.00**	**30.00**	**28.00**	**26.00**	**24.50**	**25.50**	**23.50**	**21.50**	**20.50**
GSM 1900	512	30.05	30.04	27.81	26.24	24.13	25.33	23.72	21.55	20.46
	661	29.77	29.76	27.42	26.03	24.25	25.10	23.54	21.46	20.30
	810	30.05	30.04	27.56	26.02	24.20	25.69	23.70	21.92	20.66

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**21.97**	**21.97**	**22.98**	**22.74**	**22.49**	**17.47**	**18.48**	**18.24**	**18.49**
Nominal		**20.97**	**20.97**	**21.98**	**21.74**	**21.49**	**16.47**	**17.48**	**17.24**	**17.49**
GSM 1900	512	21.02	21.01	21.79	21.98	21.12	16.30	17.70	17.29	17.45
	661	20.74	20.73	21.40	21.77	21.24	16.07	17.52	17.20	17.29
	810	21.02	21.01	21.54	21.76	21.19	16.66	17.68	17.66	17.65

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 (Hotspot mode activated)

GSM1900

Measured DSI = 3 P_{Limit} Calculations

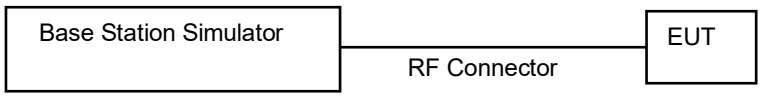
Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**29.00**	**29.00**	**26.00**	**23.20**	**22.00**	N/A	N/A	N/A	N/A
Nominal		**28.00**	**28.00**	**25.00**	**22.20**	**21.00**	N/A	N/A	N/A	N/A
GSM 1900	512	27.69	27.79	24.88	22.58	20.96	N/A	N/A	N/A	N/A
	661	27.13	27.24	25.00	22.63	21.06	N/A	N/A	N/A	N/A
	810	26.83	26.95	24.96	22.41	20.71	N/A	N/A	N/A	N/A

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**19.97**	**19.97**	**19.98**	**18.94**	**18.99**	N/A	N/A	N/A	N/A
Nominal		**18.97**	**18.97**	**18.98**	**17.94**	**17.99**	N/A	N/A	N/A	N/A
GSM 1900	512	18.66	18.76	18.86	18.32	17.95	N/A	N/A	N/A	N/A
	661	18.10	18.21	18.98	18.37	18.05	N/A	N/A	N/A	N/A
	810	17.80	17.92	18.94	18.15	17.70	N/A	N/A	N/A	N/A

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



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

Measured DSI = 1, 4 Calculations

GSM1900

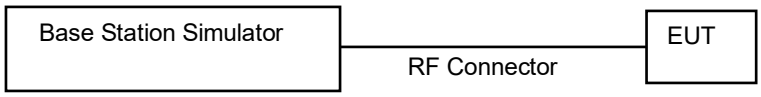
Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**29.00**	**29.00**	**26.00**	**23.20**	**22.00**	N/A	N/A	N/A	N/A
Nominal		**28.00**	**28.00**	**25.00**	**22.20**	**21.00**	N/A	N/A	N/A	N/A
GSM 1900	512	27.78	27.71	24.97	22.66	21.01	N/A	N/A	N/A	N/A
	661	27.19	27.20	25.09	22.62	21.08	N/A	N/A	N/A	N/A
	810	26.85	26.87	24.92	22.48	20.69	N/A	N/A	N/A	N/A

GSM Conducted output powers (Burst-Average)

Mode / Band		Voice	GPRS(GMSK) Data – CS1(dBm)				EDGE Data (dBm)			
		GSM	GPRS 1 TX Slot	GPRS 2 TX Slot	GPRS 3 TX Slot	GPRS 4 TX Slot	EDGE 1 TX Slot	EDGE 2 TX Slot	EDGE 3 TX Slot	EDGE 4 TX Slot
Maximum		**19.97**	**19.97**	**19.98**	**18.94**	**18.99**	N/A	N/A	N/A	N/A
Nominal		**18.97**	**18.97**	**18.98**	**17.94**	**17.99**	N/A	N/A	N/A	N/A
GSM 1900	512	18.75	18.68	18.95	18.40	18.00	N/A	N/A	N/A	N/A
	661	18.16	18.17	19.07	18.36	18.07	N/A	N/A	N/A	N/A
	810	17.82	17.84	18.90	18.22	17.68	N/A	N/A	N/A	N/A

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

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

11.2.1 UMTS Maximum Conducted Output Power

UMTS Band 5 Maximum Conducted Output Power (P_{max}, All DSI)

3GPP Release Version	Mode	3GPP 34.121 Subtest	UMTS Band 5 [dBm] UL4132 DL4357	UL4183 DL4408	UL4233 DL4458	3GPP MPR
99	UMTS	12.2 kbps RMC	24.17	24.19	24.32	-
99		12.2 kbps AMR	24.16	24.19	24.29	-
5	HSDPA	Subtest 1	23.16	23.18	23.30	0
5		Subtest 2	23.17	23.16	23.26	0
5		Subtest 3	22.69	22.72	22.85	0.5
5		Subtest 4	22.69	22.64	22.85	0.5
6	HSUPA	Subtest 1	23.13	23.24	23.32	0
6		Subtest 2	21.21	21.14	21.31	2
6		Subtest 3	22.13	22.14	22.38	1
6		Subtest 4	21.24	21.21	21.34	2
6		Subtest 5	23.18	23.20	23.33	0
8	DC-HSDPA	Subtest1	22.90	22.85	22.88	0
8		Subtest2	22.89	22.84	22.94	0
8		Subtest3	22.41	22.35	22.45	0.5
8		Subtest4	22.39	22.35	22.44	0.5

UMTS Average Conducted output powers

UMTS Band 4 Maximum Conducted Output Power (P_{max}, DSI = 0, 2)

3GPP Release Version	Mode	3GPP 34.121 Subtest	UMTS Band 4 [dBm] UL 1312 DL 1537	UL 1412 DL 1637	UL 1513 DL 1738	3GPP MPR
99	UMTS	12.2 kbps RMC	23.81	23.50	23.67	-
99		12.2 kbps AMR	23.83	23.43	23.65	-
5	HSDPA	Subtest 1	22.79	22.51	22.69	0
5		Subtest 2	22.80	22.46	22.68	0
5		Subtest 3	22.38	21.98	22.22	0.5
5		Subtest 4	22.37	21.95	22.22	0.5
6	HSUPA	Subtest 1	22.90	22.56	22.75	0
6		Subtest 2	20.95	20.44	20.60	2
6		Subtest 3	21.76	21.51	21.79	1
6		Subtest 4	20.85	20.42	20.75	2
6		Subtest 5	22.86	22.50	22.72	0
8	DC-HSDPA	Subtest1	22.32	22.01	22.37	0
8		Subtest2	22.33	21.98	22.40	0
8		Subtest3	21.83	21.52	21.91	0.5
8		Subtest4	21.81	21.50	21.90	0.5

UMTS Average Conducted output powers

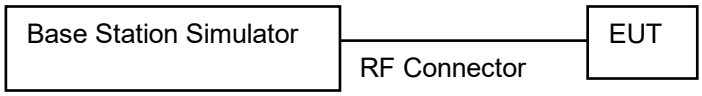
UMTS Band 2 Maximum Conducted Output Power (P_{max}, DSI = 0, 2)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	
99	UMTS	12.2 kbps RMC	23.38	23.29	23.22	-
99		12.2 kbps AMR	23.36	23.28	23.23	-
5	HSDPA	Subtest 1	22.44	22.32	22.20	0
5		Subtest 2	22.41	22.35	22.26	0
5		Subtest 3	21.91	21.80	21.78	0.5
5		Subtest 4	21.92	21.79	21.77	0.5
6	HSUPA	Subtest 1	22.48	22.37	22.29	0
6		Subtest 2	20.65	20.34	20.55	2
6		Subtest 3	21.58	21.46	21.42	1
6		Subtest 4	20.60	20.63	20.57	2
6		Subtest 5	22.53	22.47	22.49	0
8	DC-HSDPA	Subtest 1	22.36	22.16	22.07	0
8		Subtest2	22.36	22.13	22.05	0
8		Subtest3	21.87	21.62	21.57	0.5
8		Subtest4	21.85	21.61	21.53	0.5

UMTS Average Conducted output powers

DC-HSDPA Configurations

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



11.2.2 UMTS Reduced Conducted Output Power (Hotspot mode activated)

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

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

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 4 [dBm]			3GPP MPR
		Subtest	UL 1312 DL 1537	UL 1412 DL 1637	UL 1513 DL 1738	
99	UMTS	12.2 kbps RMC	20.82	20.51	20.72	-
99		12.2 kbps AMR	20.83	20.47	20.69	-
5	HSDPA	Subtest 1	19.78	19.35	19.62	0
5		Subtest 2	19.82	19.43	19.69	0
5		Subtest 3	19.29	18.98	19.21	0.5
5		Subtest 4	19.35	18.93	19.19	0.5
6	HSUPA	Subtest 1	19.84	19.45	19.67	0
6		Subtest 2	17.89	17.54	17.76	2
6		Subtest 3	18.83	18.52	18.74	1
6		Subtest 4	17.98	17.57	17.70	2
6		Subtest 5	19.85	19.47	19.72	0
8	DC-HSDPA	Subtest 1	19.27	18.95	19.39	0
8		Subtest2	19.33	18.99	19.38	0
8		Subtest3	18.84	18.47	18.90	0.5
8		Subtest4	18.82	18.51	18.91	0.5

UMTS Average Conducted output powers

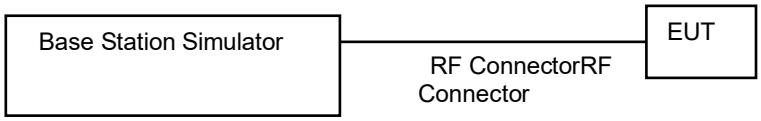
UMTS Band 2 Hotspot Back-off Power (DSI = 3)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	
99	UMTS	12.2 kbps RMC	18.25	18.27	18.28	-
99		12.2 kbps AMR	18.23	18.24	18.22	-
5	HSDPA	Subtest 1	17.29	17.29	17.32	0
5		Subtest 2	17.29	17.28	17.29	0
5		Subtest 3	16.75	16.74	16.79	0.5
5		Subtest 4	16.79	16.76	16.79	0.5
6	HSUPA	Subtest 1	17.22	17.24	17.23	0
6		Subtest 2	15.15	15.38	15.24	2
6		Subtest 3	16.31	16.34	16.26	1
6		Subtest 4	15.32	15.20	15.26	2
6		Subtest 5	17.23	17.32	17.25	0
8	DC-HSDPA	Subtest 1	17.13	17.15	17.20	0
8		Subtest2	17.18	17.17	17.17	0
8		Subtest3	16.53	16.53	16.55	0.5
8		Subtest4	16.58	16.70	16.53	0.5

UMTS Average Conducted output powers

DC-HSDPA Configurations

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



11.2.3 UMTS Reduced Conducted Output Power – (Grip back Activated/ Ear jack Activated)

DSI = 1, 4 P_{Limit} Calculations - 3G Phablet Reduced SAR

UMTS Band 4 Grip Back-off Power (DSI = 1, 4)

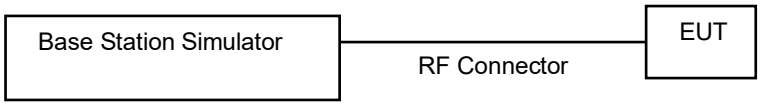
3GPP Release Version	Mode	3GPP 34.121	UMTS Band 4 [dBm]			3GPP MPR
		Subtest	UL 1312 DL 1537	UL 1412 DL 1637	UL 1513 DL 1738	
99	UMTS	12.2 kbps RMC	20.86	20.53	20.78	-
99		12.2 kbps AMR	20.84	20.47	20.70	-
5	HSDPA	Subtest 1	19.71	19.33	19.65	0
5		Subtest 2	19.80	19.39	19.69	0
5		Subtest 3	19.28	18.91	19.17	0.5
5		Subtest 4	19.31	18.89	19.17	0.5
6	HSUPA	Subtest 1	19.89	19.52	19.71	0
6		Subtest 2	17.93	17.52	17.67	2
6		Subtest 3	18.92	18.56	18.72	1
6		Subtest 4	17.91	17.55	17.74	2
6		Subtest 5	19.88	19.50	19.73	0
8	DC-HSDPA	Subtest 1	19.29	19.01	19.34	0
8		Subtest2	19.33	18.97	19.38	0
8		Subtest3	18.82	18.49	18.90	0.5
8		Subtest4	18.82	18.48	18.89	0.5

UMTS Average Conducted output powers

UMTS Band 2 Grip back-off Power (DSI = 1, 4)

3GPP Release Version	Mode	3GPP 34.121	UMTS Band 2 [dBm]			3GPP MPR
		Subtest	UL9262 DL9662	UL9400 DL9800	UL9538 DL9938	
99	UMTS	12.2 kbps RMC	20.39	20.31	20.34	-
99		12.2 kbps AMR	20.43	20.28	20.29	-
5	HSDPA	Subtest 1	19.27	19.20	19.23	0
5		Subtest 2	19.28	19.18	19.25	0
5		Subtest 3	18.75	18.68	18.74	0.5
5		Subtest 4	18.77	18.68	18.84	0.5
6	HSUPA	Subtest 1	19.36	19.24	19.31	0
6		Subtest 2	17.31	17.28	17.40	2
6		Subtest 3	18.48	18.36	18.41	1
6		Subtest 4	17.46	17.34	17.33	2
6		Subtest 5	19.39	19.29	19.38	0
8	DC-HSDPA	Subtest 1	19.20	18.87	18.93	0
8		Subtest 2	19.17	18.90	18.92	0
8		Subtest 3	18.68	18.39	18.45	0.5
8		Subtest 4	18.65	18.41	18.45	0.5

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



11.3 LTE Maximum Output Power

LTE B4/B5/B12/B13/B17/B26/B41 at Max Bandwidth does not support three non-overlapping channels. Per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel Bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

11.3.1 LTE Maximum Conducted Power

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

[LTE Band 2 Conducted Power _ P_{max}, DSI = 0,2]

LTE Band 2 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 ㎒	18900 Ch. 1880 ㎒	19193 Ch. 1909.3 ㎒		
1.4 ㎒	QPSK	1	0	22.62	22.61	22.63	0	0
		1	3	22.57	22.67	22.74	0	0
		1	5	22.56	22.62	22.64	0	0
		3	0	22.49	22.69	22.63	0	0
		3	1	22.57	22.65	22.73	0	0
		3	3	22.53	22.68	22.64	0	0
		6	0	21.54	21.67	21.59	0-1	1
	16QAM	1	0	21.83	21.78	22.07	0-1	1
		1	3	21.77	22.06	22.09	0-1	1
		1	5	21.64	21.84	22.17	0-1	1
		3	0	21.65	21.82	21.83	0-1	1
		3	1	21.76	21.73	21.87	0-1	1
		3	3	21.75	21.79	21.88	0-1	1
		6	0	20.64	20.67	20.69	0-2	2
	64QAM	1	0	20.71	20.74	20.76	0-2	2
		1	3	20.84	20.81	20.88	0-2	2
		1	5	20.63	20.71	20.82	0-2	2
		3	0	20.69	20.77	20.77	0-2	2
		3	1	20.65	20.75	20.78	0-2	2
		3	3	20.58	20.76	20.77	0-2	2
		6	0	19.58	19.66	19.69	0-3	3
	256QAM	1	0	17.71	17.70	17.73	0-5	5
		1	3	17.77	17.68	17.89	0-5	5
		1	5	17.64	17.69	17.65	0-5	5
		3	0	17.56	17.64	17.73	0-5	5
		3	1	17.56	17.71	17.72	0-5	5
		3	3	17.62	17.67	17.67	0-5	5
		6	0	17.58	17.66	17.69	0-5	5

LTE Band 2 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 ㎒	18900 Ch. 1880 ㎒	19185 Ch. 1908.5 ㎒		
3 ㎒	QPSK	1	0	22.69	22.58	22.63	0	0
		1	7	22.63	22.65	22.71	0	0
		1	14	22.58	22.60	22.67	0	0
		8	0	21.67	21.62	21.69	0-1	1
		8	3	21.67	21.64	21.71	0-1	1
		8	7	21.63	21.69	21.74	0-1	1
		15	0	21.63	21.71	21.61	0-1	1
	16QAM	1	0	21.86	21.82	21.87	0-1	1
		1	7	21.80	21.88	21.82	0-1	1
		1	14	21.81	21.77	22.05	0-1	1
		8	0	20.58	20.71	20.64	0-2	2
		8	3	20.76	20.61	20.75	0-2	2
		8	7	20.65	20.69	20.74	0-2	2
		15	0	20.65	20.67	20.69	0-2	2
	64QAM	1	0	20.71	20.63	20.93	0-2	2
		1	7	20.76	20.74	20.78	0-2	2
		1	14	20.72	20.69	20.82	0-2	2
		8	0	19.58	19.69	19.68	0-3	3
		8	3	19.67	19.69	19.76	0-3	3
		8	7	19.61	19.60	19.78	0-3	3
		15	0	19.59	19.65	19.63	0-3	3
	256QAM	1	0	17.43	17.56	17.83	0-5	5
		1	7	17.70	17.94	17.81	0-5	5
		1	14	17.63	17.61	17.65	0-5	5
		8	0	17.65	17.64	17.68	0-5	5
		8	3	17.69	17.64	17.70	0-5	5
		8	7	17.52	17.71	17.72	0-5	5
		15	0	17.60	17.71	17.65	0-5	5

LTE Band 2 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 ㎒	18900 Ch. 1880 ㎒	19175 Ch. 1907.5 ㎒		
5 ㎒	QPSK	1	0	22.72	22.63	22.63	0	0
		1	12	22.75	22.66	22.83	0	0
		1	24	22.57	22.64	22.76	0	0
		12	0	21.67	21.61	21.60	0-1	1
		12	6	21.69	21.64	21.74	0-1	1
		12	11	21.59	21.76	21.72	0-1	1
		25	0	21.59	21.71	21.65	0-1	1
	16QAM	1	0	21.67	21.89	21.94	0-1	1
		1	12	21.98	22.05	21.94	0-1	1
		1	24	21.89	21.98	22.09	0-1	1
		12	0	20.71	20.69	20.63	0-2	2
		12	6	20.73	20.72	20.70	0-2	2
		12	11	20.71	20.73	20.78	0-2	2
		25	0	20.56	20.73	20.68	0-2	2
	64QAM	1	0	20.72	20.52	20.82	0-2	2
		1	12	20.79	20.78	20.78	0-2	2
		1	24	20.60	20.73	20.87	0-2	2
		12	0	19.64	19.66	19.65	0-3	3
		12	6	19.56	19.70	19.71	0-3	3
		12	11	19.58	19.73	19.80	0-3	3
		25	0	19.65	19.71	19.66	0-3	3
	256QAM	1	0	17.43	17.72	17.69	0-5	5
		1	12	17.92	17.78	17.87	0-5	5
		1	24	17.56	17.81	17.70	0-5	5
		12	0	17.61	17.63	17.72	0-5	5
		12	6	17.72	17.68	17.71	0-5	5
		12	11	17.62	17.72	17.71	0-5	5
		25	0	17.57	17.70	17.70	0-5	5

LTE Band 2 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 ㎒	18900 Ch. 1880 ㎒	19150 Ch. 1905 ㎒		
10 ㎒	QPSK	1	0	22.62	22.69	22.74	0	0
		1	24	22.61	22.70	22.78	0	0
		1	49	22.54	22.69	22.65	0	0
		25	0	21.55	21.60	21.69	0-1	1
		25	12	21.70	21.68	21.82	0-1	1
		25	24	21.64	21.70	21.73	0-1	1
		50	0	21.68	21.77	21.77	0-1	1
	16QAM	1	0	21.96	21.89	21.92	0-1	1
		1	24	21.74	21.76	21.84	0-1	1
		1	49	21.83	22.00	21.98	0-1	1
		25	0	20.57	20.72	20.71	0-2	2
		25	12	20.69	20.67	20.81	0-2	2
		25	24	20.64	20.75	20.80	0-2	2
		50	0	20.59	20.72	20.79	0-2	2
	64QAM	1	0	20.73	20.67	20.84	0-2	2
		1	24	20.80	20.78	20.86	0-2	2
		1	49	20.68	20.68	20.78	0-2	2
		25	0	19.55	19.68	19.72	0-3	3
		25	12	19.75	19.70	19.77	0-3	3
		25	24	19.57	19.76	19.81	0-3	3
		50	0	19.65	19.70	19.83	0-3	3
	256QAM	1	0	17.65	17.61	17.70	0-5	5
		1	24	17.63	17.77	17.89	0-5	5
		1	49	17.71	17.89	17.72	0-5	5
		25	0	17.48	17.68	17.72	0-5	5
		25	12	17.71	17.67	17.78	0-5	5
		25	24	17.58	17.67	17.71	0-5	5
		50	0	17.59	17.75	17.82	0-5	5

LTE Band 2 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 ㎒	18900 Ch. 1880 ㎒	19125 Ch. 1902.5 ㎒		
15 ㎒	QPSK	1	0	22.38	22.56	22.86	0	0
		1	36	22.56	22.60	22.56	0	0
		1	74	22.58	22.60	22.70	0	0
		36	0	21.43	21.50	21.57	0-1	1
		36	18	21.50	21.50	21.56	0-1	1
		36	39	21.48	21.61	21.62	0-1	1
		75	0	21.49	21.63	21.58	0-1	1
	16QAM	1	0	21.69	21.83	22.10	0-1	1
		1	36	21.64	21.63	21.75	0-1	1
		1	74	21.53	21.55	21.55	0-1	1
		36	0	20.50	20.47	20.54	0-2	2
		36	18	20.46	20.51	20.58	0-2	2
		36	39	20.46	20.63	20.60	0-2	2
		75	0	20.53	20.57	20.54	0-2	2
	64QAM	1	0	20.62	20.66	20.72	0-2	2
		1	36	20.53	20.56	20.78	0-2	2
		1	74	20.63	20.59	20.74	0-2	2
		36	0	19.47	19.59	19.59	0-3	3
		36	18	19.46	19.46	19.58	0-3	3
		36	39	19.56	19.65	19.56	0-3	3
		75	0	19.49	19.58	19.53	0-3	3
	256QAM	1	0	17.36	17.27	17.52	0-5	5
		1	36	17.67	17.65	17.60	0-5	5
		1	74	17.63	17.72	17.81	0-5	5
		36	0	17.42	17.45	17.59	0-5	5
		36	18	17.48	17.52	17.55	0-5	5
		36	39	17.50	17.61	17.67	0-5	5
		75	0	17.52	17.57	17.54	0-5	5

LTE Band 2 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 ㎒	18900 Ch. 1880 ㎒	19100 Ch. 1900 ㎒		
20 ㎒	QPSK	1	0	22.62	22.66	22.89	0	0
		1	49	22.64	22.56	22.61	0	0
		1	99	22.43	22.60	22.47	0	0
		50	0	21.51	21.45	21.57	0-1	1
		50	25	21.56	21.64	21.67	0-1	1
		50	49	21.48	21.62	21.63	0-1	1
		100	0	21.56	21.52	21.67	0-1	1
	16QAM	1	0	21.59	21.76	22.01	0-1	1
		1	49	21.80	22.46	22.17	0-1	1
		1	99	21.64	21.54	21.61	0-1	1
		50	0	20.47	20.56	20.61	0-2	2
		50	25	20.50	20.60	20.68	0-2	2
		50	49	20.51	20.57	20.67	0-2	2
		100	0	20.57	20.58	20.69	0-2	2
	64QAM	1	0	20.87	20.69	20.84	0-2	2
		1	49	20.64	20.66	20.68	0-2	2
		1	99	20.50	20.58	20.80	0-2	2
		50	0	19.45	19.55	19.58	0-3	3
		50	25	19.46	19.56	19.69	0-3	3
		50	49	19.46	19.63	19.65	0-3	3
		100	0	19.55	19.55	19.66	0-3	3
	256QAM	1	0	17.73	17.40	17.65	0-5	5
		1	49	17.50	17.64	17.57	0-5	5
		1	99	17.50	17.63	17.61	0-5	5
		50	0	17.48	17.50	17.61	0-5	5
		50	25	17.53	17.66	17.64	0-5	5
		50	49	17.53	17.59	17.60	0-5	5
		100	0	17.51	17.57	17.74	0-5	5

[LTE Band 4 Conducted Power _ P_{max}, DSI = 0,2]

LTE Band 4 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19957 Ch. 1710.7 ㎒	20175 Ch. 1732.5 ㎒	20393 Ch. 1754.3 ㎒		
1.4 ㎒	QPSK	1	0	23.33	22.77	23.10	0	0
		1	3	23.26	22.73	23.02	0	0
		1	5	23.17	22.65	22.98	0	0
		3	0	23.24	22.77	22.92	0	0
		3	1	23.24	22.72	22.99	0	0
		3	3	23.25	22.79	23.02	0	0
		6	0	22.14	21.78	22.02	0-1	1
	16QAM	1	0	22.91	21.95	22.12	0-1	1
		1	3	22.40	22.19	22.32	0-1	1
		1	5	22.36	21.85	22.49	0-1	1
		3	0	22.28	21.90	22.10	0-1	1
		3	1	22.23	21.94	22.15	0-1	1
		3	3	22.23	21.91	22.00	0-1	1
		6	0	21.20	20.80	21.09	0-2	2
	64QAM	1	0	21.40	21.01	21.04	0-2	2
		1	3	21.41	20.79	21.09	0-2	2
		1	5	21.46	20.77	20.92	0-2	2
		3	0	21.37	20.88	21.05	0-2	2
		3	1	21.30	20.90	21.08	0-2	2
		3	3	21.34	20.81	21.04	0-2	2
		6	0	20.20	19.76	20.04	0-3	3
	256QAM	1	0	18.28	17.76	18.07	0-5	5
		1	3	18.18	17.95	18.02	0-5	5
		1	5	18.35	17.86	18.01	0-5	5
		3	0	18.33	17.81	18.09	0-5	5
		3	1	18.33	17.86	18.00	0-5	5
		3	3	18.30	17.82	18.01	0-5	5
		6	0	18.16	17.83	18.03	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	23.05	22.76	22.94	0	0
		1	7	23.23	22.86	23.02	0	0
		1	14	23.07	22.72	22.96	0	0
		8	0	22.23	21.80	21.93	0-1	1
		8	3	22.23	21.84	22.04	0-1	1
		8	7	22.11	21.76	22.01	0-1	1
		15	0	22.16	21.81	21.96	0-1	1
	16QAM	1	0	22.49	22.03	22.23	0-1	1
		1	7	22.47	21.92	22.29	0-1	1
		1	14	22.39	21.95	22.10	0-1	1
		8	0	21.20	20.87	21.01	0-2	2
		8	3	21.28	20.87	21.06	0-2	2
		8	7	21.05	20.80	21.03	0-2	2
		15	0	21.22	20.83	20.97	0-2	2
	64QAM	1	0	21.30	20.86	21.07	0-2	2
		1	7	21.44	20.94	21.07	0-2	2
		1	14	21.36	20.90	20.98	0-2	2
		8	0	20.24	19.83	20.04	0-3	3
		8	3	20.26	19.84	20.05	0-3	3
		8	7	20.13	19.80	20.12	0-3	3
		15	0	20.24	19.86	19.98	0-3	3
	256QAM	1	0	18.30	17.81	18.00	0-5	5
		1	7	18.41	17.99	18.00	0-5	5
		1	14	18.22	17.95	17.98	0-5	5
		8	0	18.28	17.80	17.94	0-5	5
		8	3	18.30	17.82	17.97	0-5	5
		8	7	18.10	17.87	18.04	0-5	5
		15	0	18.17	17.85	17.91	0-5	5

LTE Band 4 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19975 Ch. 1712.5 ㎒	20175 Ch. 1732.5 ㎒	20375 Ch. 1752.5 ㎒		
5 ㎒	QPSK	1	0	23.35	22.80	22.92	0	0
		1	12	23.22	22.88	23.06	0	0
		1	24	23.12	22.80	22.87	0	0
		12	0	22.14	21.81	21.93	0-1	1
		12	6	22.24	21.83	22.00	0-1	1
		12	11	22.12	21.78	22.06	0-1	1
		25	0	22.20	21.76	22.00	0-1	1
	16QAM	1	0	22.54	22.03	22.05	0-1	1
		1	12	22.43	22.05	22.21	0-1	1
		1	24	22.29	21.94	22.24	0-1	1
		12	0	21.22	20.80	21.01	0-2	2
		12	6	21.26	20.81	21.00	0-2	2
		12	11	21.15	20.79	21.08	0-2	2
		25	0	21.24	20.82	20.95	0-2	2
	64QAM	1	0	21.22	20.94	21.13	0-2	2
		1	12	21.32	20.89	21.25	0-2	2
		1	24	21.29	20.88	21.12	0-2	2
		12	0	20.23	19.83	19.99	0-3	3
		12	6	20.22	19.80	20.05	0-3	3
		12	11	20.06	19.80	20.13	0-3	3
		25	0	20.13	19.78	19.99	0-3	3
	256QAM	1	0	18.32	17.78	17.88	0-5	5
		1	12	18.41	17.89	18.18	0-5	5
		1	24	18.07	17.89	17.98	0-5	5
		12	0	18.22	17.88	17.96	0-5	5
		12	6	18.31	17.84	18.03	0-5	5
		12	11	18.15	17.85	18.06	0-5	5
		25	0	18.20	17.77	17.97	0-5	5

LTE Band 4 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20000 Ch. 1715 ㎒	20175 Ch. 1732.5 ㎒	20350 Ch. 1750 ㎒		
10 ㎒	QPSK	1	0	23.26	22.87	22.91	0	0
		1	24	23.16	22.83	22.98	0	0
		1	49	23.04	22.84	22.96	0	0
		25	0	22.21	21.82	21.96	0-1	1
		25	12	22.19	21.85	22.00	0-1	1
		25	24	22.03	21.76	22.02	0-1	1
		50	0	22.10	21.84	22.02	0-1	1
	16QAM	1	0	22.44	22.09	22.06	0-1	1
		1	24	22.29	22.02	22.15	0-1	1
		1	49	22.34	22.01	22.17	0-1	1
		25	0	21.19	20.80	20.99	0-2	2
		25	12	21.18	20.86	21.04	0-2	2
		25	24	21.01	20.84	21.03	0-2	2
		50	0	21.07	20.82	20.99	0-2	2
	64QAM	1	0	21.28	20.96	21.03	0-2	2
		1	24	21.40	20.91	21.16	0-2	2
		1	49	21.21	21.05	21.09	0-2	2
		25	0	20.18	19.81	19.93	0-3	3
		25	12	20.18	19.89	20.08	0-3	3
		25	24	20.03	19.85	19.98	0-3	3
		50	0	20.12	19.91	20.07	0-3	3
	256QAM	1	0	18.28	17.91	18.17	0-5	5
		1	24	18.27	17.92	18.11	0-5	5
		1	49	18.18	17.88	17.92	0-5	5
		25	0	18.20	17.84	17.92	0-5	5
		25	12	18.26	17.88	18.12	0-5	5
		25	24	18.06	17.75	17.98	0-5	5
		50	0	18.12	17.75	17.99	0-5	5

LTE Band 4 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20025 Ch. 1717.5 ㎒	20175 Ch. 1732.5 ㎒	20325 Ch. 1747.5 ㎒		
15 ㎒	QPSK	1	0	22.82	22.56	22.87	0	0
		1	36	23.01	22.73	22.84	0	0
		1	74	22.85	22.84	22.84	0	0
		36	0	22.02	21.69	21.77	0-1	1
		36	18	21.97	21.64	21.74	0-1	1
		36	39	21.84	21.70	21.89	0-1	1
		75	0	21.98	21.70	21.78	0-1	1
	16QAM	1	0	22.43	21.98	22.10	0-1	1
		1	36	22.01	21.91	21.74	0-1	1
		1	74	22.08	21.98	22.02	0-1	1
		36	0	20.94	20.72	20.76	0-2	2
		36	18	20.96	20.71	20.73	0-2	2
		36	39	20.84	20.66	20.86	0-2	2
		75	0	21.04	20.69	20.84	0-2	2
	64QAM	1	0	21.11	20.83	20.79	0-2	2
		1	36	21.32	20.74	20.99	0-2	2
		1	74	21.24	20.96	20.69	0-2	2
		36	0	20.02	19.76	19.80	0-3	3
		36	18	20.11	19.64	19.76	0-3	3
		36	39	19.88	19.60	19.84	0-3	3
		75	0	19.97	19.66	19.82	0-3	3
	256QAM	1	0	18.13	17.77	17.92	0-5	5
		1	36	17.93	17.80	17.93	0-5	5
		1	74	17.95	17.96	17.94	0-5	5
		36	0	17.97	17.73	17.88	0-5	5
		36	18	17.98	17.70	17.82	0-5	5
		36	39	17.84	17.56	17.91	0-5	5
		75	0	17.90	17.72	17.91	0-5	5

LTE Band 4 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 20175 Ch. 1732.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
20 ㎒	QPSK	1	0	22.82	0	0
		1	49	22.70	0	0
		1	99	22.80	0	0
		50	0	21.73	0-1	1
		50	25	21.71	0-1	1
		50	49	21.72	0-1	1
		100	0	21.72	0-1	1
	16QAM	1	0	22.18	0-1	1
		1	49	21.87	0-1	1
		1	99	21.92	0-1	1
		50	0	20.71	0-2	2
		50	25	20.76	0-2	2
		50	49	20.60	0-2	2
		100	0	20.81	0-2	2
	64QAM	1	0	20.92	0-2	2
		1	49	20.91	0-2	2
		1	99	20.69	0-2	2
		50	0	19.81	0-3	3
		50	25	19.68	0-3	3
		50	49	19.64	0-3	3
		100	0	19.72	0-3	3
	256QAM	1	0	18.13	0-5	5
		1	49	17.68	0-5	5
		1	99	17.94	0-5	5
		50	0	17.72	0-5	5
		50	25	17.67	0-5	5
		50	49	17.71	0-5	5
		100	0	17.71	0-5	5

[LTE Band 5 Conducted Power _ P_{max}, DSI = All]

LTE Band 5 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20407 Ch. 824.7 ㎒	20525 Ch. 836.5 ㎒	20643 Ch. 848.3 ㎒		
1.4 ㎒	QPSK	1	0	24.50	24.48	24.65	0	0
		1	3	24.61	24.60	24.66	0	0
		1	5	24.59	24.54	24.69	0	0
		3	0	24.58	24.49	24.63	0	0
		3	1	24.62	24.63	24.72	0	0
		3	3	24.55	24.57	24.68	0	0
		6	0	23.58	23.53	23.67	0-1	1
	16QAM	1	0	23.91	23.69	23.83	0-1	1
		1	3	23.86	23.95	23.94	0-1	1
		1	5	23.87	23.80	23.88	0-1	1
		3	0	23.64	23.56	23.78	0-1	1
		3	1	23.69	23.73	23.74	0-1	1
		3	3	23.72	23.70	23.76	0-1	1
		6	0	22.59	22.58	22.73	0-2	2
	64QAM	1	0	22.59	22.58	22.61	0-2	2
		1	3	22.83	22.67	22.88	0-2	2
		1	5	22.62	22.66	22.82	0-2	2
		3	0	22.64	22.61	22.77	0-2	2
		3	1	22.68	22.64	22.80	0-2	2
		3	3	22.63	22.57	22.65	0-2	2
		6	0	21.63	21.50	21.62	0-3	3
	256QAM	1	0	19.62	19.58	19.68	0-5	5
		1	3	19.70	19.61	19.77	0-5	5
		1	5	19.68	19.57	19.51	0-5	5
		3	0	19.66	19.55	19.72	0-5	5
		3	1	19.55	19.65	19.68	0-5	5
		3	3	19.60	19.58	19.66	0-5	5
		6	0	19.63	19.55	19.66	0-5	5

LTE Band 5 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20415 Ch. 825.5 ㎒	20525 Ch. 836.5 ㎒	20635 Ch. 847.5 ㎒		
3 ㎒	QPSK	1	0	24.59	24.56	24.60	0	0
		1	7	24.64	24.57	24.65	0	0
		1	14	24.47	24.51	24.52	0	0
		8	0	23.61	23.50	23.63	0-1	1
		8	3	23.63	23.55	23.63	0-1	1
		8	7	23.61	23.57	23.68	0-1	1
		15	0	23.60	23.55	23.66	0-1	1
	16QAM	1	0	23.80	23.77	23.79	0-1	1
		1	7	23.71	23.73	24.01	0-1	1
		1	14	23.84	23.63	23.85	0-1	1
		8	0	22.69	22.59	22.65	0-2	2
		8	3	22.68	22.69	22.71	0-2	2
		8	7	22.59	22.64	22.71	0-2	2
		15	0	22.58	22.61	22.60	0-2	2
	64QAM	1	0	22.67	22.61	22.88	0-2	2
		1	7	22.83	22.72	22.82	0-2	2
		1	14	22.67	22.65	22.84	0-2	2
		8	0	21.61	21.52	21.68	0-3	3
		8	3	21.57	21.60	21.67	0-3	3
		8	7	21.63	21.64	21.65	0-3	3
		15	0	21.60	21.54	21.66	0-3	3
	256QAM	1	0	19.51	19.68	19.68	0-5	5
		1	7	19.74	19.72	19.80	0-5	5
		1	14	19.70	19.60	19.74	0-5	5
		8	0	19.64	19.53	19.61	0-5	5
		8	3	19.67	19.64	19.62	0-5	5
		8	7	19.64	19.62	19.75	0-5	5
		15	0	19.63	19.60	19.66	0-5	5

LTE Band 5 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20425 Ch. 826.5 ㎒	20525 Ch. 836.5 ㎒	20625 Ch. 846.5 ㎒		
5 ㎒	QPSK	1	0	24.55	24.61	24.57	0	0
		1	12	24.63	24.61	24.71	0	0
		1	24	24.56	24.50	24.55	0	0
		12	0	23.54	23.54	23.66	0-1	1
		12	6	23.64	23.67	23.61	0-1	1
		12	11	23.51	23.60	23.72	0-1	1
		25	0	23.62	23.58	23.57	0-1	1
	16QAM	1	0	23.70	23.95	23.88	0-1	1
		1	12	23.77	23.80	23.98	0-1	1
		1	24	23.74	23.72	23.92	0-1	1
		12	0	22.57	22.53	22.61	0-2	2
		12	6	22.66	22.63	22.58	0-2	2
		12	11	22.60	22.60	22.67	0-2	2
		25	0	22.65	22.55	22.59	0-2	2
	64QAM	1	0	22.77	22.61	22.66	0-2	2
		1	12	22.65	22.71	22.78	0-2	2
		1	24	22.79	22.64	22.81	0-2	2
		12	0	21.49	21.56	21.58	0-3	3
		12	6	21.67	21.60	21.61	0-3	3
		12	11	21.58	21.62	21.63	0-3	3
		25	0	21.65	21.48	21.64	0-3	3
	256QAM	1	0	19.52	19.60	19.67	0-5	5
		1	12	19.74	19.66	19.84	0-5	5
		1	24	19.61	19.63	19.72	0-5	5
		12	0	19.53	19.58	19.61	0-5	5
		12	6	19.70	19.62	19.67	0-5	5
		12	11	19.61	19.61	19.60	0-5	5
		25	0	19.61	19.60	19.55	0-5	5

LTE Band 5 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 20525 Ch. 836.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	24.61	0	0
		1	24	24.64	0	0
		1	49	24.62	0	0
		25	0	23.57	0-1	1
		25	12	23.62	0-1	1
		25	24	23.57	0-1	1
		50	0	23.64	0-1	1
	16QAM	1	0	23.96	0-1	1
		1	24	23.78	0-1	1
		1	49	23.75	0-1	1
		25	0	22.57	0-2	2
		25	12	22.67	0-2	2
		25	24	22.58	0-2	2
		50	0	22.61	0-2	2
	64QAM	1	0	22.79	0-2	2
		1	24	22.67	0-2	2
		1	49	22.80	0-2	2
		25	0	21.47	0-3	3
		25	12	21.62	0-3	3
		25	24	21.57	0-3	3
		50	0	21.61	0-3	3
	256QAM	1	0	19.61	0-5	5
		1	24	19.72	0-5	5
		1	49	19.71	0-5	5
		25	0	19.63	0-5	5
		25	12	19.66	0-5	5
		25	24	19.63	0-5	5
		50	0	19.62	0-5	5

[LTE Band 12 Conducted Power_ P_{max}, DSI = All]

LTE Band 12 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23017 Ch. 699.7 ㎒	23095 Ch. 707.5 ㎒	23173 Ch. 715.3 ㎒		
1.4 ㎒	QPSK	1	0	23.88	23.88	23.76	0	0
		1	3	23.85	23.91	23.73	0	0
		1	5	23.90	23.85	23.70	0	0
		3	0	23.97	23.81	23.78	0	0
		3	1	23.93	23.82	23.76	0	0
		3	3	23.90	23.90	23.69	0	0
		6	0	22.92	22.75	22.75	0-1	1
	16QAM	1	0	23.04	22.90	22.83	0-1	1
		1	3	23.37	23.05	22.79	0-1	1
		1	5	23.17	23.25	22.91	0-1	1
		3	0	23.03	23.01	22.87	0-1	1
		3	1	23.12	22.95	22.89	0-1	1
		3	3	23.14	23.11	22.75	0-1	1
		6	0	21.95	21.74	21.84	0-2	2
	64QAM	1	0	22.09	22.08	21.88	0-2	2
		1	3	22.11	22.02	21.98	0-2	2
		1	5	22.05	22.03	21.80	0-2	2
		3	0	22.04	21.93	21.74	0-2	2
		3	1	21.98	21.95	21.89	0-2	2
		3	3	21.98	21.94	21.76	0-2	2
		6	0	20.96	20.74	20.70	0-3	3
	256QAM	1	0	18.91	18.74	18.86	0-5	5
		1	3	19.00	18.92	18.85	0-5	5
		1	5	19.01	18.87	18.80	0-5	5
		3	0	18.94	18.82	18.76	0-5	5
		3	1	19.01	18.89	18.74	0-5	5
		3	3	18.98	18.83	18.70	0-5	5
		6	0	18.98	18.82	18.72	0-5	5

LTE Band 12 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23025 Ch. 700.5 ㎒	23095 Ch. 707.5 ㎒	23165 Ch. 714.5 ㎒		
3 ㎒	QPSK	1	0	23.79	23.83	23.70	0	0
		1	7	23.98	23.96	23.82	0	0
		1	14	23.89	23.82	23.71	0	0
		8	0	22.93	22.80	22.84	0-1	1
		8	3	22.99	22.89	22.80	0-1	1
		8	7	22.95	22.89	22.79	0-1	1
		15	0	22.91	22.84	22.76	0-1	1
	16QAM	1	0	23.20	23.00	22.92	0-1	1
		1	7	23.27	23.28	23.13	0-1	1
		1	14	23.07	23.11	22.78	0-1	1
		8	0	22.05	21.87	21.92	0-2	2
		8	3	21.95	21.85	21.73	0-2	2
		8	7	21.94	21.89	21.80	0-2	2
		15	0	21.96	21.79	21.80	0-2	2
	64QAM	1	0	22.01	21.91	21.83	0-2	2
		1	7	22.13	22.00	22.10	0-2	2
		1	14	21.93	22.03	21.82	0-2	2
		8	0	21.03	20.85	20.78	0-3	3
		8	3	21.07	20.84	20.83	0-3	3
		8	7	20.92	20.86	20.76	0-3	3
		15	0	21.02	20.85	20.83	0-3	3
	256QAM	1	0	18.87	18.75	18.74	0-5	5
		1	7	18.96	18.92	18.90	0-5	5
		1	14	18.91	18.83	18.76	0-5	5
		8	0	19.05	18.80	18.76	0-5	5
		8	3	18.97	18.87	18.82	0-5	5
		8	7	18.97	18.83	18.75	0-5	5
		15	0	18.93	18.82	18.65	0-5	5

LTE Band 12 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				23035 Ch. 701.5 ㎒	23095 Ch. 707.5 ㎒	23155 Ch. 713.5 ㎒		
5 ㎒	QPSK	1	0	23.92	23.81	23.85	0	0
		1	12	23.86	23.96	23.86	0	0
		1	24	23.80	23.86	23.76	0	0
		12	0	22.85	22.72	22.83	0-1	1
		12	6	23.02	22.82	22.81	0-1	1
		12	11	22.95	22.86	22.82	0-1	1
		25	0	22.91	22.81	22.76	0-1	1
	16QAM	1	0	23.24	23.11	23.05	0-1	1
		1	12	23.16	23.11	23.12	0-1	1
		1	24	23.03	23.09	22.95	0-1	1
		12	0	21.97	21.77	21.84	0-2	2
		12	6	22.04	21.85	21.85	0-2	2
		12	11	21.96	21.84	21.77	0-2	2
		25	0	22.03	21.77	21.83	0-2	2
	64QAM	1	0	22.02	21.98	22.00	0-2	2
		1	12	22.20	22.01	22.01	0-2	2
		1	24	21.96	21.98	21.92	0-2	2
		12	0	20.87	20.77	20.89	0-3	3
		12	6	21.05	20.88	20.83	0-3	3
		12	11	20.99	20.95	20.79	0-3	3
		25	0	20.93	20.77	20.72	0-3	3
	256QAM	1	0	18.95	18.92	18.98	0-5	5
		1	12	18.97	18.99	18.81	0-5	5
		1	24	18.95	18.87	18.78	0-5	5
		12	0	18.86	18.81	18.82	0-5	5
		12	6	18.95	18.84	18.78	0-5	5
		12	11	18.89	18.87	18.79	0-5	5
		25	0	18.95	18.76	18.85	0-5	5

LTE Band 12 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23095 Ch. 707.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	23.88	0	0
		1	24	23.97	0	0
		1	49	23.79	0	0
		25	0	22.81	0-1	1
		25	12	22.82	0-1	1
		25	24	22.90	0-1	1
		50	0	22.82	0-1	1
	16QAM	1	0	23.07	0-1	1
		1	24	23.04	0-1	1
		1	49	22.90	0-1	1
		25	0	21.87	0-2	2
		25	12	21.87	0-2	2
		25	24	21.85	0-2	2
		50	0	21.85	0-2	2
	64QAM	1	0	22.01	0-2	2
		1	24	21.87	0-2	2
		1	49	21.87	0-2	2
		25	0	20.86	0-3	3
		25	12	20.85	0-3	3
		25	24	20.86	0-3	3
		50	0	20.85	0-3	3
	256QAM	1	0	19.07	0-5	5
		1	24	19.04	0-5	5
		1	49	18.89	0-5	5
		25	0	18.88	0-5	5
		25	12	18.79	0-5	5
		25	24	18.87	0-5	5
		50	0	18.75	0-5	5

[LTE Band 13 Conducted Power_ P_{max}, DSI All]

LTE Band 13 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23230 Ch. 782 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
5 ㎒	QPSK	1	0	23.42	0	0
		1	12	23.50	0	0
		1	24	23.33	0	0
		12	0	22.40	0-1	1
		12	6	22.51	0-1	1
		12	11	22.45	0-1	1
		25	0	22.39	0-1	1
	16QAM	1	0	22.70	0-1	1
		1	12	22.65	0-1	1
		1	24	22.72	0-1	1
		12	0	21.42	0-2	2
		12	6	21.52	0-2	2
		12	11	21.49	0-2	2
		25	0	21.54	0-2	2
	64QAM	1	0	21.56	0-2	2
		1	12	21.67	0-2	2
		1	24	21.47	0-2	2
		12	0	20.39	0-3	3
		12	6	20.48	0-3	3
		12	11	20.49	0-3	3
		25	0	20.45	0-3	3
	256QAM	1	0	18.46	0-5	5
		1	12	18.60	0-5	5
		1	24	18.44	0-5	5
		12	0	18.40	0-5	5
		12	6	18.53	0-5	5
		12	11	18.46	0-5	5
		25	0	18.52	0-5	5

LTE Band 13 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23230 Ch. 782 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	23.43	0	0
		1	24	23.48	0	0
		1	49	23.50	0	0
		25	0	22.47	0-1	1
		25	12	22.54	0-1	1
		25	24	22.49	0-1	1
		50	0	22.46	0-1	1
	16QAM	1	0	23.18	0-1	1
		1	24	22.58	0-1	1
		1	49	22.77	0-1	1
		25	0	21.47	0-2	2
		25	12	21.47	0-2	2
		25	24	21.49	0-2	2
		50	0	21.47	0-2	2
	64QAM	1	0	21.58	0-2	2
		1	24	21.62	0-2	2
		1	49	21.59	0-2	2
		25	0	20.45	0-3	3
		25	12	20.51	0-3	3
		25	24	20.45	0-3	3
		50	0	20.51	0-3	3
	256QAM	1	0	18.41	0-5	5
		1	24	18.61	0-5	5
		1	49	18.57	0-5	5
		25	0	18.47	0-5	5
		25	12	18.48	0-5	5
		25	24	18.45	0-5	5
		50	0	18.41	0-5	5

[LTE Band 17 Conducted Power_ P_{max}, DSI = All]
LTE Band 17 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23790 710 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
5 ㎒	QPSK	1	0	23.74	0	0
		1	12	23.84	0	0
		1	24	23.76	0	0
		12	0	22.76	0-1	1
		12	6	22.81	0-1	1
		12	11	22.83	0-1	1
		25	0	22.78	0-1	1
	16QAM	1	0	23.10	0-1	1
		1	12	23.08	0-1	1
		1	24	22.76	0-1	1
		12	0	21.81	0-2	2
		12	6	21.82	0-2	2
		12	11	21.91	0-2	2
		25	0	21.77	0-2	2
	64QAM	1	0	21.87	0-2	2
		1	12	22.08	0-2	2
		1	24	21.82	0-2	2
		12	0	20.81	0-3	3
		12	6	20.85	0-3	3
		12	11	20.84	0-3	3
		25	0	20.78	0-3	3
	256QAM	1	0	18.92	0-5	5
		1	12	18.97	0-5	5
		1	24	18.73	0-5	5
		12	0	18.78	0-5	5
		12	6	18.79	0-5	5
		12	11	18.85	0-5	5
		25	0	18.71	0-5	5

LTE Band 17 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23790 710 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	23.81	0	0
		1	24	23.83	0	0
		1	49	23.77	0	0
		25	0	22.81	0-1	1
		25	12	22.81	0-1	1
		25	24	22.88	0-1	1
		50	0	22.73	0-1	1
	16QAM	1	0	23.01	0-1	1
		1	24	23.00	0-1	1
		1	49	23.22	0-1	1
		25	0	21.87	0-2	2
		25	12	21.84	0-2	2
		25	24	21.84	0-2	2
		50	0	21.89	0-2	2
	64QAM	1	0	22.11	0-2	2
		1	24	22.01	0-2	2
		1	49	21.86	0-2	2
		25	0	20.95	0-3	3
		25	12	20.80	0-3	3
		25	24	20.88	0-3	3
		50	0	20.82	0-3	3
	256QAM	1	0	18.89	0-5	5
		1	24	18.96	0-5	5
		1	49	18.70	0-5	5
		25	0	18.84	0-5	5
		25	12	18.84	0-5	5
		25	24	18.82	0-5	5
		50	0	18.79	0-5	5

[LTE Band 25 Conducted Power_ P_{max}, DSI = 0,2]

LTE Band 25 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26047 Ch. 1850.7 ㎒	26365 Ch. 1882.5 ㎒	26683 Ch. 1914.3 ㎒		
1.4 ㎒	QPSK	1	0	22.62	22.65	22.68	0	0
		1	3	22.64	22.67	22.68	0	0
		1	5	22.66	22.59	22.66	0	0
		3	0	22.70	22.56	22.69	0	0
		3	1	22.62	22.64	22.61	0	0
		3	3	22.63	22.58	22.61	0	0
		6	0	21.64	21.60	21.66	0-1	1
	16QAM	1	0	21.89	21.95	21.70	0-1	1
		1	3	21.90	21.93	21.90	0-1	1
		1	5	21.95	22.10	21.82	0-1	1
		3	0	21.84	21.65	21.86	0-1	1
		3	1	21.78	21.71	21.96	0-1	1
		3	3	21.67	21.82	21.79	0-1	1
		6	0	20.63	20.67	20.66	0-2	2
	64QAM	1	0	20.79	20.81	20.82	0-2	2
		1	3	20.61	20.89	20.83	0-2	2
		1	5	20.71	20.65	20.60	0-2	2
		3	0	20.74	20.72	20.80	0-2	2
		3	1	20.75	20.71	20.71	0-2	2
		3	3	20.61	20.71	20.73	0-2	2
		6	0	19.58	19.62	19.65	0-3	3
	256QAM	1	0	17.68	17.66	17.61	0-5	5
		1	3	17.76	17.56	17.78	0-5	5
		1	5	17.66	17.59	17.63	0-5	5
		3	0	17.69	17.70	17.80	0-5	5
		3	1	17.61	17.71	17.63	0-5	5
		3	3	17.55	17.70	17.60	0-5	5
		6	0	17.70	17.66	17.62	0-5	5

LTE Band 25 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26055 Ch. 1851.5 ㎒	26365 Ch. 1882.5 ㎒	26675Ch. 1913.5 ㎒		
3 ㎒	QPSK	1	0	22.47	22.64	22.68	0	0
		1	7	22.66	22.64	22.79	0	0
		1	14	22.59	22.61	22.63	0	0
		8	0	21.59	21.57	21.55	0-1	1
		8	3	21.65	21.68	21.63	0-1	1
		8	7	21.66	21.62	21.73	0-1	1
		15	0	21.65	21.68	21.58	0-1	1
	16QAM	1	0	21.73	21.76	21.85	0-1	1
		1	7	22.01	21.84	21.87	0-1	1
		1	14	21.92	21.88	21.97	0-1	1
		8	0	20.65	20.61	20.65	0-2	2
		8	3	20.75	20.70	20.75	0-2	2
		8	7	20.72	20.73	20.73	0-2	2
		15	0	20.66	20.64	20.62	0-2	2
	64QAM	1	0	20.69	20.72	20.95	0-2	2
		1	7	20.82	20.77	20.86	0-2	2
		1	14	20.55	20.76	20.75	0-2	2
		8	0	19.68	19.61	19.60	0-3	3
		8	3	19.68	19.71	19.71	0-3	3
		8	7	19.65	19.63	19.68	0-3	3
		15	0	19.60	19.68	19.66	0-3	3
	256QAM	1	0	17.45	17.65	17.57	0-5	5
		1	7	17.68	17.74	17.79	0-5	5
		1	14	17.61	17.69	17.68	0-5	5
		8	0	17.67	17.60	17.63	0-5	5
		8	3	17.63	17.60	17.64	0-5	5
		8	7	17.69	17.63	17.73	0-5	5
		15	0	17.64	17.64	17.65	0-5	5

LTE Band 25 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26065 Ch. 1852.5 ㎒	26365 Ch. 1882.5 ㎒	26665 Ch. 1912.5 ㎒		
5 ㎒	QPSK	1	0	22.69	22.60	22.65	0	0
		1	12	22.66	22.73	22.76	0	0
		1	24	22.63	22.60	22.71	0	0
		12	0	21.67	21.63	21.56	0-1	1
		12	6	21.73	21.71	21.70	0-1	1
		12	11	21.69	21.66	21.75	0-1	1
		25	0	21.66	21.61	21.69	0-1	1
	16QAM	1	0	21.72	21.86	21.91	0-1	1
		1	12	21.91	21.78	22.04	0-1	1
		1	24	21.87	21.90	21.85	0-1	1
		12	0	20.61	20.57	20.65	0-2	2
		12	6	20.74	20.71	20.71	0-2	2
		12	11	20.70	20.61	20.74	0-2	2
		25	0	20.65	20.66	20.59	0-2	2
	64QAM	1	0	20.87	21.02	20.88	0-2	2
		1	12	20.76	20.87	20.90	0-2	2
		1	24	20.71	20.83	20.76	0-2	2
		12	0	19.63	19.59	19.69	0-3	3
		12	6	19.66	19.66	19.69	0-3	3
		12	11	19.66	19.63	19.78	0-3	3
		25	0	19.64	19.66	19.65	0-3	3
	256QAM	1	0	17.63	17.63	17.64	0-5	5
		1	12	17.65	17.69	17.79	0-5	5
		1	24	17.69	17.81	17.73	0-5	5
		12	0	17.62	17.58	17.67	0-5	5
		12	6	17.67	17.71	17.61	0-5	5
		12	11	17.57	17.67	17.70	0-5	5
		25	0	17.66	17.67	17.68	0-5	5

LTE Band 25 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26090 Ch. 1855 ㎒	26365 Ch. 1882.5 ㎒	26640 Ch. 1910 ㎒		
10 ㎒	QPSK	1	0	22.58	22.57	22.81	0	0
		1	24	22.70	22.64	22.75	0	0
		1	49	22.58	22.62	22.65	0	0
		25	0	21.59	21.61	21.69	0-1	1
		25	12	21.64	21.65	21.71	0-1	1
		25	24	21.67	21.63	21.73	0-1	1
		50	0	21.62	21.64	21.79	0-1	1
	16QAM	1	0	21.78	21.83	21.95	0-1	1
		1	24	21.74	21.91	22.07	0-1	1
		1	49	21.75	21.97	21.77	0-1	1
		25	0	20.59	20.57	20.66	0-2	2
		25	12	20.66	20.70	20.75	0-2	2
		25	24	20.66	20.69	20.68	0-2	2
		50	0	20.68	20.71	20.71	0-2	2
	64QAM	1	0	20.70	20.85	20.89	0-2	2
		1	24	20.90	20.83	20.88	0-2	2
		1	49	20.80	20.66	20.84	0-2	2
		25	0	19.54	19.59	19.64	0-3	3
		25	12	19.65	19.72	19.80	0-3	3
		25	24	19.61	19.69	19.76	0-3	3
		50	0	19.69	19.68	19.79	0-3	3
	256QAM	1	0	17.62	17.63	17.61	0-5	5
		1	24	17.68	17.77	17.83	0-5	5
		1	49	17.58	17.82	17.72	0-5	5
		25	0	17.56	17.59	17.59	0-5	5
		25	12	17.66	17.68	17.74	0-5	5
		25	24	17.62	17.61	17.71	0-5	5
		50	0	17.65	17.69	17.79	0-5	5

LTE Band 25 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26115 Ch. 1857.5 ㎒	26365 Ch. 1882.5 ㎒	26615 Ch. 1907.5 ㎒		
15 ㎒	QPSK	1	0	22.64	22.49	22.93	0	0
		1	36	22.63	22.52	22.60	0	0
		1	74	22.33	22.25	22.59	0	0
		36	0	21.46	21.44	21.51	0-1	1
		36	18	21.52	21.41	21.46	0-1	1
		36	39	21.45	21.53	21.53	0-1	1
		75	0	21.44	21.50	21.53	0-1	1
	16QAM	1	0	21.78	21.73	21.63	0-1	1
		1	36	21.58	21.51	21.62	0-1	1
		1	74	21.57	21.46	21.91	0-1	1
		36	0	20.48	20.38	20.50	0-2	2
		36	18	20.53	20.41	20.44	0-2	2
		36	39	20.48	20.50	20.56	0-2	2
		75	0	20.49	20.55	20.51	0-2	2
	64QAM	1	0	20.64	20.73	20.65	0-2	2
		1	36	20.81	20.62	20.68	0-2	2
		1	74	20.58	20.53	20.84	0-2	2
		36	0	19.35	19.39	19.54	0-3	3
		36	18	19.52	19.37	19.52	0-3	3
		36	39	19.42	19.53	19.59	0-3	3
		75	0	19.48	19.51	19.51	0-3	3
	256QAM	1	0	17.49	17.52	17.31	0-5	5
		1	36	17.40	17.56	17.69	0-5	5
		1	74	17.65	17.75	17.74	0-5	5
		36	0	17.28	17.45	17.50	0-5	5
		36	18	17.58	17.47	17.52	0-5	5
		36	39	17.43	17.49	17.52	0-5	5
		75	0	17.47	17.48	17.50	0-5	5

LTE Band 25 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 ㎒	26365 Ch. 1882.5 ㎒	26590 Ch. 1905 ㎒		
20 ㎒	QPSK	1	0	22.74	22.80	22.76	0	0
		1	49	22.60	22.43	22.57	0	0
		1	99	22.42	22.36	22.47	0	0
		50	0	21.50	21.43	21.51	0-1	1
		50	25	21.52	21.55	21.60	0-1	1
		50	49	21.47	21.49	21.61	0-1	1
		100	0	21.51	21.52	21.53	0-1	1
	16QAM	1	0	21.78	21.82	21.45	0-1	1
		1	49	21.60	21.67	21.63	0-1	1
		1	99	21.65	21.55	21.86	0-1	1
		50	0	20.43	20.38	20.49	0-2	2
		50	25	20.53	20.50	20.61	0-2	2
		50	49	20.53	20.53	20.54	0-2	2
		100	0	20.48	20.60	20.60	0-2	2
	64QAM	1	0	20.78	20.31	20.48	0-2	2
		1	49	20.47	20.54	20.42	0-2	2
		1	99	20.37	20.52	20.53	0-2	2
		50	0	19.43	19.48	19.52	0-3	3
		50	25	19.48	19.51	19.59	0-3	3
		50	49	19.46	19.60	19.57	0-3	3
		100	0	19.48	19.48	19.59	0-3	3
	256QAM	1	0	17.58	17.61	17.59	0-5	5
		1	49	17.50	17.64	17.55	0-5	5
		1	99	17.69	17.57	17.77	0-5	5
		50	0	17.44	17.44	17.49	0-5	5
		50	25	17.57	17.53	17.61	0-5	5
		50	49	17.54	17.52	17.55	0-5	5
		100	0	17.45	17.52	17.60	0-5	5

[LTE Band 26 Conducted Power _ Pmax, DSI = All]

LTE Band 26 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26697 Ch. 814.7 ㎒	26865 Ch. 831.5 ㎒	27033 Ch. 848.3 ㎒		
1.4 ㎒	QPSK	1	0	23.49	23.21	23.24	0	0
		1	3	23.36	23.21	23.27	0	0
		1	5	23.31	23.13	23.24	0	0
		3	0	23.48	23.21	23.29	0	0
		3	1	23.42	23.31	23.22	0	0
		3	3	23.35	23.15	23.30	0	0
		6	0	22.38	22.19	22.30	0-1	1
	16QAM	1	0	22.67	22.36	22.55	0-1	1
		1	3	22.82	22.59	22.49	0-1	1
		1	5	22.51	22.34	22.60	0-1	1
		3	0	22.57	22.30	22.36	0-1	1
		3	1	22.54	22.34	22.30	0-1	1
		3	3	22.51	22.25	22.27	0-1	1
		6	0	21.46	21.27	21.41	0-2	2
	64QAM	1	0	21.45	21.32	21.35	0-2	2
		1	3	21.56	21.31	21.45	0-2	2
		1	5	21.64	21.34	21.33	0-2	2
		3	0	21.48	21.30	21.37	0-2	2
		3	1	21.48	21.32	21.36	0-2	2
		3	3	21.52	21.25	21.26	0-2	2
		6	0	20.43	20.20	20.31	0-3	3
	256QAM	1	0	18.52	18.29	18.21	0-5	5
		1	3	18.59	18.22	18.32	0-5	5
		1	5	18.50	18.21	18.20	0-5	5
		3	0	18.54	18.21	18.24	0-5	5
		3	1	18.48	18.20	18.29	0-5	5
		3	3	18.47	18.20	18.30	0-5	5
		6	0	18.43	18.19	18.21	0-5	5

LTE Band 26 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26705 Ch. 815.5 ㎒	26865 Ch. 831.5 ㎒	27025 Ch. 847.5 ㎒		
3 ㎒	QPSK	1	0	23.43	23.20	23.19	0	0
		1	7	23.38	23.25	23.26	0	0
		1	14	23.33	23.09	23.19	0	0
		8	0	22.47	22.25	22.21	0-1	1
		8	3	22.49	22.22	22.21	0-1	1
		8	7	22.41	22.19	22.27	0-1	1
		15	0	22.46	22.26	22.14	0-1	1
	16QAM	1	0	22.67	22.54	22.40	0-1	1
		1	7	22.88	22.56	22.52	0-1	1
		1	14	22.66	22.42	22.27	0-1	1
		8	0	21.45	21.25	21.26	0-2	2
		8	3	21.41	21.32	21.21	0-2	2
		8	7	21.54	21.23	21.26	0-2	2
		15	0	21.49	21.27	21.21	0-2	2
	64QAM	1	0	21.53	21.27	21.37	0-2	2
		1	7	21.45	21.26	21.43	0-2	2
		1	14	21.64	21.25	21.31	0-2	2
		8	0	20.48	20.22	20.23	0-3	3
		8	3	20.52	20.20	20.25	0-3	3
		8	7	20.41	20.22	20.28	0-3	3
		15	0	20.40	20.26	20.18	0-3	3
	256QAM	1	0	18.50	18.35	18.19	0-5	5
		1	7	18.60	18.37	18.28	0-5	5
		1	14	18.38	18.26	18.29	0-5	5
		8	0	18.44	18.26	18.21	0-5	5
		8	3	18.41	18.28	18.26	0-5	5
		8	7	18.37	18.16	18.24	0-5	5
		15	0	18.41	18.22	18.18	0-5	5

LTE Band 26 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26715 Ch. 816.5 ㎒	26865 Ch. 831.5 ㎒	27015 Ch. 846.5 ㎒		
5 ㎒	QPSK	1	0	23.77	23.57	23.64	0	0
		1	12	23.86	23.69	23.75	0	0
		1	24	23.70	23.57	23.67	0	0
		12	0	22.80	22.59	22.62	0-1	1
		12	6	22.83	22.62	22.60	0-1	1
		12	11	22.78	22.60	22.68	0-1	1
		25	0	22.79	22.57	22.55	0-1	1
	16QAM	1	0	23.08	22.77	22.83	0-1	1
		1	12	23.24	22.86	23.01	0-1	1
		1	24	23.04	22.89	22.81	0-1	1
		12	0	21.94	21.65	21.58	0-2	2
		12	6	21.77	21.61	21.72	0-2	2
		12	11	21.81	21.57	21.76	0-2	2
		25	0	21.76	21.58	21.69	0-2	2
	64QAM	1	0	21.95	21.68	21.67	0-2	2
		1	12	21.96	21.61	21.91	0-2	2
		1	24	21.85	21.70	21.59	0-2	2
		12	0	20.92	20.57	20.61	0-3	3
		12	6	20.80	20.60	20.61	0-3	3
		12	11	20.73	20.53	20.63	0-3	3
		25	0	20.69	20.57	20.63	0-3	3
	256QAM	1	0	18.97	18.63	18.67	0-5	5
		1	12	19.01	18.56	18.74	0-5	5
		1	24	18.67	18.61	18.67	0-5	5
		12	0	18.87	18.60	18.61	0-5	5
		12	6	18.83	18.54	18.61	0-5	5
		12	11	18.76	18.55	18.65	0-5	5
		25	0	18.72	18.52	18.63	0-5	5

LTE Band 26 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26740 Ch. 819 ㎒	26865 Ch. 831.5 ㎒	26990 Ch. 844 ㎒		
10 ㎒	QPSK	1	0	23.82	23.59	23.70	0	0
		1	24	23.74	23.55	23.65	0	0
		1	49	23.58	23.57	23.55	0	0
		25	0	22.82	22.61	22.56	0-1	1
		25	12	22.76	22.64	22.72	0-1	1
		25	24	22.72	22.65	22.67	0-1	1
		50	0	22.69	22.66	22.69	0-1	1
	16QAM	1	0	22.98	22.86	22.99	0-1	1
		1	24	22.94	22.77	23.02	0-1	1
		1	49	22.82	22.93	22.96	0-1	1
		25	0	21.81	21.63	21.61	0-2	2
		25	12	21.75	21.59	21.76	0-2	2
		25	24	21.73	21.61	21.71	0-2	2
		50	0	21.66	21.61	21.75	0-2	2
	64QAM	1	0	22.05	21.74	21.87	0-2	2
		1	24	21.96	21.60	21.81	0-2	2
		1	49	21.69	21.75	21.77	0-2	2
		25	0	20.84	20.57	20.65	0-3	3
		25	12	20.78	20.62	20.66	0-3	3
		25	24	20.72	20.53	20.68	0-3	3
		50	0	20.71	20.60	20.67	0-3	3
	256QAM	1	0	18.85	18.71	18.64	0-5	5
		1	24	18.93	18.62	18.69	0-5	5
		1	49	18.59	18.74	18.88	0-5	5
		25	0	18.82	18.59	18.55	0-5	5
		25	12	18.71	18.66	18.69	0-5	5
		25	24	18.65	18.46	18.57	0-5	5
		50	0	18.68	18.58	18.69	0-5	5

LTE Band 26 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 26865 Ch. 831.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
15 ㎒	QPSK	1	0	23.46	0	0
		1	36	23.29	0	0
		1	74	23.50	0	0
		36	0	22.48	0-1	1
		36	18	22.39	0-1	1
		36	39	22.46	0-1	1
		75	0	22.50	0-1	1
	16QAM	1	0	22.84	0-1	1
		1	36	22.67	0-1	1
		1	74	22.59	0-1	1
		36	0	21.51	0-2	2
		36	18	21.44	0-2	2
		36	39	21.50	0-2	2
		75	0	21.45	0-2	2
	64QAM	1	0	21.52	0-2	2
		1	36	21.40	0-2	2
		1	74	21.49	0-2	2
		36	0	20.45	0-3	3
		36	18	20.46	0-3	3
		36	39	20.32	0-3	3
		75	0	20.46	0-3	3
	256QAM	1	0	18.69	0-5	5
		1	36	18.43	0-5	5
		1	74	18.66	0-5	5
		36	0	18.47	0-5	5
		36	18	18.46	0-5	5
		36	39	18.42	0-5	5
		75	0	18.50	0-5	5

[LTE Band 41 Conducted Power_ P_{max}, DSI = 0,2] - Power Class 3

LTE Band 41 _ 5 ㎒ Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
5 ㎒	QPSK	1	0	24.24	24.34	24.64	24.70	24.39	0	0
		1	12	24.33	24.43	24.77	24.71	24.50	0	0
		1	24	24.34	24.38	24.67	24.68	24.34	0	0
		12	0	23.40	23.48	23.77	23.85	23.50	0-1	1
		12	6	23.43	23.51	23.82	23.89	23.52	0-1	1
		12	11	23.42	23.48	23.78	23.86	23.51	0-1	1
		25	0	23.42	23.48	23.79	23.82	23.50	0-1	1
	16QAM	1	0	23.28	23.31	23.64	23.77	23.41	0-1	1
		1	12	23.28	23.44	23.70	23.81	23.56	0-1	1
		1	24	23.28	23.39	23.63	23.65	23.39	0-1	1
		12	0	22.41	22.49	22.75	22.86	22.51	0-2	2
		12	6	22.40	22.51	22.79	22.91	22.56	0-2	2
		12	11	22.45	22.50	22.77	22.83	22.52	0-2	2
		25	0	22.41	22.49	22.77	22.85	22.48	0-2	2
	64QAM	1	0	22.43	22.50	22.79	22.87	22.53	0-2	2
		1	12	22.45	22.61	22.79	22.84	22.67	0-2	2
		1	24	22.43	22.40	22.82	22.72	22.48	0-2	2
		12	0	21.41	21.51	21.76	21.81	21.56	0-3	3
		12	6	21.44	21.51	21.82	21.87	21.51	0-3	3
		12	11	21.41	21.51	21.78	21.82	21.56	0-3	3
		25	0	21.41	21.49	21.73	21.85	21.51	0-3	3
	256QAM	1	0	19.26	19.31	19.54	19.59	19.35	0-5	5
		1	12	19.27	19.46	19.57	19.76	19.54	0-5	5
		1	24	19.28	19.46	19.73	19.66	19.49	0-5	5
		12	0	19.42	19.45	19.72	19.82	19.53	0-5	5
		12	6	19.41	19.53	19.77	19.81	19.59	0-5	5
		12	11	19.42	19.49	19.73	19.83	19.54	0-5	5
		25	0	19.42	19.48	19.76	19.81	19.54	0-5	5

LTE Band 41 _ 10 ㎒ Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
10 ㎒	QPSK	1	0	24.28	24.42	24.55	24.67	24.41	0	0
		1	24	24.33	24.45	24.67	24.61	24.46	0	0
		1	49	24.34	24.46	24.64	24.70	24.39	0	0
		25	0	23.31	23.50	23.77	23.89	23.48	0-1	1
		25	12	23.42	23.53	23.82	23.86	23.50	0-1	1
		25	24	23.43	23.52	23.79	23.74	23.43	0-1	1
		50	0	23.45	23.55	23.79	23.88	23.54	0-1	1
	16QAM	1	0	23.24	23.40	23.70	23.82	23.41	0-1	1
		1	24	23.32	23.45	23.77	23.81	23.43	0-1	1
		1	49	23.38	23.39	23.63	23.75	23.34	0-1	1
		25	0	22.31	22.53	22.79	22.87	22.54	0-2	2
		25	12	22.46	22.55	22.83	22.88	22.53	0-2	2
		25	24	22.41	22.51	22.80	22.79	22.44	0-2	2
		50	0	22.43	22.52	22.81	22.89	22.52	0-2	2
	64QAM	1	0	22.43	22.45	22.76	22.84	22.47	0-2	2
		1	24	22.44	22.50	22.83	22.89	22.56	0-2	2
		1	49	22.50	22.57	22.73	22.74	22.54	0-2	2
		25	0	21.32	21.49	21.78	21.85	21.54	0-3	3
		25	12	21.45	21.52	21.82	21.86	21.53	0-3	3
		25	24	21.43	21.50	21.76	21.75	21.42	0-3	3
		50	0	21.40	21.50	21.82	21.86	21.49	0-3	3
	256QAM	1	0	19.22	19.35	19.53	19.64	19.56	0-5	5
		1	24	19.22	19.54	19.69	19.77	19.54	0-5	5
		1	49	19.45	19.40	19.69	19.76	19.26	0-5	5
		25	0	19.34	19.54	19.76	19.86	19.56	0-5	5
		25	12	19.46	19.53	19.81	19.84	19.58	0-5	5
		25	24	19.41	19.54	19.77	19.78	19.44	0-5	5
		50	0	19.45	19.51	19.79	19.82	19.56	0-5	5

LTE Band 41 _ 15 MHz Bandwidth- Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	24.03	24.29	24.46	24.57	24.27	0	0
		1	36	24.05	24.26	24.48	24.52	24.15	0	0
		1	74	24.19	24.28	24.54	24.56	24.18	0	0
		36	0	23.19	23.41	23.58	23.71	23.42	0-1	1
		36	18	23.29	23.40	23.66	23.67	23.36	0-1	1
		36	39	23.30	23.41	23.66	23.59	23.31	0-1	1
		75	0	23.29	23.41	23.64	23.69	23.39	0-1	1
	16QAM	1	0	23.11	23.32	23.64	23.54	23.40	0-1	1
		1	36	23.18	23.33	23.54	23.55	23.28	0-1	1
		1	74	23.18	23.41	23.64	23.58	23.29	0-1	1
		36	0	22.20	22.40	22.57	22.74	22.42	0-2	2
		36	18	22.32	22.39	22.66	22.73	22.39	0-2	2
		36	39	22.30	22.41	22.63	22.59	22.27	0-2	2
		75	0	22.29	22.35	22.65	22.69	22.36	0-2	2
	64QAM	1	0	22.17	22.40	22.59	22.73	22.45	0-2	2
		1	36	22.35	22.29	22.64	22.79	22.42	0-2	2
		1	74	22.23	22.44	22.72	22.68	22.33	0-2	2
		36	0	21.19	21.38	21.54	21.69	21.40	0-3	3
		36	18	21.30	21.38	21.63	21.64	21.35	0-3	3
		36	39	21.29	21.38	21.64	21.59	21.31	0-3	3
		75	0	21.31	21.41	21.59	21.67	21.40	0-3	3
	256QAM	1	0	19.12	19.30	19.42	19.64	19.35	0-5	5
		1	36	19.19	19.32	19.66	19.55	19.21	0-5	5
		1	74	19.21	19.41	19.60	19.47	19.31	0-5	5
		36	0	19.18	19.41	19.54	19.73	19.37	0-5	5
		36	18	19.28	19.36	19.62	19.67	19.40	0-5	5
		36	39	19.30	19.38	19.64	19.57	19.31	0-5	5
		75	0	19.30	19.42	19.66	19.71	19.42	0-5	5

LTE Band 41 _ 20 ㎒ Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
20 ㎒	QPSK	1	0	24.06	24.29	24.55	24.53	24.31	0	0
		1	49	24.16	24.25	24.47	24.49	24.16	0	0
		1	99	24.23	24.21	24.54	24.61	24.21	0	0
		50	0	23.21	23.42	23.59	23.73	23.40	0-1	1
		50	25	23.35	23.43	23.70	23.72	23.40	0-1	1
		50	49	23.33	23.40	23.68	23.61	23.30	0-1	1
		100	0	23.33	23.41	23.67	23.70	23.43	0-1	1
	16QAM	1	0	23.22	23.42	23.58	23.63	23.36	0-1	1
		1	49	23.39	23.49	23.50	23.82	23.41	0-1	1
		1	99	23.26	23.24	23.70	23.47	23.38	0-1	1
		50	0	22.21	22.40	22.57	22.73	22.42	0-2	2
		50	25	22.35	22.43	22.66	22.69	22.39	0-2	2
		50	49	22.29	22.38	22.64	22.61	22.32	0-2	2
		100	0	22.32	22.39	22.66	22.71	22.39	0-2	2
	64QAM	1	0	22.21	22.44	22.57	22.78	22.43	0-2	2
		1	49	22.40	22.42	22.64	22.70	22.36	0-2	2
		1	99	22.34	22.33	22.77	22.70	22.48	0-2	2
		50	0	21.21	21.40	21.56	21.75	21.43	0-3	3
		50	25	21.33	21.42	21.68	21.73	21.42	0-3	3
		50	49	21.30	21.37	21.62	21.59	21.28	0-3	3
		100	0	21.33	21.37	21.63	21.69	21.39	0-3	3
	256QAM	1	0	19.02	19.46	19.44	19.65	19.48	0-5	5
		1	49	19.28	19.35	19.65	19.64	19.17	0-5	5
		1	99	19.38	19.38	19.56	19.45	19.26	0-5	5
		50	0	19.19	19.40	19.57	19.75	19.42	0-5	5
		50	25	19.30	19.42	19.68	19.68	19.46	0-5	5
		50	49	19.33	19.37	19.63	19.61	19.30	0-5	5
		100	0	19.33	19.39	19.64	19.71	19.38	0-5	5

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

[LTE Band 41 Conducted Power _ P_{max}, DSI = 0,2] - Power Class 2

LTE Band 41 _ 5 ㎒ Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
5 ㎒	QPSK	1	0	25.56	25.66	25.95	26.13	25.62	0	0
		1	12	25.65	25.81	26.07	26.25	25.71	0	0
		1	24	25.59	25.69	26.03	26.11	25.60	0	0
		12	0	24.65	24.72	24.98	25.13	24.67	0-1	1
		12	6	24.69	24.76	25.01	25.16	24.75	0-1	1
		12	11	24.62	24.75	25.01	25.09	24.73	0-1	1
		25	0	24.65	24.76	25.00	25.08	24.69	0-1	1
	16QAM	1	0	24.94	24.94	25.25	25.47	24.92	0-1	1
		1	12	24.91	25.14	25.22	25.34	25.08	0-1	1
		1	24	24.85	24.90	25.22	25.18	24.85	0-1	1
		12	0	23.65	23.82	24.04	24.17	23.80	0-2	2
		12	6	23.71	23.85	24.10	24.22	23.79	0-2	2
		12	11	23.67	23.82	24.03	24.17	23.74	0-2	2
		25	0	23.68	23.75	24.03	24.14	23.74	0-2	2
	64QAM	1	0	23.98	24.08	24.24	24.32	23.96	0-2	2
		1	12	23.94	24.14	24.29	24.34	24.11	0-2	2
		1	24	23.97	24.06	24.27	24.35	24.07	0-2	2
		12	0	22.70	22.75	23.03	23.12	22.77	0-3	3
		12	6	22.80	22.88	23.06	23.22	22.86	0-3	3
		12	11	22.74	22.84	23.10	23.13	22.79	0-3	3
		25	0	22.70	22.74	23.06	23.12	22.78	0-3	3
	256QAM	1	0	20.80	20.88	21.04	21.24	20.71	0-5	5
		1	12	20.70	20.98	21.28	21.30	20.93	0-5	5
		1	24	20.84	20.93	21.15	21.10	20.74	0-5	5
		12	0	20.73	20.86	21.09	21.18	20.84	0-5	5
		12	6	20.76	20.90	21.12	21.20	20.82	0-5	5
		12	11	20.78	20.89	21.09	21.19	20.81	0-5	5
		25	0	20.72	20.81	21.06	21.18	20.82	0-5	5

LTE Band 41 _ 10 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	25.71	25.71	25.91	26.24	25.68	0	0
		1	24	25.74	25.76	25.98	26.16	25.74	0	0
		1	49	25.72	25.75	25.96	26.07	25.65	0	0
		25	0	24.61	24.79	25.02	25.06	24.70	0-1	1
		25	12	24.70	24.80	25.04	25.14	24.74	0-1	1
		25	24	24.68	24.77	25.00	24.99	24.63	0-1	1
		50	0	24.69	24.78	25.03	25.11	24.71	0-1	1
	16QAM	1	0	24.96	24.99	25.18	25.46	25.03	0-1	1
		1	24	24.94	25.05	25.22	25.41	24.89	0-1	1
		1	49	24.91	25.02	25.33	25.28	24.96	0-1	1
		25	0	23.65	23.81	24.05	24.12	23.77	0-2	2
		25	12	23.70	23.85	24.09	24.15	23.79	0-2	2
		25	24	23.73	23.78	24.07	24.03	23.72	0-2	2
		50	0	23.67	23.80	24.07	24.15	23.75	0-2	2
	64QAM	1	0	23.94	24.05	24.30	24.40	24.04	0-2	2
		1	24	24.06	24.14	24.40	24.43	24.15	0-2	2
		1	49	23.95	24.05	24.24	24.30	24.04	0-2	2
		25	0	22.65	22.79	23.02	23.18	22.78	0-3	3
		25	12	22.79	22.86	23.06	23.13	22.78	0-3	3
		25	24	22.75	22.81	23.05	23.06	22.68	0-3	3
		50	0	22.71	22.80	23.07	23.10	22.78	0-3	3
	256QAM	1	0	20.81	20.96	21.04	21.29	20.99	0-5	5
		1	24	20.91	20.89	21.29	21.26	20.90	0-5	5
		1	49	20.94	20.94	21.15	21.21	20.88	0-5	5
		25	0	20.72	20.87	21.11	21.18	20.84	0-5	5
		25	12	20.81	20.89	21.12	21.19	20.84	0-5	5
		25	24	20.81	20.91	21.11	21.07	20.76	0-5	5
		50	0	20.80	20.85	21.10	21.17	20.82	0-5	5

LTE Band 41 _ 15 MHz Bandwidth- Power Class 2

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
15 MHz	QPSK	1	0	25.49	25.62	25.81	26.07	25.61	0	0
		1	36	25.55	25.58	25.78	25.97	25.50	0	0
		1	74	25.60	25.56	25.89	25.88	25.58	0	0
		36	0	24.50	24.69	24.85	25.02	24.64	0-1	1
		36	18	24.59	24.66	24.92	24.98	24.61	0-1	1
		36	39	24.58	24.69	24.90	24.89	24.52	0-1	1
		75	0	24.58	24.67	24.93	25.01	24.60	0-1	1
	16QAM	1	0	24.62	24.86	25.02	25.18	24.86	0-1	1
		1	36	24.73	24.71	24.98	25.06	24.75	0-1	1
		1	74	24.77	24.86	25.16	25.15	24.66	0-1	1
		36	0	23.47	23.72	23.84	23.99	23.66	0-2	2
		36	18	23.62	23.65	23.98	23.99	23.62	0-2	2
		36	39	23.61	23.69	23.94	23.89	23.55	0-2	2
		75	0	23.63	23.68	23.95	24.00	23.66	0-2	2
	64QAM	1	0	23.80	23.86	24.23	24.34	23.84	0-2	2
		1	36	23.88	24.03	24.14	24.24	23.94	0-2	2
		1	74	23.75	23.84	24.24	24.40	23.75	0-2	2
		36	0	22.49	22.68	22.86	23.05	22.67	0-3	3
		36	18	22.61	22.68	22.92	23.02	22.66	0-3	3
		36	39	22.60	22.69	22.91	22.87	22.56	0-3	3
		75	0	22.58	22.73	22.96	22.97	22.68	0-3	3
	256QAM	1	0	20.65	20.73	20.93	21.16	20.77	0-5	5
		1	36	20.78	20.76	21.08	21.16	20.75	0-5	5
		1	74	20.81	20.81	21.08	21.02	20.69	0-5	5
		36	0	20.48	20.75	20.91	21.10	20.69	0-5	5
		36	18	20.60	20.71	20.96	21.00	20.68	0-5	5
		36	39	20.66	20.72	21.01	20.92	20.60	0-5	5
		75	0	20.63	20.72	21.02	21.04	20.63	0-5	5

LTE Band 41 _ 20 ㎒ Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Max. Average Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
20 ㎒	QPSK	1	0	25.66	25.63	26.00	26.13	25.69	0	0
		1	49	25.62	25.50	25.86	25.90	25.60	0	0
		1	99	25.51	25.60	26.01	26.03	25.54	0	0
		50	0	24.50	24.66	24.86	25.06	24.63	0-1	1
		50	25	24.62	24.69	24.95	25.02	24.62	0-1	1
		50	49	24.60	24.67	24.96	24.92	24.54	0-1	1
		100	0	24.63	24.69	24.94	25.00	24.60	0-1	1
	16QAM	1	0	24.69	24.87	25.09	25.43	24.98	0-1	1
		1	49	24.90	25.01	24.99	25.19	24.78	0-1	1
		1	99	24.70	24.81	25.19	25.15	24.86	0-1	1
		50	0	23.52	23.70	23.89	24.04	23.71	0-2	2
		50	25	23.62	23.71	23.95	24.00	23.66	0-2	2
		50	49	23.67	23.68	23.93	23.90	23.55	0-2	2
		100	0	23.63	23.71	23.97	24.00	23.67	0-2	2
	64QAM	1	0	23.85	23.92	24.17	24.26	23.93	0-2	2
		1	49	23.80	24.08	24.06	24.34	23.74	0-2	2
		1	99	23.94	23.94	24.26	24.19	23.89	0-2	2
		50	0	22.57	22.75	22.89	23.06	22.69	0-3	3
		50	25	22.61	22.74	23.00	23.05	22.67	0-3	3
		50	49	22.64	22.72	22.96	22.94	22.57	0-3	3
		100	0	22.63	22.73	22.93	23.01	22.67	0-3	3
	256QAM	1	0	20.77	20.96	21.04	21.16	20.84	0-5	5
		1	49	20.52	20.74	20.99	21.17	20.67	0-5	5
		1	99	20.80	20.91	21.11	21.05	20.74	0-5	5
		50	0	20.52	20.76	20.93	21.08	20.69	0-5	5
		50	25	20.65	20.73	21.05	21.05	20.66	0-5	5
		50	49	20.67	20.75	21.02	20.96	20.60	0-5	5
		100	0	20.65	20.72	20.97	21.04	20.69	0-5	5

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

[LTE Band 66 Conducted Power_ P_{max}, DSI = 0,2]

LTE Band 66 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979Ch. 1710.7 ㎒	132322 Ch. 1745 ㎒	132665 Ch. 1779.3 ㎒		
1.4 ㎒	QPSK	1	0	23.19	22.86	22.72	0	0
		1	3	23.26	22.96	22.85	0	0
		1	5	23.09	22.93	22.85	0	0
		3	0	23.19	22.98	22.77	0	0
		3	1	23.14	22.91	22.89	0	0
		3	3	23.21	22.96	22.76	0	0
		6	0	22.18	21.95	21.83	0-1	1
	16QAM	1	0	22.47	22.10	22.00	0-1	1
		1	3	22.48	22.47	21.94	0-1	1
		1	5	22.49	22.13	22.05	0-1	1
		3	0	22.24	22.08	21.92	0-1	1
		3	1	22.35	22.08	21.96	0-1	1
		3	3	22.21	22.04	21.85	0-1	1
		6	0	21.27	20.95	20.91	0-2	2
	64QAM	1	0	21.22	21.06	20.80	0-2	2
		1	3	21.40	21.11	20.91	0-2	2
		1	5	21.17	21.12	20.83	0-2	2
		3	0	21.31	20.97	20.87	0-2	2
		3	1	21.22	20.99	20.85	0-2	2
		3	3	21.08	21.02	20.78	0-2	2
		6	0	20.19	20.03	19.85	0-3	3
	256QAM	1	0	18.35	18.15	17.67	0-5	5
		1	3	18.31	18.16	17.86	0-5	5
		1	5	18.37	17.96	17.84	0-5	5
		3	0	18.24	18.11	17.75	0-5	5
		3	1	18.19	18.02	17.81	0-5	5
		3	3	18.24	18.06	17.81	0-5	5
		6	0	18.16	17.97	17.79	0-5	5

LTE Band 66 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131987 Ch. 1711.5 ㎒	132322 Ch. 1745 ㎒	132657 Ch. 1778.5 ㎒		
3 ㎒	QPSK	1	0	23.22	22.89	22.70	0	0
		1	7	23.26	22.91	22.82	0	0
		1	14	23.09	22.92	22.74	0	0
		8	0	22.19	21.98	21.74	0-1	1
		8	3	22.19	22.02	21.82	0-1	1
		8	7	22.24	21.95	21.89	0-1	1
		15	0	22.18	22.02	21.76	0-1	1
	16QAM	1	0	22.22	22.01	21.91	0-1	1
		1	7	22.53	22.25	22.06	0-1	1
		1	14	22.24	22.08	21.85	0-1	1
		8	0	21.16	21.03	20.85	0-2	2
		8	3	21.33	21.07	20.76	0-2	2
		8	7	21.24	21.00	20.90	0-2	2
		15	0	21.21	21.04	20.68	0-2	2
	64QAM	1	0	21.40	21.30	20.90	0-2	2
		1	7	21.37	21.10	21.03	0-2	2
		1	14	21.21	21.06	20.82	0-2	2
		8	0	20.24	20.02	19.78	0-3	3
		8	3	20.24	19.99	19.80	0-3	3
		8	7	20.29	20.00	19.88	0-3	3
		15	0	20.22	20.00	19.75	0-3	3
	256QAM	1	0	18.28	18.06	17.79	0-5	5
		1	7	18.28	18.13	17.95	0-5	5
		1	14	18.07	17.95	17.87	0-5	5
		8	0	18.17	18.05	17.77	0-5	5
		8	3	18.19	18.00	17.82	0-5	5
		8	7	18.23	18.05	17.85	0-5	5
		15	0	18.21	17.99	17.73	0-5	5

LTE Band 66 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131997 Ch. 1712.5 ㎒	132322Ch. 1745 ㎒	132647 Ch. 1777.5 ㎒		
5 ㎒	QPSK	1	0	23.23	22.83	22.77	0	0
		1	12	23.20	23.05	22.89	0	0
		1	24	23.09	22.90	22.81	0	0
		12	0	22.17	21.94	21.76	0-1	1
		12	6	22.25	22.02	21.85	0-1	1
		12	11	22.23	21.97	21.83	0-1	1
		25	0	22.23	21.97	21.81	0-1	1
	16QAM	1	0	22.34	21.99	21.90	0-1	1
		1	12	22.34	22.08	22.11	0-1	1
		1	24	22.33	22.18	21.99	0-1	1
		12	0	21.08	20.92	20.80	0-2	2
		12	6	21.28	21.04	20.90	0-2	2
		12	11	21.25	21.00	20.87	0-2	2
		25	0	21.21	20.97	20.82	0-2	2
	64QAM	1	0	21.32	21.10	20.85	0-2	2
		1	12	21.17	20.99	20.98	0-2	2
		1	24	21.31	21.03	21.02	0-2	2
		12	0	20.19	19.93	19.79	0-3	3
		12	6	20.21	19.98	19.84	0-3	3
		12	11	20.24	20.05	19.83	0-3	3
		25	0	20.22	20.00	19.86	0-3	3
	256QAM	1	0	18.16	18.01	17.77	0-5	5
		1	12	18.26	18.19	17.99	0-5	5
		1	24	18.29	17.98	17.79	0-5	5
		12	0	18.11	17.92	17.80	0-5	5
		12	6	18.19	18.03	17.86	0-5	5
		12	11	18.20	18.06	17.84	0-5	5
		25	0	18.19	18.00	17.79	0-5	5

LTE Band 66 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132022 Ch. 1715 ㎒	132322 Ch. 1745 ㎒	132622 Ch. 1775 ㎒		
10 ㎒	QPSK	1	0	23.14	22.96	22.76	0	0
		1	24	23.25	23.00	22.92	0	0
		1	49	23.08	22.94	22.81	0	0
		25	0	22.20	21.98	21.87	0-1	1
		25	12	22.24	22.03	21.82	0-1	1
		25	24	22.26	21.99	21.84	0-1	1
		50	0	22.17	22.06	21.89	0-1	1
	16QAM	1	0	22.53	22.16	22.10	0-1	1
		1	24	22.45	22.18	22.23	0-1	1
		1	49	22.26	22.03	22.08	0-1	1
		25	0	21.19	20.96	20.85	0-2	2
		25	12	21.21	21.07	20.85	0-2	2
		25	24	21.18	21.00	20.90	0-2	2
		50	0	21.19	20.98	20.89	0-2	2
	64QAM	1	0	21.28	21.15	20.94	0-2	2
		1	24	21.33	21.13	21.03	0-2	2
		1	49	21.27	21.10	21.05	0-2	2
		25	0	20.23	19.97	19.86	0-3	3
		25	12	20.23	20.03	19.90	0-3	3
		25	24	20.20	19.95	19.89	0-3	3
		50	0	20.24	20.03	19.88	0-3	3
	256QAM	1	0	18.16	17.93	17.85	0-5	5
		1	24	18.22	18.15	18.04	0-5	5
		1	49	18.23	17.94	17.88	0-5	5
		25	0	18.23	17.96	17.74	0-5	5
		25	12	18.18	18.01	17.83	0-5	5
		25	24	18.23	18.01	17.87	0-5	5
		50	0	18.14	17.92	17.89	0-5	5

LTE Band 66 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132047 Ch. 1717.5 ㎒	132322 Ch. 1745 ㎒	132597 Ch. 1772.5 ㎒		
15 ㎒	QPSK	1	0	23.03	22.85	22.81	0	0
		1	36	22.99	22.76	22.64	0	0
		1	74	23.00	22.79	22.73	0	0
		36	0	21.99	21.82	21.74	0-1	1
		36	18	21.99	21.78	21.67	0-1	1
		36	39	22.04	21.87	21.74	0-1	1
		75	0	22.05	21.87	21.71	0-1	1
	16QAM	1	0	22.42	22.08	21.84	0-1	1
		1	36	22.23	22.10	21.84	0-1	1
		1	74	22.13	22.16	21.80	0-1	1
		36	0	21.06	20.86	20.72	0-2	2
		36	18	21.02	20.77	20.71	0-2	2
		36	39	21.03	20.78	20.84	0-2	2
		75	0	21.00	20.87	20.67	0-2	2
	64QAM	1	0	21.08	20.94	20.73	0-2	2
		1	36	21.24	20.86	20.89	0-2	2
		1	74	21.22	20.91	20.76	0-2	2
		36	0	20.00	19.79	19.82	0-3	3
		36	18	20.04	19.73	19.75	0-3	3
		36	39	20.06	19.71	19.71	0-3	3
		75	0	19.94	19.82	19.70	0-3	3
	256QAM	1	0	18.05	17.87	17.81	0-5	5
		1	36	17.97	18.02	17.86	0-5	5
		1	74	18.14	17.93	17.87	0-5	5
		36	0	18.07	17.73	17.78	0-5	5
		36	18	18.05	17.80	17.67	0-5	5
		36	39	18.03	17.85	17.68	0-5	5
		75	0	18.02	17.88	17.67	0-5	5

LTE Band 66 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 ㎒	132322 Ch. 1745 ㎒	132572 Ch. 1770 ㎒		
20 ㎒	QPSK	1	0	23.07	22.96	22.99	0	0
		1	49	22.96	22.83	22.68	0	0
		1	99	22.95	22.96	22.71	0	0
		50	0	21.96	21.86	21.75	0-1	1
		50	25	21.95	21.84	21.78	0-1	1
		50	49	21.99	21.80	21.76	0-1	1
		100	0	21.98	21.82	21.70	0-1	1
	16QAM	1	0	22.25	22.85	21.84	0-1	1
		1	49	22.17	21.93	21.73	0-1	1
		1	99	22.11	21.89	21.64	0-1	1
		50	0	20.94	20.81	20.73	0-2	2
		50	25	20.98	20.84	20.68	0-2	2
		50	49	20.97	20.87	20.77	0-2	2
		100	0	21.02	20.90	20.73	0-2	2
	64QAM	1	0	21.11	21.09	20.87	0-2	2
		1	49	21.15	21.06	20.85	0-2	2
		1	99	21.02	21.05	20.89	0-2	2
		50	0	19.90	19.78	19.73	0-3	3
		50	25	20.03	19.91	19.66	0-3	3
		50	49	19.93	19.81	19.81	0-3	3
		100	0	20.03	19.74	19.79	0-3	3
	256QAM	1	0	18.07	18.06	17.82	0-5	5
		1	49	18.10	17.91	17.70	0-5	5
		1	99	17.99	17.93	17.90	0-5	5
		50	0	18.06	17.77	17.75	0-5	5
		50	25	18.04	17.87	17.64	0-5	5
		50	49	18.00	17.83	17.78	0-5	5
		100	0	18.10	17.82	17.69	0-5	5

11.3.2 LTE Reduced Conducted Power

[LTE Band 2 Conducted Power_ DSI = 3]

LTE Band 2 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 ㎒	18900 Ch. 1880 ㎒	19193 Ch. 1909.3 ㎒		
1.4 ㎒	QPSK	1	0	18.33	18.34	18.44	0	0
		1	3	18.44	18.47	18.64	0	0
		1	5	18.41	18.44	18.52	0	0
		3	0	18.39	18.49	18.55	0	0
		3	1	18.46	18.54	18.54	0	0
		3	3	18.36	18.58	18.59	0	0
		6	0	18.39	18.54	18.54	0-1	0
	16QAM	1	0	18.56	18.81	18.67	0-1	0
		1	3	18.47	18.89	18.87	0-1	0
		1	5	18.55	18.86	18.61	0-1	0
		3	0	18.41	18.61	18.72	0-1	0
		3	1	18.46	18.68	18.61	0-1	0
		3	3	18.58	18.62	18.59	0-1	0
		6	0	18.43	18.52	18.59	0-2	0
	64QAM	1	0	18.38	18.51	18.74	0-2	0
		1	3	18.50	18.57	18.63	0-2	0
		1	5	18.47	18.47	18.62	0-2	0
		3	0	18.42	18.48	18.57	0-2	0
		3	1	18.49	18.57	18.80	0-2	0
		3	3	18.39	18.59	18.61	0-2	0
		6	0	18.44	18.54	18.63	0-3	0
	256QAM	1	0	17.52	17.68	17.79	0-5	0.5
		1	3	17.37	17.63	17.73	0-5	0.5
		1	5	17.36	17.59	17.65	0-5	0.5
		3	0	17.52	17.60	17.65	0-5	0.5
		3	1	17.48	17.67	17.79	0-5	0.5
		3	3	17.44	17.61	17.72	0-5	0.5
		6	0	17.37	17.64	17.64	0-5	0.5

LTE Band 2 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 ㎒	18900 Ch. 1880 ㎒	19185 Ch. 1908.5 ㎒		
3 ㎒	QPSK	1	0	18.19	18.29	18.28	0	0
		1	7	18.39	18.53	18.56	0	0
		1	14	18.36	18.37	18.53	0	0
		8	0	18.33	18.41	18.46	0-1	0
		8	3	18.43	18.50	18.48	0-1	0
		8	7	18.38	18.52	18.51	0-1	0
		15	0	18.34	18.49	18.43	0-1	0
	16QAM	1	0	18.55	18.65	18.79	0-1	0
		1	7	18.53	18.75	18.88	0-1	0
		1	14	18.48	18.65	18.58	0-1	0
		8	0	18.42	18.48	18.51	0-2	0
		8	3	18.43	18.53	18.53	0-2	0
		8	7	18.37	18.57	18.63	0-2	0
		15	0	18.37	18.51	18.53	0-2	0
	64QAM	1	0	18.34	18.48	18.62	0-2	0
		1	7	18.46	18.66	18.70	0-2	0
		1	14	18.37	18.51	18.71	0-2	0
		8	0	18.43	18.48	18.48	0-3	0
		8	3	18.42	18.54	18.54	0-3	0
		8	7	18.38	18.49	18.55	0-3	0
		15	0	18.35	18.52	18.55	0-3	0
	256QAM	1	0	17.45	17.54	17.73	0-5	0.5
		1	7	17.43	17.73	17.78	0-5	0.5
		1	14	17.57	17.64	17.61	0-5	0.5
		8	0	17.48	17.54	17.58	0-5	0.5
		8	3	17.49	17.56	17.69	0-5	0.5
		8	7	17.41	17.59	17.74	0-5	0.5
		15	0	17.50	17.59	17.59	0-5	0.5

LTE Band 2 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 ㎒	18900 Ch. 1880 ㎒	19175 Ch. 1907.5 ㎒		
5 ㎒	QPSK	1	0	18.18	18.32	18.41	0	0
		1	12	18.38	18.49	18.51	0	0
		1	24	18.29	18.40	18.51	0	0
		12	0	18.38	18.45	18.52	0-1	0
		12	6	18.42	18.51	18.52	0-1	0
		12	11	18.34	18.46	18.57	0-1	0
		25	0	18.37	18.53	18.48	0-1	0
	16QAM	1	0	18.28	18.55	18.67	0-1	0
		1	12	18.44	18.69	18.82	0-1	0
		1	24	18.40	18.64	18.61	0-1	0
		12	0	18.35	18.43	18.50	0-2	0
		12	6	18.40	18.45	18.57	0-2	0
		12	11	18.37	18.60	18.54	0-2	0
		25	0	18.32	18.52	18.49	0-2	0
	64QAM	1	0	18.44	18.50	18.65	0-2	0
		1	12	18.46	18.59	18.75	0-2	0
		1	24	18.41	18.54	18.71	0-2	0
		12	0	18.37	18.45	18.47	0-3	0
		12	6	18.46	18.51	18.48	0-3	0
		12	11	18.29	18.52	18.59	0-3	0
		25	0	18.38	18.51	18.53	0-3	0
	256QAM	1	0	17.29	17.52	17.77	0-5	0.5
		1	12	17.36	17.71	17.77	0-5	0.5
		1	24	17.54	17.62	17.77	0-5	0.5
		12	0	17.46	17.57	17.65	0-5	0.5
		12	6	17.44	17.53	17.63	0-5	0.5
		12	11	17.42	17.63	17.67	0-5	0.5
		25	0	17.50	17.61	17.58	0-5	0.5

LTE Band 2 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 ㎒	18900 Ch. 1880 ㎒	19150 Ch. 1905 ㎒		
10 ㎒	QPSK	1	0	18.28	18.37	18.42	0	0
		1	24	18.40	18.51	18.55	0	0
		1	49	18.29	18.49	18.45	0	0
		25	0	18.32	18.39	18.51	0-1	0
		25	12	18.40	18.46	18.57	0-1	0
		25	24	18.42	18.51	18.56	0-1	0
		50	0	18.40	18.51	18.57	0-1	0
	16QAM	1	0	18.72	18.71	18.75	0-1	0
		1	24	18.53	18.66	18.73	0-1	0
		1	49	18.57	18.57	18.69	0-1	0
		25	0	18.30	18.44	18.51	0-2	0
		25	12	18.38	18.44	18.63	0-2	0
		25	24	18.38	18.52	18.58	0-2	0
		50	0	18.41	18.63	18.56	0-2	0
	64QAM	1	0	18.33	18.67	18.45	0-2	0
		1	24	18.62	18.54	18.70	0-2	0
		1	49	18.57	18.62	18.60	0-2	0
		25	0	18.34	18.44	18.50	0-3	0
		25	12	18.43	18.47	18.59	0-3	0
		25	24	18.41	18.51	18.61	0-3	0
		50	0	18.44	18.49	18.60	0-3	0
	256QAM	1	0	17.44	17.51	17.68	0-5	0.5
		1	24	17.62	17.70	17.77	0-5	0.5
		1	49	17.49	17.74	17.65	0-5	0.5
		25	0	17.44	17.57	17.57	0-5	0.5
		25	12	17.48	17.61	17.66	0-5	0.5
		25	24	17.53	17.66	17.69	0-5	0.5
		50	0	17.50	17.59	17.75	0-5	0.5

LTE Band 2 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 ㎒	18900 Ch. 1880 ㎒	19125 Ch. 1902.5 ㎒		
15 ㎒	QPSK	1	0	18.35	18.14	18.28	0	0
		1	36	18.10	18.24	18.27	0	0
		1	74	18.31	18.40	18.40	0	0
		36	0	18.19	18.35	18.29	0-1	0
		36	18	18.28	18.31	18.34	0-1	0
		36	39	18.33	18.37	18.44	0-1	0
		75	0	18.28	18.43	18.29	0-1	0
	16QAM	1	0	18.36	18.61	18.54	0-1	0
		1	36	18.29	18.48	18.67	0-1	0
		1	74	18.36	18.43	18.57	0-1	0
		36	0	18.12	18.35	18.39	0-2	0
		36	18	18.27	18.24	18.36	0-2	0
		36	39	18.30	18.39	18.44	0-2	0
		75	0	18.21	18.46	18.25	0-2	0
	64QAM	1	0	18.51	18.56	18.46	0-2	0
		1	36	18.29	18.39	18.61	0-2	0
		1	74	18.41	18.36	18.43	0-2	0
		36	0	18.18	18.28	18.31	0-3	0
		36	18	18.25	18.21	18.38	0-3	0
		36	39	18.29	18.33	18.44	0-3	0
		75	0	18.27	18.30	18.37	0-3	0
	256QAM	1	0	16.98	17.52	17.62	0-5	0.5
		1	36	17.33	17.41	17.59	0-5	0.5
		1	74	17.45	17.66	17.69	0-5	0.5
		36	0	17.32	17.37	17.45	0-5	0.5
		36	18	17.30	17.44	17.38	0-5	0.5
		36	39	17.35	17.51	17.55	0-5	0.5
		75	0	17.32	17.45	17.45	0-5	0.5

LTE Band 2 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 ㎒	18900 Ch. 1880 ㎒	19100 Ch. 1900 ㎒		
20 ㎒	QPSK	1	0	18.13	18.20	18.35	0	0
		1	49	18.17	18.23	18.38	0	0
		1	99	18.33	18.33	18.31	0	0
		50	0	18.23	18.34	18.31	0-1	0
		50	25	18.31	18.39	18.42	0-1	0
		50	49	18.37	18.38	18.38	0-1	0
		100	0	18.34	18.42	18.45	0-1	0
	16QAM	1	0	18.05	18.41	18.57	0-1	0
		1	49	18.24	18.45	18.54	0-1	0
		1	99	18.78	18.42	18.51	0-1	0
		50	0	18.21	18.34	18.34	0-2	0
		50	25	18.24	18.39	18.41	0-2	0
		50	49	18.31	18.38	18.50	0-2	0
		100	0	18.35	18.44	18.44	0-2	0
	64QAM	1	0	18.56	18.43	18.68	0-2	0
		1	49	18.35	18.43	18.52	0-2	0
		1	99	18.40	18.39	18.51	0-2	0
		50	0	18.13	18.31	18.35	0-3	0
		50	25	18.22	18.45	18.42	0-3	0
		50	49	18.32	18.38	18.47	0-3	0
		100	0	18.21	18.34	18.41	0-3	0
	256QAM	1	0	17.48	17.34	17.69	0-5	0.5
		1	49	17.38	17.50	17.71	0-5	0.5
		1	99	17.55	17.71	17.32	0-5	0.5
		50	0	17.25	17.33	17.37	0-5	0.5
		50	25	17.38	17.52	17.48	0-5	0.5
		50	49	17.37	17.55	17.54	0-5	0.5
		100	0	17.38	17.49	17.59	0-5	0.5

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

LTE Band 2 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18607 Ch. 1850.7 ㎒	18900 Ch. 1880 ㎒	19193 Ch. 1909.3 ㎒		
1.4 ㎒	QPSK	1	0	18.75	18.83	18.69	0	0
		1	3	18.77	18.88	18.75	0	0
		1	5	18.74	18.82	18.68	0	0
		3	0	18.76	18.87	18.73	0	0
		3	1	18.79	18.89	18.74	0	0
		3	3	18.77	18.91	18.76	0	0
		6	0	18.77	18.90	18.74	0-1	0
	16QAM	1	0	19.11	19.23	19.05	0-1	0
		1	3	19.10	19.27	19.06	0-1	0
		1	5	19.03	19.22	19.12	0-1	0
		3	0	18.89	18.99	18.88	0-1	0
		3	1	18.92	19.04	18.91	0-1	0
		3	3	18.90	18.99	18.85	0-1	0
		6	0	18.88	18.96	18.84	0-2	0
	64QAM	1	0	18.91	19.06	18.88	0-2	0
		1	3	18.92	19.04	18.96	0-2	0
		1	5	18.93	19.07	18.85	0-2	0
		3	0	18.90	18.98	18.79	0-2	0
		3	1	18.86	18.98	18.86	0-2	0
		3	3	18.88	19.01	18.89	0-2	0
		6	0	18.77	18.90	18.76	0-3	0
	256QAM	1	0	17.74	17.83	17.57	0-5	1
		1	3	17.97	17.81	17.56	0-5	1
		1	5	17.65	17.72	17.65	0-5	1
		3	0	17.69	17.67	17.77	0-5	1
		3	1	17.75	17.61	17.65	0-5	1
		3	3	17.77	17.69	17.55	0-5	1
		6	0	17.61	17.42	17.39	0-5	1

LTE Band 2 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18615 Ch. 1851.5 ㎒	18900 Ch. 1880 ㎒	19185 Ch. 1908.5 ㎒		
3 ㎒	QPSK	1	0	18.66	18.79	18.67	0	0
		1	7	18.79	18.89	18.76	0	0
		1	14	18.69	18.83	18.65	0	0
		8	0	18.81	18.84	18.69	0-1	0
		8	3	18.82	18.83	18.80	0-1	0
		8	7	18.81	18.88	18.78	0-1	0
		15	0	18.78	18.81	18.70	0-1	0
	16QAM	1	0	19.04	19.06	19.02	0-1	0
		1	7	19.16	19.30	19.10	0-1	0
		1	14	19.09	19.15	19.06	0-1	0
		8	0	18.90	18.88	18.83	0-2	0
		8	3	18.93	18.91	18.84	0-2	0
		8	7	18.91	18.97	18.83	0-2	0
		15	0	18.83	18.86	18.73	0-2	0
	64QAM	1	0	18.88	19.03	18.92	0-2	0
		1	7	19.00	19.11	18.99	0-2	0
		1	14	18.87	18.98	18.91	0-2	0
		8	0	18.84	18.86	18.74	0-3	0
		8	3	18.88	18.91	18.85	0-3	0
		8	7	18.80	18.93	18.83	0-3	0
		15	0	18.82	18.86	18.72	0-3	0
	256QAM	1	0	17.63	17.78	17.53	0-5	1
		1	7	17.87	17.68	17.52	0-5	1
		1	14	17.67	17.66	17.57	0-5	1
		8	0	17.63	17.56	17.64	0-5	1
		8	3	17.71	17.59	17.52	0-5	1
		8	7	17.68	17.62	17.48	0-5	1
		15	0	17.59	17.38	17.42	0-5	1

LTE Band 2 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18625 Ch. 1852.5 ㎒	18900 Ch. 1880 ㎒	19175 Ch. 1907.5 ㎒		
5 ㎒	QPSK	1	0	18.75	18.79	18.70	0	0
		1	12	18.84	18.89	18.79	0	0
		1	24	18.75	18.84	18.70	0	0
		12	0	18.74	18.83	18.78	0-1	0
		12	6	18.83	18.84	18.81	0-1	0
		12	11	18.81	18.89	18.77	0-1	0
		25	0	18.79	18.81	18.78	0-1	0
	16QAM	1	0	19.06	19.18	19.04	0-1	0
		1	12	19.16	19.28	19.13	0-1	0
		1	24	19.07	19.17	19.06	0-1	0
		12	0	18.78	18.86	18.79	0-2	0
		12	6	18.86	18.91	18.85	0-2	0
		12	11	18.85	18.95	18.83	0-2	0
		25	0	18.82	18.84	18.80	0-2	0
	64QAM	1	0	18.89	19.04	18.90	0-2	0
		1	12	18.94	19.09	18.98	0-2	0
		1	24	18.88	18.92	18.88	0-2	0
		12	0	18.75	18.85	18.83	0-3	0
		12	6	18.87	18.87	18.86	0-3	0
		12	11	18.85	18.93	18.83	0-3	0
		25	0	18.78	18.82	18.79	0-3	0
	256QAM	1	0	17.67	17.85	17.67	0-5	1
		1	12	18.08	17.87	17.72	0-5	1
		1	24	17.82	17.83	17.75	0-5	1
		12	0	17.73	17.72	17.72	0-5	1
		12	6	17.74	17.69	17.60	0-5	1
		12	11	17.73	17.80	17.64	0-5	1
		25	0	17.65	17.53	17.55	0-5	1

LTE Band 2 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18650 Ch. 1855 ㎒	18900 Ch. 1880 ㎒	19150 Ch. 1905 ㎒		
10 ㎒	QPSK	1	0	18.77	18.86	18.78	0	0
		1	24	18.78	18.95	18.79	0	0
		1	49	18.71	18.82	18.74	0	0
		25	0	18.75	18.84	18.75	0-1	0
		25	12	18.87	18.86	18.85	0-1	0
		25	24	18.80	18.87	18.78	0-1	0
		50	0	18.81	18.82	18.79	0-1	0
	16QAM	1	0	19.12	19.14	19.08	0-1	0
		1	24	19.11	19.26	19.08	0-1	0
		1	49	19.06	19.16	19.03	0-1	0
		25	0	18.78	18.88	18.78	0-2	0
		25	12	18.86	18.86	18.87	0-2	0
		25	24	18.86	18.91	18.82	0-2	0
		50	0	18.86	18.85	18.79	0-2	0
	64QAM	1	0	18.94	19.09	18.96	0-2	0
		1	24	18.96	19.05	19.00	0-2	0
		1	49	18.94	18.99	18.89	0-2	0
		25	0	18.77	18.83	18.73	0-3	0
		25	12	18.88	18.85	18.85	0-3	0
		25	24	18.79	18.92	18.80	0-3	0
		50	0	18.82	18.83	18.82	0-3	0
	256QAM	1	0	17.63	17.82	17.59	0-5	1
		1	24	17.92	17.77	17.53	0-5	1
		1	49	17.70	17.78	17.69	0-5	1
		25	0	17.65	17.67	17.63	0-5	1
		25	12	17.76	17.54	17.52	0-5	1
		25	24	17.69	17.72	17.51	0-5	1
		50	0	17.60	17.42	17.47	0-5	1

LTE Band 2 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18675 Ch. 1857.5 ㎒	18900 Ch. 1880 ㎒	19125 Ch. 1902.5 ㎒		
15 ㎒	QPSK	1	0	18.59	18.67	18.55	0	0
		1	36	18.60	18.73	18.57	0	0
		1	74	18.70	18.65	18.54	0	0
		36	0	18.67	18.76	18.62	0-1	0
		36	18	18.69	18.69	18.59	0-1	0
		36	39	18.70	18.75	18.65	0-1	0
		75	0	18.71	18.70	18.60	0-1	0
	16QAM	1	0	18.94	19.06	18.84	0-1	0
		1	36	18.95	19.12	18.89	0-1	0
		1	74	18.83	18.88	18.82	0-1	0
		36	0	18.63	18.80	18.66	0-2	0
		36	18	18.71	18.73	18.64	0-2	0
		36	39	18.70	18.79	18.69	0-2	0
		75	0	18.68	18.73	18.63	0-2	0
	64QAM	1	0	18.81	18.90	18.81	0-2	0
		1	36	18.78	18.91	18.78	0-2	0
		1	74	18.84	18.79	18.74	0-2	0
		36	0	18.64	18.70	18.60	0-3	0
		36	18	18.69	18.70	18.59	0-3	0
		36	39	18.65	18.72	18.64	0-3	0
		75	0	18.69	18.68	18.60	0-3	0
	256QAM	1	0	17.60	17.81	17.56	0-5	1
		1	36	17.90	17.77	17.51	0-5	1
		1	74	17.71	17.67	17.69	0-5	1
		36	0	17.68	17.55	17.66	0-5	1
		36	18	17.70	17.53	17.55	0-5	1
		36	39	17.70	17.75	17.52	0-5	1
		75	0	17.59	17.38	17.43	0-5	1

LTE Band 2 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				18700 Ch. 1860 ㎒	18900 Ch. 1880 ㎒	19100 Ch. 1900 ㎒		
20 ㎒	QPSK	1	0	18.58	18.64	18.60	0	0
		1	49	18.63	18.67	18.63	0	0
		1	99	18.64	18.64	18.56	0	0
		50	0	18.67	18.74	18.64	0-1	0
		50	25	18.74	18.72	18.62	0-1	0
		50	49	18.77	18.75	18.66	0-1	0
		100	0	18.75	18.68	18.62	0-1	0
	16QAM	1	0	18.91	19.04	19.01	0-1	0
		1	49	19.00	19.12	18.92	0-1	0
		1	99	18.93	18.85	18.81	0-1	0
		50	0	18.67	18.79	18.68	0-2	0
		50	25	18.71	18.77	18.65	0-2	0
		50	49	18.70	18.77	18.69	0-2	0
		100	0	18.70	18.76	18.64	0-2	0
	64QAM	1	0	18.76	18.89	18.78	0-2	0
		1	49	18.89	18.89	18.82	0-2	0
		1	99	18.80	18.78	18.71	0-2	0
		50	0	18.68	18.75	18.63	0-3	0
		50	25	18.74	18.74	18.62	0-3	0
		50	49	18.72	18.73	18.64	0-3	0
		100	0	18.71	18.69	18.57	0-3	0
	256QAM	1	0	17.64	17.72	17.49	0-5	1
		1	49	17.82	17.63	17.51	0-5	1
		1	99	17.62	17.67	17.64	0-5	1
		50	0	17.61	17.53	17.59	0-5	1
		50	25	17.71	17.53	17.56	0-5	1
		50	49	17.65	17.61	17.44	0-5	1
		100	0	17.52	17.32	17.39	0-5	1

[LTE Band 4 Conducted Power_ DSI = 1,3,4]

LTE Band 4 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19957 Ch. 1710.7 ㎒	20175 Ch. 1732.5 ㎒	20393 Ch. 1754.3 ㎒		
1.4 ㎒	QPSK	1	0	19.95	19.64	19.91	0	0
		1	3	20.09	19.72	19.94	0	0
		1	5	20.06	19.61	19.88	0	0
		3	0	20.11	19.64	19.88	0-1	0
		3	1	19.96	19.58	19.88	0-1	0
		3	3	20.12	19.66	19.92	0-1	0
		6	0	20.06	19.62	19.87	0-1	0
	16QAM	1	0	20.33	19.86	20.21	0-1	0
		1	3	20.33	19.90	20.11	0-1	0
		1	5	20.31	19.90	20.18	0-1	0
		3	0	20.13	19.83	19.96	0-2	0
		3	1	20.25	19.75	20.05	0-2	0
		3	3	20.19	19.72	20.02	0-2	0
		6	0	20.07	19.69	19.98	0-2	0
	64QAM	1	0	20.04	19.76	20.03	0-2	0
		1	3	20.22	19.87	20.00	0-2	0
		1	5	20.07	19.65	19.90	0-2	0
		3	0	20.26	19.65	20.00	0-3	0
		3	1	20.06	19.72	19.97	0-3	0
		3	3	20.14	19.72	19.99	0-3	0
		6	0	20.15	19.71	19.93	0-3	0
	256QAM	1	0	18.10	17.73	18.04	0-5	2
		1	3	18.20	17.92	18.15	0-5	2
		1	5	18.17	17.79	18.00	0-5	2
		3	0	18.25	17.78	17.95	0-5	2
		3	1	18.25	17.86	18.00	0-5	2
		3	3	18.29	17.78	18.00	0-5	2
		6	0	18.25	17.71	17.98	0-5	2

LTE Band 4 _ 3 MHz Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19965 Ch. 1711.5 MHz	20175 Ch. 1732.5 MHz	20385 Ch. 1753.5 MHz		
3 MHz	QPSK	1	0	20.12	19.57	19.70	0	0
		1	7	20.16	19.71	19.94	0	0
		1	14	20.05	19.65	19.80	0	0
		8	0	20.09	19.66	19.81	0-1	0
		8	3	20.08	19.66	19.79	0-1	0
		8	7	20.07	19.68	19.93	0-1	0
		15	0	20.14	19.62	19.87	0-1	0
	16QAM	1	0	20.26	19.89	20.16	0-1	0
		1	7	20.27	19.93	20.24	0-1	0
		1	14	20.25	19.86	20.08	0-1	0
		8	0	20.09	19.68	19.83	0-2	0
		8	3	20.13	19.68	19.95	0-2	0
		8	7	20.12	19.74	19.88	0-2	0
		15	0	20.15	19.70	19.86	0-2	0
	64QAM	1	0	20.06	19.65	20.04	0-2	0
		1	7	20.17	19.76	19.97	0-2	0
		1	14	20.11	19.73	20.01	0-2	0
		8	0	20.07	19.60	19.87	0-3	0
		8	3	20.13	19.70	19.92	0-3	0
		8	7	20.01	19.58	19.97	0-3	0
		15	0	20.08	19.63	19.91	0-3	0
	256QAM	1	0	18.20	17.85	18.01	0-5	2
		1	7	18.21	17.91	17.97	0-5	2
		1	14	18.21	17.75	17.91	0-5	2
		8	0	18.20	17.80	17.89	0-5	2
		8	3	18.24	17.77	17.93	0-5	2
		8	7	18.11	17.77	18.04	0-5	2
		15	0	18.19	17.77	17.96	0-5	2

LTE Band 4 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				19975 Ch. 1712.5 ㎒	20175 Ch. 1732.5 ㎒	20375 Ch. 1752.5 ㎒		
5 ㎒	QPSK	1	0	20.07	19.69	19.80	0	0
		1	12	20.15	19.66	19.82	0	0
		1	24	19.98	19.64	19.91	0	0
		12	0	20.10	19.65	19.75	0-1	0
		12	6	20.12	19.63	19.80	0-1	0
		12	11	20.00	19.63	19.89	0-1	0
		25	0	20.06	19.66	19.86	0-1	0
	16QAM	1	0	20.22	19.93	20.22	0-1	0
		1	12	20.39	19.97	20.08	0-1	0
		1	24	20.23	19.93	19.95	0-1	0
		12	0	20.11	19.63	19.83	0-2	0
		12	6	20.14	19.74	19.85	0-2	0
		12	11	20.00	19.72	19.87	0-2	0
		25	0	20.11	19.67	19.83	0-2	0
	64QAM	1	0	20.13	19.72	19.98	0-2	0
		1	12	20.29	19.90	19.92	0-2	0
		1	24	20.12	19.62	19.99	0-2	0
		12	0	20.12	19.66	19.82	0-3	0
		12	6	20.13	19.65	19.89	0-3	0
		12	11	20.00	19.61	19.91	0-3	0
		25	0	20.07	19.64	19.88	0-3	0
	256QAM	1	0	18.26	17.80	17.94	0-5	2
		1	12	18.41	17.94	18.06	0-5	2
		1	24	18.11	17.76	18.06	0-5	2
		12	0	18.21	17.81	17.82	0-5	2
		12	6	18.13	17.82	17.94	0-5	2
		12	11	18.07	17.78	18.03	0-5	2
		25	0	18.08	17.71	17.90	0-5	2

LTE Band 4 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20000 Ch. 1715 ㎒	20175 Ch. 1732.5 ㎒	20350 Ch. 1750 ㎒		
10 ㎒	QPSK	1	0	20.07	19.73	19.90	0	0
		1	24	20.02	19.70	19.92	0	0
		1	49	19.85	19.57	19.82	0	0
		25	0	20.05	19.72	19.77	0-1	0
		25	12	19.98	19.74	19.95	0-1	0
		25	24	20.01	19.57	19.80	0-1	0
		50	0	19.97	19.72	19.92	0-1	0
	16QAM	1	0	20.32	19.85	20.12	0-1	0
		1	24	20.16	19.94	20.13	0-1	0
		1	49	20.19	19.80	20.08	0-1	0
		25	0	20.06	19.73	19.79	0-2	0
		25	12	20.05	19.73	19.89	0-2	0
		25	24	19.91	19.70	19.90	0-2	0
		50	0	19.97	19.68	19.89	0-2	0
	64QAM	1	0	20.05	19.79	19.85	0-2	0
		1	24	20.11	19.82	19.95	0-2	0
		1	49	20.16	19.74	19.96	0-2	0
		25	0	20.07	19.69	19.72	0-3	0
		25	12	20.10	19.66	19.89	0-3	0
		25	24	19.96	19.74	19.92	0-3	0
		50	0	19.93	19.69	19.77	0-3	0
	256QAM	1	0	18.26	17.86	17.94	0-5	2
		1	24	18.17	17.96	18.12	0-5	2
		1	49	18.02	17.91	18.02	0-5	2
		25	0	18.07	17.75	17.90	0-5	2
		25	12	18.21	17.78	18.04	0-5	2
		25	24	18.07	17.80	18.03	0-5	2
		50	0	18.10	17.76	17.92	0-5	2

LTE Band 4 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				20025 Ch. 1717.5 ㎒	20175 Ch. 1732.5 ㎒	20325 Ch. 1747.5 ㎒		
15 ㎒	QPSK	1	0	19.76	19.58	19.59	0	0
		1	36	19.77	19.55	19.68	0	0
		1	74	19.64	19.66	19.74	0	0
		36	0	19.90	19.66	19.64	0-1	0
		36	18	19.79	19.52	19.56	0-1	0
		36	39	19.70	19.63	19.77	0-1	0
		75	0	19.88	19.58	19.62	0-1	0
	16QAM	1	0	20.11	19.89	19.93	0-1	0
		1	36	19.97	19.61	19.98	0-1	0
		1	74	19.94	19.63	19.82	0-1	0
		36	0	19.93	19.61	19.57	0-2	0
		36	18	19.87	19.49	19.73	0-2	0
		36	39	19.73	19.58	19.79	0-2	0
		75	0	19.84	19.58	19.78	0-2	0
	64QAM	1	0	19.97	19.99	19.90	0-2	0
		1	36	19.90	19.66	19.78	0-2	0
		1	74	19.97	19.71	19.85	0-2	0
		36	0	19.94	19.62	19.71	0-3	0
		36	18	19.88	19.50	19.60	0-3	0
		36	39	19.77	19.46	19.79	0-3	0
		75	0	19.84	19.57	19.71	0-3	0
	256QAM	1	0	18.00	17.84	17.62	0-5	2
		1	36	18.12	17.64	17.95	0-5	2
		1	74	17.92	17.89	17.91	0-5	2
		36	0	18.00	17.72	17.66	0-5	2
		36	18	18.03	17.71	17.78	0-5	2
		36	39	17.90	17.66	17.83	0-5	2
		75	0	17.93	17.65	17.74	0-5	2

LTE Band 4 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
					20175 Ch. 1732.5 ㎒			
20 ㎒	QPSK	1	0		19.70		0	0
		1	49		19.65		0	0
		1	99		19.65		0	0
		50	0		19.60		0-1	0
		50	25		19.57		0-1	0
		50	49		19.54		0-1	0
		100	0		19.53		0-1	0
	16QAM	1	0		19.91		0-1	0
		1	49		19.66		0-1	0
		1	99		19.73		0-1	0
		50	0		19.59		0-2	0
		50	25		19.58		0-2	0
		50	49		19.42		0-2	0
		100	0		19.61		0-2	0
	64QAM	1	0		19.73		0-2	0
		1	49		19.43		0-2	0
		1	99		19.70		0-2	0
		50	0		19.55		0-3	0
		50	25		19.54		0-3	0
		50	49		19.52		0-3	0
		100	0		19.58		0-3	0
	256QAM	1	0		17.77		0-5	2
		1	49		17.74		0-5	2
		1	99		17.80		0-5	2
		50	0		17.74		0-5	2
		50	25		17.68		0-5	2
		50	49		17.66		0-5	2
		100	0		17.64		0-5	2

[LTE Band 25 Conducted Power _ DSI = 3]

LTE Band 25 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26047 Ch. 1850.7 ㎒	26365 Ch. 1882.5 ㎒	26683 Ch. 1914.3 ㎒		
1.4 ㎒	QPSK	1	0	18.47	18.28	18.37	0	0
		1	3	18.28	18.34	18.45	0	0
		1	5	18.27	18.44	18.55	0	0
		3	0	18.29	18.49	18.40	0	0
		3	1	18.34	18.31	18.43	0	0
		3	3	18.27	18.34	18.47	0	0
		6	0	18.32	18.41	18.48	0-1	0
	16QAM	1	0	18.46	18.68	18.58	0-1	0
		1	3	18.43	18.64	18.70	0-1	0
		1	5	18.56	18.52	18.67	0-1	0
		3	0	18.40	18.48	18.59	0-1	0
		3	1	18.36	18.54	18.53	0-1	0
		3	3	18.37	18.41	18.49	0-1	0
		6	0	18.38	18.46	18.41	0-2	0
	64QAM	1	0	18.39	18.54	18.36	0-2	0
		1	3	18.40	18.73	18.38	0-2	0
		1	5	18.45	18.47	18.39	0-2	0
		3	0	18.33	18.48	18.54	0-2	0
		3	1	18.30	18.53	18.45	0-2	0
		3	3	18.32	18.50	18.48	0-2	0
		6	0	18.31	18.37	18.51	0-3	0
	256QAM	1	0	17.40	17.55	17.59	0-5	0.5
		1	3	17.35	17.65	17.66	0-5	0.5
		1	5	17.44	17.50	17.56	0-5	0.5
		3	0	17.48	17.66	17.60	0-5	0.5
		3	1	17.43	17.58	17.62	0-5	0.5
		3	3	17.44	17.61	17.57	0-5	0.5
		6	0	17.30	17.57	17.56	0-5	0.5

LTE Band 25 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26055 Ch. 1851.5 ㎒	26365 Ch. 1882.5 ㎒	26675Ch. 1913.5 ㎒		
3 ㎒	QPSK	1	0	18.18	18.23	18.32	0	0
		1	7	18.24	18.37	18.56	0	0
		1	14	18.18	18.28	18.41	0	0
		8	0	18.41	18.33	18.43	0-1	0
		8	3	18.28	18.45	18.42	0-1	0
		8	7	18.32	18.40	18.52	0-1	0
		15	0	18.28	18.44	18.39	0-1	0
	16QAM	1	0	18.42	18.58	18.57	0-1	0
		1	7	18.54	18.66	18.67	0-1	0
		1	14	18.44	18.64	18.56	0-1	0
		8	0	18.37	18.41	18.43	0-2	0
		8	3	18.37	18.56	18.41	0-2	0
		8	7	18.40	18.48	18.51	0-2	0
		15	0	18.37	18.45	18.36	0-2	0
	64QAM	1	0	18.43	18.46	18.53	0-2	0
		1	7	18.45	18.57	18.62	0-2	0
		1	14	18.46	18.54	18.70	0-2	0
		8	0	18.38	18.47	18.38	0-3	0
		8	3	18.36	18.55	18.45	0-3	0
		8	7	18.35	18.47	18.44	0-3	0
		15	0	18.28	18.46	18.45	0-3	0
	256QAM	1	0	17.51	17.53	17.53	0-5	0.5
		1	7	17.63	17.70	17.64	0-5	0.5
		1	14	17.44	17.55	17.59	0-5	0.5
		8	0	17.46	17.54	17.49	0-5	0.5
		8	3	17.45	17.53	17.53	0-5	0.5
		8	7	17.44	17.57	17.60	0-5	0.5
		15	0	17.38	17.54	17.48	0-5	0.5

LTE Band 25 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26065 Ch. 1852.5 ㎒	26365 Ch. 1882.5 ㎒	26665 Ch. 1912.5 ㎒		
5 ㎒	QPSK	1	0	18.36	18.31	18.45	0	0
		1	12	18.25	18.58	18.63	0	0
		1	24	18.22	18.43	18.43	0	0
		12	0	18.34	18.29	18.44	0-1	0
		12	6	18.38	18.46	18.39	0-1	0
		12	11	18.29	18.43	18.53	0-1	0
		25	0	18.33	18.47	18.47	0-1	0
	16QAM	1	0	18.41	18.46	18.67	0-1	0
		1	12	18.55	18.71	18.65	0-1	0
		1	24	18.40	18.62	18.58	0-1	0
		12	0	18.35	18.42	18.42	0-2	0
		12	6	18.35	18.55	18.51	0-2	0
		12	11	18.45	18.56	18.53	0-2	0
		25	0	18.38	18.47	18.39	0-2	0
	64QAM	1	0	18.25	18.37	18.64	0-2	0
		1	12	18.40	18.58	18.56	0-2	0
		1	24	18.39	18.51	18.40	0-2	0
		12	0	18.32	18.36	18.38	0-3	0
		12	6	18.41	18.48	18.48	0-3	0
		12	11	18.38	18.46	18.51	0-3	0
		25	0	18.21	18.49	18.48	0-3	0
	256QAM	1	0	17.28	17.47	17.66	0-5	0.5
		1	12	17.38	17.69	17.71	0-5	0.5
		1	24	17.55	17.64	17.66	0-5	0.5
		12	0	17.41	17.40	17.46	0-5	0.5
		12	6	17.48	17.51	17.48	0-5	0.5
		12	11	17.37	17.60	17.63	0-5	0.5
		25	0	17.37	17.61	17.57	0-5	0.5

LTE Band 25 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26090 Ch. 1855 ㎒	26365 Ch. 1882.5 ㎒	26640 Ch. 1910 ㎒		
10 ㎒	QPSK	1	0	18.34	18.37	18.37	0	0
		1	24	18.33	18.42	18.54	0	0
		1	49	18.33	18.32	18.42	0	0
		25	0	18.25	18.41	18.45	0-1	0
		25	12	18.35	18.51	18.57	0-1	0
		25	24	18.37	18.47	18.53	0-1	0
		50	0	18.37	18.45	18.52	0-1	0
	16QAM	1	0	18.51	18.60	18.82	0-1	0
		1	24	18.48	18.61	18.73	0-1	0
		1	49	18.49	18.73	18.51	0-1	0
		25	0	18.23	18.42	18.44	0-2	0
		25	12	18.38	18.45	18.51	0-2	0
		25	24	18.41	18.48	18.53	0-2	0
		50	0	18.38	18.40	18.49	0-2	0
	64QAM	1	0	18.48	18.49	18.68	0-2	0
		1	24	18.45	18.54	18.64	0-2	0
		1	49	18.42	18.55	18.53	0-2	0
		25	0	18.26	18.37	18.44	0-3	0
		25	12	18.41	18.50	18.46	0-3	0
		25	24	18.35	18.48	18.57	0-3	0
		50	0	18.41	18.55	18.51	0-3	0
	256QAM	1	0	17.39	17.51	17.50	0-5	0.5
		1	24	17.51	17.59	17.64	0-5	0.5
		1	49	17.52	17.62	17.70	0-5	0.5
		25	0	17.34	17.48	17.47	0-5	0.5
		25	12	17.52	17.52	17.54	0-5	0.5
		25	24	17.47	17.58	17.60	0-5	0.5
		50	0	17.44	17.55	17.61	0-5	0.5

LTE Band 25 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26115 Ch. 1857.5 ㎒	26365 Ch. 1882.5 ㎒	26615 Ch. 1907.5 ㎒		
15 ㎒	QPSK	1	0	18.10	18.23	18.19	0	0
		1	36	18.15	18.19	18.36	0	0
		1	74	18.30	18.29	18.24	0	0
		36	0	18.17	18.22	18.32	0-1	0
		36	18	18.24	18.20	18.23	0-1	0
		36	39	18.27	18.35	18.36	0-1	0
		75	0	18.25	18.32	18.35	0-1	0
	16QAM	1	0	18.32	18.44	18.36	0-1	0
		1	36	18.37	18.45	18.54	0-1	0
		1	74	18.68	18.41	18.43	0-1	0
		36	0	18.26	18.28	18.27	0-2	0
		36	18	18.25	18.29	18.29	0-2	0
		36	39	18.27	18.35	18.44	0-2	0
		75	0	18.26	18.36	18.32	0-2	0
	64QAM	1	0	18.41	18.40	18.28	0-2	0
		1	36	18.30	18.35	18.46	0-2	0
		1	74	18.42	18.38	18.55	0-2	0
		36	0	18.17	18.22	18.30	0-3	0
		36	18	18.27	18.24	18.19	0-3	0
		36	39	18.26	18.28	18.48	0-3	0
		75	0	18.21	18.33	18.31	0-3	0
	256QAM	1	0	17.07	17.16	17.46	0-5	0.5
		1	36	17.51	17.50	17.39	0-5	0.5
		1	74	17.55	17.55	17.39	0-5	0.5
		36	0	17.18	17.36	17.48	0-5	0.5
		36	18	17.33	17.32	17.36	0-5	0.5
		36	39	17.32	17.43	17.48	0-5	0.5
		75	0	17.29	17.44	17.41	0-5	0.5

LTE Band 25 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 ㎒	26365 Ch. 1882.5 ㎒	26590 Ch. 1905 ㎒		
20 ㎒	QPSK	1	0	18.10	18.12	18.09	0	0
		1	49	18.40	18.16	18.24	0	0
		1	99	18.18	18.10	18.06	0	0
		50	0	18.28	18.27	18.13	0-1	0
		50	25	18.40	18.31	18.29	0-1	0
		50	49	18.36	18.30	18.24	0-1	0
		100	0	18.33	18.26	18.38	0-1	0
	16QAM	1	0	18.42	18.55	18.35	0-1	0
		1	49	18.49	18.98	18.42	0-1	0
		1	99	18.66	18.57	18.43	0-1	0
		50	0	18.24	18.28	18.17	0-2	0
		50	25	18.38	18.44	18.23	0-2	0
		50	49	18.37	18.28	18.30	0-2	0
		100	0	18.30	18.31	18.28	0-2	0
	64QAM	1	0	18.42	18.24	18.23	0-2	0
		1	49	18.34	18.41	18.15	0-2	0
		1	99	18.62	18.38	18.27	0-2	0
		50	0	18.27	18.27	18.07	0-3	0
		50	25	18.39	18.29	18.19	0-3	0
		50	49	18.43	18.35	18.25	0-3	0
		100	0	18.36	18.36	18.21	0-3	0
	256QAM	1	0	17.33	17.40	17.19	0-5	0.5
		1	49	17.44	17.49	17.36	0-5	0.5
		1	99	17.37	17.35	17.53	0-5	0.5
		50	0	17.36	17.33	17.22	0-5	0.5
		50	25	17.48	17.44	17.33	0-5	0.5
		50	49	17.46	17.40	17.26	0-5	0.5
		100	0	17.43	17.43	17.36	0-5	0.5

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

LTE Band 25 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26047 Ch. 1850.7 ㎒	26365 Ch. 1882.5 ㎒	26683 Ch. 1914.3 ㎒		
1.4 ㎒	QPSK	1	0	18.77	18.83	18.69	0	0
		1	3	18.82	18.91	18.74	0	0
		1	5	18.80	18.84	18.69	0	0
		3	0	18.80	18.89	18.68	0	0
		3	1	18.78	18.88	18.68	0	0
		3	3	18.80	18.89	18.70	0	0
		6	0	18.81	18.86	18.72	0-1	0
	16QAM	1	0	19.07	19.11	18.92	0-1	0
		1	3	19.08	19.18	18.96	0-1	0
		1	5	19.12	19.19	18.98	0-1	0
		3	0	18.97	19.03	18.79	0-1	0
		3	1	18.94	18.95	18.83	0-1	0
		3	3	18.88	18.98	18.83	0-1	0
		6	0	18.84	18.97	18.72	0-2	0
	64QAM	1	0	18.97	18.99	18.82	0-2	0
		1	3	19.02	19.00	18.89	0-2	0
		1	5	18.89	19.06	18.81	0-2	0
		3	0	18.89	18.98	18.75	0-2	0
		3	1	18.92	19.01	18.77	0-2	0
		3	3	18.95	19.05	18.80	0-2	0
		6	0	18.81	18.90	18.74	0-3	0
	256QAM	1	0	17.78	17.92	17.71	0-5	1
		1	3	18.10	17.92	17.70	0-5	1
		1	5	17.86	17.85	17.78	0-5	1
		3	0	17.84	17.72	17.72	0-5	1
		3	1	17.79	17.68	17.63	0-5	1
		3	3	17.81	17.79	17.66	0-5	1
		6	0	17.71	17.60	17.62	0-5	1

LTE Band 25 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26055 Ch. 1851.5 ㎒	26365 Ch. 1882.5 ㎒	26675Ch. 1913.5 ㎒		
3 ㎒	QPSK	1	0	18.75	18.79	18.65	0	0
		1	7	18.84	18.90	18.76	0	0
		1	14	18.74	18.81	18.64	0	0
		8	0	18.81	18.84	18.68	0-1	0
		8	3	18.85	18.85	18.76	0-1	0
		8	7	18.84	18.90	18.72	0-1	0
		15	0	18.80	18.86	18.66	0-1	0
	16QAM	1	0	19.04	19.12	18.96	0-1	0
		1	7	19.16	19.20	19.05	0-1	0
		1	14	19.04	19.08	18.98	0-1	0
		8	0	18.87	18.87	18.71	0-2	0
		8	3	18.87	18.92	18.81	0-2	0
		8	7	18.87	18.95	18.76	0-2	0
		15	0	18.84	18.83	18.69	0-2	0
	64QAM	1	0	18.96	19.06	18.80	0-2	0
		1	7	19.02	19.10	18.92	0-2	0
		1	14	19.01	19.06	18.81	0-2	0
		8	0	18.82	18.88	18.69	0-3	0
		8	3	18.88	18.91	18.78	0-3	0
		8	7	18.85	18.92	18.77	0-3	0
		15	0	18.84	18.83	18.68	0-3	0
	256QAM	1	0	17.81	17.95	17.75	0-5	1
		1	7	18.08	18.00	17.73	0-5	1
		1	14	17.89	17.91	17.83	0-5	1
		8	0	17.87	17.78	17.76	0-5	1
		8	3	17.84	17.73	17.66	0-5	1
		8	7	17.80	17.83	17.66	0-5	1
		15	0	17.74	17.68	17.60	0-5	1

LTE Band 25 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26065 Ch. 1852.5 ㎒	26365 Ch. 1882.5 ㎒	26665 Ch. 1912.5 ㎒		
5 ㎒	QPSK	1	0	18.77	18.85	18.71	0	0
		1	12	18.85	18.92	18.77	0	0
		1	24	18.81	18.86	18.73	0	0
		12	0	18.86	18.85	18.72	0-1	0
		12	6	18.88	18.88	18.70	0-1	0
		12	11	18.83	18.90	18.79	0-1	0
		25	0	18.82	18.84	18.68	0-1	0
	16QAM	1	0	19.08	19.20	18.98	0-1	0
		1	12	19.06	19.26	19.04	0-1	0
		1	24	19.07	19.21	18.93	0-1	0
		12	0	18.86	18.87	18.67	0-2	0
		12	6	18.93	18.89	18.73	0-2	0
		12	11	18.86	18.95	18.74	0-2	0
		25	0	18.83	18.87	18.70	0-2	0
	64QAM	1	0	18.98	19.11	18.87	0-2	0
		1	12	19.12	19.11	18.91	0-2	0
		1	24	19.00	19.00	18.88	0-2	0
		12	0	18.90	18.89	18.72	0-3	0
		12	6	18.89	18.89	18.76	0-3	0
		12	11	18.88	18.93	18.78	0-3	0
		25	0	18.86	18.84	18.70	0-3	0
	256QAM	1	0	18.01	18.15	17.95	0-5	1
		1	12	18.20	18.16	17.96	0-5	1
		1	24	18.06	18.08	17.97	0-5	1
		12	0	17.99	17.93	17.82	0-5	1
		12	6	17.96	17.94	17.83	0-5	1
		12	11	17.95	17.99	17.85	0-5	1
		25	0	17.92	17.89	17.77	0-5	1

LTE Band 25 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26090 Ch. 1855 ㎒	26365 Ch. 1882.5 ㎒	26640 Ch. 1910 ㎒		
10 ㎒	QPSK	1	0	18.75	18.88	18.79	0	0
		1	24	18.86	18.94	18.80	0	0
		1	49	18.76	18.85	18.75	0	0
		25	0	18.79	18.86	18.74	0-1	0
		25	12	18.91	18.89	18.74	0-1	0
		25	24	18.87	18.93	18.80	0-1	0
		50	0	18.85	18.84	18.73	0-1	0
	16QAM	1	0	19.14	19.16	19.10	0-1	0
		1	24	19.21	19.20	19.11	0-1	0
		1	49	19.15	19.22	19.06	0-1	0
		25	0	18.80	18.89	18.72	0-2	0
		25	12	18.93	18.87	18.76	0-2	0
		25	24	18.83	18.92	18.81	0-2	0
		50	0	18.84	18.85	18.72	0-2	0
	64QAM	1	0	19.04	19.09	18.97	0-2	0
		1	24	18.96	19.20	18.94	0-2	0
		1	49	18.93	19.08	18.93	0-2	0
		25	0	18.81	18.86	18.73	0-3	0
		25	12	18.90	18.89	18.72	0-3	0
		25	24	18.84	18.94	18.79	0-3	0
		50	0	18.87	18.85	18.71	0-3	0
	256QAM	1	0	18.00	18.08	17.92	0-5	1
		1	24	18.20	18.15	17.94	0-5	1
		1	49	18.05	18.07	17.92	0-5	1
		25	0	17.94	17.89	17.74	0-5	1
		25	12	17.89	17.90	17.81	0-5	1
		25	24	17.88	17.99	17.78	0-5	1
		50	0	17.85	17.85	17.74	0-5	1

LTE Band 25 _ 15 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26115 Ch. 1857.5 ㎒	26365 Ch. 1882.5 ㎒	26615 Ch. 1907.5 ㎒		
15 ㎒	QPSK	1	0	18.69	18.66	18.53	0	0
		1	36	18.72	18.71	18.65	0	0
		1	74	18.70	18.63	18.52	0	0
		36	0	18.71	18.74	18.58	0-1	0
		36	18	18.72	18.73	18.67	0-1	0
		36	39	18.73	18.77	18.64	0-1	0
		75	0	18.77	18.72	18.66	0-1	0
	16QAM	1	0	18.90	19.01	18.87	0-1	0
		1	36	19.02	19.00	18.98	0-1	0
		1	74	18.95	18.89	18.79	0-1	0
		36	0	18.68	18.74	18.60	0-2	0
		36	18	18.74	18.72	18.67	0-2	0
		36	39	18.70	18.77	18.64	0-2	0
		75	0	18.72	18.71	18.64	0-2	0
	64QAM	1	0	18.95	18.92	18.80	0-2	0
		1	36	18.83	18.94	18.83	0-2	0
		1	74	18.80	18.82	18.78	0-2	0
		36	0	18.68	18.76	18.63	0-3	0
		36	18	18.70	18.75	18.66	0-3	0
		36	39	18.65	18.76	18.63	0-3	0
		75	0	18.69	18.73	18.68	0-3	0
	256QAM	1	0	17.91	18.05	17.92	0-5	1
		1	36	18.15	18.12	17.81	0-5	1
		1	74	17.94	18.02	17.88	0-5	1
		36	0	17.96	17.87	17.73	0-5	1
		36	18	17.89	17.81	17.78	0-5	1
		36	39	17.90	17.98	17.76	0-5	1
		75	0	17.83	17.84	17.72	0-5	1

LTE Band 25 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				26140 Ch. 1860 ㎒	26365 Ch. 1882.5 ㎒	26590 Ch. 1905 ㎒		
20 ㎒	QPSK	1	0	18.70	18.64	18.67	0	0
		1	49	18.67	18.81	18.64	0	0
		1	99	18.63	18.69	18.56	0	0
		50	0	18.71	18.77	18.62	0-1	0
		50	25	18.76	18.74	18.68	0-1	0
		50	49	18.82	18.76	18.64	0-1	0
		100	0	18.76	18.73	18.70	0-1	0
	16QAM	1	0	18.96	18.98	19.04	0-1	0
		1	49	19.13	19.04	19.01	0-1	0
		1	99	18.84	18.86	18.73	0-1	0
		50	0	18.71	18.76	18.65	0-2	0
		50	25	18.77	18.73	18.66	0-2	0
		50	49	18.73	18.74	18.63	0-2	0
		100	0	18.76	18.73	18.73	0-2	0
	64QAM	1	0	18.92	18.90	18.81	0-2	0
		1	49	18.95	18.92	18.90	0-2	0
		1	99	18.72	18.80	18.77	0-2	0
		50	0	18.74	18.77	18.63	0-3	0
		50	25	18.79	18.77	18.69	0-3	0
		50	49	18.72	18.76	18.65	0-3	0
		100	0	18.78	18.73	18.68	0-3	0
	256QAM	1	0	17.90	18.05	17.83	0-5	1
		1	49	18.13	18.05	17.75	0-5	1
		1	99	17.98	17.96	17.90	0-5	1
		50	0	17.90	17.86	17.76	0-5	1
		50	25	17.81	17.74	17.70	0-5	1
		50	49	17.86	17.90	17.76	0-5	1
		100	0	17.76	17.76	17.63	0-5	1

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

LTE Band 41 _ 5 ㎒ Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
5 ㎒	QPSK	1	0	22.51	22.61	22.86	22.88	22.68	0	0
		1	12	22.67	22.75	22.93	22.94	22.76	0	0
		1	24	22.58	22.62	22.88	22.87	22.64	0	0
		12	0	22.62	22.68	22.97	22.93	22.74	0-1	0
		12	6	22.63	22.79	22.97	22.92	22.75	0-1	0
		12	11	22.60	22.74	22.97	22.91	22.74	0-1	0
		25	0	22.56	22.73	22.92	22.90	22.70	0-1	0
	16QAM	1	0	22.48	22.68	22.93	22.94	22.66	0-1	0
		1	12	22.57	22.77	22.94	22.91	22.87	0-1	0
		1	24	22.50	22.66	22.85	22.81	22.65	0-1	0
		12	0	22.43	22.49	22.78	22.85	22.48	0-2	0
		12	6	22.41	22.52	22.82	22.90	22.57	0-2	0
		12	11	22.47	22.52	22.82	22.78	22.54	0-2	0
		25	0	22.39	22.50	22.76	22.86	22.52	0-2	0
	64QAM	1	0	22.45	22.47	22.81	22.80	22.50	0-2	0
		1	12	22.51	22.64	22.90	22.82	22.68	0-2	0
		1	24	22.40	22.45	22.71	22.80	22.61	0-2	0
		12	0	21.43	21.51	21.82	21.86	21.51	0-3	1
		12	6	21.44	21.55	21.82	21.93	21.51	0-3	1
		12	11	21.41	21.47	21.82	21.80	21.52	0-3	1
		25	0	21.45	21.51	21.79	21.85	21.47	0-3	1
	256QAM	1	0	19.32	19.54	19.60	19.65	19.42	0-5	3
		1	12	19.39	19.48	19.71	19.73	19.40	0-5	3
		1	24	19.26	19.29	19.72	19.64	19.30	0-5	3
		12	0	19.41	19.53	19.76	19.79	19.51	0-5	3
		12	6	19.35	19.49	19.79	19.80	19.59	0-5	3
		12	11	19.38	19.51	19.76	19.83	19.54	0-5	3
		25	0	19.46	19.50	19.75	19.84	19.52	0-5	3

LTE Band 41 _ 10 ㎒ Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
10 ㎒	QPSK	1	0	22.57	22.68	22.92	22.94	22.68	0	0
		1	24	22.60	22.67	22.97	22.98	22.73	0	0
		1	49	22.52	22.68	22.92	22.90	22.63	0	0
		25	0	22.55	22.76	22.94	22.95	22.70	0-1	0
		25	12	22.67	22.82	22.87	22.97	22.76	0-1	0
		25	24	22.70	22.78	22.93	22.96	22.67	0-1	0
		50	0	22.72	22.73	22.95	22.91	22.73	0-1	0
	16QAM	1	0	22.60	22.55	22.88	22.88	22.69	0-1	0
		1	24	22.61	22.78	22.96	22.98	22.74	0-1	0
		1	49	22.55	22.71	22.93	22.85	22.66	0-1	0
		25	0	22.36	22.55	22.83	22.87	22.49	0-2	0
		25	12	22.44	22.57	22.87	22.84	22.52	0-2	0
		25	24	22.47	22.53	22.80	22.81	22.45	0-2	0
		50	0	22.45	22.58	22.85	22.90	22.51	0-2	0
	64QAM	1	0	22.47	22.56	22.81	22.89	22.55	0-2	0
		1	24	22.46	22.46	22.77	22.91	22.54	0-2	0
		1	49	22.45	22.45	22.76	22.76	22.46	0-2	0
		25	0	21.38	21.54	21.75	21.91	21.55	0-3	1
		25	12	21.42	21.55	21.81	21.86	21.58	0-3	1
		25	24	21.47	21.54	21.80	21.78	21.38	0-3	1
		50	0	21.45	21.55	21.81	21.80	21.49	0-3	1
	256QAM	1	0	19.29	19.47	19.64	19.76	19.47	0-5	3
		1	24	19.40	19.44	19.78	19.76	19.39	0-5	3
		1	49	19.27	19.27	19.58	19.55	19.35	0-5	3
		25	0	19.41	19.54	19.79	19.83	19.52	0-5	3
		25	12	19.50	19.51	19.80	19.79	19.61	0-5	3
		25	24	19.48	19.53	19.78	19.76	19.45	0-5	3
		50	0	19.47	19.43	19.77	19.85	19.58	0-5	3

LTE Band 41 _ 15 ㎒ Bandwidth- Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
15 ㎒	QPSK	1	0	22.35	22.58	22.77	22.84	22.52	0	0
		1	36	22.45	22.52	22.78	22.80	22.45	0	0
		1	74	22.40	22.61	22.79	22.78	22.49	0	0
		36	0	22.42	22.61	22.78	22.92	22.68	0-1	0
		36	18	22.53	22.59	22.88	22.89	22.64	0-1	0
		36	39	22.55	22.64	22.89	22.79	22.54	0-1	0
		75	0	22.51	22.68	22.88	22.90	22.59	0-1	0
	16QAM	1	0	22.29	22.47	22.64	22.88	22.51	0-1	0
		1	36	22.50	22.40	22.61	22.79	22.57	0-1	0
		1	74	22.32	22.47	22.82	22.71	22.52	0-1	0
		36	0	22.17	22.37	22.58	22.74	22.39	0-2	0
		36	18	22.31	22.41	22.64	22.68	22.41	0-2	0
		36	39	22.33	22.43	22.64	22.62	22.30	0-2	0
		75	0	22.32	22.42	22.65	22.74	22.39	0-2	0
	64QAM	1	0	22.24	22.43	22.72	22.69	22.56	0-2	0
		1	36	22.36	22.38	22.63	22.70	22.44	0-2	0
		1	74	22.27	22.44	22.80	22.73	22.51	0-2	0
		36	0	21.15	21.39	21.61	21.69	21.43	0-3	1
		36	18	21.28	21.41	21.65	21.75	21.37	0-3	1
		36	39	21.34	21.41	21.62	21.62	21.29	0-3	1
		75	0	21.27	21.42	21.66	21.70	21.37	0-3	1
	256QAM	1	0	18.96	19.30	19.55	19.67	19.30	0-5	3
		1	36	19.15	19.24	19.59	19.53	19.42	0-5	3
		1	74	19.29	19.31	19.67	19.54	19.21	0-5	3
		36	0	19.23	19.45	19.59	19.69	19.38	0-5	3
		36	18	19.23	19.37	19.64	19.66	19.40	0-5	3
		36	39	19.33	19.39	19.68	19.59	19.30	0-5	3
		75	0	19.35	19.44	19.65	19.74	19.42	0-5	3

LTE Band 41 _ 20 ㎒ Bandwidth - Power Class 3

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
20 ㎒	QPSK	1	0	22.36	22.51	22.83	22.96	22.49	0	0
		1	49	22.41	22.55	22.78	22.73	22.36	0	0
		1	99	22.46	22.50	22.79	22.75	22.45	0	0
		50	0	22.40	22.64	22.78	22.95	22.57	0-1	0
		50	25	22.51	22.68	22.89	22.93	22.63	0-1	0
		50	49	22.59	22.58	22.85	22.78	22.54	0-1	0
		100	0	22.54	22.60	22.92	22.92	22.67	0-1	0
	16QAM	1	0	22.32	22.56	22.71	22.90	22.53	0-1	0
		1	49	22.47	22.67	22.57	22.84	22.67	0-1	0
		1	99	22.47	22.40	22.78	22.76	22.49	0-1	0
		50	0	22.27	22.45	22.55	22.76	22.43	0-2	0
		50	25	22.37	22.44	22.65	22.76	22.42	0-2	0
		50	49	22.30	22.43	22.63	22.63	22.35	0-2	0
		100	0	22.35	22.43	22.67	22.71	22.40	0-2	0
	64QAM	1	0	22.19	22.44	22.70	22.84	22.51	0-2	0
		1	49	22.33	22.50	22.64	22.81	22.48	0-2	0
		1	99	22.40	22.43	22.66	22.68	22.45	0-2	0
		50	0	21.22	21.40	21.57	21.78	21.41	0-3	1
		50	25	21.32	21.46	21.62	21.68	21.42	0-3	1
		50	49	21.32	21.38	21.66	21.57	21.33	0-3	1
		100	0	21.33	21.38	21.69	21.71	21.37	0-3	1
	256QAM	1	0	19.19	19.35	19.50	19.64	19.62	0-5	3
		1	49	19.32	19.35	19.51	19.58	19.35	0-5	3
		1	99	19.23	19.36	19.65	19.51	19.26	0-5	3
		50	0	19.20	19.38	19.55	19.70	19.37	0-5	3
		50	25	19.27	19.40	19.65	19.71	19.45	0-5	3
		50	49	19.33	19.38	19.65	19.54	19.33	0-5	3
		100	0	19.29	19.41	19.71	19.74	19.46	0-5	3

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

[LTE Band 41 Conducted Power_ DSI = 1,3,4] - Power Class 2

LTE Band 41 _ 5 ㎒ Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
5 ㎒	QPSK	1	0	24.09	24.30	24.43	24.48	24.21	0	0
		1	12	24.23	24.40	24.45	24.40	24.24	0	0
		1	24	24.23	24.29	24.46	24.49	24.14	0	0
		12	0	24.18	24.30	24.49	24.46	24.28	0-1	0
		12	6	24.20	24.25	24.43	24.48	24.27	0-1	0
		12	11	24.16	24.29	24.46	24.44	24.22	0-1	0
		25	0	24.16	24.30	24.44	24.43	24.24	0-1	0
	16QAM	1	0	24.35	24.45	24.46	24.46	24.45	0-1	0
		1	12	24.47	24.41	24.46	24.49	24.40	0-1	0
		1	24	24.41	24.46	24.41	24.41	24.34	0-1	0
		12	0	23.66	23.70	24.01	24.07	23.66	0-2	0
		12	6	23.60	23.78	23.96	24.11	23.71	0-2	0
		12	11	23.67	23.77	24.01	24.07	23.66	0-2	0
		25	0	23.60	23.67	23.99	24.09	23.71	0-2	0
	64QAM	1	0	23.92	23.84	24.15	24.20	24.01	0-2	0
		1	12	23.90	24.03	24.28	24.35	24.01	0-2	0
		1	24	23.84	23.84	24.22	24.23	23.83	0-2	0
		12	0	22.58	22.73	22.91	23.05	22.71	0-3	1
		12	6	22.64	22.73	23.05	23.14	22.72	0-3	1
		12	11	22.59	22.77	23.00	23.08	22.68	0-3	1
		25	0	22.61	22.77	23.00	23.02	22.64	0-3	1
	256QAM	1	0	20.57	20.95	20.95	21.15	20.79	0-5	3
		1	12	20.78	20.88	21.06	21.18	21.01	0-5	3
		1	24	20.64	20.75	21.16	21.08	20.71	0-5	3
		12	0	20.68	20.77	20.99	21.13	20.70	0-5	3
		12	6	20.71	20.78	21.05	21.14	20.78	0-5	3
		12	11	20.71	20.77	20.99	21.10	20.73	0-5	3
		25	0	20.64	20.75	21.04	21.00	20.77	0-5	3

LTE Band 41 _ 10 MHz Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 MHz	40185 Ch. 2549.5 MHz	40620 Ch. 2593.0 MHz	41055 Ch. 2636.5 MHz	41490 Ch. 2680.0 MHz		
10 MHz	QPSK	1	0	24.22	24.33	24.49	24.49	24.20	0	0
		1	24	24.24	24.32	24.47	24.48	24.24	0	0
		1	49	24.31	24.28	24.41	24.43	24.10	0	0
		25	0	24.13	24.30	24.48	24.45	24.24	0-1	0
		25	12	24.24	24.35	24.40	24.42	24.26	0-1	0
		25	24	24.26	24.29	24.47	24.46	24.16	0-1	0
		50	0	24.22	24.32	24.48	24.43	24.29	0-1	0
	16QAM	1	0	24.35	24.41	24.41	24.44	24.43	0-1	0
		1	24	24.45	24.44	24.48	24.41	24.44	0-1	0
		1	49	24.48	24.41	24.47	24.41	24.44	0-1	0
		25	0	23.57	23.74	23.97	24.14	23.71	0-2	0
		25	12	23.65	23.79	24.04	24.09	23.71	0-2	0
		25	24	23.66	23.71	24.03	23.96	23.61	0-2	0
		50	0	23.61	23.71	23.97	24.07	23.60	0-2	0
	64QAM	1	0	23.89	23.98	24.23	24.39	23.98	0-2	0
		1	24	24.01	23.97	24.30	24.25	24.02	0-2	0
		1	49	23.88	24.00	24.30	24.29	23.85	0-2	0
		25	0	22.58	22.73	23.01	23.10	22.73	0-3	1
		25	12	22.70	22.79	23.02	23.11	22.72	0-3	1
		25	24	22.68	22.72	22.98	22.96	22.60	0-3	1
		50	0	22.63	22.74	23.00	23.07	22.71	0-3	1
	256QAM	1	0	20.60	20.80	21.09	21.21	20.86	0-5	3
		1	24	20.82	20.92	21.01	21.19	20.86	0-5	3
		1	49	20.75	20.80	21.11	20.99	20.65	0-5	3
		25	0	20.66	20.79	21.00	21.08	20.73	0-5	3
		25	12	20.69	20.80	21.10	21.15	20.82	0-5	3
		25	24	20.71	20.81	20.99	20.95	20.69	0-5	3
		50	0	20.73	20.79	21.02	21.09	20.77	0-5	3

LTE Band 41 _ 15 ㎒ Bandwidth- Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
15 ㎒	QPSK	1	0	24.09	24.15	24.41	24.45	24.07	0	0
		1	36	24.04	24.14	24.29	24.45	24.08	0	0
		1	74	24.07	24.16	24.45	24.46	24.08	0	0
		36	0	23.96	24.17	24.37	24.44	24.15	0-1	0
		36	18	24.12	24.14	24.42	24.47	24.11	0-1	0
		36	39	24.12	24.17	24.42	24.40	24.06	0-1	0
		75	0	24.10	24.23	24.46	24.43	24.15	0-1	0
	16QAM	1	0	24.17	24.43	24.43	24.42	24.29	0-1	0
		1	36	24.28	24.20	24.46	24.48	24.21	0-1	0
		1	74	24.23	24.49	24.43	24.47	24.36	0-1	0
		36	0	23.41	23.62	23.78	23.99	23.58	0-2	0
		36	18	23.51	23.67	23.84	23.96	23.56	0-2	0
		36	39	23.53	23.58	23.87	23.85	23.42	0-2	0
		75	0	23.51	23.57	23.86	23.87	23.55	0-2	0
	64QAM	1	0	23.73	23.92	24.02	24.17	23.88	0-2	0
		1	36	23.68	23.77	24.19	24.16	23.82	0-2	0
		1	74	23.86	23.81	24.07	24.15	23.88	0-2	0
		36	0	22.44	22.62	22.82	22.94	22.62	0-3	1
		36	18	22.59	22.56	22.81	22.97	22.60	0-3	1
		36	39	22.50	22.62	22.82	22.79	22.51	0-3	1
		75	0	22.53	22.62	22.85	22.90	22.56	0-3	1
	256QAM	1	0	20.56	20.65	20.91	21.14	20.65	0-5	3
		1	36	20.59	20.73	20.93	20.99	20.67	0-5	3
		1	74	20.58	20.64	20.96	20.94	20.56	0-5	3
		36	0	20.43	20.60	20.73	21.01	20.63	0-5	3
		36	18	20.44	20.61	20.82	20.94	20.61	0-5	3
		36	39	20.54	20.60	20.82	20.82	20.47	0-5	3
		75	0	20.54	20.61	20.84	20.94	20.63	0-5	3

LTE Band 41 _ 20 ㎒ Bandwidth - Power Class 2

Band width	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR Allowed Per 3GPP [dB]	MPR [dB]
				39750 Ch. 2506.0 ㎒	40185 Ch. 2549.5 ㎒	40620 Ch. 2593.0 ㎒	41055 Ch. 2636.5 ㎒	41490 Ch. 2680.0 ㎒		
20 ㎒	QPSK	1	0	24.09	24.16	24.47	24.43	24.31	0	0
		1	49	24.04	24.19	24.33	24.43	24.11	0	0
		1	99	24.10	24.20	24.45	24.44	24.02	0	0
		50	0	24.09	24.24	24.41	24.49	24.17	0-1	0
		50	25	24.12	24.25	24.40	24.46	24.16	0-1	0
		50	49	24.12	24.22	24.40	24.40	24.01	0-1	0
		100	0	24.12	24.22	24.43	24.41	24.12	0-1	0
	16QAM	1	0	24.18	24.42	24.48	24.44	24.33	0-1	0
		1	49	24.28	24.38	24.49	24.49	24.20	0-1	0
		1	99	24.33	24.21	24.48	24.46	24.16	0-1	0
		50	0	23.44	23.64	23.81	23.94	23.60	0-2	0
		50	25	23.52	23.58	23.83	23.98	23.57	0-2	0
		50	49	23.55	23.59	23.87	23.81	23.51	0-2	0
		100	0	23.49	23.62	23.78	23.88	23.55	0-2	0
	64QAM	1	0	23.76	23.75	23.93	24.28	23.87	0-2	0
		1	49	23.72	23.97	24.11	24.11	23.81	0-2	0
		1	99	23.75	23.76	24.15	24.15	23.75	0-2	0
		50	0	22.44	22.61	22.78	22.97	22.60	0-3	1
		50	25	22.50	22.61	22.90	22.96	22.54	0-3	1
		50	49	22.53	22.58	22.87	22.79	22.50	0-3	1
		100	0	22.50	22.57	22.83	22.93	22.55	0-3	1
	256QAM	1	0	20.57	20.69	20.95	21.12	20.86	0-5	3
		1	49	20.72	20.81	20.83	21.10	20.64	0-5	3
		1	99	20.57	20.68	21.04	20.87	20.65	0-5	3
		50	0	20.45	20.65	20.77	21.01	20.54	0-5	3
		50	25	20.61	20.57	20.88	20.96	20.59	0-5	3
		50	49	20.58	20.59	20.90	20.84	20.54	0-5	3
		100	0	20.55	20.64	20.96	20.92	20.58	0-5	3

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

[LTE Band 66 Conducted Power_DSI = 1, 3, 4]

LTE Band 66 _ 1.4 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131979Ch. 1710.7 ㎒	132322 Ch. 1745 ㎒	132665 Ch. 1779.3 ㎒		
1.4 ㎒	QPSK	1	0	20.13	19.85	19.69	0	0
		1	3	20.09	19.89	19.74	0	0
		1	5	20.05	19.85	19.61	0	0
		3	0	20.06	19.79	19.76	0	0
		3	1	20.04	19.79	19.68	0	0
		3	3	20.00	19.76	19.68	0	0
		6	0	20.01	19.82	19.73	0-1	0
	16QAM	1	0	20.22	19.85	19.72	0-1	0
		1	3	20.19	19.99	19.80	0-1	0
		1	5	20.25	20.04	19.97	0-1	0
		3	0	20.25	19.95	19.75	0-1	0
		3	1	20.08	19.85	19.74	0-1	0
		3	3	20.25	20.02	19.73	0-1	0
		6	0	20.12	19.88	19.74	0-2	0
	64QAM	1	0	20.18	20.02	19.74	0-2	0
		1	3	20.19	19.87	19.77	0-2	0
		1	5	20.16	19.94	19.73	0-2	0
		3	0	20.22	19.99	19.81	0-2	0
		3	1	20.24	19.94	19.69	0-2	0
		3	3	20.16	19.92	19.68	0-2	0
		6	0	20.13	19.95	19.74	0-3	0
	256QAM	1	0	18.20	18.01	17.85	0-5	2
		1	3	18.24	18.05	17.91	0-5	2
		1	5	18.19	18.03	17.78	0-5	2
		3	0	18.24	17.97	17.84	0-5	2
		3	1	18.28	18.06	17.81	0-5	2
		3	3	18.21	18.04	17.79	0-5	2
		6	0	18.16	17.92	17.88	0-5	2

LTE Band 66 _ 3 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131987 Ch. 1711.5 ㎒	132322 Ch. 1745 ㎒	132657 Ch. 1778.5 ㎒		
3 ㎒	QPSK	1	0	20.03	19.71	19.57	0	0
		1	7	20.05	19.78	19.79	0	0
		1	14	20.01	19.71	19.65	0	0
		8	0	20.07	19.90	19.64	0-1	0
		8	3	20.13	19.92	19.68	0-1	0
		8	7	20.14	19.85	19.66	0-1	0
		15	0	20.32	19.89	19.59	0-1	0
	16QAM	1	0	20.16	20.00	19.76	0-1	0
		1	7	20.32	19.92	20.03	0-1	0
		1	14	20.28	19.92	19.87	0-1	0
		8	0	20.06	19.94	19.72	0-2	0
		8	3	20.11	19.99	19.81	0-2	0
		8	7	20.12	19.90	19.72	0-2	0
		15	0	20.09	19.82	19.65	0-2	0
	64QAM	1	0	20.19	19.84	19.97	0-2	0
		1	7	20.35	20.10	20.01	0-2	0
		1	14	20.04	19.80	19.91	0-2	0
		8	0	20.08	19.95	19.56	0-3	0
		8	3	20.10	19.86	19.74	0-3	0
		8	7	20.12	19.90	19.75	0-3	0
		15	0	20.08	19.84	19.63	0-3	0
	256QAM	1	0	18.30	17.88	17.68	0-5	2
		1	7	18.26	17.98	17.93	0-5	2
		1	14	18.28	17.92	17.80	0-5	2
		8	0	18.16	17.99	17.66	0-5	2
		8	3	18.21	18.00	17.89	0-5	2
		8	7	18.11	18.02	17.88	0-5	2
		15	0	18.09	17.90	17.73	0-5	2

LTE Band 66 _ 5 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				131997 Ch. 1712.5 ㎒	132322Ch. 1745 ㎒	132647 Ch. 1777.5 ㎒		
5 ㎒	QPSK	1	0	20.09	19.74	19.61	0	0
		1	12	20.06	19.90	19.69	0	0
		1	24	20.04	19.76	19.71	0	0
		12	0	20.03	19.79	19.67	0-1	0
		12	6	20.05	19.93	19.73	0-1	0
		12	11	20.07	19.87	19.80	0-1	0
		25	0	20.05	19.85	19.67	0-1	0
	16QAM	1	0	20.29	19.90	19.93	0-1	0
		1	12	20.36	20.11	19.96	0-1	0
		1	24	20.24	19.96	19.78	0-1	0
		12	0	20.01	19.84	19.70	0-2	0
		12	6	20.20	19.94	19.73	0-2	0
		12	11	20.14	19.89	19.70	0-2	0
		25	0	20.03	19.88	19.74	0-2	0
	64QAM	1	0	19.96	20.01	19.83	0-2	0
		1	12	20.26	20.06	19.87	0-2	0
		1	24	20.10	19.99	19.73	0-2	0
		12	0	20.03	19.78	19.66	0-3	0
		12	6	20.10	19.91	19.70	0-3	0
		12	11	20.14	19.86	19.80	0-3	0
		25	0	20.08	19.89	19.67	0-3	0
	256QAM	1	0	18.26	17.96	17.63	0-5	2
		1	12	18.17	18.12	17.93	0-5	2
		1	24	18.15	17.95	17.91	0-5	2
		12	0	18.04	17.85	17.74	0-5	2
		12	6	18.14	18.00	17.81	0-5	2
		12	11	18.14	17.94	17.78	0-5	2
		25	0	18.16	17.99	17.76	0-5	2

LTE Band 66 _ 10 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132022 Ch. 1715 ㎒	132322 Ch. 1745 ㎒	132622 Ch. 1775 ㎒		
10 ㎒	QPSK	1	0	19.97	19.86	19.78	0	0
		1	24	20.02	19.92	19.73	0	0
		1	49	19.93	19.77	19.81	0	0
		25	0	20.08	19.73	19.69	0-1	0
		25	12	20.11	19.89	19.71	0-1	0
		25	24	20.04	19.87	19.75	0-1	0
		50	0	20.09	19.84	19.76	0-1	0
	16QAM	1	0	20.27	20.05	19.81	0-1	0
		1	24	20.31	20.18	19.83	0-1	0
		1	49	20.13	20.11	19.77	0-1	0
		25	0	20.07	19.85	19.72	0-2	0
		25	12	20.16	19.95	19.69	0-2	0
		25	24	20.15	19.86	19.79	0-2	0
		50	0	20.02	19.89	19.68	0-2	0
	64QAM	1	0	20.17	20.18	19.97	0-2	0
		1	24	20.35	19.94	19.80	0-2	0
		1	49	20.11	19.86	19.95	0-2	0
		25	0	20.09	19.83	19.80	0-3	0
		25	12	20.14	19.87	19.73	0-3	0
		25	24	20.10	19.81	19.80	0-3	0
		50	0	20.08	19.92	19.78	0-3	0
	256QAM	1	0	18.11	17.94	17.92	0-5	2
		1	24	18.34	18.06	18.06	0-5	2
		1	49	18.18	17.97	17.80	0-5	2
		25	0	18.13	17.86	17.75	0-5	2
		25	12	18.21	18.02	17.83	0-5	2
		25	24	18.15	18.04	17.81	0-5	2
		50	0	18.14	17.99	17.83	0-5	2

LTE Band 66 _ 15 ㎒ Bandwidth

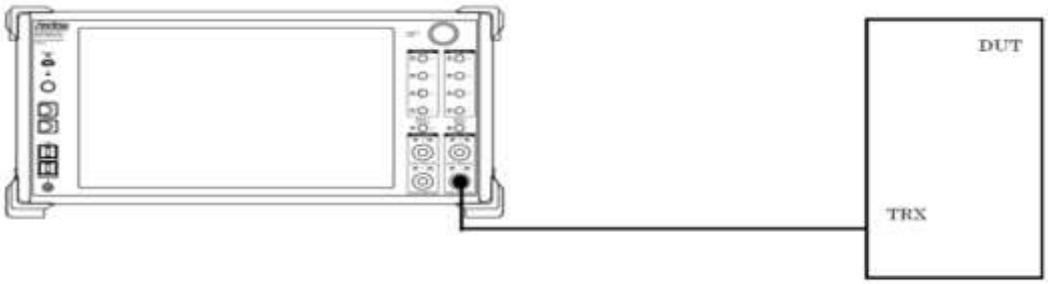
Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132047 Ch. 1717.5 ㎒	132322 Ch. 1745 ㎒	132597 Ch. 1772.5 ㎒		
15 ㎒	QPSK	1	0	19.97	19.78	19.87	0	0
		1	36	19.78	19.64	19.61	0	0
		1	74	19.93	19.83	19.58	0	0
		36	0	19.95	19.69	19.59	0-1	0
		36	18	19.93	19.68	19.55	0-1	0
		36	39	19.91	19.66	19.57	0-1	0
		75	0	19.87	19.76	19.61	0-1	0
	16QAM	1	0	19.92	19.87	19.85	0-1	0
		1	36	19.94	19.95	19.70	0-1	0
		1	74	20.12	19.84	19.77	0-1	0
		36	0	19.86	19.71	19.62	0-2	0
		36	18	19.92	19.72	19.59	0-2	0
		36	39	19.94	19.75	19.69	0-2	0
		75	0	19.98	19.71	19.51	0-2	0
	64QAM	1	0	20.01	19.67	19.78	0-2	0
		1	36	19.91	19.65	19.42	0-2	0
		1	74	19.96	19.69	19.56	0-2	0
		36	0	19.95	19.64	19.59	0-3	0
		36	18	19.93	19.50	19.59	0-3	0
		36	39	19.90	19.74	19.60	0-3	0
		75	0	19.86	19.75	19.51	0-3	0
	256QAM	1	0	17.96	17.80	17.85	0-5	2
		1	36	18.04	17.89	17.88	0-5	2
		1	74	18.14	17.88	17.81	0-5	2
		36	0	18.02	17.68	17.68	0-5	2
		36	18	17.96	17.79	17.60	0-5	2
		36	39	17.97	17.78	17.66	0-5	2
		75	0	18.01	17.88	17.67	0-5	2

LTE Band 66 _ 20 ㎒ Bandwidth

Bandwidth	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR Allowed Per 3GPP [dB]	MPR [dB]
				132072 Ch. 1720 ㎒	132322 Ch. 1745 ㎒	132572 Ch. 1770 ㎒		
20 ㎒	QPSK	1	0	19.98	19.65	19.60	0	0
		1	49	19.80	19.76	19.60	0	0
		1	99	19.81	19.68	19.47	0	0
		50	0	19.89	19.70	19.65	0-1	0
		50	25	19.94	19.76	19.55	0-1	0
		50	49	19.88	19.69	19.64	0-1	0
		100	0	19.92	19.68	19.60	0-1	0
	16QAM	1	0	20.21	19.81	19.85	0-1	0
		1	49	20.09	20.05	19.78	0-1	0
		1	99	20.11	20.00	19.61	0-1	0
		50	0	19.91	19.74	19.60	0-2	0
		50	25	19.95	19.81	19.48	0-2	0
		50	49	19.88	19.69	19.58	0-2	0
		100	0	19.96	19.73	19.60	0-2	0
	64QAM	1	0	20.10	19.82	19.77	0-2	0
		1	49	20.12	19.93	19.72	0-2	0
		1	99	19.72	19.80	19.69	0-2	0
		50	0	19.86	19.68	19.58	0-3	0
		50	25	19.88	19.74	19.55	0-3	0
		50	49	19.90	19.69	19.69	0-3	0
		100	0	19.86	19.62	19.52	0-3	0
	256QAM	1	0	18.08	18.09	17.77	0-5	2
		1	49	18.01	17.94	17.66	0-5	2
		1	99	18.20	17.81	17.99	0-5	2
		50	0	17.90	17.76	17.74	0-5	2
		50	25	17.98	17.84	17.72	0-5	2
		50	49	17.93	17.75	17.72	0-5	2
		100	0	17.94	17.83	17.64	0-5	2

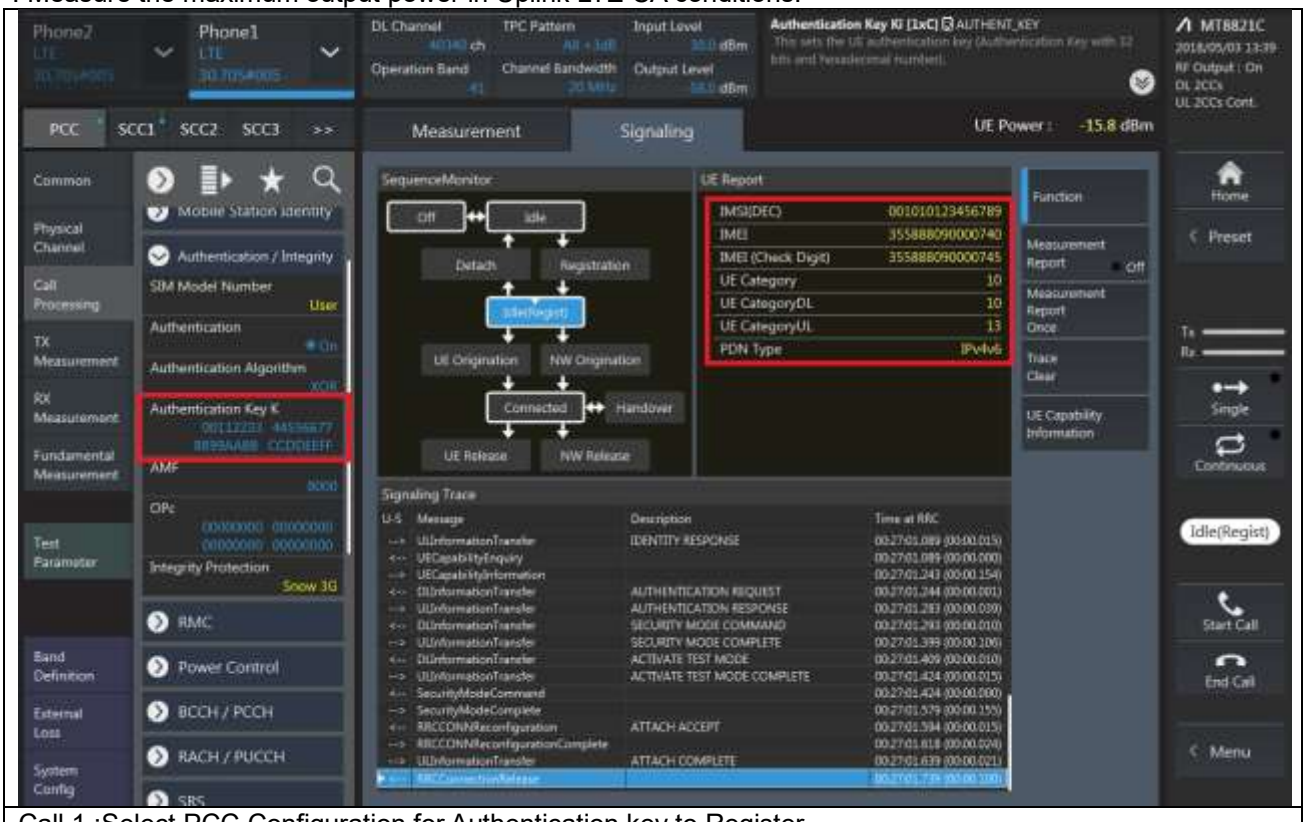
11.3.4 LTE Up-link Carrier Aggregation Conducted Powers Setup

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

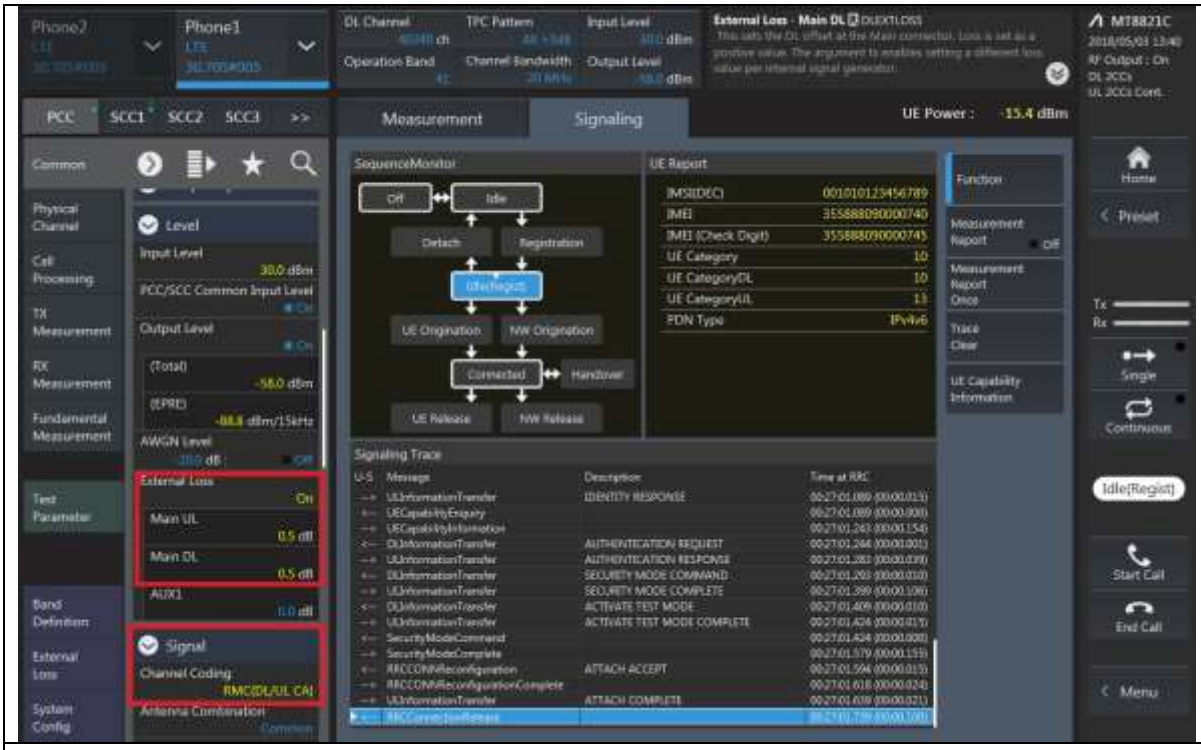


Power Measurement setup

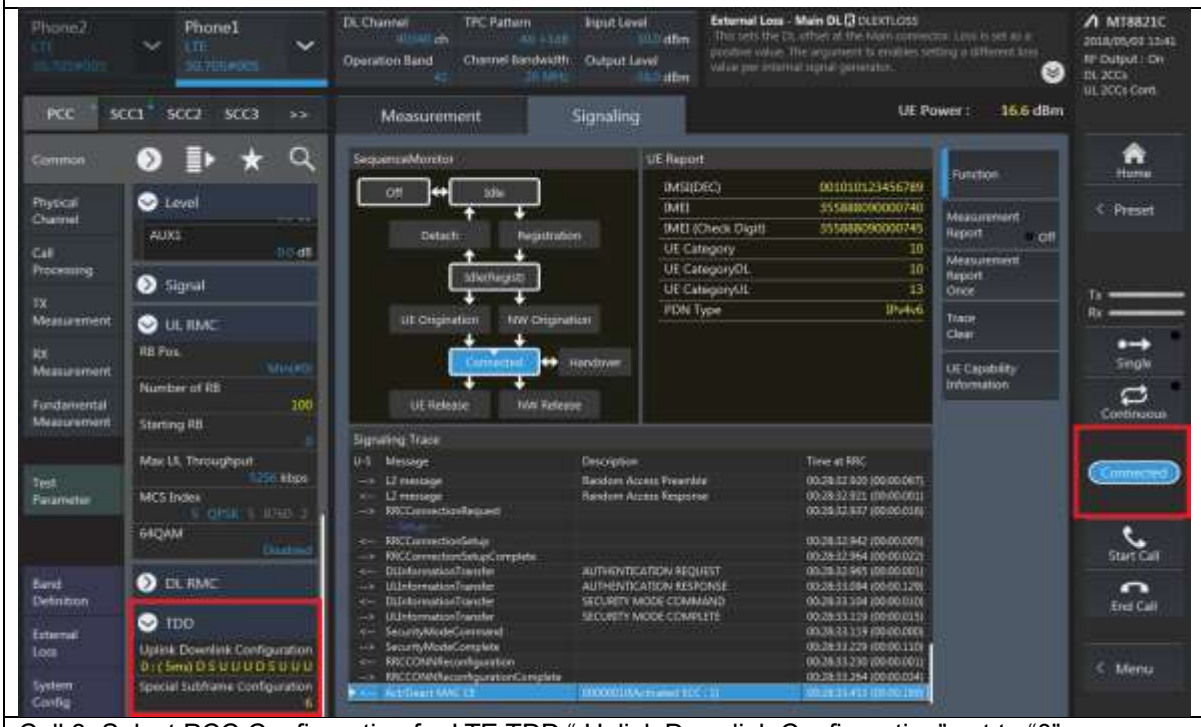
.TDD CA_41C Intra-Band Contiguous Call Connection
Set to MT8821C with following parameters:
-. Set up the call box for PCC Configuration for LTE Uplink CA
-. Set up the call box for SCC Configuration for LTE Uplink CA
-. Measure the maximum output power in Uplink LTE CA conditions.



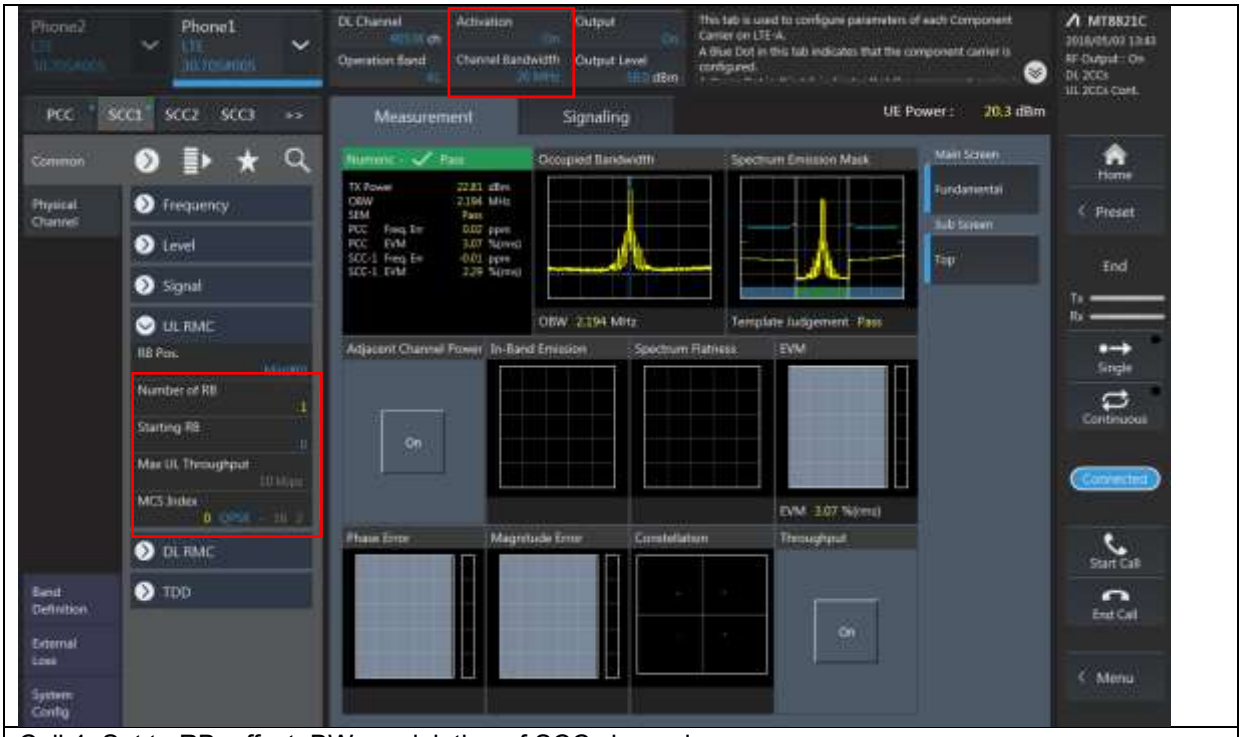
Call 1 :Select PCC Configuration for Authentication key to Register



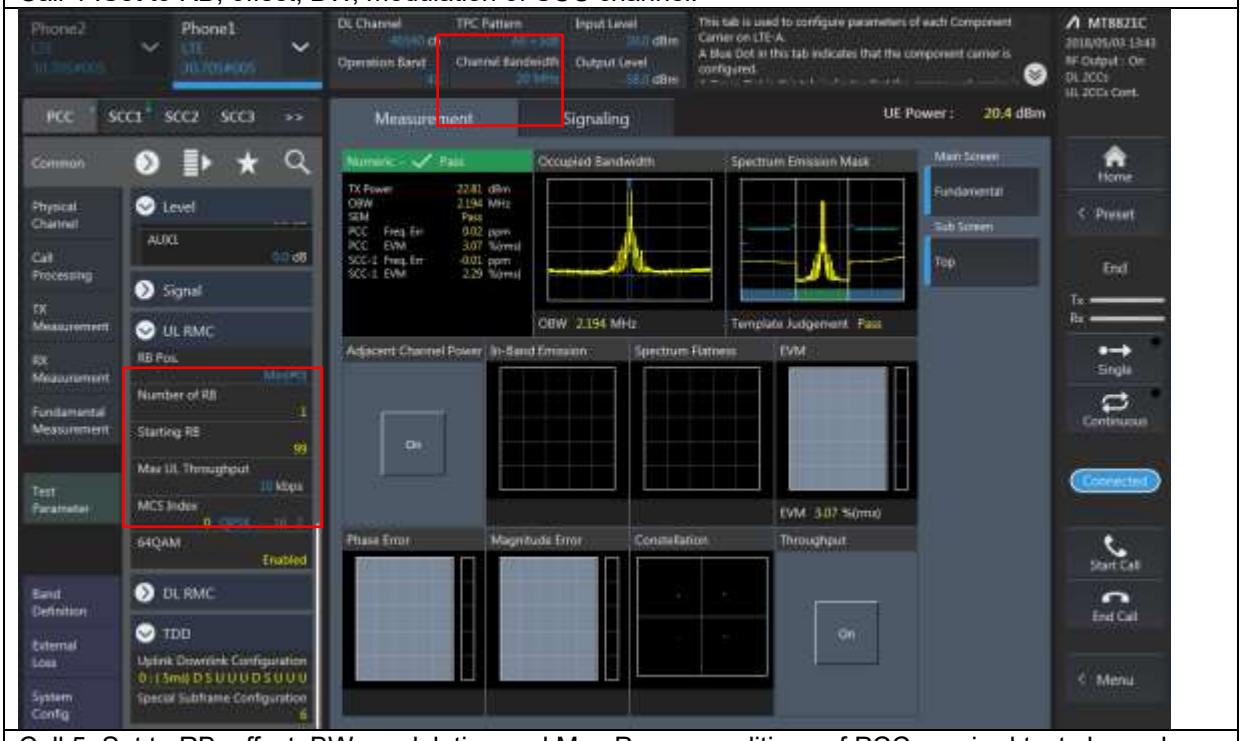
Call 2 :Select PCC Configuration for LTE UL CA and Cable loss



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



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



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

11.3.5 LTE Uplink CA Conducted Power

LTE Inter-Band Uplink Carrier Aggregation – Interim Procedures

LTE Inter-Band Carrier Aggregation

According to October 2018 TCB workshop, Uplink CA SAR Test Guidance as follows:

- Provide the single uplink SAR values you have obtained for the relevant SAR configurations and frequency bands that employ inter-band uplink carrier aggregation.
- If the single uplink 1-g SAR values for each band are both less than 0.8 W/kg and the algebraic summation of the 1-g SAR values are less than 1.45 W/kg no additional measurements need to be performed.
- If one of the single uplink 1-g SAR values is greater than 0.8 W/kg, instead of algebraically summing the 1-g SAR values, sum up the SAR distributions, similar to the enlarged zoom scan (volume scan) procedures found in FCC KDB Publication 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04.
- If the algebraic sum of the 1-g SAR values is > 1.45 W/kg additional measurements may have to be made.

Submit a KDB inquiry for additional guidance.

Maximum Output Power (Tune-up Limit) and SAR test exemption for LTE UL Carrier Aggregation

The maximum UL CA transmit power is reduced by 3dB from the standalone values for both carriers therefore SAR will be reduced accordingly.

The reported 1g SAR for any standalone LTE configuration does not exceed 1.2 W/kg. The worst case UL CA SAR per band will therefore be <0.6W/kg. As the SAR for each individual band is <0.6 W/kg and the algebraic summation cannot exceed 1.2 W/kg no further measurements are needed.

The combined SAR contribution cannot exceed the highest standalone SAR:

$(SAR_{LTE1}/2 + SAR_{LTE2}/2 \leq Max (SAR_{LTE1}, SAR_{LTE2})$

therefore simultaneous transmission analysis of UL-CA and WLAN/BT transmitters can be done using either of the standalone LTE SAR values alone.

Except 2A-4A Combination. This combination Operates Different ANT(2A(Main)-4A(Sub2)), therefore The maximum LTE 2A UL CA transmit power is reduced by 3dB from the LTE 25 Main ANT standalone values, 4A Sub2 ANT obtained SAR Results doing the Test.

[LTE Band 2A(PCC)-4A(SCC) ULCA Maximum Conducted Power]

[LTE Band 2(PCC) ULCA Conducted Power]

- Maximum Conducted Power

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR Allowed Per 3GPP[dB]	MPR [dB]
				18700 Ch. 1860 ㎒	18900 Ch. 1880 ㎒	19100 Ch. 1900 ㎒		
20 ㎒	QPSK	1	0	20.74	20.83	20.71	0	0
		1	99	20.77	20.89	20.78	0	0
		18	0	20.70	20.92	20.83	0	0
		18	82	20.78	20.95	20.84	0	0

[LTE Band 4(Upper, Sub Ant #2) ULCA Conducted Power]

- Maximum Conducted Power DSI = 0,1,3,4

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR Allowed Per 3GPP[dB]	MPR [dB]
				20175 Ch. 1732.5 ㎒		
20 ㎒	QPSK	1	0	20.13	0	0
		1	99	20.06	0	0
		18	0	20.16	0	0
		18	82	20.09	0	0

- Reduced Conducted Power DSI = 2

Bandwidth	Modulation	RB Size	RB Offset	Reduced Average Power [dBm]	MPR Allowed Per 3GPP[dB]	MPR [dB]
				20175 Ch. 1732.5 ㎒		
20 ㎒	QPSK	1	0	15.93	0	0
		1	99	15.85	0	0
		18	0	15.98	0	0
		18	82	15.93	0	0

[LTE Band 4A(PCC)-5A(SCC) ULCA Maximum Conducted Power]

LTE Band 4A(PCC) UL CA Conducted Power DSI = All

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 20175 Ch. 1732.5 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
20 MHz	QPSK	1	0	19.65	0	0
		1	99	19.52	0	0
		18	0	19.77	0	0
		18	82	19.71	0	0

LTE Band 5A(SCC) UL CA Conducted Power DSI = All

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 20525 Ch. 836.5 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 MHz	QPSK	1	0	20.56	0	0
		1	49	20.61	0	0
		9	0	20.58	0	0
		9	41	20.61	0	0

[LTE Band 4A(PCC)-12A(SCC) ULCA Maximum Conducted Power]

LTE Band 4A(PCC) UL CA Conducted Power DSI = All

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 20175 Ch. 1732.5 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
20 MHz	QPSK	1	0	20.80	0	0
		1	99	20.66	0	0
		18	0	20.81	0	0
		18	82	20.75	0	0

LTE Band 12A(SCC) UL CA Conducted Power DSI = All

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23095 Ch. 707.5 MHz	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 MHz	QPSK	1	0	21.49	0	0
		1	49	21.37	0	0
		9	0	21.49	0	0
		9	41	21.38	0	0

[LTE Band 5A(PCC)-66A(SCC) ULCA Maximum Conducted Power]

LTE Band 5A(PCC) UL CA Conducted Power DSI = All

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 20525 Ch. 836.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	20.29	0	0
		1	49	20.37	0	0
		9	0	20.32	0	0
		9	41	20.34	0	0

LTE Band 66A(SCC) UL CA Conducted Power DSI = All

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 132072 1720 ㎒	132322 1745 ㎒	132572 1770 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
20 ㎒	QPSK	1	0	19.34	19.08	19.42	0	0
		1	99	19.27	18.97	19.29	0	0
		18	0	19.35	19.18	19.09	0	0
		18	82	19.27	19.09	19.05	0	0

[LTE Band 12A(PCC)-66A(SCC) ULCA Maximum Conducted Power]

LTE Band 12A(PCC) UL CA Conducted Power DSI = All

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 23095 Ch. 707.5 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
10 ㎒	QPSK	1	0	21.10	0	0
		1	49	20.95	0	0
		9	0	21.07	0	0
		9	41	20.97	0	0

LTE Band 66A(SCC) UL CA Conducted Power DSI = All

Bandwidth	Modulation	RB Size	RB Offset	Max. Average Power [dBm] 132072 1720 ㎒	132322 1745 ㎒	132572 1770 ㎒	MPR Allowed Per 3GPP [dB]	MPR [dB]
20 ㎒	QPSK	1	0	19.42	19.27	19.11	0	0
		1	99	19.32	19.07	18.93	0	0
		18	0	19.37	19.22	19.15	0	0
		18	82	19.25	19.15	19.12	0	0

The single uplink 1g SAR values for each band are both less than 0.8 W/kg and the algebraic summation of the 1g SAR values are less than therefore, no additional measurements are required.

11.4 NR Maximum Output Power
11.4.1 NR Band Maximum Conducted Power
DSI = Pmax, 0, 2 PLimit Calculations – NR Body-Worn, Phablet Max, Head SAR
[NR Band n2 Conducted Power _ P_{max}, DSI = 0,2]

NR Band n2 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 ㎒	1880 ㎒	1907.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.23	22.41	22.47	0
				1	13	22.18	22.46	22.42	0
				1	23	22.16	22.40	22.38	0
				12	0	21.78	22.07	22.03	0.5
				12	7	22.22	22.53	22.49	0
				12	13	21.68	21.98	21.96	0.5
				25	0	21.69	22.03	22.02	0.5
			QPSK	1	1	22.15	22.35	22.40	0
				1	13	22.11	22.36	22.32	0
				1	23	22.08	22.29	22.28	0
				12	0	21.29	21.58	21.61	1
				12	7	22.21	22.48	22.53	0
				12	13	21.20	21.44	21.47	1
				25	0	21.23	21.54	21.54	1
			16QAM	1	1	21.44	21.75	21.86	1
			64QAM	1	1	19.64	19.86	19.86	2.5
			256QAM	1	1	17.52	17.76	17.79	4.5
		CP	QPSK	1	1	20.67	20.93	21.06	1.5

NR Band n2 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 ㎒	1880 ㎒	1905 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.26	22.46	22.46	0
				1	26	22.24	22.50	22.52	0
				1	50	22.25	22.43	22.44	0
				25	0	21.84	22.02	22.17	0.5
				25	14	22.28	22.57	22.61	0
				25	27	21.84	22.05	22.11	0.5
				50	0	21.76	22.04	22.12	0.5
			QPSK	1	1	22.18	22.41	22.40	0
				1	26	22.12	22.41	22.45	0
				1	50	22.18	22.35	22.39	0
				25	0	21.36	21.56	21.69	1
				25	14	22.28	22.57	22.63	0
				25	27	21.37	21.56	21.57	1
				50	0	21.30	21.59	21.61	1
			16QAM	1	1	21.62	21.85	21.85	1
			64QAM	1	1	19.69	19.88	19.90	2.5
			256QAM	1	1	17.58	17.76	17.79	4.5
		CP	QPSK	1	1	20.77	20.97	20.98	1.5

NR Band n2 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 ㎒	1880 ㎒	1902.5 ㎒	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.36	22.60	22.57	0
				1	40	22.41	22.65	22.55	0
				1	77	22.52	22.57	22.56	0
				36	0	21.93	22.27	22.18	0.5
				36	22	22.53	22.74	22.59	0
				36	43	22.12	22.18	22.21	0.5
				75	0	22.05	22.24	22.16	0.5
			QPSK	1	1	22.22	22.54	22.54	0
				1	40	22.34	22.54	22.45	0
				1	77	22.45	22.48	22.50	0
				36	0	21.43	21.75	21.67	1
				36	22	22.54	22.68	22.60	0
				36	43	21.58	21.71	21.74	1
				75	0	21.56	21.75	21.68	1
			16QAM	1	1	21.70	21.96	21.97	1
			64QAM	1	1	19.75	20.04	20.02	2.5
			256QAM	1	1	17.57	17.89	17.85	4.5
		CP	QPSK	1	1	20.85	21.12	21.10	1.5

NR Band n2 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 ㎒	1880 ㎒	1900 ㎒	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.25	22.64	22.51	0
				1	53	22.42	22.66	22.55	0
				1	104	22.53	22.50	22.56	0
				50	0	21.89	22.18	22.21	0.5
				50	28	22.53	22.73	22.64	0
				50	56	22.09	22.20	22.12	0.5
				100	0	22.04	22.27	22.19	0.5
			QPSK	1	1	22.17	22.56	22.45	0
				1	53	22.33	22.55	22.50	0
				1	104	22.47	22.45	22.49	0
				50	0	21.43	21.71	21.71	1
				50	28	22.49	22.75	22.69	0
				50	56	21.60	21.68	21.62	1
				100	0	21.50	21.79	21.74	1
			16QAM	1	1	21.60	21.92	21.91	1
			64QAM	1	1	19.63	20.01	19.93	2.5
			256QAM	1	1	17.57	17.89	17.82	4.5
		CP	QPSK	1	1	20.78	21.15	21.05	1.5

[NR Band n5 Conducted Power_ P_{max}, DSI = All]

NR Band n5_ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						165300	167300	169300	
						826.5 ㎒	836.5 ㎒	846.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	23.56	23.64	23.63	0
				1	13	23.79	23.52	23.55	0
				1	23	23.75	23.53	23.65	0
				12	0	23.39	23.16	23.15	0.5
				12	7	23.82	23.57	23.63	0
				12	13	23.32	23.07	23.27	0.5
				25	0	23.38	23.16	23.18	0.5
			QPSK	1	1	23.30	23.51	23.54	0
				1	13	23.66	23.44	23.44	0
				1	23	23.70	23.46	23.57	0
				12	0	22.87	22.65	22.67	1
				12	7	23.80	23.61	23.66	0
				12	13	22.80	22.56	22.78	1
				25	0	22.87	22.65	22.68	1
			16QAM	1	1	23.26	23.00	23.02	1
			64QAM	1	1	21.32	21.07	21.07	2.5
			256QAM	1	1	19.16	18.88	18.92	4.5
		CP	QPSK	1	1	22.46	22.18	22.17	1.5

NR Band n5_ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							167300		
							836.5 MHz		
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1		23.61		0
				1	26		23.51		0
				1	50		23.54		0
				25	0		23.18		0.5
				25	14		23.18		0
				25	27		22.87		0.5
				50	0		22.95		0.5
			QPSK	1	1		23.52		0
				1	26		23.44		0
				1	50		23.47		0
				25	0		22.73		1
				25	14		23.67		0
				25	27		22.62		1
				50	0		22.70		1
			16QAM	1	1		23.03		1
			64QAM	1	1		21.06		2.5
			256QAM	1	1		18.91		4.5
		CP	QPSK	1	1		22.15		1.5

NR Band n5_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							167300		
							836.5 ㎒		
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1		23.82		0
				1	40		23.71		0
				1	77		23.66		0
				36	0		23.36		0.5
				36	22		23.81		0
				36	43		23.19		0.5
				75	0		23.33		0.5
			QPSK	1	1		23.56		0
				1	40		23.56		0
				1	77		23.59		0
				36	0		22.89		1
				36	22		23.76		0
				36	43		22.68		1
				75	0		22.82		1
			16QAM	1	1		22.73		1
			64QAM	1	1		21.30		2.5
			256QAM	1	1		19.12		4.5
		CP	QPSK	1	1		22.42		1.5

NR Band n5_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							167300		
							836.5 ㎒		
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1		23.94		0
				1	53		23.72		0
				1	104		23.71		0
				50	0		23.37		0.5
				50	28		23.76		0
				50	56		23.27		0.5
				100	0		23.32		0.5
			QPSK	1	1		23.84		0
				1	53		23.60		0
				1	104		23.62		0
				50	0		22.90		1
				50	28		23.56		0
				50	56		22.75		1
				100	0		22.81		1
			16QAM	1	1		23.30		1
			64QAM	1	1		21.38		2.5
			256QAM	1	1		19.20		4.5
		CP	QPSK	1	1		22.46		1.5

[NR Band n25 Conducted Power_ P_{max}, DSI = 0,2]

NR Band n25 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						370500	376500	382500	
						1852.5 ㎒	1882.5 ㎒	1912.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.22	22.54	22.40	0
				1	13	22.31	22.56	22.46	0
				1	23	22.33	22.62	22.46	0
				12	0	21.86	22.15	22.01	0.5
				12	7	22.34	22.60	22.56	0
				12	13	21.90	22.13	22.11	0.5
				25	0	21.87	22.16	22.16	0.5
			QPSK	1	1	22.18	22.43	22.31	0
				1	13	22.22	22.49	22.40	0
				1	23	22.21	22.52	22.39	0
				12	0	21.40	21.69	21.52	1
				12	7	22.35	22.67	22.55	0
				12	13	21.37	21.67	21.63	1
				25	0	21.35	21.68	21.66	1
			16QAM	1	1	21.60	21.88	21.84	1
			64QAM	1	1	19.62	19.92	19.80	2.5
			256QAM	1	1	17.51	17.75	17.66	4.5
		CP	QPSK	1	1	20.77	21.00	20.95	1.5

NR Band n25 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371000	376500	382000	
						1855 ㎒	1882.5 ㎒	1910 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.24	22.51	22.47	0
				1	26	22.33	22.60	22.39	0
				1	50	22.39	22.50	22.47	0
				25	0	21.95	22.08	22.07	0.5
				25	14	22.40	22.69	22.54	0
				25	27	22.01	22.11	22.05	0.5
				50	0	21.94	22.15	22.10	0.5
			QPSK	1	1	22.15	22.41	22.40	0
				1	26	22.21	22.49	22.37	0
				1	50	22.27	22.42	22.40	0
				25	0	21.46	21.62	21.56	1
				25	14	22.42	22.69	22.61	0
				25	27	21.49	21.63	21.56	1
				50	0	21.39	21.70	21.58	1
			16QAM	1	1	21.62	21.83	21.80	1
			64QAM	1	1	19.65	19.95	19.88	2.5
			256QAM	1	1	17.48	17.74	17.70	4.5
		CP	QPSK	1	1	20.72	20.98	20.97	1.5

NR Band n25 _ 15 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						371500	376500	381500	
						1857.5 MHz	1882.5 MHz	1907.5 MHz	
15 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.42	22.72	22.63	0
				1	40	22.46	22.65	22.58	0
				1	77	22.57	22.65	22.50	0
				36	0	22.04	22.34	22.20	0.5
				36	22	22.57	22.79	22.75	0
				36	43	22.09	22.27	22.22	0.5
				75	0	22.02	22.29	22.22	0.5
			QPSK	1	1	22.27	22.60	22.58	0
				1	40	22.41	22.58	22.44	0
				1	77	22.50	22.57	22.42	0
				36	0	21.48	21.85	21.73	1
				36	22	22.59	22.81	22.70	0
				36	43	21.62	21.81	21.70	1
				75	0	21.50	21.83	21.71	1
			16QAM	1	1	21.73	22.02	21.99	1
			64QAM	1	1	19.82	20.14	20.05	2.5
			256QAM	1	1	17.64	17.87	17.89	4.5
		CP	QPSK	1	1	20.89	21.17	21.18	1.5

NR Band n25 _ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376500	381000	
						1860 MHz	1882.5 MHz	1905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.31	22.67	22.59	0
				1	53	22.48	22.65	22.58	0
				1	104	22.60	22.55	22.47	0
				50	0	22.00	22.30	22.25	0.5
				50	28	22.58	22.80	22.75	0
				50	56	22.16	22.26	22.24	0.5
				100	0	22.10	22.33	22.23	0.5
			QPSK	1	1	22.24	22.54	22.53	0
				1	53	22.34	22.57	22.51	0
				1	104	22.48	22.49	22.36	0
				50	0	21.51	21.83	21.82	1
				50	28	22.60	22.79	22.74	0
				50	56	21.70	21.75	21.70	1
				100	0	21.62	21.81	21.78	1
			16QAM	1	1	21.67	21.97	21.94	1
			64QAM	1	1	19.70	20.01	20.03	2.5
			256QAM	1	1	17.62	17.94	17.89	4.5
		CP	QPSK	1	1	20.81	21.17	21.11	1.5

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

NR Band n41 _10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						500202	509400	518598	527802	537000	
						2501.01 ㎒	2547 ㎒	2592.99 ㎒	2639.01 ㎒	2685 ㎒	
10 ㎒	30	DFT-s	pi/2 BPSK	1	1	17.98	18.25	18.46	19.05	19.10	0
				1	12	18.05	18.25	18.66	18.95	19.00	0
				1	22	18.01	18.55	18.70	18.98	18.98	0
				12	0	18.14	18.33	18.75	18.94	18.94	0
				12	6	18.29	18.56	18.89	19.07	19.12	0
				12	12	18.34	18.60	18.77	19.09	19.02	0
				24	0	18.23	18.41	18.89	19.22	19.21	0
			QPSK	1	1	18.00	18.22	18.69	19.05	18.99	0
				1	12	18.15	18.42	18.79	19.04	18.98	0
				1	22	18.18	18.54	18.77	19.05	19.12	0
				12	0	18.22	18.47	18.70	19.05	19.03	0
				12	6	18.17	18.54	18.80	19.14	19.16	0
				12	12	18.23	18.57	18.83	19.06	19.18	0
				24	0	18.30	18.52	18.78	19.07	19.08	0
			16QAM	1	1	17.83	18.01	18.24	18.84	18.99	0
			64QAM	1	1	18.00	18.16	18.67	19.00	19.07	0
			256QAM	1	1	17.38	17.79	18.07	18.44	18.68	0
		CP	QPSK	1	1	18.09	18.22	18.61	19.13	19.11	0

NR Band n41 _15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						500700	509664	518598	527562	536496	
						2503.5 ㎒	2548.32 ㎒	2592.99 ㎒	2637.81 ㎒	2682.48 ㎒	
15 ㎒	30	DFT-s	pi/2 BPSK	1	1	18.03	18.49	18.80	18.77	18.90	0
				1	18	18.08	18.34	18.85	18.60	18.71	0
				1	36	18.23	18.49	18.78	18.61	18.71	0
				18	0	18.25	18.52	18.88	18.78	18.84	0
				18	9	18.23	18.43	18.95	18.69	18.91	0
				18	18	18.13	18.48	18.85	18.77	18.70	0
				36	0	18.13	18.56	18.95	18.88	18.77	0
			QPSK	1	1	18.13	18.39	18.69	18.72	18.88	0
				1	18	18.16	18.29	18.71	18.67	18.62	0
				1	36	18.20	18.59	18.85	18.72	18.66	0
				18	0	18.24	18.62	18.99	18.76	18.90	0
				18	9	18.29	18.50	19.00	18.83	18.77	0
				18	18	18.13	18.67	18.92	18.80	18.75	0
				36	0	18.23	18.42	18.83	18.76	18.94	0
			16QAM	1	1	17.99	18.36	18.82	18.83	18.93	0
			64QAM	1	1	18.28	18.38	18.83	18.72	18.99	0
			256QAM	1	1	17.68	17.98	18.34	18.15	18.33	0
		CP	QPSK	1	1	18.12	18.35	18.73	18.65	18.84	0

NR Band n41 _20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						501204	509898	518598	527298	535998	
						2506.02 ㎒	2549.49 ㎒	2592.99 ㎒	2636.49 ㎒	2679.99 ㎒	
20 ㎒	30	DFT-s	pi/2 BPSK	1	1	18.11	18.39	18.75	18.70	18.81	0
				1	26	18.06	18.34	18.76	18.63	18.68	0
				1	49	18.16	18.47	18.78	18.68	18.71	0
				25	0	18.17	18.52	18.92	18.85	18.90	0
				25	13	18.18	18.50	18.89	18.79	18.83	0
				25	26	18.18	18.58	18.87	18.77	18.79	0
				50	0	18.23	18.52	18.91	18.83	18.85	0
			QPSK	1	1	18.13	18.42	18.79	18.73	18.86	0
				1	26	18.08	18.38	18.78	18.68	18.70	0
				1	49	18.19	18.50	18.81	18.71	18.70	0
				25	0	18.18	18.56	18.95	18.86	18.89	0
				25	13	18.23	18.54	18.91	18.83	18.85	0
				25	26	18.20	18.59	18.93	18.78	18.81	0
				50	0	18.23	18.51	18.91	18.83	18.85	0
			16QAM	1	1	17.95	18.42	18.83	18.77	18.94	0
			64QAM	1	1	18.22	18.35	18.86	18.66	18.98	0
			256QAM	1	1	17.64	17.88	18.25	18.22	18.39	0
		CP	QPSK	1	1	18.19	18.44	18.82	18.74	18.92	0

NR Band n41 _30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						502200	510402	518598	526800	534996	
						2511 ㎒	2552.01 ㎒	2592.99 ㎒	2634 ㎒	2674.98 ㎒	
30 ㎒	30	DFT-s	pi/2 BPSK	1	1	17.96	18.23	18.54	18.97	19.02	0
				1	39	18.04	18.32	18.69	18.97	18.99	0
				1	76	18.09	18.55	18.79	19.04	19.02	0
				36	0	18.12	18.38	18.71	19.01	19.02	0
				36	21	18.19	18.46	18.81	19.09	19.07	0
				36	42	18.26	18.58	18.80	19.11	19.09	0
				75	0	18.22	18.49	18.82	19.12	19.12	0
			QPSK	1	1	18.06	18.28	18.61	19.02	19.03	0
				1	39	18.10	18.39	18.73	19.04	19.03	0
				1	76	18.17	18.60	18.83	19.08	19.03	0
				36	0	18.13	18.43	18.73	19.03	19.04	0
				36	21	18.18	18.50	18.84	19.10	19.10	0
				36	42	18.28	18.60	18.85	19.14	19.11	0
				75	0	18.23	18.52	18.86	19.16	19.14	0
			16QAM	1	1	17.80	17.98	18.16	18.93	18.98	0
			64QAM	1	1	17.90	18.12	18.60	19.03	19.06	0
			256QAM	1	1	17.47	17.69	18.07	18.51	18.58	0
		CP	QPSK	1	1	18.08	18.22	18.59	19.06	19.10	0

NR Band n41 _40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						503202	513468		523734	534000	
						2516.01 ㎒	2567.34 ㎒		2618.67 ㎒	2670 ㎒	
40 ㎒	30	DFT-s	pi/2 BPSK	1	1	17.91	18.17		18.95	19.04	0
				1	53	17.93	18.38		18.88	18.91	0
				1	104	18.22	18.60		19.04	18.95	0
				50	0	18.02	18.43		18.94	18.98	0
				50	28	18.08	18.51		19.00	19.03	0
				50	56	18.23	18.62		19.01	19.00	0
				100	0	18.11	18.53		19.02	18.97	0
			QPSK	1	1	17.96	18.23		19.01	19.06	0
				1	53	17.98	18.43		18.91	18.93	0
				1	104	18.25	18.66		19.08	18.98	0
				50	0	18.05	18.47		18.94	18.99	0
				50	28	18.07	18.54		18.98	19.05	0
				50	56	18.26	18.64		19.01	19.04	0
				100	0	18.11	18.56		19.04	18.98	0
			16QAM	1	1	17.83	18.13		18.66	18.78	0
			64QAM	1	1	17.81	18.26		19.02	18.95	0
			256QAM	1	1	17.40	17.68		18.55	18.56	0
		CP	QPSK	1	1	17.82	18.09		18.96	19.09	0

NR Band n41 _50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						504204		518598		532998	
						2521.02 ㎒		2592.99 ㎒		2664.99 ㎒	
50 ㎒	30	DFT-s	pi/2 BPSK	1	1	18.17		18.45		18.75	0
				1	67	18.31		18.72		18.80	0
				1	131	18.54		18.68		18.79	0
				64	0	18.30		18.60		18.85	0
				64	35	18.41		18.80		18.88	0
				64	69	18.43		18.77		18.86	0
				128	0	18.41		18.72		18.91	0
			QPSK	1	1	18.24		18.51		18.78	0
				1	67	18.33		18.76		18.85	0
				1	131	18.56		18.75		18.87	0
				64	0	18.31		18.65		18.90	0
				64	35	18.44		18.87		18.94	0
				64	69	18.50		18.87		18.88	0
				128	0	18.44		18.73		18.93	0
			16QAM	1	1	18.15		18.33		18.83	0
			64QAM	1	1	18.19		18.72		18.91	0
			256QAM	1	1	17.68		18.17		18.39	0
		CP	QPSK	1	1	18.10		18.67		18.87	0

NR Band n41 _60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						505200		518598		531996		
						2526 ㎒		2592.99 ㎒		2659.98 ㎒		
60 ㎒	30	DFT-s	pi/2 BPSK	1	1	17.98		18.47		18.72		0
				1	81	18.07		18.85		18.67		0
				1	160	18.38		18.72		18.72		0
				81	0	18.15		18.73		18.85		0
				81	41	18.18		18.92		18.77		0
				81	81	18.34		18.90		18.83		0
				162	0	18.30		18.81		18.80		0
			QPSK	1	1	18.01		18.49		18.74		0
				1	81	18.10		18.88		18.73		0
				1	160	18.41		18.76		18.77		0
				81	0	18.20		18.78		18.86		0
				81	41	18.20		18.95		18.80		0
				81	81	18.34		18.91		18.85		0
				162	0	18.34		18.88		18.84		0
			16QAM	1	1	18.04		18.50		18.48		0
			64QAM	1	1	18.16		18.60		18.83		0
			256QAM	1	1	17.60		18.06		18.31		0
		CP	QPSK	1	1	18.06		18.56		18.74		0

NR Band n41 _70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						506208				530994	
						2531.04 MHz				2654.97 MHz	
70 ㎒	30	DFT-s	pi/2 BPSK	1	1	17.92				18.68	0
				1	81	18.15				18.77	0
				1	160	18.31				18.70	0
				81	0	18.14				18.89	0
				81	41	18.25				18.88	0
				81	81	18.28				18.90	0
				162	0	18.25				18.91	0
			QPSK	1	1	17.97				18.74	0
				1	81	18.17				18.85	0
				1	160	18.36				18.73	0
				81	0	18.17				18.88	0
				81	41	18.27				18.92	0
				81	81	18.31				18.92	0
				162	0	18.30				18.94	0
			16QAM	1	1	17.60				18.62	0
			64QAM	1	1	18.07				18.77	0
			256QAM	1	1	17.49				18.26	0
		CP	QPSK	1	1	17.99				18.71	0

NR Band n41 _80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						507204				529998	
						2536.02 ㎒				2649.99 ㎒	
80 ㎒	30	DFT-s	pi/2 BPSK	1	1	17.90				18.68	0
				1	109	18.06				18.70	0
				1	215	18.53				18.70	0
				108	0	18.05				18.84	0
				108	55	18.18				18.82	0
				108	109	18.33				18.82	0
				216	0	18.23				18.81	0
			QPSK	1	1	17.92				18.72	0
				1	109	18.09				18.73	0
				1	215	18.54				18.74	0
				108	0	18.07				18.87	0
				108	55	18.22				18.84	0
				108	109	18.38				18.83	0
				216	0	18.24				18.87	0
			16QAM	1	1	17.88				18.65	0
			64QAM	1	1	17.97				18.65	0
			256QAM	1	1	17.38				18.22	0
		CP	QPSK	1	1	17.96				18.69	0

NR Band n41 _90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						508200				528996	
						2541 ㎒				2644.98 ㎒	
90 ㎒	30	DFT-s	pi/2 BPSK	1	1	17.96				18.65	0
				1	123	18.18				18.85	0
				1	243	18.69				18.75	0
				120	0	18.21				18.85	0
				120	63	18.29				18.96	0
				120	125	18.49				18.91	0
				243	0	18.31				18.92	0
			QPSK	1	1	17.99				18.70	0
				1	123	18.20				18.87	0
				1	243	18.70				18.77	0
				120	0	18.23				18.88	0
				120	63	18.30				18.98	0
				120	125	18.50				18.91	0
				243	0	18.33				18.97	0
			16QAM	1	1	17.88				18.66	0
			64QAM	1	1	18.02				18.61	0
			256QAM	1	1	17.44				18.16	0
		CP	QPSK	1	1	17.92				18.70	0

NR Band n41 _100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
								518598			
								2592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			18.25			0
				1	137			18.72			0
				1	271			18.67			0
				135	0			18.58			0
				135	69			18.70			0
				135	138			18.80			0
				270	0			18.67			0
			QPSK	1	1			18.25			0
				1	137			18.74			0
				1	271			18.70			0
				135	0			18.60			0
				135	69			18.73			0
				135	138			18.82			0
				270	0			18.71			0
			16QAM	1	1			17.97			0
			64QAM	1	1			18.34			0
			256QAM	1	1			17.75			0
		CP	QPSK	1	1			18.23			0

[NR Band n66 Conducted Power _ P_{max}, DSI = 0,2 (Lower Ant)]

NR Band n66 _5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						342500	349000	355500	
						1712.5 ㎒	1745 ㎒	1777.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	21.99	22.46	22.83	0
				1	13	22.01	22.57	22.87	0
				1	23	22.04	22.54	23.01	0
				12	0	21.53	22.08	22.33	0.5
				12	7	22.03	22.58	22.87	0
				12	13	21.62	22.07	22.46	0.5
				25	0	21.58	22.07	22.38	0.5
			QPSK	1	1	22.01	22.46	22.92	0
				1	13	21.97	22.59	22.93	0
				1	23	22.05	22.55	23.00	0
				12	0	21.06	21.53	21.85	1
				12	7	22.08	22.61	22.87	0
				12	13	21.16	21.55	21.97	1
				25	0	21.03	21.57	21.92	1
			16QAM	1	1	21.06	21.50	21.85	1
			64QAM	1	1	19.46	20.16	20.58	2.5
			256QAM	1	1	17.19	17.36	17.78	4.5
		CP	QPSK	1	1	20.53	20.91	21.33	1.5

NR Band n66 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343000	349000	355000	
						1715 ㎒	1745 ㎒	1775 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.10	22.48	22.78	0
				1	26	22.21	22.59	22.92	0
				1	50	22.24	22.54	23.03	0
				25	0	21.66	21.97	22.39	0.5
				25	14	22.21	22.59	22.93	0
				25	27	21.65	22.07	22.39	0.5
				50	0	21.71	22.09	22.38	0.5
			QPSK	1	1	22.18	22.54	22.84	0
				1	26	22.25	22.61	22.96	0
				1	50	22.26	22.61	23.07	0
				25	0	21.12	21.51	21.91	1
				25	14	22.25	22.60	22.95	0
				25	27	21.22	21.57	21.97	1
				50	0	21.20	21.60	21.92	1
			16QAM	1	1	21.17	21.52	21.79	1
			64QAM	1	1	19.84	20.19	20.51	2.5
			256QAM	1	1	17.22	17.35	17.67	4.5
		CP	QPSK	1	1	20.61	20.95	21.26	1.5

NR Band n66 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343500	349000	354500	
						1717.5 ㎒	1745 ㎒	1772.5 ㎒	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.19	22.75	23.00	0
				1	40	22.17	23.18	23.37	0
				1	77	22.38	22.98	23.28	0
				36	0	21.72	22.54	22.82	0.5
				36	22	22.23	23.11	23.42	0
				36	43	21.79	22.64	22.92	0.5
				75	0	21.74	22.54	22.85	0.5
			QPSK	1	1	22.23	22.87	23.06	0
				1	40	22.21	23.26	23.41	0
				1	77	22.44	23.04	23.35	0
				36	0	21.18	22.11	22.38	1
				36	22	22.27	23.13	23.43	0
				36	43	21.32	22.18	22.49	1
				75	0	21.28	22.09	22.42	1
			16QAM	1	1	21.20	21.77	22.00	1
			64QAM	1	1	19.88	20.46	20.77	2.5
			256QAM	1	1	17.26	17.62	17.87	4.5
		CP	QPSK	1	1	20.68	21.25	21.53	1.5

NR Band n66 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						344000	349000	354000	
						1720 ㎒	1745 ㎒	1770 ㎒	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	22.17	22.50	22.84	0
				1	53	22.23	23.17	23.37	0
				1	104	22.45	22.83	23.08	0
				50	0	21.76	22.41	22.71	0.5
				50	28	22.29	23.14	23.47	0
				50	56	21.88	22.54	22.87	0.5
				100	0	21.83	22.52	22.82	0.5
			QPSK	1	1	22.27	22.56	22.94	0
				1	53	22.25	23.23	23.48	0
				1	104	22.52	22.90	23.17	0
				50	0	21.22	21.91	22.18	1
				50	28	22.32	23.12	23.48	0
				50	56	21.41	22.11	22.46	1
				100	0	21.33	22.05	22.36	1
			16QAM	1	1	21.19	21.48	21.86	1
			64QAM	1	1	19.89	20.21	20.62	2.5
			256QAM	1	1	17.34	17.35	17.69	4.5
		CP	QPSK	1	1	20.68	21.00	21.39	1.5

NR Band n66 _ 30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
							1745 ㎒		
30 ㎒	15	DFT-s	pi/2 BPSK	1	1		22.45		0
				1	80		22.78		0
				1	158		22.80		0
				80	0		22.16		0.5
				80	40		22.74		0
				80	80		22.35		0.5
				160	0		22.21		0.5
			QPSK	1	1		22.48		0
				1	80		22.82		0
				1	158		22.83		0
				80	0		21.68		1
				80	40		22.72		0
				80	80		21.86		1
				160	0		21.74		1
			16QAM	1	1		21.45		1
			64QAM	1	1		20.17		2.5
			256QAM	1	1		17.32		4.5
		CP	QPSK	1	1		20.96		1.5

NR Band n66 _ 40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
							1745 ㎒		
40 ㎒	15	DFT-s	pi/2 BPSK	1	1		22.35		0
				1	108		22.76		0
				1	214		22.83		0
				108	0		22.03		0.5
				108	54		22.74		0
				108	108		22.43		0.5
				216	0		22.24		0.5
			QPSK	1	1		22.92		0
				1	108		22.83		0
				1	214		22.75		0
				108	0		21.59		1
				108	54		22.77		0
				108	108		21.96		1
				216	0		21.79		1
			16QAM	1	1		21.38		1
			64QAM	1	1		20.09		2.5
			256QAM	1	1		17.34		4.5
		CP	QPSK	1	1		20.86		1.5

[NR Band n66 Conducted Power _ DSI = 0,1,3,4 (ENDC, Upper Ant.]

NR Band n66 _5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						342500	349000	355500	
						1712.5 ㎒	1745 ㎒	1777.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.06	19.97	19.87	0
				1	13	20.03	19.89	19.91	0
				1	23	19.90	19.97	20.01	0
				12	0	20.02	19.86	19.97	0
				12	7	20.10	19.99	19.92	0
				12	13	19.97	19.83	20.06	0
				25	0	20.16	19.86	20.03	0
			QPSK	1	1	20.04	19.89	19.95	0
				1	13	20.06	19.87	19.95	0
				1	23	20.01	19.84	20.06	0
				12	0	20.09	19.86	19.90	0
				12	7	20.11	19.96	20.11	0
				12	13	19.99	19.93	20.01	0
				25	0	20.11	19.96	20.02	0
			16QAM	1	1	20.11	19.87	19.87	0
			64QAM	1	1	20.08	20.15	20.07	0
			256QAM	1	1	17.90	17.82	17.78	1.5
		CP	QPSK	1	1	19.99	19.87	19.93	0

NR Band n66 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343000	349000	355000	
						1715 ㎒	1745 ㎒	1775 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.05	19.85	20.00	0
				1	26	20.87	20.56	20.06	0
				1	50	20.21	20.03	20.07	0
				25	0	20.54	20.46	19.96	0
				25	14	20.63	20.41	20.11	0
				25	27	20.41	20.44	19.98	0
				50	0	20.52	20.32	20.10	0
			QPSK	1	1	20.16	20.11	20.11	0
				1	26	20.85	20.61	20.05	0
				1	50	20.26	20.04	19.97	0
				25	0	20.49	20.28	20.04	0
				25	14	20.74	20.53	19.90	0
				25	27	20.44	20.47	20.14	0
				50	0	20.52	20.38	19.95	0
			16QAM	1	1	20.00	20.10	20.10	0
			64QAM	1	1	20.26	20.13	20.11	0
			256QAM	1	1	17.97	17.92	17.93	1.5
		CP	QPSK	1	1	20.12	20.07	20.02	0

NR Band n66 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						343500	349000	354500	
						1717.5 ㎒	1745 ㎒	1772.5 ㎒	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.19	20.00	20.10	0
				1	40	20.09	20.02	19.95	0
				1	77	20.22	20.02	19.98	0
				36	0	20.17	19.95	20.09	0
				36	22	20.09	19.97	20.03	0
				36	43	20.16	20.11	20.17	0
				75	0	20.27	20.01	20.07	0
			QPSK	1	1	20.26	20.07	20.04	0
				1	40	20.17	19.98	20.10	0
				1	77	20.26	20.17	20.17	0
				36	0	20.13	20.07	20.15	0
				36	22	20.17	20.01	19.97	0
				36	43	20.12	20.13	20.12	0
				75	0	20.17	20.06	20.00	0
			16QAM	1	1	20.22	19.94	19.95	0
			64QAM	1	1	20.31	20.19	20.34	0
			256QAM	1	1	18.04	17.89	17.78	1.5
		CP	QPSK	1	1	20.25	20.10	20.09	0

NR Band n66 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						344000	349000	354000	
						1720 ㎒	1745 ㎒	1770 ㎒	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	20.30	20.00	20.04	0
				1	53	20.10	20.01	20.05	0
				1	104	20.12	20.11	19.98	0
				50	0	20.09	20.07	20.14	0
				50	28	20.16	20.18	20.10	0
				50	56	20.22	20.08	20.18	0
				100	0	20.16	20.09	20.06	0
			QPSK	1	1	20.22	20.14	20.02	0
				1	53	20.20	19.93	20.09	0
				1	104	20.10	20.12	20.12	0
				50	0	20.24	20.16	20.02	0
				50	28	20.22	20.00	20.06	0
				50	56	20.15	20.01	20.03	0
				100	0	20.28	19.98	20.11	0
			16QAM	1	1	20.28	19.99	20.13	0
			64QAM	1	1	20.38	20.14	20.38	0
			256QAM	1	1	17.89	17.76	17.87	1.5
		CP	QPSK	1	1	20.26	20.14	20.14	0

NR Band n66 _ 30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
							1745 ㎒		
30 ㎒	15	DFT-s	pi/2 BPSK	1	1		20.28		0
				1	80		20.05		0
				1	158		20.16		0
				80	0		20.21		0
				80	40		20.23		0
				80	80		20.26		0
				160	0		20.18		0
			QPSK	1	1		20.28		0
				1	80		20.23		0
				1	158		20.09		0
				80	0		20.31		0
				80	40		20.21		0
				80	80		20.23		0
				160	0		20.13		0
			16QAM	1	1		20.23		0
			64QAM	1	1		20.47		0
			256QAM	1	1		18.14		1.5
		CP	QPSK	1	1		20.34		0

NR Band n66 _ 40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
							349000		
							1745 ㎒		
40 ㎒	15	DFT-s	pi/2 BPSK	1	1		20.10		0
				1	108		20.07		0
				1	214		20.01		0
				108	0		20.17		0
				108	54		20.15		0
				108	108		20.25		0
				216	0		20.15		0
			QPSK	1	1		20.22		0
				1	108		20.19		0
				1	214		20.13		0
				108	0		20.21		0
				108	54		20.31		0
				108	108		20.23		0
				216	0		20.30		0
			16QAM	1	1		20.29		0
			64QAM	1	1		20.40		0
			256QAM	1	1		17.97		1.5
		CP	QPSK	1	1		20.30		0

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

NR Band n77_ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647000	650600	654200	657800	661400	665000	
						3705 ㎒	3759 ㎒	3813 ㎒	3867 ㎒	3921 ㎒	3975 ㎒	
10 ㎒	30	DFT-s	pi/2 BPSK	1	1	17.71	18.05	18.27	17.97	17.56	17.58	0
				1	12	17.78	18.08	18.28	17.98	17.56	17.58	0
				1	22	17.76	18.06	18.17	17.85	17.51	17.65	0
				12	0	17.83	18.14	18.36	18.06	17.66	17.68	0
				12	6	17.84	18.13	18.35	18.04	17.63	17.67	0
				12	12	17.83	18.14	18.28	17.99	17.61	17.71	0
				24	0	17.85	18.14	18.32	18.02	17.56	17.70	0
			QPSK	1	1	17.75	18.05	18.29	18.00	17.57	17.57	0
				1	12	17.79	18.11	18.27	18.00	17.59	17.59	0
				1	22	17.79	18.05	18.18	17.90	17.51	17.65	0
				12	0	17.83	18.17	18.34	18.05	17.64	17.69	0
				12	6	17.84	18.13	18.33	18.05	17.63	17.67	0
				12	12	17.86	18.13	18.28	18.05	17.65	17.72	0
				24	0	17.85	18.14	18.33	18.01	17.62	17.72	0
			16QAM	1	1	17.83	17.88	18.33	18.00	17.35	17.36	0
			64QAM	1	1	17.77	18.19	18.43	18.08	17.64	17.61	0
			256QAM	1	1	17.32	17.60	17.80	17.48	16.99	16.99	0
		CP	QPSK	1	1	17.74	18.04	18.30	18.01	17.52	17.49	0

NR Band n77_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647168	650700	654232	657766	661300	664832	
						3707.52 ㎒	3760.5 ㎒	3813.49 ㎒	3866.5 ㎒	3919.5 ㎒	3972.48 ㎒	
15 ㎒	30	DFT-s	pi/2 BPSK	1	1	17.99	18.19	18.51	18.26	17.83	17.85	0
				1	18	17.90	18.23	18.48	18.16	17.72	17.85	0
				1	36	17.98	18.34	18.53	18.23	17.84	17.90	0
				18	0	18.03	18.27	18.50	18.33	17.85	17.93	0
				18	9	18.01	18.28	18.57	18.26	17.83	17.89	0
				18	18	18.07	18.37	18.57	18.24	17.85	17.96	0
				36	0	18.04	18.34	18.63	18.29	17.88	17.92	0
			QPSK	1	1	18.02	18.21	18.50	18.32	17.84	17.91	0
				1	18	17.97	18.19	18.51	18.17	17.77	17.87	0
				1	36	18.03	18.30	18.50	18.26	17.82	17.92	0
				18	0	18.01	18.22	18.52	18.32	17.89	17.89	0
				18	9	18.00	18.30	18.58	18.25	17.85	17.91	0
				18	18	18.09	18.33	18.54	18.28	17.86	17.92	0
				36	0	18.03	18.34	18.58	18.28	17.88	17.91	0
			16QAM	1	1	17.76	18.13	18.29	18.36	17.83	17.77	0
			64QAM	1	1	18.02	18.26	18.57	18.43	17.87	17.89	0
			256QAM	1	1	17.49	17.70	18.00	17.78	17.27	17.26	0
		CP	QPSK	1	1	18.00	18.14	18.49	18.25	17.78	17.74	0

NR Band n77_ 20 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647334	650800	654266	657734	661200	664666	
						3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz	
20 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	18.07	18.20	18.52	18.26	17.81	17.84	0
				1	26	18.01	18.25	18.50	18.19	17.74	17.79	0
				1	49	18.06	18.29	18.44	18.18	17.80	17.93	0
				25	0	18.12	18.41	18.55	18.33	17.88	17.92	0
				25	13	18.09	18.37	18.60	18.29	17.84	17.88	0
				25	26	18.14	18.41	18.57	18.31	17.87	17.97	0
				50	0	18.12	18.40	18.61	18.31	17.85	17.94	0
			QPSK	1	1	18.07	18.23	18.52	18.28	17.80	17.86	0
				1	26	18.04	18.27	18.52	18.20	17.72	17.86	0
				1	49	18.06	18.28	18.48	18.22	17.77	17.92	0
				25	0	18.10	18.42	18.58	18.33	17.86	17.89	0
				25	13	18.12	18.37	18.62	18.30	17.87	17.89	0
				25	26	18.14	18.39	18.60	18.27	17.84	17.90	0
				50	0	18.11	18.39	18.63	18.32	17.88	17.87	0
			16QAM	1	1	18.10	18.25	18.54	18.40	17.63	17.62	0
			64QAM	1	1	18.18	18.34	18.62	18.40	17.92	18.00	0
			256QAM	1	1	17.45	17.62	17.96	17.67	17.23	17.05	0
		CP	QPSK	1	1	17.98	18.17	18.48	18.29	17.77	17.72	0

NR Band n77_ 30 MHz Bandwidth

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						647668	651000	654334	657666	661000	664332	
						3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz	
30 MHz	30	DFT-s	pi/2 BPSK	1	1	17.50	17.60	18.31	18.48	17.86	17.82	0
				1	39	17.54	17.80	18.31	18.30	17.69	17.88	0
				1	76	17.64	17.90	18.41	18.14	17.70	17.85	0
				36	0	17.61	17.82	18.37	18.47	17.91	17.91	0
				36	21	17.62	17.93	18.42	18.37	17.73	17.90	0
				36	42	17.76	17.99	18.39	18.30	17.73	17.92	0
				75	0	17.66	17.84	18.44	18.38	17.80	17.94	0
			QPSK	1	1	17.58	17.64	18.30	18.48	17.90	17.79	0
				1	39	17.59	17.80	18.31	18.32	17.71	17.86	0
				1	76	17.72	17.89	18.37	18.18	17.73	17.85	0
				36	0	17.65	17.79	18.38	18.50	17.94	17.91	0
				36	21	17.65	17.92	18.41	18.38	17.75	17.92	0
				36	42	17.80	17.93	18.41	18.29	17.77	17.86	0
				75	0	17.68	17.84	18.43	18.43	17.79	17.91	0
			16QAM	1	1	17.38	17.43	18.34	18.39	17.83	17.89	0
			64QAM	1	1	17.64	17.76	18.40	18.51	17.91	17.87	0
			256QAM	1	1	17.00	17.06	17.76	17.89	17.28	17.16	0
		CP	QPSK	1	1	17.65	17.63	18.30	18.49	17.86	17.72	0

NR Band n77_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						648000	651200	654400	657600	660800	664000	
						3720 ㎒	3768 ㎒	3816 ㎒	3864 ㎒	3912 ㎒	3960 ㎒	
40 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	17.80	17.78	18.41	18.64	18.15	17.77	0
				1	53	17.86	17.99	18.36	18.28	17.78	17.83	0
				1	104	17.86	17.97	18.40	18.03	17.73	17.98	0
				50	0	17.85	17.91	18.45	18.57	18.08	17.81	0
				50	28	17.95	18.06	18.43	18.41	17.86	17.89	0
				50	56	17.92	18.06	18.47	18.31	17.82	17.95	0
				100	0	17.85	18.03	18.47	18.42	17.91	17.90	0
			QPSK	1	1	17.84	17.84	18.43	18.67	18.21	17.82	0
				1	53	17.85	18.01	18.38	18.29	17.85	17.83	0
				1	104	17.91	17.97	18.45	18.04	17.75	17.98	0
				50	0	17.83	17.91	18.44	18.56	18.11	17.76	0
				50	28	17.93	18.04	18.48	18.42	17.90	17.87	0
				50	56	17.94	18.05	18.51	18.31	17.88	17.93	0
				100	0	17.84	18.06	18.51	18.42	17.94	17.88	0
			16QAM	1	1	17.85	17.82	18.33	18.67	17.95	17.81	0
			64QAM	1	1	17.89	17.89	18.43	18.75	18.24	17.89	0
			256QAM	1	1	17.19	17.11	17.80	18.06	17.53	17.16	0
		CP	QPSK	1	1	17.70	17.65	18.33	18.59	18.03	17.68	0

NR Band n77_ 50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						648334	652166	656000		659834	663666	
						3725.01 ㎒	3782.49 ㎒	3840 ㎒		3897.51 ㎒	3954.99 ㎒	
50 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	17.84	18.16	18.29		18.04	17.71	0
				1	67	17.92	18.27	18.26		17.72	17.64	0
				1	131	17.87	18.24	18.10		17.63	17.76	0
				64	0	17.87	18.26	18.40		18.04	17.77	0
				64	35	17.97	18.35	18.39		17.83	17.73	0
				64	69	17.98	18.36	18.32		17.81	17.72	0
				128	0	17.95	18.30	18.38		17.87	17.73	0
			QPSK	1	1	17.85	18.14	18.32		18.03	17.75	0
				1	67	17.94	18.29	18.29		17.76	17.66	0
				1	131	17.91	18.30	18.12		17.63	17.77	0
				64	0	17.87	18.31	18.40		18.07	17.74	0
				64	35	17.99	18.36	18.43		17.90	17.74	0
				64	69	17.99	18.37	18.36		17.78	17.66	0
				128	0	17.98	18.30	18.37		17.88	17.70	0
			16QAM	1	1	17.85	18.20	18.07		18.09	17.54	0
			64QAM	1	1	17.86	18.17	18.39		18.16	17.82	0
			256QAM	1	1	17.21	17.59	17.70		17.47	17.15	0
		CP	QPSK	1	1	17.70	18.08	17.95		17.72	17.35	0

NR Band n77_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						648668	653556			658444	663332	
						3730.02 ㎒	3803.34 ㎒			3876.66 ㎒	3949.98 ㎒	
60 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	17.87	18.23			18.30	17.52	0
				1	81	17.92	18.31			17.95	17.42	0
				1	160	17.90	18.19			17.73	17.49	0
				81	0	17.95	18.38			18.15	17.63	0
				81	41	18.03	18.36			18.07	17.51	0
				81	81	17.98	18.37			17.93	17.59	0
				162	0	18.02	18.33			18.06	17.60	0
			QPSK	1	1	17.93	18.24			18.31	17.59	0
				1	81	17.94	18.30			17.99	17.48	0
				1	160	17.90	18.24			17.76	17.53	0
				81	0	17.96	18.34			18.14	17.67	0
				81	41	18.01	18.39			18.05	17.52	0
				81	81	18.01	18.40			17.94	17.60	0
				162	0	18.04	18.35			18.10	17.57	0
			16QAM	1	1	17.91	18.29			18.36	17.36	0
			64QAM	1	1	17.97	18.31			18.41	17.64	0
			256QAM	1	1	17.29	17.66			17.72	16.95	0
		CP	QPSK	1	1	17.63	17.95			17.98	17.28	0

NR Band n77_70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649000	654336			658334	663000	
						3750 ㎒	3804.99 ㎒			3875.01 ㎒	3945 ㎒	
70 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	17.75	18.11			18.09	17.48	0
				1	95	17.84	18.19			17.83	17.23	0
				1	187	17.87	18.02			17.58	17.37	0
				90	0	17.78	18.27			18.12	17.37	0
				90	50	17.90	18.27			17.89	17.41	0
				90	99	17.93	18.22			17.67	17.42	0
				180	0	17.93	18.24			17.91	17.45	0
			QPSK	1	1	17.78	18.16			18.10	17.50	0
				1	95	17.88	18.24			17.88	17.30	0
				1	187	17.90	18.02			17.61	17.43	0
				90	0	17.77	18.27			18.13	17.40	0
				90	50	17.91	18.25			17.94	17.46	0
				90	99	17.94	18.23			17.75	17.43	0
				180	0	17.91	18.26			17.94	17.50	0
			16QAM	1	1	17.54	18.18			18.17	17.27	0
			64QAM	1	1	17.82	18.29			18.19	17.60	0
			256QAM	1	1	17.20	17.56			17.54	16.95	0
		CP	QPSK	1	1	17.46	17.83			17.79	17.23	0

NR Band n77_ 80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649334		656000		662666		
						3740.01 ㎒		3840 ㎒		3939.99 ㎒		
80 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	17.82		17.73		17.42		0
				1	109	17.92		17.83		17.20		0
				1	215	17.82		17.46		17.09		0
				108	0	17.97		17.94		17.31		0
				108	55	17.99		17.92		17.26		0
				108	109	17.94		17.76		17.16		0
				216	0	17.97		17.91		17.27		0
			QPSK	1	1	17.80		17.87		17.43		0
				1	109	17.94		17.92		17.28		0
				1	215	17.80		17.57		17.14		0
				108	0	18.00		18.06		17.40		0
				108	55	17.99		17.98		17.32		0
				108	109	17.94		17.80		17.19		0
				216	0	17.96		18.00		17.36		0
			16QAM	1	1	17.66		17.71		17.50		0
			64QAM	1	1	17.95		18.02		17.59		0
			256QAM	1	1	17.24		17.55		17.04		0
		CP	QPSK	1	1	17.56		17.87		17.34		0

NR Band n77_ 90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						649668		656000		662332		
						3745.02 ㎒		3840 ㎒		3934.98 ㎒		
90 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	17.57		17.96		17.51		0
				1	123	17.68		18.00		17.35		0
				1	243	17.76		17.65		17.12		0
				120	0	17.73		18.06		17.58		0
				120	63	17.73		18.10		17.45		0
				120	125	17.74		17.86		17.21		0
				243	0	17.73		17.97		17.44		0
			QPSK	1	1	17.58		17.99		17.62		0
				1	123	17.67		18.08		17.38		0
				1	243	17.80		17.70		17.10		0
				120	0	17.74		18.11		17.66		0
				120	63	17.74		18.05		17.44		0
				120	125	17.75		17.90		17.25		0
				243	0	17.77		17.97		17.44		0
			16QAM	1	1	17.41		17.84		17.40		0
			64QAM	1	1	17.73		18.07		17.65		0
			256QAM	1	1	17.14		17.58		17.17		0
		CP	QPSK	1	1	17.48		17.86		17.44		0

NR Band n77_ 100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)						MPR [dB]
						650000				662000		
						3750 ㎒				3930 ㎒		
100 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	17.63				17.65		0
				1	137	17.76				17.28		0
				1	271	17.71				17.22		0
				135	0	17.81				17.52		0
				135	69	17.77				17.36		0
				135	138	17.78				17.22		0
				270	0	17.80				17.42		0
			QPSK	1	1	17.66				17.67		0
				1	137	17.81				17.34		0
				1	271	17.73				17.33		0
				135	0	17.83				17.58		0
				135	69	17.82				17.38		0
				135	138	17.76				17.23		0
				270	0	17.79				17.43		0
			16QAM	1	1	17.47				17.55		0
			64QAM	1	1	17.78				17.80		0
			256QAM	1	1	17.25				17.20		0
		CP	QPSK	1	1	17.53				17.53		0

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

NR Band n77_10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630334	633334	636332	
						3445.01 ㎒	3500.01 ㎒	3544.98 ㎒	
10 ㎒	30	DFT-s	pi/2 BPSK	1	1	18.16	18.34	18.57	0
				1	12	18.14	18.33	18.62	0
				1	22	18.16	18.33	18.66	0
				12	0	18.23	18.40	18.69	0
				12	6	18.20	18.40	18.71	0
				12	12	18.23	18.43	18.69	0
				24	0	18.24	18.38	18.68	0
			QPSK	1	1	18.14	18.34	18.58	0
				1	12	18.15	18.30	18.64	0
				1	22	18.17	18.35	18.67	0
				12	0	18.25	18.40	18.67	0
				12	6	18.23	18.40	18.71	0
				12	12	18.26	18.41	18.72	0
				24	0	18.25	18.41	18.72	0
			16QAM	1	1	18.19	18.38	18.68	0
			64QAM	1	1	18.26	18.41	18.70	0
			256QAM	1	1	17.79	18.02	18.29	0
		CP	QPSK	1	1	18.08	18.27	18.54	0

NR Band n77_15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630500	633334	636166	
						3457.5 ㎒	3500.01 ㎒	3542.49 ㎒	
15 ㎒	30	DFT-s	pi/2 BPSK	1	1	18.20	18.46	18.55	0
				1	18	18.29	18.42	18.71	0
				1	36	18.42	18.52	18.76	0
				18	0	18.35	18.48	18.62	0
				18	9	18.35	18.47	18.68	0
				18	18	18.39	18.50	18.75	0
				36	0	18.34	18.46	18.74	0
			QPSK	1	1	18.24	18.45	18.57	0
				1	18	18.31	18.46	18.65	0
				1	36	18.42	18.52	18.75	0
				18	0	18.36	18.53	18.60	0
				18	9	18.34	18.50	18.73	0
				18	18	18.41	18.53	18.79	0
				36	0	18.38	18.53	18.74	0
			16QAM	1	1	18.28	18.29	18.38	0
			64QAM	1	1	18.31	18.51	18.52	0
			256QAM	1	1	17.85	18.12	18.12	0
		CP	QPSK	1	1	18.14	18.36	18.48	0

NR Band n77_20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						630668	633334	636000	
						3460.02 ㎒	3500.01 ㎒	3540 ㎒	
20 ㎒	30	DFT-s	pi/2 BPSK	1	1	18.37	18.58	18.56	0
				1	26	18.37	18.42	18.52	0
				1	49	18.38	18.46	18.64	0
				25	0	18.41	18.52	18.60	0
				25	13	18.42	18.50	18.54	0
				25	26	18.46	18.53	18.72	0
				50	0	18.44	18.52	18.63	0
			QPSK	1	1	18.36	18.55	18.55	0
				1	26	18.40	18.45	18.52	0
				1	49	18.42	18.43	18.62	0
				25	0	18.47	18.54	18.55	0
				25	13	18.45	18.55	18.57	0
				25	26	18.49	18.56	18.73	0
				50	0	18.48	18.54	18.59	0
			16QAM	1	1	18.37	18.60	18.62	0
			64QAM	1	1	18.48	18.64	18.73	0
			256QAM	1	1	17.98	18.17	18.22	0
		CP	QPSK	1	1	18.29	18.52	18.53	0

NR Band n77_30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						631000	633334	635666	
						3465 ㎒	3500.01 ㎒	3534.99 ㎒	
30 ㎒	30	DFT-s	pi/2 BPSK	1	1	18.25	18.62	18.76	0
				1	39	18.20	18.50	18.70	0
				1	76	18.34	18.69	18.87	0
				36	0	18.37	18.62	18.82	0
				36	21	18.32	18.60	18.80	0
				36	42	18.38	18.63	18.84	0
				75	0	18.38	18.68	18.82	0
			QPSK	1	1	18.27	18.67	18.79	0
				1	39	18.26	18.54	18.68	0
				1	76	18.32	18.71	18.89	0
				36	0	18.37	18.70	18.81	0
				36	21	18.35	18.59	18.81	0
				36	42	18.35	18.63	18.83	0
				75	0	18.38	18.70	18.81	0
			16QAM	1	1	18.12	18.57	18.67	0
			64QAM	1	1	18.31	18.71	18.81	0
			256QAM	1	1	17.93	18.26	18.37	0
		CP	QPSK	1	1	18.21	18.58	18.74	0

NR Band n77_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						631334		635332	
						3470.01 ㎒		3529.98 ㎒	
40 ㎒	30	DFT-s	pi/2 BPSK	1	1	18.45		18.67	0
				1	53	18.37		18.60	0
				1	104	18.63		18.90	0
				50	0	18.55		18.73	0
				50	28	18.56		18.73	0
				50	56	18.55		18.78	0
				100	0	18.55		18.79	0
			QPSK	1	1	18.44		18.64	0
				1	53	18.39		18.59	0
				1	104	18.65		18.92	0
				50	0	18.55		18.73	0
				50	28	18.51		18.70	0
				50	56	18.56		18.69	0
				100	0	18.59		18.77	0
			16QAM	1	1	18.44		18.57	0
			64QAM	1	1	18.55		18.67	0
			256QAM	1	1	18.06		18.22	0
		CP	QPSK	1	1	18.40		18.59	0

NR Band n77_50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
						631668		635000	
						3475.02 ㎒		3525 ㎒	
50 ㎒	30	DFT-s	pi/2 BPSK	1	1	18.26		18.34	0
				1	67	18.24		18.29	0
				1	131	18.23		18.48	0
				64	0	18.29		18.46	0
				64	35	18.30		18.39	0
				64	69	18.31		18.50	0
				128	0	18.33		18.40	0
			QPSK	1	1	18.25		18.36	0
				1	67	18.23		18.29	0
				1	131	18.20		18.46	0
				64	0	18.23		18.46	0
				64	35	18.32		18.39	0
				64	69	18.27		18.49	0
				128	0	18.28		18.42	0
			16QAM	1	1	18.07		18.17	0
			64QAM	1	1	18.16		18.36	0
			256QAM	1	1	17.80		17.89	0
		CP	QPSK	1	1	18.21		18.27	0

NR Band n77_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
60 ㎒	30	DFT-s	pi/2 BPSK	1	1		18.30		0
				1	81		18.44		0
				1	160		18.45		0
				81	0		18.51		0
				81	41		18.46		0
				81	81		18.53		0
				162	0		18.46		0
			QPSK	1	1		18.33		0
				1	81		18.42		0
				1	160		18.42		0
				81	0		18.47		0
				81	41		18.48		0
				81	81		18.52		0
				162	0		18.45		0
			16QAM	1	1		18.15		0
			64QAM	1	1		18.29		0
			256QAM	1	1		17.86		0
		CP	QPSK	1	1		18.20		0

NR Band n77_70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
70 ㎒	30	DFT-s	pi/2 BPSK	1	1		18.27		0
				1	95		18.29		0
				1	187		18.46		0
				90	0		18.40		0
				90	50		18.36		0
				90	99		18.46		0
				180	0		18.42		0
			QPSK	1	1		18.28		0
				1	95		18.31		0
				1	187		18.44		0
				90	0		18.41		0
				90	50		18.38		0
				90	99		18.47		0
				180	0		18.41		0
			16QAM	1	1		18.10		0
			64QAM	1	1		18.29		0
			256QAM	1	1		17.79		0
		CP	QPSK	1	1		18.20		0

NR Band n77_80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
80 ㎒	30	DFT-s	pi/2 BPSK	1	1		18.20		0
				1	109		18.30		0
				1	215		18.52		0
				108	0		18.41		0
				108	55		18.36		0
				108	109		18.48		0
				216	0		18.39		0
			QPSK	1	1		18.23		0
				1	109		18.29		0
				1	215		18.50		0
				108	0		18.42		0
				108	55		18.37		0
				108	109		18.48		0
				216	0		18.36		0
			16QAM	1	1		18.09		0
			64QAM	1	1		18.22		0
			256QAM	1	1		17.75		0
		CP	QPSK	1	1		18.14		0

NR Band n77_90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
90 ㎒	30	DFT-s	pi/2 BPSK	1	1		18.22		0
				1	123		18.30		0
				1	243		18.58		0
				120	0		18.42		0
				120	63		18.39		0
				120	125		18.46		0
				243	0		18.41		0
			QPSK	1	1		18.21		0
				1	123		18.30		0
				1	243		18.60		0
				120	0		18.42		0
				120	63		18.33		0
				120	125		18.47		0
				243	0		18.39		0
			16QAM	1	1		18.07		0
			64QAM	1	1		18.19		0
			256QAM	1	1		17.76		0
		CP	QPSK	1	1		18.14		0

NR Band n77_100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3500.01 ㎒		
100 ㎒	30	DFT-s	pi/2 BPSK	1	1		18.24		0
				1	137		18.29		0
				1	271		18.64		0
				135	0		18.44		0
				135	69		18.40		0
				135	138		18.48		0
				270	0		18.38		0
			QPSK	1	1		18.24		0
				1	137		18.29		0
				1	271		18.63		0
				135	0		18.41		0
				135	69		18.40		0
				135	138		18.46		0
				270	0		18.39		0
			16QAM	1	1		18.05		0
			64QAM	1	1		18.52		0
			256QAM	1	1		17.71		0
		CP	QPSK	1	1		18.17		0

[NR Band n41 Conducted Power_ DSI = All] – Antenna : SRS

NR Band n41_ 100 ㎒ Bandwidth - Antenna : SRS 2

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				518598		
				2592.99 ㎒		
100MHz	30	Zad-off chu sequence		14.39		0

NR Band n41_ 100 ㎒ Bandwidth - Antenna : SRS 3

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				518598		
				2592.99 ㎒		
100MHz	30	Zad-off chu sequence		13.04		0

NR Band n41_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				518598		
				2592.99 ㎒		
100MHz	30	Zad-off chu sequence		11.21		0

[NR Band n77 Conducted Power_ DSI = All] – Antenna : SRS

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 2

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100MHz	30	Zad-off chu sequence	12.74				13.06		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 3

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100MHz	30	Zad-off chu sequence	14.11				14.13		0

NR Band n77_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)						MPR [dB]
			650000				662000		
			3750 ㎒				3930 ㎒		
100MHz	30	Zad-off chu sequence	12.23				12.47		0

[NR Band n77 DOD Conducted Power _ DSI = All] – Antenna : SRS

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

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100MHz	30	Zad-off chu sequence		13.24		0

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

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100MHz	30	Zad-off chu sequence		14.47		0

NR Band n77 DoD_ 100 ㎒ Bandwidth - Antenna : SRS 4

Bandwidth	SCS(㎑)	Modulation	Max. Average Power (dBm)			MPR [dB]
				633334		
				3500.01 ㎒		
100MHz	30	Zad-off chu sequence		13.04		0

11.4.2 NR Band Reduced Conducted Power

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

NR Band n2 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 ㎒	1880 ㎒	1907.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.12	19.27	19.28	0
				1	13	19.17	19.30	19.20	0
				1	23	19.06	19.17	19.24	0
				12	0	19.06	19.44	19.41	0
				12	7	19.10	19.42	19.32	0
				12	13	19.07	19.32	19.24	0
				25	0	19.06	19.30	19.38	0
			QPSK	1	1	19.15	19.25	19.35	0
				1	13	18.94	19.22	19.22	0
				1	23	18.97	19.20	19.07	0
				12	0	19.09	19.44	19.53	0
				12	7	19.04	19.39	19.32	0
				12	13	18.94	19.21	19.30	0
				25	0	18.97	19.44	19.38	0
			16QAM	1	1	19.30	19.61	19.72	0
			64QAM	1	1	18.88	19.15	19.17	0
			256QAM	1	1	17.62	17.71	17.77	0.5
		CP	QPSK	1	1	19.07	19.12	19.45	0

NR Band n2 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 ㎒	1880 ㎒	1905 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.15	19.25	19.20	0
				1	26	18.98	19.45	19.26	0
				1	50	19.11	19.32	19.17	0
				25	0	19.07	19.43	19.46	0
				25	14	19.18	19.31	19.38	0
				25	27	19.12	19.43	19.26	0
				50	0	19.06	19.44	19.47	0
			QPSK	1	1	19.11	19.25	19.11	0
				1	26	19.02	19.31	19.17	0
				1	50	18.94	19.04	19.09	0
				25	0	19.16	19.32	19.33	0
				25	14	19.02	19.33	19.43	0
				25	27	19.14	19.33	19.41	0
				50	0	19.13	19.32	19.31	0
			16QAM	1	1	19.43	19.60	19.61	0
			64QAM	1	1	19.11	19.17	19.24	0
			256QAM	1	1	17.63	17.65	17.78	0.5
		CP	QPSK	1	1	19.06	19.32	19.25	0

NR Band n2 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 ㎒	1880 ㎒	1902.5 ㎒	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.13	19.32	19.34	0
				1	40	19.25	19.32	19.39	0
				1	77	19.32	19.38	19.39	0
				36	0	19.15	19.56	19.50	0
				36	22	19.23	19.49	19.41	0
				36	43	19.41	19.35	19.44	0
				75	0	19.20	19.45	19.34	0
			QPSK	1	1	19.07	19.30	19.29	0
				1	40	19.03	19.21	19.22	0
				1	77	19.24	19.31	19.35	0
				36	0	19.27	19.43	19.40	0
				36	22	19.37	19.46	19.32	0
				36	43	19.39	19.35	19.46	0
				75	0	19.35	19.48	19.43	0
			16QAM	1	1	19.37	19.79	19.68	0
			64QAM	1	1	18.94	19.24	19.31	0
			256QAM	1	1	17.57	17.89	17.81	0.5
		CP	QPSK	1	1	19.04	19.42	19.34	0

NR Band n2 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 ㎒	1880 ㎒	1900 ㎒	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.02	19.48	19.33	0
				1	53	19.10	19.53	19.38	0
				1	104	19.38	19.24	19.27	0
				50	0	19.26	19.38	19.60	0
				50	28	19.37	19.48	19.45	0
				50	56	19.38	19.51	19.30	0
				100	0	19.36	19.55	19.45	0
			QPSK	1	1	18.88	19.25	19.19	0
				1	53	19.16	19.33	19.33	0
				1	104	19.28	19.21	19.24	0
				50	0	19.21	19.43	19.41	0
				50	28	19.36	19.58	19.38	0
				50	56	19.44	19.42	19.40	0
				100	0	19.38	19.61	19.48	0
			16QAM	1	1	19.21	19.59	19.56	0
			64QAM	1	1	18.92	19.34	19.31	0
			256QAM	1	1	17.57	17.81	17.66	0.5
		CP	QPSK	1	1	19.02	19.44	19.25	0

[NR Band n2 Conducted Power, DSI = 3]

NR Band n2 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376000	381500	
						1852.5 ㎒	1880 ㎒	1907.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.78	18.78	19.01	0
				1	13	18.68	18.86	18.87	0
				1	23	18.51	18.93	18.88	0
				12	0	18.73	19.09	18.92	0
				12	7	18.73	19.00	18.99	0
				12	13	18.54	18.97	18.83	0
				25	0	18.60	18.93	18.99	0
			QPSK	1	1	18.75	18.79	18.87	0
				1	13	18.53	18.74	18.82	0
				1	23	18.58	18.72	18.67	0
				12	0	18.87	19.12	18.97	0
				12	7	18.67	18.96	18.95	0
				12	13	18.53	18.85	18.89	0
				25	0	18.60	18.92	18.91	0
			16QAM	1	1	18.93	19.16	19.30	0
			64QAM	1	1	18.49	18.75	18.92	0
			256QAM	1	1	17.57	17.66	17.75	0
		CP	QPSK	1	1	18.61	18.76	18.89	0

NR Band n2 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376000	381000	
						1855 ㎒	1880 ㎒	1905 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.63	18.85	18.88	0
				1	26	18.71	18.89	19.01	0
				1	50	18.72	18.78	18.92	0
				25	0	18.79	18.91	19.05	0
				25	14	18.70	18.95	19.12	0
				25	27	18.77	18.86	19.00	0
				50	0	18.68	19.10	19.12	0
			QPSK	1	1	18.67	18.89	18.74	0
				1	26	18.48	18.94	18.71	0
				1	50	18.59	18.78	18.72	0
				25	0	18.70	18.95	19.00	0
				25	14	18.76	18.91	18.89	0
				25	27	18.75	18.97	18.92	0
				50	0	18.73	18.96	18.89	0
			16QAM	1	1	19.03	19.21	19.17	0
			64QAM	1	1	18.55	18.88	18.72	0
			256QAM	1	1	17.59	17.68	17.73	0
		CP	QPSK	1	1	18.72	18.91	18.85	0

NR Band n2 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376000	380500	
						1857.5 ㎒	1880 ㎒	1902.5 ㎒	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.74	19.08	18.95	0
				1	40	18.86	19.04	18.81	0
				1	77	19.00	19.04	18.85	0
				36	0	18.78	19.02	19.07	0
				36	22	18.87	19.12	19.06	0
				36	43	18.94	19.09	19.15	0
				75	0	18.97	19.19	18.95	0
			QPSK	1	1	18.57	18.84	18.83	0
				1	40	18.77	18.85	18.78	0
				1	77	18.73	18.73	18.95	0
				36	0	18.76	19.06	19.10	0
				36	22	18.80	19.09	18.97	0
				36	43	19.09	18.98	19.02	0
				75	0	18.85	19.16	19.00	0
			16QAM	1	1	19.01	19.22	19.32	0
			64QAM	1	1	18.65	18.86	18.80	0
			256QAM	1	1	17.64	17.88	17.90	0
		CP	QPSK	1	1	18.73	18.97	19.06	0

NR Band n2 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376000	380000	
						1860 ㎒	1880 ㎒	1900 ㎒	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.65	18.90	18.94	0
				1	53	18.79	19.12	18.87	0
				1	104	18.89	19.01	18.93	0
				50	0	18.73	18.96	19.13	0
				50	28	18.79	19.10	19.12	0
				50	56	18.92	18.93	19.02	0
				100	0	18.80	19.05	19.04	0
			QPSK	1	1	18.59	18.89	18.72	0
				1	53	18.62	18.96	18.85	0
				1	104	18.70	18.81	18.83	0
				50	0	18.70	19.04	19.03	0
				50	28	18.85	19.23	19.10	0
				50	56	18.89	18.94	19.05	0
				100	0	18.80	19.06	19.00	0
			16QAM	1	1	18.98	19.23	19.17	0
			64QAM	1	1	18.54	18.98	18.95	0
			256QAM	1	1	17.51	17.92	17.67	0
		CP	QPSK	1	1	18.73	19.04	19.03	0

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

NR Band n25 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376500	382500	
						1852.5 ㎒	1882.5 ㎒	1912.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.11	19.38	19.18	0
				1	13	19.04	19.34	19.38	0
				1	23	19.08	19.31	19.25	0
				12	0	19.24	19.36	19.26	0
				12	7	19.16	19.49	19.27	0
				12	13	19.19	19.38	19.40	0
				25	0	19.10	19.45	19.42	0
			QPSK	1	1	18.97	19.34	19.09	0
				1	13	19.10	19.23	19.20	0
				1	23	19.09	19.35	19.14	0
				12	0	19.18	19.55	19.35	0
				12	7	19.18	19.40	19.38	0
				12	13	19.23	19.51	19.48	0
				25	0	19.20	19.44	19.34	0
			16QAM	1	1	19.30	19.64	19.43	0
			64QAM	1	1	18.97	19.18	19.20	0
			256QAM	1	1	17.55	17.76	17.72	0.5
		CP	QPSK	1	1	19.00	19.26	19.12	0

NR Band n25 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376500	382000	
						1855 ㎒	1882.5 ㎒	1910 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.98	19.26	19.18	0
				1	26	19.09	19.40	19.22	0
				1	50	19.15	19.37	19.30	0
				25	0	19.11	19.37	19.34	0
				25	14	19.12	19.41	19.40	0
				25	27	19.30	19.41	19.32	0
				50	0	19.26	19.39	19.36	0
			QPSK	1	1	18.99	19.09	19.15	0
				1	26	19.09	19.33	19.14	0
				1	50	18.97	19.11	19.10	0
				25	0	19.22	19.37	19.36	0
				25	14	19.26	19.52	19.28	0
				25	27	19.16	19.51	19.20	0
				50	0	19.14	19.32	19.44	0
			16QAM	1	1	19.23	19.50	19.54	0
			64QAM	1	1	18.85	19.33	19.06	0
			256QAM	1	1	17.47	17.74	17.64	0.5
		CP	QPSK	1	1	18.89	19.21	19.16	0

NR Band n25 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376500	381500	
						1857.5 ㎒	1882.5 ㎒	1907.5 ㎒	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.24	19.57	19.32	0
				1	40	19.27	19.41	19.21	0
				1	77	19.36	19.42	19.18	0
				36	0	19.28	19.60	19.51	0
				36	22	19.28	19.57	19.50	0
				36	43	19.38	19.60	19.47	0
				75	0	19.30	19.49	19.58	0
			QPSK	1	1	19.08	19.31	19.41	0
				1	40	19.21	19.36	19.16	0
				1	77	19.29	19.41	19.23	0
				36	0	19.31	19.51	19.51	0
				36	22	19.37	19.52	19.48	0
				36	43	19.50	19.63	19.43	0
				75	0	19.38	19.65	19.52	0
			16QAM	1	1	19.51	19.89	19.75	0
			64QAM	1	1	19.06	19.52	19.28	0
			256QAM	1	1	17.62	17.98	17.90	0.5
		CP	QPSK	1	1	19.09	19.54	19.51	0

NR Band n25 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376500	381000	
						1860 ㎒	1882.5 ㎒	1905 ㎒	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.00	19.47	19.44	0
				1	53	19.25	19.51	19.41	0
				1	104	19.43	19.43	19.32	0
				50	0	19.21	19.64	19.61	0
				50	28	19.31	19.67	19.58	0
				50	56	19.52	19.46	19.58	0
				100	0	19.48	19.51	19.53	0
			QPSK	1	1	18.88	19.32	19.26	0
				1	53	19.13	19.35	19.22	0
				1	104	19.28	19.24	19.18	0
				50	0	19.23	19.59	19.47	0
				50	28	19.41	19.54	19.46	0
				50	56	19.49	19.43	19.38	0
				100	0	19.32	19.58	19.53	0
			16QAM	1	1	19.45	19.76	19.62	0
			64QAM	1	1	19.05	19.29	19.21	0
			256QAM	1	1	17.73	17.94	17.84	0.5
		CP	QPSK	1	1	19.00	19.39	19.34	0

[NR Band n25 Conducted Power, DSI = 3]

NR Band n25 _ 5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						370500	376500	382500	
						1852.5 ㎒	1882.5 ㎒	1912.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.67	19.00	18.68	0
				1	13	18.64	18.86	18.84	0
				1	23	18.68	19.02	18.97	0
				12	0	18.72	19.06	18.91	0
				12	7	18.74	19.09	18.97	0
				12	13	18.71	19.00	19.02	0
				25	0	18.87	19.04	18.89	0
			QPSK	1	1	18.50	18.90	18.76	0
				1	13	18.64	18.75	18.85	0
				1	23	18.68	18.79	18.68	0
				12	0	18.77	19.10	18.90	0
				12	7	18.68	19.08	19.00	0
				12	13	18.66	19.13	19.08	0
				25	0	18.74	19.07	19.04	0
			16QAM	1	1	18.80	19.33	19.18	0
			64QAM	1	1	18.49	18.91	18.66	0
			256QAM	1	1	17.46	17.74	17.73	1
		CP	QPSK	1	1	18.69	18.85	18.71	0

NR Band n25 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371000	376500	382000	
						1855 ㎒	1882.5 ㎒	1910 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.62	18.91	18.88	0
				1	26	18.62	18.90	18.74	0
				1	50	18.78	18.96	18.91	0
				25	0	18.80	18.98	18.97	0
				25	14	18.79	19.11	19.02	0
				25	27	18.76	19.01	18.84	0
				50	0	18.72	18.97	18.99	0
			QPSK	1	1	18.49	18.72	18.69	0
				1	26	18.51	18.89	18.75	0
				1	50	18.69	18.70	18.82	0
				25	0	18.83	18.91	18.83	0
				25	14	18.83	19.08	18.90	0
				25	27	18.79	18.99	18.90	0
				50	0	18.78	19.08	18.91	0
			16QAM	1	1	18.94	19.13	19.13	0
			64QAM	1	1	18.62	18.89	18.64	0
			256QAM	1	1	17.44	17.67	17.59	1
		CP	QPSK	1	1	18.55	18.82	18.81	0

NR Band n25 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						371500	376500	381500	
						1857.5 ㎒	1882.5 ㎒	1907.5 ㎒	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.79	19.13	19.07	0
				1	40	18.92	19.12	18.89	0
				1	77	19.00	19.09	18.80	0
				36	0	18.87	19.22	19.14	0
				36	22	18.92	19.15	19.10	0
				36	43	19.01	19.10	19.21	0
				75	0	18.83	19.14	19.12	0
			QPSK	1	1	18.67	19.03	19.01	0
				1	40	18.84	19.03	18.89	0
				1	77	18.77	18.88	18.70	0
				36	0	18.88	19.14	19.00	0
				36	22	19.01	19.21	19.17	0
				36	43	19.07	19.17	19.07	0
				75	0	18.95	19.22	19.07	0
			16QAM	1	1	19.03	19.32	19.43	0
			64QAM	1	1	18.68	18.95	18.86	0
			256QAM	1	1	17.60	17.91	17.96	1
		CP	QPSK	1	1	18.69	19.05	18.95	0

NR Band n25 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						372000	376500	381000	
						1860 ㎒	1882.5 ㎒	1905 ㎒	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.72	19.07	19.00	0
				1	53	18.89	19.05	19.01	0
				1	104	18.93	19.05	18.95	0
				50	0	18.90	19.13	19.11	0
				50	28	19.01	19.24	19.14	0
				50	56	19.01	19.12	19.03	0
				100	0	18.90	19.20	19.19	0
			QPSK	1	1	18.66	18.93	18.82	0
				1	53	18.69	18.95	18.81	0
				1	104	18.93	18.89	18.78	0
				50	0	18.86	19.21	19.17	0
				50	28	18.91	19.15	19.12	0
				50	56	19.13	19.17	19.15	0
				100	0	19.00	19.09	19.08	0
			16QAM	1	1	19.03	19.42	19.30	0
			64QAM	1	1	18.53	18.89	18.96	0
			256QAM	1	1	17.61	18.04	17.83	1
		CP	QPSK	1	1	18.68	18.90	19.00	0

[NR Band n41 Conducted Power, DSI = 2, 3 (Power Class 3)]

NR Band n41 _10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
						500202	509400	518598	527802	537000	
						2501.01 ㎒	2547 ㎒	2592.99 ㎒	2639.01 ㎒	2685 ㎒	
10 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.97	16.19	16.42	16.81	17.05	0
				1	12	15.92	16.27	16.58	16.97	17.03	0
				1	22	16.04	16.40	16.80	17.09	17.02	0
				12	0	16.02	16.28	16.67	16.98	16.90	0
				12	6	16.13	16.32	16.79	17.04	16.98	0
				12	12	16.14	16.55	16.81	17.18	17.04	0
				24	0	16.19	16.46	16.72	17.04	17.08	0
			QPSK	1	1	16.05	16.10	16.49	16.98	16.95	0
				1	12	16.15	16.28	16.64	17.02	16.90	0
				1	22	16.03	16.40	16.74	17.13	17.01	0
				12	0	16.02	16.36	16.61	17.07	17.09	0
				12	6	16.26	16.50	16.66	17.11	17.02	0
				12	12	16.27	16.54	16.71	17.08	17.12	0
				24	0	16.29	16.38	16.74	17.00	17.04	0
			16QAM	1	1	15.96	16.26	16.57	16.94	17.01	0
			64QAM	1	1	15.97	16.09	16.45	16.90	16.95	0
			256QAM	1	1	15.83	15.57	15.98	16.42	16.36	0
		CP	QPSK	1	1	15.86	16.22	16.39	16.88	16.91	0

NR Band n41 _15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
						500700	509664	518598	527562	536496	
						2503.5 ㎒	2548.32 ㎒	2592.99 ㎒	2637.81 ㎒	2682.48 ㎒	
15 ㎒	30	DFT-s	pi/2 BPSK	1	1	16.14	16.37	16.71	16.75	16.95	0
				1	18	16.19	16.27	16.74	16.58	16.63	0
				1	36	16.25	16.54	16.90	16.61	16.65	0
				18	0	16.16	16.54	16.84	16.90	16.98	0
				18	9	16.23	16.48	16.92	16.74	16.87	0
				18	18	16.24	16.68	16.91	16.87	16.70	0
				36	0	16.28	16.50	16.91	16.84	16.82	0
			QPSK	1	1	16.12	16.49	16.77	16.61	16.93	0
				1	18	16.15	16.41	16.76	16.56	16.71	0
				1	36	16.15	16.59	16.81	16.63	16.63	0
				18	0	16.25	16.48	16.90	16.89	16.86	0
				18	9	16.25	16.59	16.92	16.84	16.94	0
				18	18	16.26	16.53	16.80	16.78	16.92	0
				36	0	16.35	16.50	16.83	16.89	16.84	0
			16QAM	1	1	16.21	16.39	16.88	16.62	16.89	0
			64QAM	1	1	16.44	16.61	16.92	16.49	16.76	0
			256QAM	1	1	15.59	15.82	16.27	16.10	16.21	0
		CP	QPSK	1	1	16.20	16.43	16.67	16.74	16.79	0

NR Band n41 _20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
						501204	509898	518598	527298	535998	
						2506.02 ㎒	2549.49 ㎒	2592.99 ㎒	2636.49 ㎒	2679.99 ㎒	
20 ㎒	30	DFT-s	pi/2 BPSK	1	1	16.22	16.38	16.76	16.69	16.85	0
				1	26	16.17	16.36	16.77	16.66	16.69	0
				1	49	16.21	16.46	16.80	16.69	16.68	0
				25	0	16.23	16.53	16.93	16.83	16.88	0
				25	13	16.27	16.48	16.89	16.78	16.83	0
				25	26	16.24	16.58	16.86	16.79	16.80	0
				50	0	16.28	16.49	16.88	16.82	16.84	0
			QPSK	1	1	16.21	16.42	16.77	16.70	16.89	0
				1	26	16.16	16.39	16.78	16.66	16.72	0
				1	49	16.23	16.50	16.82	16.72	16.72	0
				25	0	16.22	16.57	16.93	16.88	16.92	0
				25	13	16.27	16.51	16.89	16.82	16.85	0
				25	26	16.24	16.62	16.90	16.80	16.82	0
				50	0	16.27	16.52	16.91	16.82	16.85	0
			16QAM	1	1	16.14	16.32	16.93	16.66	16.99	0
			64QAM	1	1	16.34	16.58	16.89	16.49	16.85	0
			256QAM	1	1	15.52	15.79	16.20	16.14	16.27	0
		CP	QPSK	1	1	16.19	16.42	16.74	16.70	16.84	0

NR Band n41 _30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
						502200	510402	518598	526800	534996	
						2511 ㎒	2552.01 ㎒	2592.99 ㎒	2634 ㎒	2674.98 ㎒	
30 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.97	16.14	16.47	16.91	16.97	0
				1	39	16.00	16.27	16.62	16.93	16.95	0
				1	76	16.04	16.45	16.72	17.01	16.98	0
				36	0	16.08	16.33	16.64	16.98	16.97	0
				36	21	16.11	16.39	16.75	17.04	17.04	0
				36	42	16.22	16.48	16.75	17.09	17.05	0
				75	0	16.13	16.44	16.75	17.07	17.07	0
			QPSK	1	1	15.98	16.19	16.47	16.96	16.99	0
				1	39	16.05	16.30	16.66	16.95	16.96	0
				1	76	16.11	16.47	16.74	17.04	17.02	0
				36	0	16.09	16.33	16.68	17.00	16.99	0
				36	21	16.16	16.42	16.75	17.06	17.05	0
				36	42	16.24	16.50	16.77	17.09	17.07	0
				75	0	16.21	16.46	16.77	17.09	17.11	0
			16QAM	1	1	15.94	16.30	16.49	16.96	17.01	0
			64QAM	1	1	15.89	16.13	16.48	16.91	16.95	0
			256QAM	1	1	15.39	15.61	15.94	16.42	16.41	0
		CP	QPSK	1	1	15.95	16.13	16.48	16.89	16.96	0

NR Band n41 _40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
						503202	513468		523734	534000	
						2516.01 ㎒	2567.34 ㎒		2618.67 ㎒	2670 ㎒	
40 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.87	16.12		16.92	17.01	0
				1	53	15.85	16.31		16.80	16.86	0
				1	104	16.13	16.53		16.97	16.90	0
				50	0	15.93	16.35		16.86	16.95	0
				50	28	15.98	16.41		16.94	17.01	0
				50	56	16.13	16.52		16.96	16.99	0
				100	0	16.01	16.43		16.98	16.93	0
			QPSK	1	1	15.89	16.14		16.95	17.02	0
				1	53	15.90	16.32		16.84	16.89	0
				1	104	16.15	16.56		17.00	16.94	0
				50	0	15.97	16.37		16.88	16.96	0
				50	28	16.00	16.45		16.95	17.01	0
				50	56	16.16	16.56		16.95	16.99	0
				100	0	16.05	16.47		16.96	16.93	0
			16QAM	1	1	16.04	16.33		16.96	17.20	0
			64QAM	1	1	15.66	15.92		16.72	16.79	0
			256QAM	1	1	15.34	15.61		16.38	16.48	0
		CP	QPSK	1	1	15.88	16.06		16.93	16.95	0

NR Band n41 _50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
						504204		518598		532998	
						2521.02 ㎒		2592.99 ㎒		2664.99 ㎒	
50 ㎒	30	DFT-s	pi/2 BPSK	1	1	16.11		16.60		16.80	0
				1	67	16.25		16.85		16.89	0
				1	131	16.45		16.82		16.91	0
				64	0	16.21		16.75		16.93	0
				64	35	16.35		16.89		16.98	0
				64	69	16.36		16.89		16.93	0
				128	0	16.33		16.80		16.97	0
			QPSK	1	1	16.15		16.60		16.83	0
				1	67	16.27		16.86		16.92	0
				1	131	16.50		16.83		16.92	0
				64	0	16.24		16.75		16.94	0
				64	35	16.35		16.94		17.01	0
				64	69	16.42		16.94		16.93	0
				128	0	16.37		16.83		17.01	0
			16QAM	1	1	16.14		16.60		16.84	0
			64QAM	1	1	16.12		16.59		16.64	0
			256QAM	1	1	15.57		16.04		16.30	0
		CP	QPSK	1	1	16.07		16.51		16.71	0

NR Band n41 _60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						505200		518598		531996		
						2526 ㎒		2592.99 ㎒		2659.98 ㎒		
60 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.96		16.45		16.70		0
				1	81	16.01		16.80		16.67		0
				1	160	16.32		16.70		16.71		0
				81	0	16.14		16.72		16.84		0
				81	41	16.12		16.87		16.76		0
				81	81	16.29		16.84		16.79		0
				162	0	16.23		16.78		16.78		0
			QPSK	1	1	16.00		16.47		16.74		0
				1	81	16.09		16.82		16.73		0
				1	160	16.35		16.71		16.75		0
				81	0	16.17		16.74		16.88		0
				81	41	16.17		16.91		16.78		0
				81	81	16.31		16.89		16.83		0
				162	0	16.32		16.82		16.79		0
			16QAM	1	1	16.01		16.56		16.75		0
			64QAM	1	1	16.02		16.47		16.71		0
			256QAM	1	1	15.49		15.94		16.19		0
		CP	QPSK	1	1	16.08		16.45		16.68		0

NR Band n41 _70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
						506208				530994	
						2531.04 MHz				2654.97 MHz	
70 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.90				16.68	0
				1	81	16.07				16.75	0
				1	160	16.27				16.67	0
				81	0	16.09				16.86	0
				81	41	16.18				16.85	0
				81	81	16.22				16.88	0
				162	0	16.21				16.87	0
			QPSK	1	1	15.94				16.72	0
				1	81	16.14				16.80	0
				1	160	16.31				16.71	0
				81	0	16.12				16.87	0
				81	41	16.23				16.86	0
				81	81	16.27				16.92	0
				162	0	16.26				16.90	0
			16QAM	1	1	16.00				16.67	0
			64QAM	1	1	15.72				16.65	0
			256QAM	1	1	15.39				16.13	0
		CP	QPSK	1	1	15.88				16.64	0

NR Band n41 _80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
						507204				529998	
						2536.02 ㎒				2649.99 ㎒	
80 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.87				16.63	0
				1	109	16.01				16.65	0
				1	215	16.47				16.65	0
				108	0	15.98				16.81	0
				108	55	16.14				16.77	0
				108	109	16.26				16.76	0
				216	0	16.17				16.80	0
			QPSK	1	1	15.90				16.68	0
				1	109	16.06				16.71	0
				1	215	16.49				16.68	0
				108	0	16.01				16.83	0
				108	55	16.21				16.79	0
				108	109	16.29				16.78	0
				216	0	16.23				16.82	0
			16QAM	1	1	15.91				16.64	0
			64QAM	1	1	15.83				16.63	0
			256QAM	1	1	15.37				16.15	0
		CP	QPSK	1	1	15.78				16.67	0

NR Band n41 _90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
						508200				528996	
						2541 ㎒				2644.98 ㎒	
90 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.90				16.62	0
				1	123	16.10				16.80	0
				1	243	16.59				16.67	0
				120	0	16.15				16.77	0
				120	63	16.19				16.90	0
				120	125	16.40				16.80	0
				243	0	16.21				16.86	0
			QPSK	1	1	15.94				16.67	0
				1	123	16.13				16.85	0
				1	243	16.62				16.75	0
				120	0	16.17				16.85	0
				120	63	16.25				16.96	0
				120	125	16.44				16.89	0
				243	0	16.25				16.93	0
			16QAM	1	1	16.10				16.70	0
			64QAM	1	1	15.71				16.62	0
			256QAM	1	1	15.39				16.08	0
		CP	QPSK	1	1	15.80				16.55	0

NR Band n41 _100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]					MPR [dB]
								518598			
								2592.99 ㎒			
100 ㎒	30	DFT-s	pi/2 BPSK	1	1			16.23			0
				1	137			16.67			0
				1	271			16.69			0
				135	0			16.54			0
				135	69			16.70			0
				135	138			16.78			0
				270	0			16.65			0
			QPSK	1	1			16.28			0
				1	137			16.76			0
				1	271			16.71			0
				135	0			16.60			0
				135	69			16.76			0
				135	138			16.81			0
				270	0			16.71			0
			16QAM	1	1			16.09			0
			64QAM	1	1			15.88			0
			256QAM	1	1			15.67			0
		CP	QPSK	1	1			16.07			0

[NR Band n66 Receiver on Conducted Power (ENDC, Upper Ant.), DSI = 2]

NR Band n66 _5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						342500	349000	355500	
						1712.5 ㎒	1745 ㎒	1777.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.15	16.00	15.97	0
				1	13	16.02	15.93	15.99	0
				1	23	16.14	15.97	15.94	0
				12	0	16.17	15.94	15.99	0
				12	7	16.16	16.10	16.08	0
				12	13	16.03	15.91	16.16	0
				25	0	16.18	15.97	16.21	0
			QPSK	1	1	16.12	16.11	16.08	0
				1	13	16.17	16.00	16.18	0
				1	23	16.14	15.96	16.12	0
				12	0	16.14	15.98	16.07	0
				12	7	16.20	16.08	16.12	0
				12	13	16.13	16.11	16.09	0
				25	0	16.10	16.14	16.00	0
			16QAM	1	1	16.28	16.10	16.02	0
			64QAM	1	1	16.10	16.23	16.27	0
			256QAM	1	1	16.45	16.23	16.12	0
		CP	QPSK	1	1	16.17	16.09	16.02	0

NR Band n66 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						343000	349000	355000	
						1715 ㎒	1745 ㎒	1775 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.17	16.11	16.10	0
				1	26	16.95	16.64	16.12	0
				1	50	16.26	16.14	16.11	0
				25	0	16.65	16.52	16.17	0
				25	14	16.82	16.64	16.13	0
				25	27	16.50	16.56	16.02	0
				50	0	16.58	16.42	16.16	0
			QPSK	1	1	16.22	16.23	16.10	0
				1	26	16.86	16.61	16.23	0
				1	50	16.31	16.04	16.21	0
				25	0	16.59	16.48	16.05	0
				25	14	16.79	16.55	16.13	0
				25	27	16.64	16.59	16.20	0
				50	0	16.70	16.53	16.19	0
			16QAM	1	1	16.25	16.10	16.20	0
			64QAM	1	1	16.47	16.27	16.23	0
			256QAM	1	1	16.30	16.26	16.25	0
		CP	QPSK	1	1	16.15	16.17	16.01	0

NR Band n66 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						343500	349000	354500	
						1717.5 ㎒	1745 ㎒	1772.5 ㎒	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.27	16.13	16.07	0
				1	40	16.24	16.13	16.04	0
				1	77	16.16	16.10	16.11	0
				36	0	16.25	16.09	16.03	0
				36	22	16.19	16.11	16.04	0
				36	43	16.35	16.19	16.18	0
				75	0	16.34	16.15	16.15	0
			QPSK	1	1	16.32	16.03	16.11	0
				1	40	16.25	16.08	16.09	0
				1	77	16.16	16.31	16.11	0
				36	0	16.24	16.12	16.22	0
				36	22	16.18	16.19	16.15	0
				36	43	16.23	16.15	16.28	0
				75	0	16.38	16.10	16.10	0
			16QAM	1	1	16.41	16.10	16.19	0
			64QAM	1	1	16.57	16.28	16.43	0
			256QAM	1	1	16.47	16.17	16.19	0
		CP	QPSK	1	1	16.37	16.25	16.06	0

NR Band n66 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						344000	349000	354000	
						1720 ㎒	1745 ㎒	1770 ㎒	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	16.28	16.03	16.07	0
				1	53	16.29	16.07	16.02	0
				1	104	16.25	16.17	16.20	0
				50	0	16.35	16.17	16.14	0
				50	28	16.36	16.18	16.14	0
				50	56	16.27	16.23	16.32	0
				100	0	16.33	16.08	16.29	0
			QPSK	1	1	16.43	16.10	16.16	0
				1	53	16.26	16.06	16.14	0
				1	104	16.32	16.20	16.24	0
				50	0	16.20	16.16	16.20	0
				50	28	16.21	16.22	16.26	0
				50	56	16.27	16.19	16.31	0
				100	0	16.22	16.15	16.13	0
			16QAM	1	1	16.25	16.10	16.09	0
			64QAM	1	1	16.52	16.34	16.44	0
			256QAM	1	1	16.29	16.30	16.26	0
		CP	QPSK	1	1	16.32	16.11	16.23	0

NR Band n66 _ 30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							349000		
							1745 ㎒		
30 ㎒	15	DFT-s	pi/2 BPSK	1	1		16.22		0
				1	80		16.17		0
				1	158		16.26		0
				80	0		16.36		0
				80	40		16.36		0
				80	80		16.33		0
				160	0		16.30		0
			QPSK	1	1		16.35		0
				1	80		16.20		0
				1	158		16.19		0
				80	0		16.33		0
				80	40		16.39		0
				80	80		16.43		0
				160	0		16.38		0
			16QAM	1	1		16.43		0
			64QAM	1	1		16.59		0
			256QAM	1	1		16.38		0
		CP	QPSK	1	1		16.29		0

NR Band n66 _ 40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							349000		
							1745 ㎒		
40 ㎒	15	DFT-s	pi/2 BPSK	1	1		16.28		0
				1	108		16.26		0
				1	214		16.16		0
				108	0		16.34		0
				108	54		16.33		0
				108	108		16.33		0
				216	0		16.37		0
			QPSK	1	1		16.35		0
				1	108		16.28		0
				1	214		16.18		0
				108	0		16.32		0
				108	54		16.40		0
				108	108		16.27		0
				216	0		16.23		0
			16QAM	1	1		16.39		0
			64QAM	1	1		16.56		0
			256QAM	1	1		16.38		0
		CP	QPSK	1	1		16.35		0

[NR Band n66 Conducted Power _(Lower Ant.), DSI = 1, 3, 4]

NR Band n66 _5 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						342500	349000	355500	
						1712.5 ㎒	1745 ㎒	1777.5 ㎒	
5 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	18.97	19.39	19.80	0
				1	13	19.01	19.52	19.84	0
				1	23	19.08	19.48	19.97	0
				12	0	19.03	19.52	19.85	0
				12	7	19.00	19.48	19.86	0
				12	13	19.11	19.52	19.97	0
				25	0	18.99	19.52	19.84	0
			QPSK	1	1	18.98	19.44	19.85	0
				1	13	19.02	19.57	19.89	0
				1	23	19.10	19.51	19.95	0
				12	0	19.05	19.50	19.87	0
				12	7	19.06	19.52	19.88	0
				12	13	19.12	19.51	19.98	0
				25	0	18.99	19.50	19.88	0
			16QAM	1	1	19.04	19.49	19.86	0
			64QAM	1	1	19.19	19.60	20.02	0
			256QAM	1	1	17.24	17.34	17.77	1.5
		CP	QPSK	1	1	19.00	19.40	19.82	0

NR Band n66 _ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						343000	349000	355000	
						1715 ㎒	1745 ㎒	1775 ㎒	
10 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.09	19.41	19.66	0
				1	26	19.18	19.53	19.79	0
				1	50	19.24	19.47	19.90	0
				25	0	19.09	19.43	19.80	0
				25	14	19.18	19.50	19.81	0
				25	27	19.10	19.51	19.83	0
				50	0	19.14	19.48	19.80	0
			QPSK	1	1	19.10	19.43	19.73	0
				1	26	19.17	19.53	19.85	0
				1	50	19.20	19.54	19.95	0
				25	0	19.06	19.45	19.81	0
				25	14	19.16	19.51	19.86	0
				25	27	19.15	19.49	19.84	0
				50	0	19.13	19.52	19.81	0
			16QAM	1	1	19.16	19.50	19.75	0
			64QAM	1	1	19.29	19.62	19.93	0
			256QAM	1	1	17.23	17.32	17.71	1.5
		CP	QPSK	1	1	19.10	19.42	19.69	0

NR Band n66 _ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						343500	349000	354500	
						1717.5 ㎒	1745 ㎒	1772.5 ㎒	
15 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.10	19.68	19.93	0
				1	40	19.09	20.08	20.33	0
				1	77	19.30	19.91	20.26	0
				36	0	19.11	20.01	20.25	0
				36	22	19.16	20.02	20.32	0
				36	43	19.24	20.06	20.35	0
				75	0	19.17	19.97	20.29	0
			QPSK	1	1	19.20	19.74	20.03	0
				1	40	19.15	20.17	20.37	0
				1	77	19.39	19.93	20.30	0
				36	0	19.13	20.00	20.30	0
				36	22	19.19	20.04	20.38	0
				36	43	19.24	20.06	20.39	0
				75	0	19.16	20.04	20.34	0
			16QAM	1	1	19.17	19.74	20.01	0
			64QAM	1	1	19.33	19.90	20.19	0
			256QAM	1	1	17.17	17.66	17.85	1.5
		CP	QPSK	1	1	19.20	19.74	19.98	0

NR Band n66 _ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						344000	349000	354000	
						1720 ㎒	1745 ㎒	1770 ㎒	
20 ㎒	15	DFT-s OFDM	pi/2 BPSK	1	1	19.10	19.42	19.76	0
				1	53	19.16	20.11	20.33	0
				1	104	19.33	19.72	20.08	0
				50	0	19.21	19.80	20.15	0
				50	28	19.22	20.02	20.36	0
				50	56	19.27	19.99	20.29	0
				100	0	19.23	19.91	20.23	0
			QPSK	1	1	19.20	19.46	19.85	0
				1	53	19.19	20.17	20.40	0
				1	104	19.44	19.79	20.10	0
				50	0	19.17	19.86	20.13	0
				50	28	19.26	20.05	20.41	0
				50	56	19.34	20.00	20.36	0
				100	0	19.27	19.92	20.23	0
			16QAM	1	1	19.15	19.47	19.83	0
			64QAM	1	1	19.32	19.65	20.01	0
			256QAM	1	1	17.18	17.35	17.68	1.5
		CP	QPSK	1	1	19.14	19.50	19.88	0

NR Band n66 _ 30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							349000		
							1745 ㎒		
30 ㎒	15	DFT-s	pi/2 BPSK	1	1		19.34		0
				1	80		19.72		0
				1	158		19.72		0
				80	0		19.54		0
				80	40		19.61		0
				80	80		19.77		0
				160	0		19.67		0
			QPSK	1	1		19.39		0
				1	80		19.74		0
				1	158		19.73		0
				80	0		19.56		0
				80	40		19.63		0
				80	80		19.75		0
				160	0		19.69		0
			16QAM	1	1		19.40		0
			64QAM	1	1		19.56		0
			256QAM	1	1		17.55		1.5
		CP	QPSK	1	1		19.40		0

NR Band n66 _ 40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							349000		
							1745 ㎒		
40 ㎒	15	DFT-s	pi/2 BPSK	1	1		19.30		0
				1	108		19.73		0
				1	214		19.75		0
				108	0		19.48		0
				108	54		19.65		0
				108	108		19.87		0
				216	0		19.66		0
			QPSK	1	1		19.85		0
				1	108		19.78		0
				1	214		19.83		0
				108	0		19.92		0
				108	54		19.68		0
				108	108		19.88		0
				216	0		19.71		0
			16QAM	1	1		19.39		0
			64QAM	1	1		19.54		0
			256QAM	1	1		17.35		1.5
		CP	QPSK	1	1		19.32		0

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

NR Band n77_ 10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647000	650600	654200	657800	661400	665000	
						3705 ㎒	3759 ㎒	3813 ㎒	3867 ㎒	3921 ㎒	3975 ㎒	
10 ㎒	30	DFT-s	pi/2 BPSK	1	1	14.83	15.20	15.35	15.06	14.69	14.72	0
				1	12	15.06	15.17	15.53	15.17	14.66	14.59	0
				1	22	14.91	15.30	15.40	15.03	14.63	14.66	0
				12	0	14.96	15.29	15.37	15.13	14.69	14.71	0
				12	6	15.09	15.22	15.41	15.25	14.81	14.66	0
				12	12	15.01	15.22	15.40	15.15	14.82	14.69	0
				24	0	15.13	15.24	15.49	15.14	14.63	14.84	0
			QPSK	1	1	14.99	15.28	15.42	15.13	14.72	14.71	0
				1	12	15.03	15.18	15.37	15.12	14.67	14.72	0
				1	22	15.02	15.25	15.28	14.99	14.57	14.80	0
				12	0	15.11	15.40	15.57	15.24	14.63	14.77	0
				12	6	15.02	15.39	15.56	15.18	14.84	14.77	0
				12	12	15.00	15.28	15.38	15.13	14.65	14.87	0
				24	0	15.11	15.39	15.47	15.10	14.83	14.82	0
			16QAM	1	1	15.01	15.28	15.36	15.09	14.65	14.70	0
			64QAM	1	1	14.88	15.40	15.37	14.99	14.70	14.81	0
			256QAM	1	1	14.57	14.81	14.98	14.71	14.09	14.28	0
		CP	QPSK	1	1	14.92	15.40	15.33	15.00	14.51	14.57	0

NR Band n77_ 15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647168	650700	654232	657766	661300	664832	
						3707.52 ㎒	3760.5 ㎒	3813.49 ㎒	3866.5 ㎒	3919.5 ㎒	3972.48 ㎒	
15 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.11	15.23	15.50	15.42	14.92	14.87	0
				1	18	15.03	15.27	15.53	15.31	14.83	14.93	0
				1	36	15.06	15.43	15.69	15.30	14.83	14.86	0
				18	0	14.98	15.25	15.51	15.39	14.90	14.86	0
				18	9	15.02	15.28	15.67	15.36	14.86	15.00	0
				18	18	15.08	15.45	15.68	15.40	14.98	14.98	0
				36	0	15.11	15.49	15.66	15.30	14.97	15.00	0
			QPSK	1	1	15.12	15.41	15.64	15.39	15.03	14.85	0
				1	18	15.06	15.27	15.49	15.27	14.85	14.98	0
				1	36	15.00	15.29	15.65	15.33	14.98	14.93	0
				18	0	15.11	15.27	15.49	15.34	14.92	14.99	0
				18	9	14.99	15.41	15.55	15.36	14.98	14.89	0
				18	18	15.22	15.42	15.59	15.26	14.96	14.94	0
				36	0	15.15	15.46	15.67	15.38	15.02	14.90	0
			16QAM	1	1	15.10	15.37	15.62	15.51	15.03	14.97	0
			64QAM	1	1	14.90	15.19	15.54	15.36	15.05	14.81	0
			256QAM	1	1	14.76	14.87	15.17	14.79	14.51	14.53	0
		CP	QPSK	1	1	14.95	15.06	15.60	15.23	14.89	14.68	0

NR Band n77_ 20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647334	650800	654266	657734	661200	664666	
						3710.01 ㎒	3762 ㎒	3813.99 ㎒	3866.01 ㎒	3918 ㎒	3969.99 ㎒	
20 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	15.16	15.36	15.64	15.29	14.89	14.93	0
				1	26	14.97	15.22	15.59	15.32	14.72	14.90	0
				1	49	15.03	15.37	15.40	15.15	14.88	15.02	0
				25	0	15.14	15.50	15.67	15.42	14.90	14.83	0
				25	13	15.16	15.33	15.69	15.26	14.84	15.00	0
				25	26	15.24	15.42	15.60	15.44	14.94	14.95	0
				50	0	15.20	15.42	15.75	15.46	14.95	15.01	0
			QPSK	1	1	15.18	15.39	15.62	15.37	14.88	14.92	0
				1	26	15.06	15.24	15.48	15.19	14.78	14.81	0
				1	49	15.19	15.27	15.49	15.37	14.92	14.95	0
				25	0	15.20	15.45	15.69	15.50	14.94	14.91	0
				25	13	15.16	15.41	15.73	15.45	14.87	14.91	0
				25	26	15.16	15.39	15.64	15.39	14.93	14.99	0
				50	0	15.10	15.49	15.67	15.40	15.01	14.95	0
			16QAM	1	1	15.18	15.36	15.80	15.34	14.97	15.02	0
			64QAM	1	1	15.34	15.34	15.42	15.47	15.08	15.02	0
			256QAM	1	1	14.66	14.90	15.00	14.92	14.46	14.28	0
		CP	QPSK	1	1	15.19	15.31	15.60	15.36	14.79	14.91	0

NR Band n77_ 30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						647668	651000	654334	657666	661000	664332	
						3715.02 ㎒	3765 ㎒	3815.01 ㎒	3864.99 ㎒	3915 ㎒	3964.98 ㎒	
30 ㎒	30	DFT-s	pi/2 BPSK	1	1	14.68	14.68	15.46	15.52	15.03	14.84	0
				1	39	14.81	14.95	15.53	15.29	14.78	15.08	0
				1	76	14.81	14.96	15.52	15.29	14.73	14.97	0
				36	0	14.73	14.87	15.54	15.48	15.02	14.94	0
				36	21	14.87	15.14	15.48	15.41	14.87	15.04	0
				36	42	14.92	15.15	15.53	15.36	14.88	14.94	0
				75	0	14.71	15.07	15.61	15.56	14.87	15.05	0
			QPSK	1	1	14.64	14.75	15.34	15.66	15.03	14.90	0
				1	39	14.73	14.99	15.44	15.37	14.71	14.91	0
				1	76	14.89	15.14	15.61	15.32	14.70	15.01	0
				36	0	14.74	15.05	15.51	15.59	15.02	14.90	0
				36	21	14.93	15.16	15.41	15.56	14.78	15.02	0
				36	42	15.01	15.18	15.51	15.37	14.80	15.01	0
				75	0	14.88	15.06	15.59	15.49	14.80	15.03	0
			16QAM	1	1	14.75	14.61	15.37	15.56	15.17	14.87	0
			64QAM	1	1	14.78	14.81	15.53	15.65	14.76	14.91	0
			256QAM	1	1	14.40	14.17	14.91	15.08	14.51	14.32	0
		CP	QPSK	1	1	14.67	14.60	15.32	15.59	14.89	14.75	0

NR Band n77_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						648000	651200	654400	657600	660800	664000	
						3720 ㎒	3768 ㎒	3816 ㎒	3864 ㎒	3912 ㎒	3960 ㎒	
40 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	14.90	14.93	15.44	15.62	15.17	14.90	0
				1	53	14.80	14.98	15.43	15.26	14.87	14.94	0
				1	104	14.99	15.00	15.42	15.08	14.75	15.08	0
				50	0	14.92	14.96	15.55	15.50	15.12	14.85	0
				50	28	15.08	15.14	15.45	15.53	14.94	14.99	0
				50	56	15.04	15.18	15.59	15.32	14.98	14.94	0
				100	0	14.94	15.19	15.61	15.58	14.96	14.97	0
			QPSK	1	1	14.98	14.85	15.55	15.71	15.26	14.95	0
				1	53	14.87	15.06	15.38	15.48	14.87	14.98	0
				1	104	14.90	14.97	15.55	15.23	14.80	15.00	0
				50	0	14.86	15.05	15.42	15.62	15.22	14.95	0
				50	28	15.11	15.13	15.43	15.42	14.90	14.90	0
				50	56	15.09	15.19	15.64	15.37	14.85	15.06	0
				100	0	14.84	15.03	15.44	15.59	14.98	15.00	0
			16QAM	1	1	14.95	14.90	15.63	15.79	15.28	15.07	0
			64QAM	1	1	14.76	14.85	15.32	15.69	15.04	14.81	0
			256QAM	1	1	14.40	14.32	15.02	15.18	14.72	14.31	0
		CP	QPSK	1	1	14.87	14.83	15.30	15.47	15.14	14.70	0

NR Band n77_ 50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						648334	652166	656000		659834	663666	
						3725.01 ㎒	3782.49 ㎒	3840 ㎒		3897.51 ㎒	3954.99 ㎒	
50 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	14.80	15.15	15.30		15.02	14.74	0
				1	67	14.91	15.44	15.43		14.91	14.77	0
				1	131	14.96	15.32	15.20		14.76	14.70	0
				64	0	14.93	15.35	15.40		15.07	14.90	0
				64	35	15.02	15.48	15.40		14.81	14.78	0
				64	69	14.97	15.46	15.38		14.80	14.69	0
				128	0	14.91	15.28	15.38		14.93	14.85	0
			QPSK	1	1	14.91	15.30	15.29		15.09	14.83	0
				1	67	15.00	15.38	15.32		14.85	14.64	0
				1	131	14.94	15.28	15.11		14.61	14.76	0
				64	0	14.98	15.34	15.44		15.15	14.88	0
				64	35	15.11	15.47	15.45		14.94	14.71	0
				64	69	15.00	15.41	15.32		14.71	14.79	0
				128	0	15.03	15.43	15.42		14.95	14.76	0
			16QAM	1	1	14.93	15.14	15.35		15.01	14.76	0
			64QAM	1	1	14.96	15.17	15.39		15.02	14.78	0
			256QAM	1	1	14.33	14.73	14.81		14.65	14.23	0
		CP	QPSK	1	1	14.83	15.07	15.36		14.96	14.65	0

NR Band n77_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						648668	653556			658444	663332	
						3730.02 ㎒	3803.34 ㎒			3876.66 ㎒	3949.98 ㎒	
60 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	14.99	15.24			15.38	14.60	0
				1	81	15.04	15.32			15.10	14.57	0
				1	160	15.06	15.36			14.70	14.51	0
				81	0	14.97	15.41			15.25	14.68	0
				81	41	15.14	15.39			15.22	14.49	0
				81	81	15.09	15.38			14.92	14.67	0
				162	0	14.96	15.41			15.12	14.65	0
			QPSK	1	1	14.83	15.20			15.38	14.63	0
				1	81	14.99	15.42			15.10	14.52	0
				1	160	14.85	15.44			14.81	14.60	0
				81	0	14.98	15.49			15.31	14.71	0
				81	41	15.05	15.46			15.11	14.60	0
				81	81	15.08	15.44			14.94	14.73	0
				162	0	15.05	15.34			15.24	14.74	0
			16QAM	1	1	15.00	15.23			15.36	14.56	0
			64QAM	1	1	14.97	15.33			15.44	14.75	0
			256QAM	1	1	14.31	14.73			14.84	14.11	0
		CP	QPSK	1	1	14.95	15.10			15.14	14.56	0

NR Band n77_70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						649000	654336			658334	663000	
						3750 ㎒	3804.99 ㎒			3875.01 ㎒	3945 ㎒	
70 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	14.86	15.27			15.20	14.61	0
				1	95	14.94	15.22			14.92	14.42	0
				1	187	14.99	15.21			14.56	14.37	0
				90	0	14.79	15.28			15.16	14.44	0
				90	50	14.94	15.37			15.05	14.45	0
				90	99	14.93	15.20			14.85	14.41	0
				180	0	14.90	15.33			15.02	14.47	0
			QPSK	1	1	14.80	15.15			15.19	14.65	0
				1	95	14.82	15.37			14.85	14.38	0
				1	187	14.90	15.17			14.62	14.56	0
				90	0	14.76	15.46			15.15	14.43	0
				90	50	14.96	15.41			15.01	14.50	0
				90	99	15.04	15.42			14.84	14.35	0
				180	0	15.08	15.30			15.13	14.63	0
			16QAM	1	1	14.86	15.22			15.23	14.60	0
			64QAM	1	1	14.87	15.29			15.06	14.73	0
			256QAM	1	1	14.19	14.67			14.64	14.14	0
		CP	QPSK	1	1	14.71	15.24			14.97	14.37	0

NR Band n77_ 80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						649334		656000		662666		
						3740.01 ㎒		3840 ㎒		3939.99 ㎒		
80 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	14.85		15.25		14.66		0
				1	109	15.03		15.21		14.43		0
				1	215	14.77		14.93		14.41		0
				108	0	15.14		15.25		14.55		0
				108	55	15.09		15.23		14.64		0
				108	109	15.04		15.07		14.44		0
				216	0	15.07		15.24		14.50		0
			QPSK	1	1	14.90		15.21		14.78		0
				1	109	15.04		15.32		14.44		0
				1	215	14.83		14.83		14.53		0
				108	0	15.06		15.26		14.68		0
				108	55	15.13		15.21		14.63		0
				108	109	15.07		15.11		14.43		0
				216	0	14.96		15.33		14.61		0
			16QAM	1	1	14.82		15.28		14.83		0
			64QAM	1	1	14.88		15.33		14.77		0
			256QAM	1	1	14.44		14.69		14.23		0
		CP	QPSK	1	1	14.92		15.17		14.53		0

NR Band n77_ 90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						649668		656000		662332		
						3745.02 ㎒		3840 ㎒		3934.98 ㎒		
90 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	14.69		15.27		14.69		0
				1	123	14.91		15.21		14.51		0
				1	243	15.02		14.90		14.45		0
				120	0	14.85		15.35		14.74		0
				120	63	14.86		15.39		14.57		0
				120	125	15.04		15.08		14.35		0
				243	0	15.03		15.15		14.72		0
			QPSK	1	1	14.85		15.16		14.86		0
				1	123	15.00		15.17		14.52		0
				1	243	15.07		14.87		14.35		0
				120	0	14.88		15.36		14.80		0
				120	63	15.00		15.29		14.75		0
				120	125	14.91		15.17		14.42		0
				243	0	14.88		15.17		14.73		0
			16QAM	1	1	14.91		15.27		14.87		0
			64QAM	1	1	14.89		15.24		14.99		0
			256QAM	1	1	14.32		14.59		14.34		0
		CP	QPSK	1	1	14.80		14.99		14.67		0

NR Band n77_ 100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]						MPR [dB]
						650000				662000		
						3750 ㎒				3930 ㎒		
100 ㎒	30	DFT-s OFDM	pi/2 BPSK	1	1	14.85				14.80		0
				1	137	15.01				14.55		0
				1	271	14.91				14.61		0
				135	0	15.03				14.62		0
				135	69	14.98				14.65		0
				135	138	15.00				14.37		0
				270	0	14.91				14.65		0
			QPSK	1	1	14.80				14.79		0
				1	137	14.98				14.62		0
				1	271	14.92				14.47		0
				135	0	15.14				14.80		0
				135	69	15.12				14.67		0
				135	138	15.05				14.41		0
				270	0	15.13				14.60		0
			16QAM	1	1	14.82				14.98		0
			64QAM	1	1	14.99				14.99		0
			256QAM	1	1	14.39				14.33		0
		CP	QPSK	1	1	14.77				14.77		0

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

NR Band n77_10 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						630334	633334	636332	
						3445.01 ㎒	3500.01 ㎒	3544.98 ㎒	
10 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.10	15.39	15.71	0
				1	12	15.25	15.42	15.55	0
				1	22	15.26	15.43	15.74	0
				12	0	15.35	15.43	15.80	0
				12	6	15.35	15.51	15.86	0
				12	12	15.38	15.42	15.76	0
				24	0	15.25	15.52	15.84	0
			QPSK	1	1	15.25	15.31	15.72	0
				1	12	15.19	15.36	15.73	0
				1	22	15.21	15.51	15.68	0
				12	0	15.29	15.52	15.70	0
				12	6	15.37	15.46	15.71	0
				12	12	15.38	15.42	15.89	0
				24	0	15.21	15.48	15.82	0
			16QAM	1	1	15.19	15.55	15.64	0
			64QAM	1	1	15.04	15.48	15.72	0
			256QAM	1	1	14.84	14.93	15.12	0
		CP	QPSK	1	1	15.01	15.22	15.67	0

NR Band n77_15 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						630500	633334	636166	
						3457.5 ㎒	3500.01 ㎒	3542.49 ㎒	
15 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.32	15.42	15.58	0
				1	18	15.44	15.52	15.84	0
				1	36	15.45	15.56	15.77	0
				18	0	15.50	15.63	15.72	0
				18	9	15.47	15.68	15.78	0
				18	18	15.51	15.60	15.96	0
				36	0	15.55	15.60	15.86	0
			QPSK	1	1	15.23	15.49	15.58	0
				1	18	15.34	15.62	15.77	0
				1	36	15.56	15.54	15.85	0
				18	0	15.43	15.55	15.70	0
				18	9	15.37	15.45	15.74	0
				18	18	15.40	15.63	15.81	0
				36	0	15.53	15.66	15.69	0
			16QAM	1	1	15.11	15.62	15.83	0
			64QAM	1	1	15.24	15.56	15.65	0
			256QAM	1	1	14.90	14.96	15.17	0
		CP	QPSK	1	1	15.28	15.31	15.59	0

NR Band n77_20 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						630668	633334	636000	
						3460.02 ㎒	3500.01 ㎒	3540 ㎒	
20 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.47	15.64	15.59	0
				1	26	15.36	15.58	15.47	0
				1	49	15.47	15.45	15.68	0
				25	0	15.39	15.66	15.53	0
				25	13	15.56	15.53	15.62	0
				25	26	15.64	15.56	15.75	0
				50	0	15.54	15.48	15.61	0
			QPSK	1	1	15.35	15.67	15.62	0
				1	26	15.53	15.55	15.52	0
				1	49	15.50	15.57	15.82	0
				25	0	15.54	15.51	15.55	0
				25	13	15.47	15.54	15.67	0
				25	26	15.61	15.65	15.78	0
				50	0	15.56	15.65	15.64	0
			16QAM	1	1	15.35	15.64	15.68	0
			64QAM	1	1	15.48	15.74	15.72	0
			256QAM	1	1	14.95	15.20	15.09	0
		CP	QPSK	1	1	15.26	15.52	15.46	0

NR Band n77_30 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						631000	633334	635666	
						3465 ㎒	3500.01 ㎒	3534.99 ㎒	
30 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.46	15.73	15.86	0
				1	39	15.57	15.71	15.80	0
				1	76	15.42	15.75	15.89	0
				36	0	15.59	15.64	15.86	0
				36	21	15.51	15.72	15.80	0
				36	42	15.60	15.78	15.86	0
				75	0	15.59	15.71	15.92	0
			QPSK	1	1	15.35	15.64	15.87	0
				1	39	15.34	15.60	15.70	0
				1	76	15.35	15.74	15.97	0
				36	0	15.52	15.63	15.85	0
				36	21	15.41	15.60	15.72	0
				36	42	15.46	15.69	15.82	0
				75	0	15.45	15.68	15.88	0
			16QAM	1	1	15.57	15.74	15.71	0
			64QAM	1	1	15.54	15.77	15.84	0
			256QAM	1	1	14.90	15.21	15.39	0
		CP	QPSK	1	1	15.41	15.70	15.81	0

NR Band n77_40 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						631334		635332	
						3470.01 ㎒		3529.98 ㎒	
40 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.47		15.62	0
				1	53	15.51		15.64	0
				1	104	15.68		15.83	0
				50	0	15.70		15.80	0
				50	28	15.54		15.78	0
				50	56	15.60		15.86	0
				100	0	15.57		15.71	0
			QPSK	1	1	15.49		15.73	0
				1	53	15.51		15.63	0
				1	104	15.73		15.03	0
				50	0	15.60		15.86	0
				50	28	15.61		15.82	0
				50	56	15.64		15.77	0
				100	0	15.54		15.75	0
			16QAM	1	1	15.61		15.66	0
			64QAM	1	1	15.57		15.66	0
			256QAM	1	1	15.06		15.11	0
		CP	QPSK	1	1	15.44		15.58	0

NR Band n77_50 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
						631668		635000	
						3475.02 ㎒		3525 ㎒	
50 ㎒	30	DFT-s	pi/2 BPSK	1	1	15.24		15.26	0
				1	67	15.22		15.17	0
				1	131	15.13		15.52	0
				64	0	15.17		15.41	0
				64	35	15.24		15.44	0
				64	69	15.20		15.53	0
				128	0	15.20		15.32	0
			QPSK	1	1	15.31		15.28	0
				1	67	15.16		15.27	0
				1	131	15.28		15.41	0
				64	0	15.26		15.40	0
				64	35	15.32		15.31	0
				64	69	15.36		15.40	0
				128	0	15.35		15.31	0
			16QAM	1	1	15.28		15.24	0
			64QAM	1	1	15.12		15.40	0
			256QAM	1	1	14.73		14.90	0
		CP	QPSK	1	1	15.07		15.17	0

NR Band n77_60 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
60 ㎒	30	DFT-s	pi/2 BPSK	1	1		15.38		0
				1	81		15.38		0
				1	160		15.47		0
				81	0		15.57		0
				81	41		15.47		0
				81	81		15.44		0
				162	0		15.47		0
			QPSK	1	1		15.21		0
				1	81		15.49		0
				1	160		15.47		0
				81	0		15.53		0
				81	41		15.45		0
				81	81		15.45		0
				162	0		15.39		0
			16QAM	1	1		15.36		0
			64QAM	1	1		15.17		0
			256QAM	1	1		14.89		0
		CP	QPSK	1	1		15.24		0

NR Band n77_70 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
70 ㎒	30	DFT-s	pi/2 BPSK	1	1		15.20		0
				1	95		15.23		0
				1	187		15.39		0
				90	0		15.44		0
				90	50		15.28		0
				90	99		15.43		0
				180	0		15.38		0
			QPSK	1	1		15.25		0
				1	95		15.22		0
				1	187		15.51		0
				90	0		15.31		0
				90	50		15.23		0
				90	99		15.46		0
				180	0		15.33		0
			16QAM	1	1		15.08		0
			64QAM	1	1		15.09		0
			256QAM	1	1		14.73		0
		CP	QPSK	1	1		15.04		0

NR Band n77_80 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
80 ㎒	30	DFT-s	pi/2 BPSK	1	1		15.15		0
				1	109		15.32		0
				1	215		15.55		0
				108	0		15.28		0
				108	55		15.30		0
				108	109		15.49		0
				216	0		15.42		0
			QPSK	1	1		15.16		0
				1	109		15.20		0
				1	215		15.44		0
				108	0		15.31		0
				108	55		15.30		0
				108	109		15.49		0
				216	0		15.35		0
			16QAM	1	1		15.19		0
			64QAM	1	1		15.24		0
			256QAM	1	1		14.74		0
		CP	QPSK	1	1		15.17		0

NR Band n77_90 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
90 ㎒	30	DFT-s	pi/2 BPSK	1	1		15.23		0
				1	123		15.15		0
				1	243		15.63		0
				120	0		15.37		0
				120	63		15.27		0
				120	125		15.50		0
				243	0		15.36		0
			QPSK	1	1		15.20		0
				1	123		15.20		0
				1	243		15.42		0
				120	0		15.43		0
				120	63		15.38		0
				120	125		15.44		0
				243	0		15.31		0
			16QAM	1	1		15.12		0
			64QAM	1	1		15.07		0
			256QAM	1	1		14.68		0
		CP	QPSK	1	1		15.13		0

NR Band n77_100 ㎒ Bandwidth

Bandwidth	SCS(㎑)	OFDM	Modulation	RB Size	RB Offset	Reduced Power [dBm]			MPR [dB]
							633334		
							3500.01 ㎒		
100 ㎒	30	DFT-s	pi/2 BPSK	1	1		15.23		0
				1	137		15.19		0
				1	271		15.62		0
				135	0		15.23		0
				135	69		15.39		0
				135	138		15.35		0
				270	0		15.33		0
			QPSK	1	1		15.12		0
				1	137		15.34		0
				1	271		15.72		0
				135	0		15.35		0
				135	69		15.34		0
				135	138		15.43		0
				270	0		15.26		0
			16QAM	1	1		15.06		0
			64QAM	1	1		15.13		0
			256QAM	1	1		14.79		0
		CP	QPSK	1	1		15.16		0

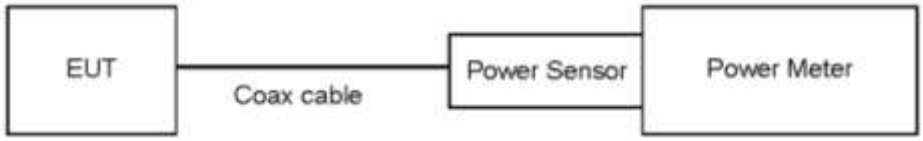
11.5 WIFI Conducted Power measurement method

Un-Licensed Bands (DTS Band)

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

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

Test setup

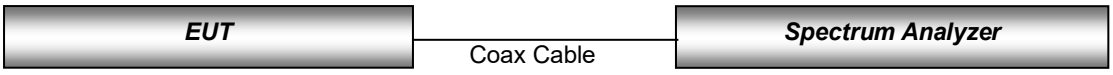


Un-Licensed Bands(NII Band)

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

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

Test setup



11.5.1 IEEE 802.11 (2.4 GHz) Maximum Conducted Power

Mode	Frequency [㎒]	Channel	IEEE 802.11 (2.4 ㎓) Average RF Conducted Power [dBm]		
			WIFI 1	WIFI 2	MIMO
802.11b	2 412	1	16.71	17.84	20.32
	2 437	6	16.27	17.90	20.17
	2 462	11	16.75	17.92	20.38
	2 467	12	3.75	4.87	7.36
	2 472	13	-3.01	-0.49	1.44
802.11g	2 412	1	15.79	16.75	19.31
	2 437	6	15.13	16.80	19.05
	2 462	11	15.56	16.76	19.21
	2 467	12	3.31	4.55	6.98
	2 472	13	-3.26	-0.65	1.25
802.11n (HT20)	2 412	1	15.65	16.55	19.14
	2 437	6	14.99	16.71	18.95
	2 462	11	15.37	16.64	19.06
	2 467	12	3.23	4.44	6.88
	2 472	13	-3.04	-0.40	1.49
802.11ax (HT20)	2 412	1	15.90	16.65	19.31
	2 437	6	15.32	16.85	19.17
	2 462	11	15.78	16.75	19.30
	2 467	12	1.79	4.75	6.53
	2 472	13	-3.86	-1.10	0.75

11.5.2 IEEE 802.11 (2.4 GHz) Reduced Conducted Power RCV ON

Mode	Frequency [㎒]	Channel	IEEE 802.11 (2.4 ㎓) Average RF Conducted Power [dBm]		
			WIFI 1	WIFI 2	MIMO
802.11b	2 412	1	12.15	13.73	16.02
	2 437	6	12.61	13.79	16.25
	2 462	11	12.89	13.87	16.42
	2 467	12	3.85	5.54	7.79
	2 472	13	-3.45	-0.37	1.37
802.11g	2 412	1	12.37	13.67	16.08
	2 437	6	12.25	13.51	15.94
	2 462	11	12.55	13.56	16.10
	2 467	12	4.20	5.70	8.03
	2 472	13	-3.75	-0.55	1.15
802.11n (HT20)	2 412	1	12.26	13.61	16.00
	2 437	6	12.11	13.39	15.81
	2 462	11	12.51	13.36	15.97
	2 467	12	4.10	5.56	7.90
	2 472	13	-3.54	-0.39	1.33
802.11ax (HT20)	2 412	1	12.19	13.63	15.98
	2 437	6	12.09	13.42	15.81
	2 462	11	12.45	13.40	15.96
	2 467	12	4.18	5.62	7.97
	2 472	13	-3.48	-0.18	1.48

IEEE 802.11 (2.4 GHz) with RSDB Mode and RSDB with receiver Active (RCV-ON)

Mode	Frequency [㎒]	Channel	IEEE 802.11 (2.4 ㎓) Average RF Conducted Power [dBm]		
			WIFI 1	WIFI 2	MIMO
802.11b	2 412	1	6.42	6.12	9.29
	2 437	6	5.73	6.58	9.19
	2 462	11	6.08	6.44	9.28
	2 467	12	3.85	5.54	7.79
	2 472	13	-3.45	-0.37	1.37
802.11g	2 412	1	12.85	12.30	15.60
	2 437	6	12.52	12.54	15.54
	2 462	11	12.68	12.56	15.64
	2 467	12	4.20	5.70	8.03
	2 472	13	-3.75	-0.55	1.15
802.11n (HT20)	2 412	1	11.43	12.02	14.74
	2 437	6	12.12	12.17	15.15
	2 462	11	12.28	11.77	15.04
	2 467	12	4.10	5.56	7.90
	2 472	13	-3.54	-0.39	1.33
802.11ax (HT20)	2 412	1	12.76	12.44	15.61
	2 437	6	12.45	12.75	15.61
	2 462	11	12.68	12.72	15.71
	2 467	12	4.18	5.62	7.97
	2 472	13	-3.48	-0.18	1.48

11.5.3 IEEE 802.11 (5 GHz) Maximum Conducted Power

Mode	Frequency [㎒]	Channel	IEEE 802.11 (5 ㎓) Average RF Conducted Power [dBm]		
			WIFI 1	WIFI 2	MIMO
802.11a (20 ㎒ BW)	5 180	36	16.57	15.49	19.08
	5 200	40	16.56	15.49	19.07
	5 220	44	15.96	15.48	18.74
	5 240	48	16.50	15.80	19.17
	5 260	52	16.78	15.68	19.27
	5 280	56	16.13	15.05	18.64
	5 300	60	16.95	15.55	19.32
	5 320	64	16.36	14.50	18.54
	5 500	100	16.06	14.52	18.37
	5 600	120	16.30	15.67	19.00
	5 620	124	16.04	15.24	18.67
	5 720	144	16.70	15.64	19.21
	5 745	149	16.74	15.59	19.21
	5 785	157	16.95	16.15	19.58
	5 825	165	16.57	16.05	19.32
	5 846	169	16.40	16.02	19.23
	5 865	173	16.35	15.58	19.00
	5 885	177	16.31	15.55	18.96

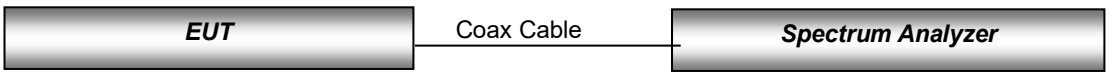
11.5.4 IEEE 802.11 (5 GHz) with RCV ON and RSDB Conducted Power

Mode	Frequency [㎒]	Channel	IEEE 802.11 (5 ㎓) Average RF Conducted Power [dBm]
			WIFI 1
802.11a (20 ㎒ BW)	5 180	36	11.73
	5 200	40	12.06
	5 220	44	12.39
	5 240	48	11.76
	5 260	52	12.11
	5 280	56	11.98
	5 300	60	12.92
	5 320	64	12.81
	5 500	100	12.74
	5 600	120	12.35
	5 620	124	12.40
	5 720	144	12.00
	5 745	149	12.01
	5 785	157	12.53
	5 825	165	12.81
	5 846	169	12.67
	5 865	173	12.40
	5 885	177	12.36

Mode	Frequency [㎒]	Channel	IEEE 802.11 (5 ㎓) Average Conducted Power [dBm]		
			WIFI 1	WIFI 2	MIMO
802.11ac (80 ㎒ BW)	5 210	42	12.16	11.32	14.77
	5 290	58	12.28	11.05	14.72
	5 530	106	13.11	10.90	15.15
	5 610	122	12.75	11.56	15.20
	5 690	138	12.80	10.92	14.97
	5 775	155	12.29	11.90	15.11
	5 855	171	11.85	11.63	14.75
802.11ac (160 ㎒ BW)	5 250	50	11.65	11.27	14.48
	5 570	114	12.26	11.45	14.89
	5 815	163	12.49	12.29	15.40

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



11.6 Bluetooth Maximum Conducted Power

The Burst Averaged-conducted power

Mode	Channel	Max. Average Conducted Power [dBm]	
		Ant.1	Ant.2
DH5	0	15.30	15.23
	39	15.86	14.42
	78	14.81	13.11
2-DH5	0	12.47	12.61
	39	13.00	11.48
	78	11.85	10.17
3-DH5	0	12.43	12.61
	39	13.01	11.48
	78	11.83	10.11

The Burst Averaged- Reduced Conducted Power

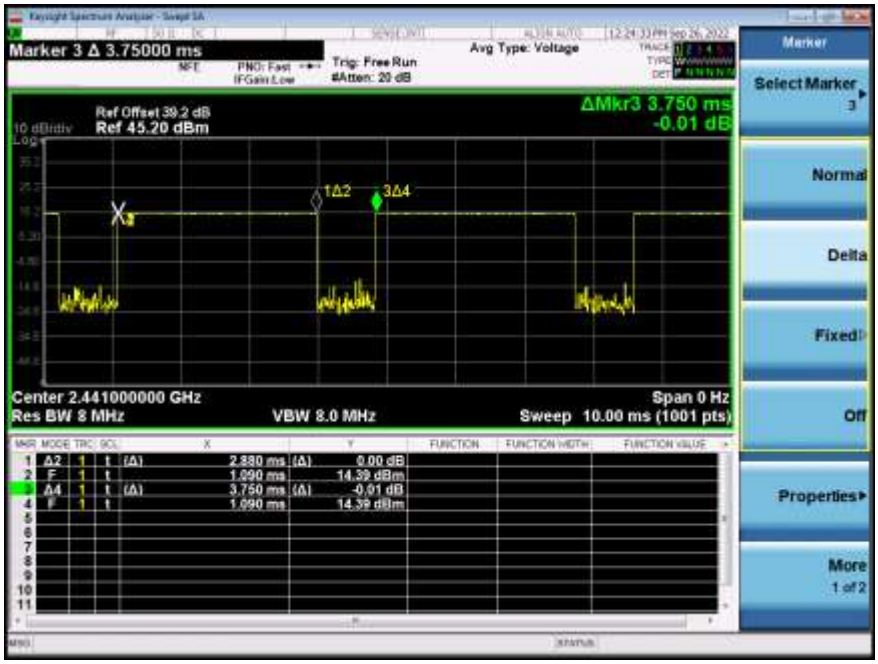
Mode	Channel	Max. Average Conducted Power [dBm]	
		Ant.1	Ant.2
DH5	0	11.42	11.43
	39	12.03	10.79
	78	11.14	9.40
2-DH5	0	11.21	11.36
	39	11.78	10.32
	78	10.55	8.94
3-DH5	0	11.08	11.38
	39	11.77	10.31
	78	10.53	8.93

BT LE Averaged-conducted power

Mode	Channel	Max. Average Conducted Power [dBm]	
		Ant.1	Ant.2
		Measured Power[dBm]	Measured Power[dBm]
LE 1M 37 Pakcet	0	14.63	15.14
	19	15.70	13.85
	39	14.21	13.36
LE 1M 255 Pakcet	0	14.44	15.01
	19	15.37	13.86
	39	14.07	13.26
LE 2M 37 Pakcet	0	14.49	15.30
	19	15.84	13.83
	39	14.60	13.35
LE 2M 255 Pakcet	0	14.90	15.26
	19	15.53	14.02
	39	14.53	12.97
LE 125K 37 Pakcet	0	6.23	7.00
	19	7.27	5.45
	39	6.96	5.29
LE 125K 255 Pakcet	0	6.15	7.00
	19	7.24	5.36
	39	6.81	5.24
LE 500K 37 Pakcet	0	6.29	7.0
	19	7.39	5.33
	39	7.00	5.36
LE 500K 255 Pakcet	0	6.18	6.97
	19	7.28	5.43
	39	6.80	5.30

Per October 2016 TCB Workshop Notes:
When call box and Bluetooth protocol are used for Bluetooth SAR measurement, time-domain plot is required to identify duty factor for supporting the test setup and result.
Bluetooth duty cycle was measured using Bluetooth tester equipment (CBT / R&S) with Bluetooth.

Bluetooth DH 5



Duty Cycle

= (BT-On time /BT-Full time) =(2.880/3.750) = 0.768 (DH5)

BT DH5 Maximum Duty Factor:
The theoretical maximum duty cycle defined by chipset manufacturer is 76.56% 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 76.8%, and the duty cycle was compensated by applying test error tolerance 1%.BTLE Mode was tested under the Worst Duty cycle condition in FTM Mode.
For more information on BT , please refer to the technical description document.

12. System Verification

12.1 Tissue Verification

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

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/06/2022	18.8	750H	705	0.859	43.789	0.889	42.174	-3.37	3.83
			710	0.864	43.717	0.890	42.148	-2.92	3.72
			750	0.908	43.100	0.893	41.940	1.68	2.77
09/13/2022	18.1	750H	750	0.870	43.600	0.893	41.940	-2.58	3.96
			785	0.905	43.134	0.896	41.758	1.00	3.30
09/05/2022	18.2	835H	820	0.905	42.036	0.899	41.577	0.67	1.10
			835	0.923	41.800	0.900	41.500	2.56	0.72
			850	0.939	41.577	0.916	41.500	2.51	0.19
09/07/2022	18.5	835H	820	0.906	41.024	0.899	41.577	0.78	-1.33
			835	0.924	40.800	0.900	41.500	2.67	-1.69
			850	0.939	40.565	0.916	41.500	2.51	-2.25
09/08/2022	19.3	835H	820	0.898	42.234	0.899	41.577	-0.11	1.58
			835	0.916	42.000	0.900	41.500	1.78	1.20
			850	0.931	41.776	0.916	41.500	1.64	0.67
09/14/2022	18.1	835H	820	0.905	41.633	0.899	41.577	0.67	0.13
			835	0.923	41.400	0.900	41.500	2.56	-0.24
			850	0.939	41.172	0.916	41.500	2.51	-0.79
09/07/2022	21.2	1800H	1710	1.298	41.660	1.348	40.144	-3.71	3.78
			1750	1.344	41.487	1.371	40.080	-1.97	3.51
			1800	1.402	41.243	1.400	40.000	0.14	3.11
09/15/2022	21.3	1800H	1710	1.289	41.666	1.348	40.144	-4.38	3.79
			1750	1.334	41.479	1.371	40.080	-2.70	3.49
			1800	1.392	41.225	1.400	40.000	-0.57	3.06
09/19/2022	21.7	1800H	1710	1.297	41.665	1.348	40.144	-3.78	3.79
			1750	1.344	41.488	1.371	40.080	-1.97	3.51
			1800	1.402	41.241	1.400	40.000	0.14	3.10
09/05/2022	23.1	1900H	1850	1.368	40.872	1.400	40.000	-2.29	2.18
			1900	1.419	40.685	1.400	40.000	1.36	1.71
			1910	1.426	40.658	1.400	40.000	1.86	1.65
09/06/2022	22.2	1900H	1850	1.367	41.471	1.400	40.000	-2.36	3.68
			1900	1.419	41.283	1.400	40.000	1.36	3.21
			1910	1.427	41.252	1.400	40.000	1.93	3.13
10/14/2022	21.8	1900H	1850	1.367	41.473	1.400	40.000	-2.36	3.68
			1900	1.419	41.286	1.400	40.000	1.36	3.22
			1910	1.426	41.256	1.400	40.000	1.86	3.14

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/22/2022	21.1	2450H	2400	1.767	39.376	1.756	39.290	0.63	0.22
			2450	1.827	39.152	1.800	39.200	1.50	-0.12
			2500	1.883	38.959	1.855	39.140	1.51	-0.46
09/23/2022	21.5	2450H	2400	1.756	39.116	1.756	39.290	0.00	-0.44
			2450	1.816	38.896	1.800	39.200	0.89	-0.78
			2500	1.871	38.702	1.855	39.140	0.86	-1.12
09/29/2022	20.0	2450H	2400	1.784	39.168	1.756	39.290	1.59	-0.31
			2450	1.839	38.910	1.800	39.200	2.17	-0.74
			2500	1.886	38.700	1.855	39.140	1.67	-1.12
10/31/2022	21.1	2450H	2400	1.748	39.210	1.756	39.290	-0.46	-0.20
			2450	1.811	38.970	1.800	39.200	0.61	-0.59
			2500	1.866	38.750	1.855	39.140	0.59	-1.00
10/31/2022	19.8	2450H	2400	1.735	39.270	1.756	39.290	-1.20	-0.05
			2450	1.802	38.990	1.800	39.200	0.11	-0.54
			2500	1.857	38.770	1.855	39.140	0.11	-0.95
11/01/2022	22.1	2450H	2400	1.735	39.24	1.756	39.290	-1.20	-0.13
			2450	1.801	39.02	1.800	39.200	0.06	-0.46
			2500	1.857	38.78	1.855	39.140	0.11	-0.92
09/14/2022	19.2	2600H	2500	1.929	39.571	1.866	39.126	3.38	1.14
			2600	1.929	39.138	1.964	39.010	-1.78	0.33
			2690	2.111	38.689	2.062	38.894	2.38	-0.53
09/13/2022	19.1	5180H-5320H	5180	4.562	36.820	4.635	36.010	-1.57	2.25
			5250	4.678	36.609	4.706	35.930	-0.59	1.89
			5280	4.725	36.558	4.737	35.894	-0.25	1.85
			5320	4.807	36.537	4.778	35.846	0.61	1.93
09/14/2022	19.6	5500H-5600H	5500	4.913	36.209	4.963	35.640	-1.01	1.60
			5600	4.963	35.871	5.065	35.530	-2.01	0.96
			5750	5.250	35.743	5.219	35.360	0.59	1.08
10/28/2022	23.0	5750H-5825H	5750	5.235	35.884	5.219	35.360	0.31	1.48
			5800	5.226	35.882	5.270	35.300	-0.83	1.65
			5825	5.220	35.832	5.296	35.270	-1.44	1.59
10/28/2022	20.8	5800H-5885H	5800	5.248	36.067	5.270	35.300	-0.42	2.17
			5835	5.249	36.046	5.306	35.258	-1.07	2.23
			5845	5.234	35.998	5.316	35.246	-1.54	2.13
			5855	5.230	35.972	5.326	35.235	-1.80	2.09
			5865	5.232	35.954	5.337	35.225	-1.97	2.07
			5875	5.236	35.873	5.347	35.215	-2.08	1.87
			5885	5.244	35.808	5.357	35.205	-2.11	1.71
10/28/2022	21.8	5800H-5885H	5800	5.265	36.028	5.270	35.300	-0.09	2.06
			5835	5.252	35.992	5.306	35.258	-1.02	2.08
			5845	5.248	35.963	5.316	35.246	-1.28	2.03
			5855	5.248	35.944	5.326	35.235	-1.46	2.01
			5865	5.242	35.903	5.337	35.225	-1.78	1.92
			5875	5.256	35.816	5.347	35.215	-1.70	1.71
			5885	5.273	35.778	5.357	35.205	-1.57	1.63
09/21/2022	20.5	5180H-5320H	5180	4.564	36.381	4.635	36.010	-1.53	1.03
			5250	4.681	36.182	4.706	35.930	-0.53	0.70
			5280	4.729	36.129	4.737	35.894	-0.17	0.65
			5320	4.798	36.084	4.778	35.846	0.42	0.66
09/22/2022	20.6	5500H-5600H	5500	4.908	36.023	4.963	35.640	-1.11	1.07
			5600	4.968	35.708	5.065	35.530	-1.92	0.50

			5750	5.252	35.505	5.219	35.360	0.63	0.41

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/23/2022	20.7	5750H-5825H	5750	5.251	35.570	5.219	35.360	0.61	0.59
			5800	5.220	35.622	5.270	35.300	-0.95	0.91
			5825	5.206	35.659	5.296	35.270	-1.70	1.10
10/04/2022	21.7	5800H-5885H	5800	5.200	35.500	5.270	35.300	-1.33	0.57
			5835	5.149	35.400	5.306	35.258	-2.96	0.40
			5845	5.145	35.364	5.316	35.246	-3.22	0.33
			5855	5.144	35.330	5.326	35.235	-3.42	0.27
			5865	5.147	35.304	5.337	35.225	-3.56	0.22
			5875	5.151	35.268	5.347	35.215	-3.67	0.15
			5885	5.162	35.232	5.357	35.205	-3.64	0.08

- 5G NR SUB 6

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/16/2022	19.5	835H	820	0.907	42.122	0.899	41.577	0.89	1.31
			835	0.927	41.900	0.900	41.500	3.00	0.96
			850	0.941	41.659	0.916	41.500	2.73	0.38
09/16/2022	19.5	1800H	1710	1.288	41.769	1.348	40.144	-4.45	4.05
			1750	1.331	41.591	1.371	40.080	-2.92	3.77
			1800	1.387	41.380	1.400	40.000	-0.93	3.45
09/26/2022	20.9	1800H	1710	1.291	41.676	1.348	40.144	-4.23	3.82
			1750	1.334	41.483	1.371	40.080	-2.70	3.50
			1800	1.391	41.230	1.400	40.000	-0.64	3.07
10/17/2022	20.3	1 900H	1850	1.369	41.460	1.400	40.000	-2.21	3.65
			1900	1.420	41.273	1.400	40.000	1.43	3.18
			1910	1.428	41.240	1.400	40.000	2.00	3.10
09/15/2022	19.2	2 600H	2500	1.861	39.742	1.866	39.126	-0.27	1.57
			2600	1.958	39.321	1.964	39.010	-0.31	0.80
			2690	1.966	39.321	2.062	38.894	-4.66	1.10
09/27/2022	21.3	2 600H	2500	1.888	39.655	1.866	39.126	1.18	1.35
			2600	1.986	39.217	1.964	39.010	1.12	0.53
			2690	1.984	39.217	2.062	38.894	-3.78	0.83
09/28/2022	22.4	2 600H	2500	1.882	38.565	1.866	39.126	0.86	-1.43
			2600	1.980	38.139	1.964	39.010	0.81	-2.23
			2690	1.977	38.139	2.062	38.894	-4.12	-1.94
09/29/2022	21.7	2 600H	2500	1.902	39.302	1.866	39.126	1.93	0.45
			2600	2.001	38.863	1.964	39.010	1.88	-0.38
			2690	1.998	38.863	2.062	38.894	-3.10	-0.08

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/20/2022	19.1	3500H	3400	2.878	37.707	2.810	38.040	2.42	-0.88
			3500	2.890	37.700	2.913	37.930	-0.79	-0.61
			3550	2.945	37.426	2.964	37.870	-0.64	-1.17
09/21/2022	21.4	3500H	3400	2.880	37.718	2.810	38.040	2.49	-0.85
			3500	2.894	37.749	2.913	37.930	-0.65	-0.48
			3550	2.947	37.437	2.964	37.870	-0.57	-1.14
09/22/2022	21.5	3500H	3400	2.846	37.440	2.810	38.040	1.28	-1.58
			3500	2.916	37.261	2.913	37.930	0.10	-1.76
			3550	2.951	37.184	2.964	37.870	-0.44	-1.81
09/23/2022	21.8	3500H	3400	2.846	38.440	2.810	38.040	1.28	1.05
			3500	2.916	38.261	2.913	37.930	0.10	0.87
			3550	2.951	38.184	2.964	37.870	-0.44	0.83

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/19/2022	18.7	3700H~3970	3700	3.080	37.100	3.118	37.700	-1.22	-1.59
			3750	3.116	37.088	3.169	37.640	-1.67	-1.47
			3800	3.190	37.227	3.220	37.590	-0.93	-0.97
			3900	3.300	37.000	3.233	37.470	2.07	-1.25
			3970	3.286	36.687	3.394	37.390	-3.18	-1.88
09/16/2022	20.4	3700H~3970	3700	3.087	37.153	3.118	37.700	-0.99	-1.45
			3750	3.116	37.098	3.169	37.640	-1.67	-1.44
			3800	3.192	37.238	3.220	37.590	-0.87	-0.94
			3900	3.299	37.011	3.233	37.470	2.04	-1.22
			3970	3.287	36.700	3.394	37.390	-3.15	-1.85
09/19/2022	18.5	3700H~3970	3700	3.074	37.339	3.118	37.700	-1.41	-0.96
			3750	3.117	37.165	3.169	37.640	-1.64	-1.26
			3800	3.229	37.276	3.220	37.590	0.28	-0.84
			3900	3.340	37.218	3.233	37.470	3.31	-0.67
			3970	3.292	36.909	3.394	37.390	-3.01	-1.29
09/20/2022	19.3	3700H~3970	3700	3.076	37.299	3.118	37.700	-1.35	-1.06
			3750	3.119	37.125	3.169	37.640	-1.58	-1.37
			3800	3.230	37.235	3.220	37.590	0.31	-0.94
			3900	3.341	37.172	3.233	37.470	3.34	-0.80
			3970	3.294	36.860	3.394	37.390	-2.95	-1.42

- Extremity

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
09/14/2022	22.9	1800H	1710	1.297	41.674	1.348	40.144	-3.78	3.81
			1750	1.343	41.501	1.371	40.080	-2.04	3.55
			1800	1.401	41.253	1.400	40.000	0.07	3.13
09/20/2022	21.1	1800H	1710	1.297	41.674	1.348	40.144	-3.78	3.81
			1750	1.343	41.484	1.371	40.080	-2.04	3.50
			1800	1.401	41.233	1.400	40.000	0.07	3.08
09/19/2022	20.5	1800H	1710	1.311	41.592	1.348	40.144	-2.74	3.61
			1750	1.353	41.426	1.371	40.080	-1.31	3.36
			1800	1.408	41.188	1.400	40.000	0.57	2.97
09/08/2022	22.5	1 900H	1850	1.366	40.806	1.400	40.000	-2.43	2.01
			1900	1.420	40.621	1.400	40.000	1.43	1.55
			1910	1.428	40.591	1.400	40.000	2.00	1.48
09/13/2022	22.2	1 900H	1850	1.369	41.471	1.400	40.000	-2.21	3.68
			1900	1.419	41.283	1.400	40.000	1.36	3.21
			1910	1.428	41.252	1.400	40.000	2.00	3.13
10/17/2022	21.7	1 900H	1850	1.368	41.467	1.400	40.000	-2.29	3.67
			1900	1.419	41.272	1.400	40.000	1.36	3.18
			1910	1.426	41.239	1.400	40.000	1.86	3.10
10/18/2022	20.5	1 900H	1850	1.370	41.460	1.400	40.000	-2.14	3.65
			1900	1.419	40.833	1.400	40.000	1.36	2.08
			1910	1.430	41.240	1.400	40.000	2.14	3.10

- Hybrid SPLSR/Volume

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ε	Target Conductivity σ (S/m)	Target Dielectric Constant, ε	% dev σ	% dev ε
10/31/2022	21.1	2450H	2400	1.725	39.624	1.756	39.290	-1.77	0.85
			2450	1.784	39.403	1.800	39.200	-0.89	0.52
			2500	1.840	39.208	1.855	39.140	-0.81	0.17
10/05/2022	20.8	3500H	3400	2.850	36.516	2.810	38.040	1.42	-4.01
			3500	2.923	36.350	2.913	37.930	0.34	-4.17
			3550	2.958	36.288	2.964	37.870	-0.20	-4.18
10/29/2022	23.5	5750H-5825H	5750	5.257	35.764	4.635	36.010	0.73	1.14
			5800	5.247	35.790	4.706	35.930	-0.44	1.39
			5825	5.236	35.782	4.737	35.894	-1.13	1.45

12.2 System Verification

Input Power: 50 mW

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR_{1g} (SPEAG) [W/kg]	50mW Measured SAR_{1g} [W/kg]	1 W Normalized SAR_{1g} [W/kg]	Deviation [%]	Limit [%]
750	09/06/2022	3903	1014	Head	18.9	18.8	8.71	0.424	8.48	- 2.64	± 10
750	09/13/2022	3903	1014	Head	18.3	18.1	8.71	0.408	8.16	- 6.31	± 10
835	09/05/2022	3903	441	Head	18.4	18.2	9.73	0.519	10.38	+ 6.68	± 10
835	09/07/2022	3903		Head	18.6	18.5	9.73	0.498	9.96	+ 2.36	± 10
835	09/08/2022	3903		Head	19.5	19.3	9.73	0.483	9.66	- 0.72	± 10
835	09/14/2022	3903		Head	18.4	18.1	9.73	0.491	9.82	+ 0.92	± 10
1 800	09/07/2022	7622	2d007	Head	21.4	21.2	38.2	1.97	39.4	+ 3.14	± 10
1 800	09/15/2022	7622		Head	21.5	21.3	38.2	1.96	39.2	+ 2.62	± 10
1 800	09/19/2022	7622		Head	21.8	21.7	38.2	1.97	39.4	+ 3.14	± 10
1 900	09/05/2022	7622	5d032	Head	23.3	23.1	40.0	1.89	37.8	- 5.50	± 10
1 900	09/06/2022	7622		Head	22.5	22.2	40.0	1.95	39.0	- 2.50	± 10
1 900	10/14/2022	7622		Head	22.1	21.8	40.0	2.08	41.6	+ 4.00	± 10
2 450	09/22/2022	7370	743	Head	21.2	21.1	53.2	2.65	53.0	- 0.38	± 10
2 450	09/23/2022	7370		Head	21.7	21.5	53.2	2.65	53.0	- 0.38	± 10
2 450	09/29/2022	7370		Head	20.1	20.0	53.2	2.68	53.6	+ 0.75	± 10
2450	10/31/2022	7370		Head	21.3	21.1	53.2	2.65	53.0	+ 0.38	± 10
2450	10/31/2022	7681		Head	19.9	19.8	53.2	2.73	54.6	+ 2.63	± 10
2450	11/01/2022	7370		Head	22.3	22.1	53.2	2.57	51.4	-3.38	± 10
2 600	09/14/2022	7370	1015	Head	19.4	19.2	56.3	2.86	57.2	+ 1.60	± 10
5 250	09/13/2022	7655	1253	Head	19.2	19.1	80.4	3.87	77.4	- 3.73	± 10
5 600	09/14/2022	7655		Head	19.7	19.6	82.1	4.16	83.2	+ 1.34	± 10
5 750	10/28/2022	7655		Head	23.3	23.0	79.9	4.11	82.2	+ 2.88	± 10
5 800	10/28/2022	7654	1107	Head	21.0	20.8	81.3	3.90	78.0	- 4.06	± 10
5 800	10/28/2022	7679		Head	21.9	21.8	81.3	4.36	87.2	+ 7.26	± 10
5 250	09/21/2022	7655	1253	Head	20.7	20.5	80.4	4.19	83.8	+ 4.23	± 10
5 600	09/22/2022	7655		Head	20.7	20.6	82.1	4.05	81.0	- 1.34	± 10
5 750	09/22/2022	7655		Head	20.7	20.6	79.9	3.95	79.0	- 1.13	± 10
5 750	09/23/2022	7655		Head	20.9	20.7	79.9	4.22	84.4	+ 5.63	± 10
5 800	10/04/2022	3903	1107	Head	22.0	21.7	81.3	3.93	78.6	- 3.32	± 10

5G NR SUB 6

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR_{1g} (SPEAG) [W/kg]	50mW Measured SAR_{1g} [W/kg]	1 W Normalized SAR_{1g} [W/kg]	Deviation [%]	Limit [%]
835	09/16/2022	3903	441	Head	19.6	19.5	9.73	0.504	10.08	+ 3.60	± 10
1 800	09/16/2022	7702	2d007	Head	19.7	19.5	38.2	1.96	39.2	+ 2.62	± 10
1 800	09/26/2022	7622	2d007	Head	21.1	20.9	38.2	1.98	39.6	+ 3.66	± 10
1 900	10/17/2022	7702	5d032	Head	20.5	20.3	40.0	2.06	41.2	+ 3.00	± 10
2 600	09/15/2022	7370	1015	Head	19.5	19.2	56.3	2.92	58.4	+ 3.73	± 10
2 600	09/27/2022	7622	1015	Head	21.5	21.3	56.3	2.93	58.6	+ 4.09	± 10
2 600	09/28/2022	7622	1015	Head	22.6	22.4	56.3	2.91	58.2	+ 3.37	± 10
2 600	09/29/2022	7622	1015	Head	21.9	21.7	56.3	2.96	59.2	+ 5.15	± 10
3 500	09/20/2022	3903	1132	Head	19.2	19.1	65.2	3.01	60.2	- 7.67	± 10
3 500	09/21/2022	7622	1132	Head	21.5	21.4	65.2	3.11	62.2	- 4.60	± 10
3 500	09/22/2022	7622	1132	Head	21.6	21.5	65.2	3.13	62.6	- 3.99	± 10
3 500	09/23/2022	7622	1132	Head	22.0	21.8	65.2	3.14	62.8	- 3.68	± 10
3 700	09/19/2022	3903	1105	Head	18.8	18.7	66.6	3.37	67.4	+ 1.20	± 10
3 900	09/19/2022	3903	1086	Head	18.8	18.7	68.9	3.68	73.6	+ 6.82	± 10
3 700	09/16/2022	7655	1105	Head	20.6	20.4	66.6	3.34	66.8	+ 0.30	± 10
3 900	09/16/2022	7655	1086	Head	20.6	20.4	68.9	3.51	70.2	+ 1.89	± 10
3 700	09/19/2022	7655	1105	Head	18.6	18.5	66.6	3.24	64.8	- 2.70	± 10
3 900	09/19/2022	7655	1086	Head	18.6	18.5	68.9	3.54	70.8	+ 2.76	± 10
3 700	09/20/2022	7655	1105	Head	19.5	19.3	66.6	3.35	67.0	+ 0.60	± 10
3 900	09/20/2022	7655	1086	Head	19.5	19.3	68.9	3.54	70.8	+ 2.76	± 10

Hybrid SPLSR/Volume

Freq. [MHz]	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR_{1g} (SPEAG) [W/kg]	50mW Measured SAR_{1g} [W/kg]	1 W Normalized SAR_{1g} [W/kg]	Deviation [%]	Limit [%]
2 450	10/33/2022	7370	743	Head	21.3	21.1	53.2	2.59	51.8	- 2.63	± 10
3 500	10/05/2022	7655	1132	Head	20.9	20.8	65.2	3.38	67.6	+ 3.68	± 10
5 750	10/29/2022	7655	1253	Head	23.6	23.5	79.9	4.11	82.2	+ 2.88	± 10

System Verification Results – Extremity SAR Input Power: 50 mW

Freq.	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR_{10g} (SPEAG)	50mW Measured SAR_{10g}	1 W Normalized SAR_{10g}	Deviation	Limit
[㎒]					[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
1 800	09/14/2022	7622	2d007	Head	23.2	22.9	19.8	0.990	19.8	+ 0.00	± 10
1 800	09/20/2022	7622		Head	21.2	21.1	19.8	0.991	19.82	+ 0.10	± 10
1 800	09/19/2022	7702		Head	20.8	20.5	19.8	0.978	19.56	- 1.21	± 10
1 900	09/08/2022	7622	5d032	Head	22.7	22.5	20.9	1.01	20.2	- 3.35	± 10
1 900	09/13/2022	7622		Head	22.5	22.2	20.9	0.957	19.14	- 8.42	± 10
1 900	10/17/2022	7622		Head	21.9	21.7	20.9	1.01	20.2	- 3.35	± 10
1 900	10/18/2022	7702		Head	20.7	20.5	20.9	1.06	21.2	+ 1.44	± 10
2 600	09/15/2022	7370	1015	Head	19.5	19.2	25.2	1.27	25.4	+ 0.79	± 10
3 500	09/20/2022	3903	1132	Head	19.2	19.1	24.5	1.15	23.0	- 6.12	± 10
5 250	09/13/2022	7655	1253	Head	19.2	19.1	22.9	1.11	22.2	- 3.06	± 10
5 600	09/14/2022	7655		Head	19.7	19.6	23.5	1.17	23.4	- 0.43	± 10
5 750	09/14/2022	7655		Head	19.7	19.6	22.6	1.14	22.8	+ 0.88	± 10
5 800	09/27/2022	7679	1107	Head	21.4	21.1	23.0	1.14	22.8	- 0.87	± 10
5 250	09/21/2022	7655	1253	Head	20.7	20.5	22.9	1.18	23.6	+ 3.06	± 10
5 600	09/22/2022	7655		Head	20.7	20.6	23.5	1.15	23.0	- 2.13	± 10
5 750	09/22/2022	7655		Head	20.7	20.6	22.6	1.10	22.0	- 2.65	± 10
5 800	10/04/2022	3903	1107	Head	22.0	21.7	23.0	1.04	20.8	- 9.57	± 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 ㎽ 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- Ant.#1												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
836.6	190	GSM	33.7	32.87	0.11	Left Cheek	1:8.3	48	0.222	1.211	0.269	-
836.6	190	GSM	33.7	32.87	-0.01	Left Tilt	1:8.3	48	0.140	1.211	0.170	-
836.6	190	GSM	33.7	32.87	0.10	Right Cheek	1:8.3	48	0.223	1.211	0.270	-
836.6	190	GSM	33.7	32.87	0.04	Right Tilt	1:8.3	48	0.116	1.211	0.140	-
836.6	190	GPRS 2Tx	32.0	31.26	0.12	Left Cheek	1:4.15	48	0.300	1.186	0.356	-
836.6	190	GPRS 2Tx	32.0	31.26	-0.07	Left Tilt	1:4.15	48	0.176	1.186	0.209	-
836.6	190	GPRS 2Tx	32.0	31.26	0.16	Right Cheek	1:4.15	48	**0.309**	1.186	**0.366**	1
836.6	190	GPRS 2Tx	32.0	31.26	-0.03	Right Tilt	1:4.15	48	0.169	1.186	0.200	-
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- Ant.#1												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1 880	661	GSM	31.0	29.77	0.17	Left Cheek	1:8.3		0.106	1.327	0.141	-
1 880	661	GSM	31.0	29.77	0.05	Left Tilt	1:8.3		0.043	1.327	0.057	-
1 880	661	GSM	31.0	29.77	0.17	Right Cheek	1:8.3		0.053	1.327	0.070	-
1 880	661	GSM	31.0	29.77	0.07	Right Tilt	1:8.3		0.041	1.327	0.054	-
1 880	661	GPRS 2Tx	29.0	27.42	-0.05	Left Cheek	1:4.15		**0.145**	1.439	**0.209**	2
1 880	661	GPRS 2Tx	29.0	27.42	0.09	Left Tilt	1:4.15		0.051	1.439	0.073	-
1 880	661	GPRS 2Tx	29.0	27.42	-0.07	Right Cheek	1:4.15		0.060	1.439	0.086	-
1 880	661	GPRS 2Tx	29.0	27.42	-0.05	Right Tilt	1:4.15		0.045	1.439	0.065	-
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- Ant.#1												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		**(W/kg)**	
836.6	4183	RMC	25.5	24.19	-0.07	Left Cheek	1:1	0	0.200	1.352	0.270	-
836.6	4183	RMC	25.5	24.19	-0.11	Left Tilt	1:1	0	0.113	1.352	0.153	-
836.6	4183	RMC	25.5	24.19	0.12	Right Cheek	1:1	0	**0.220**	1.352	**0.297**	3
836.6	4183	RMC	25.5	24.19	0.16	Right Tilt	1:1	0	0.110	1.352	0.149	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg (mW/g) Averaged over 1 gram						

UMTS Band 4 Head SAR- Ant.#1												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		**(W/kg)**	
1 732.4	1412	RMC	24.0	23.50	0.09	Left Cheek	1:1	18	**0.226**	1.122	**0.254**	4
1 732.4	1412	RMC	24.0	23.50	-0.10	Left Tilt	1:1	18	0.066	1.122	0.074	-
1 732.4	1412	RMC	24.0	23.50	-0.01	Right Cheek	1:1	18	0.129	1.122	0.145	-
1 732.4	1412	RMC	24.0	23.50	0.09	Right Tilt	1:1	18	0.110	1.122	0.123	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg (mW/g) Averaged over 1 gram						

UMTS Band 2 Head SAR- Ant.#1												
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(W/kg)		**(W/kg)**	
1 880	9400	RMC	24.0	23.29	-0.08	Left Cheek	1:1	8	**0.224**	1.178	**0.264**	5
1 880	9400	RMC	24.0	23.29	0.14	Left Tilt	1:1	8	0.071	1.178	0.084	-
1 880	9400	RMC	24.0	23.29	-0.04	Right Cheek	1:1	8	0.112	1.178	0.132	-
1 880	9400	RMC	24.0	23.29	0.14	Right Tilt	1:1	8	0.073	1.178	0.086	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg (mW/g) Averaged over 1 gram						

LTE Band 4 (Upper, Sub Ant#2) Head SAR under ULCA with RCV ON																
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB	RB	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)	Size	offset			(W/kg)		(W/kg)	
1 732.5	20175	QPSK	20	16.5	15.93	-0.14	Left Cheek	0	1	0	1:1	16	0.269	1.140	0.307	-
1 732.5	20175	QPSK	20	16.5	15.98	0.03	Left Cheek	0	18	0	1:1	16	0.246	1.127	0.277	-
1 732.5	20175	QPSK	20	16.5	15.93	-0.10	Left Tilt	0	1	0	1:1	16	0.410	1.140	0.468	-
1 732.5	20175	QPSK	20	16.5	15.98	-0.02	Left Tilt	0	18	0	1:1	16	0.411	1.127	0.463	-
1 732.5	20175	QPSK	20	16.5	15.93	0.14	Right Cheek	0	1	0	1:1	16	0.530	1.140	0.604	-
1 732.5	20175	QPSK	20	16.5	15.98	-0.03	Right Cheek	0	18	0	1:1	16	0.526	1.127	0.593	-
1 732.5	20175	QPSK	20	16.5	15.93	-0.13	Right Tilt	0	1	0	1:1	16	0.532	1.140	0.607	-
1 732.5	20175	QPSK	20	16.5	15.98	0.02	Right Tilt	0	18	0	1:1	16	**0.590**	1.127	**0.665**	6
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 5 Head SAR- Ant.#1

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
836.5	20525	QPSK	10	25.5	24.64	-0.14	Left Cheek	0	1	24	1:1	137	0.277	1.219	0.338	-
836.5	20525	QPSK	10	24.5	23.62	0.15	Left Cheek	1	25	12	1:1	137	0.220	1.225	0.269	-
836.5	20525	QPSK	10	25.5	24.64	-0.03	Left Tilt	0	1	24	1:1	137	0.160	1.219	0.195	-
836.5	20525	QPSK	10	24.5	23.62	0.01	Left Tilt	1	25	12	1:1	137	0.128	1.225	0.157	-
836.5	20525	QPSK	10	25.5	24.64	0.04	Right Cheek	0	1	24	1:1	137	**0.302**	1.219	**0.368**	7
836.5	20525	QPSK	10	24.5	23.62	0.02	Right Cheek	1	25	12	1:1	137	0.241	1.225	0.295	-
836.5	20525	QPSK	10	25.5	24.64	-0.01	Right Tilt	0	1	24	1:1	137	0.159	1.219	0.194	-
836.5	20525	QPSK	10	24.5	23.62	0.03	Right Tilt	1	25	12	1:1	137	0.133	1.225	0.163	-
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- Ant.#1

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
707.5	23095	QPSK	10	25.0	23.97	0.15	Left Cheek	0	1	24	1:1	128	**0.135**	1.268	**0.171**	8
707.5	23095	QPSK	10	24.0	22.90	0.11	Left Cheek	1	25	24	1:1	128	0.106	1.288	0.137	-
707.5	23095	QPSK	10	25.0	23.97	0.03	Left Tilt	0	1	24	1:1	128	0.079	1.268	0.100	-
707.5	23095	QPSK	10	24.0	22.90	-0.16	Left Tilt	1	25	24	1:1	128	0.059	1.288	0.076	-
707.5	23095	QPSK	10	25.0	23.97	0.18	Right Cheek	0	1	24	1:1	128	0.116	1.268	0.147	-
707.5	23095	QPSK	10	24.0	22.90	-0.03	Right Cheek	1	25	24	1:1	128	0.095	1.288	0.122	-
707.5	23095	QPSK	10	25.0	23.97	-0.04	Right Tilt	0	1	24	1:1	128	0.080	1.268	0.101	-
707.5	23095	QPSK	10	24.0	22.90	-0.10	Right Tilt	1	25	24	1:1	128	0.058	1.288	0.075	-
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- Ant.#1

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
782	23230	QPSK	10	25.0	23.50	0.18	Left Cheek	0	1	49	1:1	4	0.166	1.413	0.235	-
782	23230	QPSK	10	24.0	22.54	0.08	Left Cheek	1	25	12	1:1	4	0.134	1.400	0.188	-
782	23230	QPSK	10	25.0	23.50	0.02	Left Tilt	0	1	49	1:1	4	0.104	1.413	0.147	-
782	23230	QPSK	10	24.0	22.54	-0.10	Left Tilt	1	25	12	1:1	4	0.081	1.400	0.113	-
782	23230	QPSK	10	25.0	23.50	-0.16	Right Cheek	0	1	49	1:1	4	**0.197**	1.413	**0.278**	9
782	23230	QPSK	10	24.0	22.54	0.12	Right Cheek	1	25	12	1:1	4	0.162	1.400	0.227	-
782	23230	QPSK	10	25.0	23.50	0.03	Right Tilt	0	1	49	1:1	4	0.110	1.413	0.155	-
782	23230	QPSK	10	24.0	22.54	-0.18	Right Tilt	1	25	12	1:1	4	0.085	1.400	0.119	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

LTE Band 25 Head SAR- Ant.#1

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 882.5	26365	QPSK	20	24.0	22.80	0.13	Left Cheek	0	1	0	1:1	8	**0.216**	1.318	**0.285**	10
1 905.0	26590	QPSK	20	23.0	21.61	0.13	Left Cheek	1	50	49	1:1	8	0.133	1.377	0.183	-
1 882.5	26365	QPSK	20	24.0	22.80	0.01	Left Tilt	0	1	0	1:1	8	0.075	1.318	0.099	-
1 905.0	26590	QPSK	20	23.0	21.61	0.17	Left Tilt	1	50	49	1:1	8	0.043	1.377	0.059	-
1 882.5	26365	QPSK	20	24.0	22.80	0.05	Right Cheek	0	1	0	1:1	8	0.116	1.318	0.153	-
1 905.0	26590	QPSK	20	23.0	21.61	0.12	Right Cheek	1	50	49	1:1	8	0.065	1.377	0.090	-
1 882.5	26365	QPSK	20	24.0	22.80	-0.00	Right Tilt	0	1	0	1:1	8	0.084	1.318	0.111	-
1 905.0	26590	QPSK	20	23.0	21.61	0.14	Right Tilt	1	50	49	1:1	8	0.046	1.377	0.063	-

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- Ant.#1

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
831.5	26865	QPSK	15	25.0	23.50	0.04	Left Cheek	0	1	74	1:1	0	0.213	1.413	0.301	-
831.5	26865	QPSK	15	24.0	22.48	0.02	Left Cheek	1	36	0	1:1	0	0.186	1.419	0.264	-
831.5	26865	QPSK	15	25.0	23.50	-0.02	Left Tilt	0	1	74	1:1	0	0.143	1.413	0.202	-
831.5	26865	QPSK	15	24.0	22.48	-0.00	Left Tilt	1	36	0	1:1	0	0.123	1.419	0.175	-
831.5	26865	QPSK	15	25.0	23.50	0.13	Right Cheek	0	1	74	1:1	0	**0.257**	1.413	**0.363**	11
831.5	26865	QPSK	15	24.0	22.48	0.07	Right Cheek	1	36	0	1:1	0	0.206	1.419	0.292	-
831.5	26865	QPSK	15	25.0	23.50	0.06	Right Tilt	0	1	74	1:1	0	0.136	1.413	0.192	-
831.5	26865	QPSK	15	24.0	22.48	-0.01	Right Tilt	1	36	0	1:1	0	0.119	1.419	0.169	-

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 (Power Class 3) Head SAR- Ant.#2

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 636.5	41055	QPSK	20	25.0	24.61	-0.11	Left Cheek	0	1	99	1:1.58		**0.138**	1.094	**0.151**	12
2 636.5	41055	QPSK	20	24.0	23.73	0.12	Left Cheek	1	50	0	1:1.58		0.107	1.064	0.114	-
2 636.5	41055	QPSK	20	25.0	24.61	0.15	Left Tilt	0	1	99	1:1.58		0.050	1.094	0.055	-
2 636.5	41055	QPSK	20	24.0	23.73	0.10	Left Tilt	1	50	0	1:1.58		0.036	1.064	0.038	-
2 636.5	41055	QPSK	20	25.0	24.61	-0.03	Right Cheek	0	1	99	1:1.58		0.088	1.094	0.096	-
2 636.5	41055	QPSK	20	24.0	23.73	-0.02	Right Cheek	1	50	0	1:1.58		0.082	1.064	0.087	-
2 636.5	41055	QPSK	20	25.0	24.61	-0.04	Right Tilt	0	1	99	1:1.58		0.043	1.094	0.047	-
2 636.5	41055	QPSK	20	24.0	23.73	0.07	Right Tilt	1	50	0	1:1.58		0.036	1.064	0.038	-

LTE TDD Band 41 (Power Class 2) HPUE Head SAR- Ant.#2

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 636.5	41055	QPSK	20	26.5	26.03	0.11	Left Cheek	0	1	99	1:2.31		0.130	1.114	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 Head SAR - Ant.#1

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 720	132072	QPSK	20	24.0	23.07	-0.12	Left Cheek	0	1	0	1:1	23	**0.166**	1.239	**0.206**	13
1 720	132072	QPSK	20	23.0	21.99	0.16	Left Cheek	1	50	49	1:1	23	0.125	1.262	0.158	-
1 720	132072	QPSK	20	24.0	23.07	-0.11	Left Tilt	0	1	0	1:1	23	0.053	1.239	0.066	-
1 720	132072	QPSK	20	23.0	21.99	0.04	Left Tilt	1	50	49	1:1	23	0.032	1.262	0.040	-
1 720	132072	QPSK	20	24.0	23.07	0.16	Right Cheek	0	1	0	1:1	23	0.079	1.239	0.098	-
1 720	132072	QPSK	20	23.0	21.99	0.11	Right Cheek	1	50	49	1:1	23	0.059	1.262	0.074	-
1 720	132072	QPSK	20	24.0	23.07	-0.13	Right Tilt	0	1	0	1:1	23	0.060	1.239	0.074	-
1 720	132072	QPSK	20	23.0	21.99	0.11	Right Tilt	1	50	49	1:1	23	0.047	1.262	0.059	-

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

NR Band n5 (Cell) Head SAR- Ant.#1																
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.84	0.06	Left Cheek	0	1	1	1:1	137	0.240	1.306	0.313	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.56	0.00	Left Cheek	0	50	28	1:1	137	0.198	1.393	0.276	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.84	0.02	Left Tilt	0	1	1	1:1	137	0.163	1.306	0.213	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.56	0.01	Left Tilt	0	50	28	1:1	137	0.131	1.393	0.183	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.84	0.05	Right Cheek	0	1	1	1:1	137	**0.272**	1.306	**0.355**	14
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.56	0.11	Right Cheek	0	50	28	1:1	137	0.224	1.393	0.312	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.84	-0.02	Right Tilt	0	1	1	1:1	137	0.151	1.306	0.197	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.56	0.07	Right Tilt	0	50	28	1:1	137	0.114	1.393	0.159	-
836.5	167300	CP QPSK	20	23.5	22.46	0.02	Right Cheek	1.5	1	1	1:1	137	0.189	1.271	0.240	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

NR Band n25 Head SAR- Ant.#1																
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.57	-0.16	Left Cheek	0	1	53	1:1	8	0.225	1.390	**0.313**	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.79	0.04	Left Cheek	0	50	28	1:1	8	**0.234**	1.321	0.309	15
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.57	0.05	Left Tilt	0	1	53	1:1	8	0.060	1.390	0.084	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.79	0.15	Left Tilt	0	50	28	1:1	8	0.066	1.321	0.087	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.57	-0.04	Right Cheek	0	1	53	1:1	8	0.102	1.390	0.142	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.79	-0.15	Right Cheek	0	50	28	1:1	8	0.111	1.321	0.147	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.57	0.18	Right Tilt	0	1	53	1:1	8	0.077	1.390	0.106	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.79	-0.08	Right Tilt	0	50	28	1:1	8	0.081	1.321	0.107	-
1 882.5	376500	CP QPSK	20	22.5	21.17	-0.12	Left Cheek	1.5	1	1	1:1	8	0.165	1.358	0.224	-
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 – Power class 3 (RCV-On) - SUB Ant.#2																
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.76	-0.07	Left Cheek	0	1	137	1:1		0.248	1.186	0.294	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.81	-0.12	Left Cheek	0	135	138	1:1		0.231	1.172	0.271	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.76	0.02	Left Tilt	0	1	137	1:1		0.362	1.186	0.429	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.81	-0.05	Left Tilt	0	135	138	1:1		0.376	1.172	0.441	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.76	-0.16	Right Cheek	0	1	137	1:1		0.421	1.186	0.499	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.81	0.14	Right Cheek	0	135	138	1:1		0.434	1.172	0.509	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.76	-0.15	Right Tilt	0	1	137	1:1		**0.529**	1.186	0.627	16
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.81	0.10	Right Tilt	0	135	138	1:1		0.497	1.172	0.583	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.71	-0.16	Right Tilt	0	270	0	1:1		0.518	1.199	0.621	-
2 592.99	518598	CP QPSK	100	17.5	16.07	-0.11	Right Tilt	0	1	1	1:1		0.481	1.390	**0.669**	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

* Power reduction condition during Receiver_ON

NR Band n41 SRS Head SAR																
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
SRS #2 Main Ant.#2																
2 592.99	518598	CW	100	15.5	14.39	-0.01	Left Cheek	0	-	-	1:1		0.026	1.291	0.034	-
2 592.99	518598	CW	100	15.5	14.39	0.05	Left Tilt	0	-	-	1:1		0.00606	1.291	0.008	-
2 592.99	518598	CW	100	15.5	14.39	0	Right Cheek	0	-	-	1:1		0	1.291	0.000	-
2 592.99	518598	CW	100	15.5	14.39	-0.05	Right Tilt	0	-	-	1:1		0.0053	1.291	0.007	-
SRS #3 Sub Ant.#1																
2 592.99	518598	CW	100	14.0	13.04	-0.08	Left Cheek	0	-	-	1:1		0.235	1.247	0.293	-
2 592.99	518598	CW	100	14.0	13.04	-0.02	Left Tilt	0	-	-	1:1		**0.276**	1.247	**0.344**	17
2 592.99	518598	CW	100	14.0	13.04	0.07	Right Cheek	0	-	-	1:1		0.156	1.247	0.195	-
2 592.99	518598	CW	100	14.0	13.04	-0.19	Right Tilt	0	-	-	1:1		0.150	1.247	0.187	-
SRS #4 Main Ant.#4																
2 592.99	518598	CW	100	12.5	11.21	0	Left Cheek	0	-	-	1:1		0.000	1.346	0.000	-
2 592.99	518598	CW	100	12.5	11.21	0.12	Left Tilt	0	-	-	1:1		0.00148	1.346	0.002	-
2 592.99	518598	CW	100	12.5	11.21	0	Right Cheek	0	-	-	1:1		0	1.346	0.000	-
2 592.99	518598	CW	100	12.5	11.21	0.17	Right Tilt	0	-	-	1:1		0.012	1.346	0.016	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

* Power reduction condition during Receiver_ON

NR Band n66 Head SAR - Ant.#1																
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.92	0.12	Left Cheek	0	1	1	1:1	23	**0.248**	1.282	**0.318**	18
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.77	0.11	Left Cheek	0	108	54	1:1	23	0.226	1.327	0.300	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.92	0.11	Left Tilt	0	1	1	1:1	23	0.062	1.282	0.080	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.77	0.07	Left Tilt	0	108	54	1:1	23	0.060	1.327	0.080	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.92	-0.16	Right Cheek	0	1	1	1:1	23	0.115	1.282	0.147	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.77	-0.07	Right Cheek	0	108	54	1:1	23	0.125	1.327	0.166	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.92	0.16	Right Tilt	0	1	1	1:1	23	0.074	1.282	0.095	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.77	0.18	Right Tilt	0	108	54	1:1	23	0.084	1.327	0.112	-
1 745	349000	CP QPSK	40	22.5	20.86	-0.11	Left Cheek	1.5	1	1	1:1	23	0.159	1.459	0.232	-
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 (Upper, Sub Ant.#2) Head SAR under EN-DC with LTE Band 2 (RCV-ON)																
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 745	349000	DFT-s OFDM QPSK	40	17.0	16.35	0.05	Left Cheek	0	1	1	1:1	23	0.268	1.161	0.311	-
1 745	349000	DFT-s OFDM QPSK	40	17.0	16.40	0.06	Left Cheek	0	108	54	1:1	23	0.303	1.148	0.348	-
1 745	349000	DFT-s OFDM QPSK	40	17.0	16.35	-0.03	Left Tilt	0	1	1	1:1	23	0.462	1.161	0.537	-
1 745	349000	DFT-s OFDM QPSK	40	17.0	16.40	-0.00	Left Tilt	0	108	54	1:1	23	0.437	1.148	0.502	-
1 745	349000	DFT-s OFDM QPSK	40	17.0	16.35	0.12	Right Cheek	0	1	1	1:1	23	0.460	1.161	0.534	-
1 745	349000	DFT-s OFDM QPSK	40	17.0	16.40	0.16	Right Cheek	0	108	54	1:1	23	0.580	1.148	0.666	-
1 745	349000	DFT-s OFDM QPSK	40	17.0	16.35	0.03	Right Tilt	0	1	1	1:1	23	0.579	1.161	0.672	-
1 745	349000	DFT-s OFDM QPSK	40	17.0	16.40	0.01	Right Tilt	0	108	54	1:1	23	0.562	1.148	0.645	-
1 745	349000	CP QPSK	40	17.0	16.35	0.08	Right Tilt	0	1	1	1:1	23	**0.592**	1.161	**0.688**	19
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

* Power reduction condition during Receiver_ON

NR Band n77 Head SAR- Power class 3 (RCV-ON) - SUB Ant.#2																
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
3 750	650000	DFT-s OFDM QPSK	100	16.0	14.98	-0.10	Left Cheek	0	1	137	1:1		0.287	1.265	0.363	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.14	0.17	Left Cheek	0	135	0	1:1		0.247	1.219	0.301	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	14.98	0.18	Left Tilt	0	1	137	1:1		0.377	1.265	0.477	-
3 930	662000	DFT-s OFDM QPSK	100	16.0	14.79	0.03	Left Tilt	0	1	1	1:1		0.357	1.321	0.472	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.14	0.03	Left Tilt	0	135	0	1:1		0.318	1.219	0.388	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.13	0.12	Left Tilt	0	270	0	1:1		0.324	1.222	0.396	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	14.98	0.15	Right Cheek	0	1	137	1:1		0.354	1.265	0.448	-
3 930	662000	DFT-s OFDM QPSK	100	16.0	14.79	0.17	Right Cheek	0	1	1	1:1		0.456	1.321	0.603	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.14	-0.15	Right Cheek	0	135	0	1:1		0.424	1.219	0.517	-
3 930	662000	DFT-s OFDM QPSK	100	16.0	14.80	0.13	Right Cheek	0	135	0	1:1		0.403	1.318	0.531	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.13	-0.16	Right Cheek	0	270	0	1:1		0.438	1.222	0.535	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	14.98	0.15	Right Tilt	0	1	137	1:1		0.495	1.265	0.626	-
3 930	662000	DFT-s OFDM QPSK	100	16.0	14.79	0.09	Right Tilt	0	1	1	1:1		0.388	1.321	0.513	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.14	0.14	Right Tilt	0	135	0	1:1		0.550	1.219	0.670	-
3 930	662000	DFT-s OFDM QPSK	100	16.0	14.80	0.17	Right Tilt	0	135	0	1:1		0.434	1.318	0.572	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.13	-0.00	Right Tilt	0	270	0	1:1		**0.551**	1.222	**0.673**	20
3 750	650000	CP OFDM QPSK	100	16.0	14.77	0.15	Right Tilt	0	1	1	1:1		0.496	1.327	0.658	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

* Power reduction condition during Receiver_ON

NR Band n77 (DoD) Head SAR- Power class 3 (RCV-ON) - SUB Ant.#2																
Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.72	0.02	Left Cheek	0	1	271	1:1		0.298	1.067	0.318	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.43	0.04	Left Cheek	0	135	138	1:1		0.295	1.140	0.336	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.72	0.02	Left Tilt	0	1	271	1:1		0.406	1.067	0.433	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.43	0.02	Left Tilt	0	135	138	1:1		0.402	1.140	0.458	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.26	-0.04	Left Tilt	0	270	0	1:1		0.365	1.186	0.433	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.72	0.19	Right Cheek	0	1	271	1:1		0.635	1.067	0.677	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.43	-0.04	Right Cheek	0	135	138	1:1		**0.658**	1.140	**0.750**	21
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.26	0.04	Right Cheek	0	270	0	1:1		0.631	1.186	0.748	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.72	0.05	Right Tilt	0	1	271	1:1		0.647	1.067	0.690	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.43	0.06	Right Tilt	0	135	138	1:1		0.602	1.140	0.686	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.26	0.14	Right Tilt	0	270	0	1:1		0.546	1.186	0.647	-
3 500.01	633334	CP OFDM QPSK	100	16.0	15.16	0.10	Right Tilt	0	1	1	1:1		0.566	1.213	0.687	*
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram									

Note: * Data entry indicate Variability measurement.
Power reduction condition during Receiver_ON

NR Band n77 SRS Head SAR

Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
SRS #2 Main Ant.#3																
3 930.0	662000	CW	100	14.0	13.06	0	Left Cheek	0	-	-	1:1		0	1.242	0.000	-
3 930.0	662000	CW	100	14.0	13.06	0	Left Tilt	0	-	-	1:1		0	1.242	0.000	-
3 930.0	662000	CW	100	14.0	13.06	0	Right Cheek	0	-	-	1:1		0	1.242	0.000	-
3 930.0	662000	CW	100	14.0	13.06	0	Right Tilt	0	-	-	1:1		0	1.242	0.000	-
SRS #3 Sub Ant.#5																
3 930.0	662000	CW	100	14.5	14.21	-0.10	Left Cheek	0	-	-	1:1		0.299	1.069	0.320	-
3 930.0	662000	CW	100	14.5	14.21	0.00	Left Tilt	0	-	-	1:1		0.00762	1.069	0.008	-
3 930.0	662000	CW	100	14.5	14.21	-0.10	Right Cheek	0	-	-	1:1		0.456	1.069	0.487	-
3 750.0	650000	CW	100	14.5	14.16	-0.15	Right Cheek	0	-	-	1:1		**0.507**	1.081	**0.548**	22
3 930.0	662000	CW	100	14.5	14.21	0.00	Right Tilt	0	-	-	1:1		0.016	1.069	0.017	-
SRS #4 Main Ant.#4																
3 930.0	662000	CW	100	13.5	12.47	0	Left Cheek	0	-	-	1:1		0	1.268	0.000	-
3 930.0	662000	CW	100	13.5	12.47	0	Left Tilt	0	-	-	1:1		0	1.268	0.000	-
3 930.0	662000	CW	100	13.5	12.47	0	Right Cheek	0	-	-	1:1		0	1.268	0.000	-
3 930.0	662000	CW	100	13.5	12.47	0	Right Tilt	0	-	-	1:1		0	1.268	0.000	-

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

* Power reduction condition during Receiver_ON

NR Band n77 DoD SRS Head SAR

Frequency		Modulation	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
SRS #2 Main Ant.#3																
3 500.01	633334	CW	100	14.0	13.24	0	Left Cheek	0	-	-	1:1		0	1.191	0.000	-
3 500.01	633334	CW	100	14.0	13.24	0	Left Tilt	0	-	-	1:1		0	1.191	0.000	-
3 500.01	633334	CW	100	14.0	13.24	0	Right Cheek	0	-	-	1:1		0	1.191	0.000	-
3 500.01	633334	CW	100	14.0	13.24	0	Right Tilt	0	-	-	1:1		0	1.191	0.000	-
SRS #3 Sub Ant.#5																
3 500.01	633334	CW	100	14.5	14.47	0.01	Left Cheek	0	-	-	1:1		0.228	1.007	0.230	-
3 500.01	633334	CW	100	14.5	14.47	0.00	Left Tilt	0	-	-	1:1		0.026	1.007	0.026	-
3 500.01	633334	CW	100	14.5	14.47	0.00	Right Cheek	0	-	-	1:1		**0.569**	1.007	**0.573**	23
3 500.01	633334	CW	100	14.5	14.47	-0.03	Right Tilt	0	-	-	1:1		0.039	1.007	0.039	-
SRS #4 Main Ant.#4																
3 500.01	633334	CW	100	13.5	13.04	0	Left Cheek	0	-	-	1:1		0	1.112	0.000	-
3 500.01	633334	CW	100	13.5	13.04	0	Left Tilt	0	-	-	1:1		0	1.112	0.000	-
3 500.01	633334	CW	100	13.5	13.04	0	Right Cheek	0	-	-	1:1		0	1.112	0.000	-
3 500.01	633334	CW	100	13.5	13.04	0	Right Tilt	0	-	-	1:1		0	1.112	0.000	-

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

* Power reduction condition during Receiver_ON

DTS Head SAR - RCV-ON																
Frequency		Mode	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Ant. Config.	Duty Cycle	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
2 462	11	802.11b	20	1	14.0	13.87	0.18	Left Cheek	WIFI2	98.8	0.768	**0.567**	1.030	1.012	0.591	24
2 462	11	802.11b	20	1	14.0	13.87	0.11	Left Tilt	WIFI2	98.8	0.156	0.102	1.030	1.012	0.106	-
2 462	11	802.11b	20	1	14.0	13.87	-0.14	Right Cheek	WIFI2	98.8	0.447	0.224	1.030	1.012	0.234	-
2 462	11	802.11b	20	1	14.0	13.87	-0.02	Right Tilt	WIFI2	98.8	0.068	0.043	1.030	1.012	0.045	-
2 462	11	802.11b	20	1	17.0	16.42	0.01	Left Cheek	MIMO	98.8	0.782	0.528	1.291	1.012	**0.690**	-
2 462	11	802.11b	20	1	17.0	16.42	0.09	Left Tilt	MIMO	98.8	0.141	0.079	1.291	1.012	0.103	-
2 462	11	802.11b	20	1	17.0	16.42	-0.17	Right Cheek	MIMO	98.8	0.783	0.521	1.291	1.012	0.681	-
2 462	11	802.11b	20	1	17.0	16.42	0.13	Right Tilt	MIMO	98.8	0.391	0.220	1.291	1.012	0.287	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Head 1.6 W/kg Averaged over 1 gram						

- For the SAR measurement results of MIMO Ant Mode(802.11b), higher power scalling factor among each SISO ANT was applied.

DTS Head SAR - RSDB with RCV-ON																
Frequency		Mode	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Ant. Config.	Duty Cycle	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
2 437	6	802.11b	20	1	7	6.58	-0.18	Left Cheek	WIFI2	98.8	0.154	0.098	1.102	1.012	0.109	-
2 437	6	802.11b	20	1	7	6.58	0.14	Left Tilt	WIFI2	98.8	0.0271	0.012	1.102	1.012	0.013	-
2 437	6	802.11b	20	1	7	6.58	-0.14	Right Cheek	WIFI2	98.8	0.138	0.056	1.102	1.012	0.062	-
2 437	6	802.11b	20	1	7	6.58	0.018	Right Tilt	WIFI2	98.8	0.0275	0.00625	1.102	1.012	0.007	-
2 462	11	802.11g	20	6	13	12.56	-0.07	Left Cheek	WIFI2	93.3	0.545	0.403	1.107	1.072	0.478	-
2 462	11	802.11g	20	6	13	12.56	0.10	Left Tilt	WIFI2	93.3	0.093	0.062	1.107	1.072	0.074	-
2 462	11	802.11g	20	6	13	12.56	-0.17	Right Cheek	WIFI2	93.3	0.582	0.334	1.107	1.072	0.396	-
2 462	11	802.11g	20	6	13	12.56	0.15	Right Tilt	WIFI2	93.3	0.0655	0.039	1.107	1.072	0.046	-
2 412	1	802.11b	20	1	10	9.29	-0.17	Left Cheek	MIMO	98.8	0.182	0.106	1.225	1.012	0.131	-
2 412	1	802.11b	20	1	10	9.29	0.01	Left Tilt	MIMO	98.8	0.0441	0.016	1.225	1.012	0.020	-
2 412	1	802.11b	20	1	10	9.29	-0.08	Right Cheek	MIMO	98.8	0.142	0.064	1.225	1.012	0.079	-
2 412	1	802.11b	20	1	10	9.29	0.17	Right Tilt	MIMO	98.8	0.0793	0.035	1.225	1.012	0.043	-
2 462	11	802.11g	20	6	16	15.64	0.17	Left Cheek	MIMO	93.3	0.623	**0.411**	1.107	1.072	**0.488**	99
2 462	11	802.11g	20	6	16	15.64	0.01	Left Tilt	MIMO	93.3	0.150	0.102	1.107	1.072	0.121	-
2 462	11	802.11g	20	6	16	15.64	0.14	Right Cheek	MIMO	93.3	0.604	0.307	1.107	1.072	0.364	-
2 462	11	802.11g	20	6	16	15.64	0.18	Right Tilt	MIMO	93.3	0.301	0.203	1.107	1.072	0.241	-
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/ RSDB with 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)	
5 300	60	802.11a	20	6	13.0	12.92	-0.12	Left Cheek	WIFI1	93.7	0.585	0.134	1.019	1.067	0.146	-
5 300	60	802.11a	20	6	13.0	12.92	0.15	Left Tilt	WIFI1	93.7	0.308	0.125	1.019	1.067	0.136	-
5 300	60	802.11a	20	6	13.0	12.92	0.12	Right Check	WIFI1	93.7	1.86	**0.612**	1.019	1.067	**0.665**	25
5 300	60	802.11a	20	6	13.0	12.92	0.15	Right Tilt	WIFI1	93.7	0.855	0.290	1.019	1.067	0.315	-
5 500	100	802.11a	20	6	13.0	12.74	-0.17	Left Cheek	WIFI1	93.7	0.536	0.064	1.062	1.067	0.073	-
5 500	100	802.11a	20	6	13.0	12.74	0.13	Left Tilt	WIFI1	93.7	0.229	0.095	1.062	1.067	0.108	-
5 500	100	802.11a	20	6	13.0	12.74	0.16	Right Check	WIFI1	93.7	1.31	0.502	1.062	1.067	0.569	-
5 500	100	802.11a	20	6	13.0	12.74	0.12	Right Tilt	WIFI1	93.7	0.799	0.293	1.062	1.067	0.332	-
5 825	165	802.11a	20	6	13.0	12.81	0.13	Left Cheek	WIFI1	93.7	0.0668	0.017	1.045	1.067	0.019	-
5 825	165	802.11a	20	6	13.0	12.81	0.02	Left Tilt	WIFI1	93.7	0.0929	0.020	1.045	1.067	0.022	-
5 825	165	802.11a	20	6	13.0	12.81	-0.17	Right Check	WIFI1	93.7	0.541	0.172	1.045	1.067	0.192	-
5 825	165	802.11a	20	6	13.0	12.81	0.12	Right Tilt	WIFI1	93.7	0.107	0.028	1.045	1.067	0.031	-
5 845	169	802.11a	20	6	13.0	12.67	0.03	Left Cheek	WIFI1	93.7	0.36	0.051	1.079	1.067	0.059	-
5 845	169	802.11a	20	6	13.0	12.67	-0.16	Left Tilt	WIFI1	93.7	0.273	0.045	1.079	1.067	0.052	-
5 845	169	802.11a	20	6	13.0	12.67	0.17	Right Check	WIFI1	93.7	3.63	0.525	1.079	1.067	0.604	-
5 845	169	802.11a	20	6	13.0	12.67	0.11	Right Tilt	WIFI1	93.7	1.22	0.198	1.079	1.067	0.228	-
5 290	58	802.11ac	80	MCS0	16.0	14.72	0.11	Left Cheek	MIMO	92.3	0.746	0.172	1.567	1.083	0.292	-
5 290	58	802.11ac	80	MCS0	16.0	14.72	0.10	Left Tilt	MIMO	92.3	0.389	0.124	1.567	1.083	0.210	-
5 290	58	802.11ac	80	MCS0	16.0	14.72	-0.03	Right Check	MIMO	92.3	1.08	0.280	1.567	1.083	0.475	
5 290	58	802.11ac	80	MCS0	16.0	14.72	0.07	Right Tilt	MIMO	92.3	0.743	0.248	1.567	1.083	0.421	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	-0.13	Left Cheek	MIMO	92.3	0.179	0.051	1.393	1.083	0.077	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	-0.15	Left Tilt	MIMO	92.3	0.381	0.047	1.393	1.083	0.071	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	0.11	Right Check	MIMO	92.3	1.60	0.209	1.393	1.083	0.315	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	0.01	Right Tilt	MIMO	92.3	0.591	0.191	1.393	1.083	0.288	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	-0.14	Left Cheek	MIMO	92.3	0.342	0.047	1.288	1.083	0.066	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	0.18	Left Tilt	MIMO	92.3	0.248	0.028	1.288	1.083	0.039	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	0.12	Right Check	MIMO	92.3	1.140	0.385	1.288	1.083	0.537	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	0.13	Right Tilt	MIMO	92.3	0.359	0.079	1.288	1.083	0.110	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	-0.06	Left Cheek	MIMO	92.3	0.208	0.065	1.371	1.083	0.097	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	0.13	Left Tilt	MIMO	92.3	0.224	0.057	1.371	1.083	0.085	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	-0.05	Right Check	MIMO	92.3	0.883	0.228	1.371	1.083	0.339	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	0.17	Right Tilt	MIMO	92.3	0.325	0.091	1.371	1.083	0.135	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram								

- For the SAR measurement results of MIMO Ant Mode(802.11ac 80MHz BW), higher power scalling factor among each SISO ANT was applied.
- The RCV-ON and RSDB with RCV-ON of the 5 GHz WLAN are the same target.

DSS Head SAR - RCV-ON												
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)	
2 441	39	Bluetooth DH5	13.0	12.03	-0.06	Left Cheek	Ant.1	0.068	1.250	1.013	0.086	-
2 441	39	Bluetooth DH5	13.0	12.03	0.03	Left Tilt	Ant.1	0.046	1.250	1.013	0.058	-
2 441	39	Bluetooth DH5	13.0	12.03	-0.16	Right Cheek	Ant.1	0.219	1.250	1.013	0.277	-
2 441	39	Bluetooth DH5	13.0	12.03	-0.13	Right Tilt	Ant.1	0.115	1.250	1.013	0.146	-
2 402	0	Bluetooth DH5	13.0	11.43	-0.12	Left Cheek	Ant.2	**0.308**	1.435	1.013	**0.448**	26
2 402	0	Bluetooth DH5	13.0	11.43	-0.13	Left Tilt	Ant.2	0.049	1.435	1.013	0.071	-
2 402	0	Bluetooth DH5	13.0	11.43	-0.16	Right Cheek	Ant.2	0.114	1.435	1.013	0.166	-
2 402	0	Bluetooth DH5	13.0	11.43	-0.13	Right Tilt	Ant.2	0.020	1.435	1.013	0.029	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Head 1.6 W/kg Averaged over 1 gram						

13.2 Body-worn SAR Measurement Results

GSM/ UMTS Body-Worn SAR- Ant.#1														
Frequency		Mode		Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
836.6	190	GSM 850 Voice		33.7	32.87	0.01	Rear	1:8.3	48	15	0.264	1.211	0.320	-
836.6	190	GSM 850 Voice		33.7	32.87	0.05	Front	1:8.3	48	15	0.305	1.211	0.369	-
836.6	190	GSM 850 GPRS 2Tx		32.0	31.26	-0.01	Rear	1:4.15	48	15	**0.409**	1.186	**0.485**	27
836.6	190	GSM 850 GPRS 2Tx		32.0	31.26	-0.01	Front	1:4.15	48	15	0.385	1.186	0.457	-
1 880	661	GSM 1900 Voice		31.0	29.77	0.01	Rear	1:8.3		15	0.222	1.327	0.295	-
1 880	661	GSM 1900 Voice		31.0	29.77	0.06	Front	1:8.3		15	0.178	1.327	0.236	-
1 880	661	GSM 1900 GPRS 2Tx		29.0	27.42	-0.01	Rear	1:4.15		15	**0.262**	1.439	**0.377**	28
1 880	661	GSM 1900 GPRS 2Tx		29.0	27.42	0.09	Front	1:4.15		15	0.217	1.439	0.312	-
836.6	4183	UMTS Band 5	RMC	25.5	24.19	-0.11	Rear	1:1	0	15	**0.273**	1.352	**0.369**	29
836.6	4183	UMTS Band 5	RMC	25.5	24.19	0.12	Front	1:1	0	15	0.222	1.352	0.300	-
1 732.4	1412	UMTS Band 4	RMC	24.0	23.50	0.06	Rear	1:1	18	15	**0.585**	1.122	**0.656**	30
1 732.4	1412	UMTS Band 4	RMC	24.0	23.50	0.01	Front	1:1	18	15	0.240	1.122	0.269	-
1 880.0	9400	UMTS Band 2	RMC	24.0	23.29	0.06	Rear	1:1	8	15	**0.477**	1.178	**0.562**	31
1 880.0	9400	UMTS Band 2	RMC	24.0	23.29	0.01	Front	1:1	8	15	0.196	1.178	0.231	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram							

LTE Body-Worn SAR - Ant.#1																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
836.5	20525	LTE 5 QPSK	10	25.5	24.64	-0.04	Rear	0	1	24	1:1	137	15	**0.391**	1.219	**0.477**	32
836.5	20525		10	24.5	23.62	0.00	Rear	1	25	12	1:1	137	15	0.302	1.225	0.370	-
836.5	20525		10	25.5	24.64	0.01	Front	0	1	24	1:1	137	15	0.381	1.219	0.464	-
836.5	20525		10	24.5	23.62	0.00	Front	1	25	12	1:1	137	15	0.303	1.225	0.371	-
707.5	23095	LTE 12 QPSK	10	25.0	23.97	0.03	Rear	0	1	24	1:1	128	15	0.178	1.268	0.226	-
707.5	23095		10	24.0	22.90	0.02	Rear	1	25	24	1:1	128	15	0.137	1.288	0.176	-
707.5	23095		10	25.0	23.97	0.01	Front	0	1	24	1:1	128	15	**0.187**	1.268	**0.237**	33
707.5	23095		10	24.0	22.90	-0.01	Front	1	25	24	1:1	128	15	0.141	1.288	0.182	-
782	23230	LTE 13 QPSK	10	25.0	23.50	0.02	Rear	0	1	49	1:1	4	15	0.316	1.413	0.446	-
782	23230		10	24.0	22.54	0.01	Rear	1	25	12	1:1	4	15	0.253	1.400	0.354	-
782	23230		10	25.0	23.50	-0.00	Front	0	1	49	1:1	4	15	**0.348**	1.413	**0.492**	34
782	23230		10	24.0	22.54	0.02	Front	1	25	12	1:1	4	15	0.271	1.400	0.379	-
1 882.5	26365	LTE 25 QPSK	20	24.0	22.80	0.07	Rear	0	1	0	1:1	8	15	**0.461**	1.318	**0.608**	35
1 905.0	26590		20	23.0	21.61	0.12	Rear	1	50	49	1:1	8	15	0.299	1.377	0.412	-
1 882.5	26365		20	24.0	22.80	0.07	Front	0	1	0	1:1	8	15	0.359	1.318	0.473	-
1 905.0	26590		20	23.0	21.61	0.18	Front	1	50	49	1:1	8	15	0.248	1.377	0.342	-
831.5	26865	LTE 26 QPSK	15	25.0	23.50	-0.02	Rear	0	1	74	1:1	0	15	0.281	1.413	0.397	-
831.5	26865		15	24.0	22.48	-0.00	Rear	1	36	0	1:1	0	15	0.243	1.419	0.345	-
831.5	26865		15	25.0	23.50	0.00	Front	0	1	74	1:1	0	15	**0.303**	1.413	**0.428**	36
831.5	26865		15	24.0	22.48	0.02	Front	1	36	0	1:1	0	15	0.281	1.419	0.399	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram									

LTE Body-Worn SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 636.5	41055	**Ant.#2** LTE 41 QPSK (PC3)	20	25.0	24.61	0.13	Rear	0	1	99	1:1.58		15	**0.276**	1.094	**0.302**	37
2 636.5	41055		20	24.0	23.73	-0.06	Rear	1	50	0	1:1.58		15	0.217	1.064	0.231	-
2 636.5	41055		20	25.0	24.61	0.09	Front	0	1	99	1:1.58		15	0.263	1.094	0.288	-
2 636.5	41055		20	24.0	23.73	-0.09	Front	1	50	0	1:1.58		15	0.152	1.064	0.162	-
2 636.5	41055	**Ant.#2** LTE 41 QPSK (PC2)	20	26.5	26.03	-0.08	Rear	0	1	99	1:2.31		15	0.265	1.114	0.295	-
1 720	132072	**Ant.#1** LTE 66 QPSK	20	24.0	23.07	0.11	Rear	0	1	0	1:1	23	15	**0.527**	1.239	**0.653**	38
1 720	132072		20	23.0	21.99	0.08	Rear	1	50	49	1:1	23	15	0.474	1.262	0.598	-
1 720	132072		20	24.0	23.07	0.19	Front	0	1	0	1:1	23	15	0.409	1.239	0.507	-
1 720	132072		20	23.0	21.99	0.11	Front	1	50	49	1:1	23	15	0.319	1.262	0.403	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 4 (Upper, Sub Ant#2) Body-Worn SAR under ULCA

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 732.5	20175	LTE 4(SCC) QPSK	20	21.0	20.13	-0.06	Rear	0	1	0	1:1	16	15	**0.205**	1.222	**0.250**	39
1 732.5	20175		20	21.0	20.16	-0.17	Rear	0	18	0	1:1	16	15	0.183	1.213	0.222	-
1 732.5	20175		20	21.0	20.13	0.15	Front	0	1	0	1:1	16	15	0.146	1.222	0.178	-
1 732.5	20175		20	21.0	20.16	-0.11	Front	0	18	0	1:1	16	15	0.138	1.213	0.167	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

NR Body-Worn SAR																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
836.5	167300	**Ant.#1**	20	25.0	23.84	0.00	Rear	0	1	1	1:1	137	15	0.313	1.306	0.409	-
836.5	167300	NR n5	20	25.0	23.56	-0.02	Rear	0	50	28	1:1	137	15	0.253	1.393	0.352	-
836.5	167300	DFT-s OFDM	20	25.0	23.84	0.02	Front	0	1	1	1:1	137	15	**0.324**	1.306	**0.423**	40
836.5	167300	QPSK	20	25.0	23.56	0.03	Front	0	50	28	1:1	137	15	0.254	1.393	0.354	-
836.5	167300	CP QPSK	20	23.5	22.46	0.03	Front	1.5	1	1	1:1	137	15	0.238	1.271	0.302	-
1 882.5	376500	**Ant.#1**	20	24.0	22.57	-0.15	Rear	0	1	53	1:1	8	15	**0.402**	1.390	**0.559**	41
1 882.5	376500	NR n25	20	24.0	22.79	-0.05	Rear	0	50	28	1:1	8	15	0.378	1.321	0.499	-
1 882.5	376500	DFT-s OFDM	20	24.0	22.57	-0.11	Front	0	1	53	1:1	8	15	0.311	1.390	0.432	-
1 882.5	376500	QPSK	20	24.0	22.79	0.02	Front	0	50	28	1:1	8	15	0.276	1.321	0.365	-
1 882.5	376500	CP QPSK	20	22.5	21.17	-0.09	Rear	1.5	1	1	1:1	8	15	0.358	1.358	0.486	-
1 745	349000	**Ant.#1**	40	24.0	22.92	-0.10	Rear	0	1	1	1:1	23	15	0.528	1.282	0.677	-
1 745	349000	NR n66	40	24.0	22.77	-0.11	Rear	0	108	54	1:1	23	15	**0.530**	1.327	**0.704**	42
1 745	349000	DFT-s OFDM	40	24.0	22.92	0.12	Front	0	1	1	1:1	23	15	0.415	1.282	0.532	-
1 745	349000	QPSK	40	24.0	22.77	-0.02	Front	0	108	54	1:1	23	15	0.419	1.327	0.556	-
1 745	349000	CP QPSK	40	22.5	20.86	0.01	Rear	1.5	1	1	1:1	23	15	0.440	1.459	0.642	-
2 592.99	518598	**SUB Ant.#2**	100	19.5	18.74	-0.15	Rear	0	1	137	1:1		15	0.153	1.191	0.182	-
2 592.99	518598	NR n41	100	19.5	18.82	-0.16	Rear	0	135	138	1:1		15	**0.156**	1.169	0.182	43
2 592.99	518598	DFT-s OFDM	100	19.5	18.74	0.13	Front	0	1	137	1:1		15	0.066	1.191	0.079	-
2 592.99	518598	QPSK	100	19.5	18.82	0.00	Front	0	135	138	1:1		15	0.059	1.169	0.069	-
2 592.99	518598	CP QPSK	100	19.5	18.23	-0.13	Rear	0	1	1	1:1		15	0.148	1.340	**0.198**	-
3 750	650000	**SUB Ant.#2**	100	19.0	17.81	-0.10	Rear	0	1	137	1:1		15	0.086	1.315	0.113	-
3 750	650000	NR n77	100	19.0	17.83	-0.15	Rear	0	135	0	1:1		15	**0.090**	1.309	**0.118**	44
3 750	650000	DFT-s OFDM	100	19.0	17.81	0.12	Front	0	1	137	1:1		15	0.031	1.315	0.041	-
3 750	650000	QPSK (PC3)	100	19.0	17.83	-0.10	Front	0	135	0	1:1		15	0.032	1.309	0.042	-
3 750	650000	CP QPSK	100	19.0	17.53	0.11	Rear	0	1	1	1:1		15	0.083	1.403	0.116	-
3 500.01	633334	**SUB Ant.#2**	100	19.0	18.63	-0.00	Rear	0	1	271	1:1		15	**0.125**	1.089	**0.136**	45
3 500.01	633334	NR n77 DFT-s	100	19.0	18.46	-0.17	Rear	0	135	138	1:1		15	0.108	1.132	0.122	-
3 500.01	633334	OFDM QPSK	100	19.0	18.63	0.14	Front	0	1	271	1:1		15	0.071	1.089	0.077	-
3 500.01	633334	(PC3) DoD	100	19.0	18.46	0.11	Front	0	135	138	1:1		15	0.070	1.132	0.079	-
3 500.01	633334	CP QPSK	100	19.0	18.17	-0.14	Rear	0	1	1	1:1		15	0.079	1.211	0.096	-
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 SRS Body-Worn SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
SRS #2 Main Ant.#3																	
2 592.99	518598	CW	100	15.5	14.39	-0.08	Rear	0	-	-	1:1		15	**0.046**	1.291	**0.059**	46
2 592.99	518598	CW	100	15.5	14.39	0.00	Front	0	-	-	1:1		15	0.026	1.291	0.034	-
SRS #3 Sub Ant.#5																	
2 592.99	518598	CW	100	14.0	13.04	-0.14	Rear	0	-	-	1:1		15	0.044	1.247	0.054	-
2 592.99	518598	CW	100	14.0	13.04	-0.10	Front	0	-	-	1:1		15	0.00449	1.247	0.006	-
SRS #4 Main Ant.#4																	
2 592.99	518598	CW	100	12.5	11.21	-0.11	Rear	0	-	-	1:1		15	0.019	1.346	0.026	-
2 592.99	518598	CW	100	12.5	11.21	0	Front	0	-	-	1:1		15	0.00	1.346	0.000	-
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 SRS Body-Worn SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
SRS #2 Main Ant.#3																	
3 930.0	662000	CW	100	14.0	13.06	0.00	Rear	0	-	-	1:1		15	0.00542	1.242	0.007	-
3 930.0	662000	CW	100	14.0	13.06	0.00	Front	0	-	-	1:1		15	0	1.242	0.000	-
SRS #3 Sub Ant.#5																	
3 930.0	662000	CW	100	14.5	14.21	-0.18	Rear	0	-	-	1:1		15	0.011	1.069	0.012	-
3 930.0	662000	CW	100	14.5	14.21	0.00	Front	0	-	-	1:1		15	0	1.069	0.000	-
SRS #4 Main Ant.#4																	
3 930.0	662000	CW	100	13.5	12.47	0.00	Rear	0	-	-	1:1		15	**0.012**	1.268	**0.015**	47
3 930.0	662000	CW	100	13.5	12.47	0.00	Front	0	-	-	1:1		15	0	1.268	0.000	-
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 DoD SRS Body-Worn SAR

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
SRS #2 Main Ant.#3																	
3 500.01	633334	CW	100	14.0	13.24	0.04	Rear	0	-	-	1:1		15	0.036	1.191	0.043	-
3 500.01	633334	CW	100	14.0	13.24	0.00	Front	0	-	-	1:1		15	0.015	1.191	0.018	-
SRS #3 Sub Ant.#5																	
3 500.01	633334	CW	100	14.5	14.47	-0.01	Rear	0	-	-	1:1		15	0.046	1.007	0.046	-
3 500.01	633334	CW	100	14.5	14.47	0.01	Front	0	-	-	1:1		15	0.029	1.007	0.029	-
SRS #4 Main Ant.#4																	
3 500.01	633334	CW	100	13.5	13.04	0.07	Rear	0	-	-	1:1		15	**0.114**	1.112	**0.127**	48
3 500.01	633334	CW	100	13.5	13.04	0.00	Front	0	-	-	1:1		15	0	1.112	0.000	-
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 (Upper, Sub Ant.#2) Body-Worn SAR under EN-DC with LTE Band 2																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 745	349000	NR n66 DFT-s OFDM QPSK	40	21.0	20.22	0.02	Rear	0	1	1	1:1	23	15	0.155	1.197	0.185	-
1 745	349000		40	21.0	20.31	-0.13	Rear	0	108	54	1:1	23	15	0.129	1.172	0.151	
1 745	349000		40	21.0	20.22	-0.12	Front	0	1	1	1:1	23	15	0.137	1.197	0.164	-
1 745	349000		40	21.0	20.31	-0.05	Front	0	108	54	1:1	23	15	0.116	1.172	0.136	-
1 745	349000	CP QPSK	40	21.0	20.30	-0.18	Rear	1.5	1	1	1:1	23	15	**0.242**	1.175	**0.284**	49
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

DTS Body-Worn SAR																	
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)										
2 462	11	802.11b	20	1	18.0	17.92	-0.08	Rear	WIFI2	98.8	15	0.165	0.105	1.019	1.012	0.108	-
2 462	11	802.11b	20	1	18.0	17.92	0.16	Front	WIFI2	98.8	15	0.185	0.121	1.019	1.012	0.125	-
2 462	11	802.11b	20	1	21.0	20.38	-0.16	Rear	MIMO	98.8	15	0.429	**0.271**	1.334	1.012	**0.366**	50
2 462	11	802.11b	20	1	21.0	20.38	0.15	Front	MIMO	98.8	15	0.374	0.247	1.334	1.012	0.333	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

- For the SAR measurement results of MIMO Ant Mode(802.11b), higher power scalling factor among each SISO ANT was applied.
- Simultaneous transmission evaluation of body worn in RSDB mode of 2.4Ghz WLAN was evaluated as the result of body worn measurement in maximum power mode of 2.4GHz WLAN, which is more higher output.

DTS Body-Worn SAR - RSDB																	
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant. Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)										
2 437	6	802.11b	20	1	7	6.58	-0.13	Rear	WIFI2	98.8	15	0.00763	0.00152	1.102	1.012	0.002	-
2 437	6	802.11b	20	1	7	6.58	0.09	Front	WIFI2	98.8	15	0.00952	0.00612	1.102	1.012	0.007	-
2 462	11	802.11g	20	6	13	12.56	-0.19	Rear	WIFI2	93.3	15	0.0643	0.038	1.107	1.072	0.045	-
2 462	11	802.11g	20	6	13	12.56	-0.04	Front	WIFI2	93.3	15	0.0555	0.034	1.107	1.072	0.040	-
2 412	1	802.11b	20	1	10	9.29	0.12	Rear	MIMO	98.8	15	0.0233	0.0072	1.225	1.012	0.009	-
2 412	1	802.11b	20	1	10	9.29	-0.16	Front	MIMO	98.8	15	0.0132	0.00474	1.225	1.012	0.006	-
2 462	11	802.11g	20	6	16	15.64	-0.09	Rear	MIMO	93.3	15	0.125	**0.077**	1.107	1.072	**0.091**	51
2 462	11	802.11g	20	6	16	15.64	0.12	Front	MIMO	93.3	15	0.108	0.069	1.107	1.072	0.082	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

NII Body-Worn SAR																	
Frequency		Mode	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Ant. Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																
5 300	60	802.11a	20	6	17.0	16.95	0.16	Rear	WIFI1	93.7	15	0.364	0.159	1.012	1.067	0.172	-
5 300	60	802.11a	20	6	17.0	16.95	0.13	Front	WIFI1	93.7	15	0.266	0.106	1.012	1.067	0.114	-
5 720	144	802.11a	20	6	17.0	16.70	0.07	Rear	WIFI1	93.7	15	0.293	0.115	1.072	1.067	0.131	-
5 720	144	802.11a	20	6	17.0	16.70	0.05	Front	WIFI1	93.7	15	0.114	0.041	1.072	1.067	0.047	-
5 785	157	802.11a	20	6	17.0	16.95	0.04	Rear	WIFI1	93.7	15	0.375	0.159	1.012	1.067	0.172	-
5 785	157	802.11a	20	6	17.0	16.95	0.06	Front	WIFI1	93.7	15	0.126	0.043	1.012	1.067	0.046	-
5 845	169	802.11a	20	6	17.0	16.40	-0.15	Rear	WIFI1	93.7	15	0.387	0.068	1.148	1.067	0.083	-
5 845	169	802.11a	20	6	17.0	16.40	-0.18	Front	WIFI1	93.7	15	0.294	0.000	1.148	1.067	0.000	-
5 300	60	802.11a	20	6	20.0	19.32	0.02	Rear	MIMO	93.7	15	0.230	0.038	1.396	1.067	0.057	-
5 300	60	802.11a	20	6	20.0	19.32	-0.10	Front	MIMO	93.7	15	0.116	0.060	1.396	1.067	0.089	-
5 720	144	802.11a	20	6	20.0	19.21	0.15	Rear	MIMO	93.7	15	0.228	0.058	1.368	1.067	0.085	-
5 720	144	802.11a	20	6	20.0	19.21	-0.13	Front	MIMO	93.7	15	0.0992	0.011	1.368	1.067	0.016	-
5 785	157	802.11a	20	6	20.0	19.58	0.03	Rear	MIMO	93.7	15	0.330	0.132	1.216	1.067	0.171	-
5 785	157	802.11a	20	6	20.0	19.58	0.02	Front	MIMO	93.7	15	0.0918	0.020	1.216	1.067	0.026	-
5 845	169	802.11a	20	6	20.0	19.23	0.00	Rear	MIMO	93.7	15	0.459	**0.211**	1.253	1.067	**0.282**	52
5 845	169	802.11a	20	6	20.0	19.23	0.00	Front	MIMO	93.7	15	0.295	0.124	1.253	1.067	0.166	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Body 1.6 W/kg Averaged over 1 gram					

WIFI1 (Sub Ant #4), WIFI2(Sub Ant #1)

NII Body-Worn SAR - RSDB																	
Frequency		Mode	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Ant. Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																
5 290	58	802.11ac	80	MCS0	16.0	14.72	0.04	Rear	MIMO	92.3	15	0.0786	0.010	1.567	1.083	0.017	-
5 290	58	802.11ac	80	MCS0	16.0	14.72	-0.17	Front	MIMO	92.3	15	0.115	**0.059**	1.567	1.083	**0.100**	53
5 610	122	802.11ac	80	MCS0	16.0	15.20	0.03	Rear	MIMO	92.3	15	0.0628	0.020	1.393	1.083	0.030	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	0.00	Front	MIMO	92.3	15	0.000	00.000	1.393	1.083	0.000	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	0.07	Rear	MIMO	92.3	15	0.0989	0.024	1.288	1.083	0.033	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	0.02	Front	MIMO	92.3	15	0.000	0.000	1.288	1.083	0.000	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	0.00	Rear	MIMO	92.3	15	0.122	0.039	1.371	1.083	0.058	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	0.00	Front	MIMO	92.3	15	0.0542	0.00982	1.371	1.083	0.015	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Body 1.6 W/kg Averaged over 1 gram					

DSS Body-Worn 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)	
2 441	39	Bluetooth DH5	16.0	15.86	-0.09	Rear	Ant.1	15	**0.059**	1.033	1.013	0.062	54
2 441	39	Bluetooth DH5	16.0	15.86	0.11	Front	Ant.1	15	0.042	1.033	1.013	0.044	-
2440	19	BT LE 1M 255 Packet	16.0	15.37	-0.19	Rear	Ant.1	15	0.00738	1.156	1.000	0.009	-
2440	19	BT LE 1M 255 Packet	16.0	15.37	-0.09	Front	Ant.1	15	0.00766	1.156	1.000	0.009	-
2 402	0	Bluetooth DH5	16.0	15.23	-0.18	Rear	Ant.2	15	0.054	1.194	1.013	0.065	-
2 402	0	Bluetooth DH5	16.0	15.23	0.05	Front	Ant.2	15	0.055	1.194	1.013	**0.067**	-
2 402	0	BT LE 1M 255 Packet	16.0	15.01	0.13	Rear	Ant.2	15	0.00865	1.256	1.000	0.011	-
2 402	0	BT LE 1M 255 Packet	16.0	15.01	-0.11	Front	Ant.2	15	0.00827	1.256	1.000	0.010	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram						

13.3 Hotspot SAR Measurement Results

GSM 850 Hotspot SAR- Ant.#1													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)			(mm)		(W/kg)		(W/kg)	
836.6	190	GPRS 2Tx	32.0	31.26	0.00	Rear	1:4.15	10	48	0.531	1.186	0.630	-
836.6	190	GPRS 2Tx	32.0	31.26	0.01	Front	1:4.15	10	48	0.424	1.186	0.503	-
836.6	190	GPRS 2Tx	32.0	31.26	-0.05	Left	1:4.15	10	48	0.446	1.186	0.529	-
836.6	190	GPRS 2Tx	32.0	31.26	0.02	Right	1:4.15	10	48	**0.719**	1.186	0.853	55
824.2	128	GPRS 2Tx	32.0	30.64	-0.02	Right	1:4.15	10	48	0.625	1.368	**0.855**	-
848.8	251	GPRS 2Tx	32.0	31.23	-0.01	Right	1:4.15	10	48	0.567	1.194	0.677	-
836.6	190	GPRS 2Tx	32.0	31.26	0.01	Bottom	1:4.15	10	48	0.214	1.186	0.254	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

GSM 1900 Hotspot SAR- Ant.#1													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)			(mm)		(W/kg)		(W/kg)	
1 880.0	661	GPRS 2TX	26.0	25.00	-0.10	Rear	1:4.15	10		0.345	1.259	0.434	-
1 880.0	661	GPRS 2TX	26.0	25.00	0.01	Front	1:4.15	10		0.250	1.259	0.315	-
1 880.0	661	GPRS 2TX	26.0	25.00	0.15	Left	1:4.15	10		0.149	1.259	0.188	-
1 880.0	661	GPRS 2TX	26.0	25.00	0.04	Right	1:4.15	10		0.017	1.259	0.021	-
1 880.0	661	GPRS 2TX	26.0	25.00	0.05	Bottom	1:4.15	10		0.676	1.259	0.851	-
1 850.2	512	GPRS 2TX	26.0	24.88	0.16	Bottom	1:4.15	10		0.529	1.294	0.685	-
1 909.8	810	GPRS 2TX	26.0	24.96	0.17	Bottom	1:4.15	10		**0.726**	1.271	**0.922**	56
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

UMTS Band 5 Hotspot SAR- Ant.#1													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
836.6	4183	RMC	25.5	24.19	-0.03	Rear	1:1	0	10	**0.552**	1.352	**0.746**	57
836.6	4183	RMC	25.5	24.19	0.15	Front	1:1	0	10	0.479	1.352	0.648	-
836.6	4183	RMC	25.5	24.19	0.01	Left	1:1	0	10	0.273	1.352	0.369	-
836.6	4183	RMC	25.5	24.19	-0.00	Right	1:1	0	10	0.496	1.352	0.671	-
836.6	4183	RMC	25.5	24.19	0.04	Bottom	1:1	0	10	0.121	1.352	0.164	-
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 SAR- Ant.#1													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
1 732.4	1412	RMC	21.0	20.51	0.12	Rear	1:1	18	10	0.610	1.119	0.683	-
1 732.4	1412	RMC	21.0	20.51	-0.06	Front	1:1	18	10	0.490	1.119	0.549	-
1 732.4	1412	RMC	21.0	20.51	0.03	Left	1:1	18	10	0.149	1.119	0.167	-
1 732.4	1412	RMC	21.0	20.51	0.02	Right	1:1	18	10	0.074	1.119	0.083	-
1 732.4	1412	RMC	21.0	20.51	0.07	Bottom	1:1	18	10	**0.758**	1.119	**0.849**	58
1 712.4	1312	RMC	21.0	20.82	0.07	Bottom	1:1	18	10	0.749	1.042	0.781	-
1 752.6	1513	RMC	21.0	20.72	-0.03	Bottom	1:1	18	10	0.747	1.067	0.797	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population						Body 1.6 W/kg Averaged over 1 gram							

UMTS Band 2 Hotspot SAR- Ant.#1													
Frequency		Mode	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.		(dB)	(dB)	(dB)				(mm)	(W/kg)		(W/kg)	
1 880.0	9400	RMC	18.5	18.27	0.15	Rear	1:1	8	10	0.300	1.054	0.316	-
1 880.0	9400	RMC	18.5	18.27	0.10	Front	1:1	8	10	0.282	1.054	0.297	-
1 880.0	9400	RMC	18.5	18.27	-0.01	Left	1:1	8	10	0.174	1.054	0.183	-
1 880.0	9400	RMC	18.5	18.27	0.14	Right	1:1	8	10	0.016	1.054	0.017	-
1 880.0	9400	RMC	18.5	18.27	0.05	Bottom	1:1	8	10	0.921	1.054	0.971	-
1 852.4	9262	RMC	18.5	18.25	0.08	Bottom	1:1	8	10	0.794	1.059	0.841	-
1 907.6	9538	RMC	18.5	18.28	0.08	Bottom	1:1	8	10	**0.923**	1.052	**0.971**	59
1 907.6	9538	RMC	18.5	18.28	0.07	Bottom	1:1	8	10	0.921	1.052	0.969	*
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.

LTE Band 4 (Upper, Sub Ant#2) Hotspot SAR under ULCA																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 732.5	20175	QPSK	20	21.0	20.13	-0.00	Rear	0	1	0	1:1	16	10	0.299	1.222	0.365	-
1 732.5	20175	QPSK	20	21.0	20.16	-0.14	Rear	0	18	0	1:1	16	10	0.328	1.213	0.398	-
1 732.5	20175	QPSK	20	21.0	20.13	-0.10	Front	0	1	0	1:1	16	10	0.255	1.222	0.312	-
1 732.5	20175	QPSK	20	21.0	20.16	0.01	Front	0	18	0	1:1	16	10	0.257	1.213	0.312	-
1 732.5	20175	QPSK	20	21.0	20.13	-0.11	Left	0	1	0	1:1	16	10	0.132	1.222	0.161	-
1 732.5	20175	QPSK	20	21.0	20.16	-0.02	Left	0	18	0	1:1	16	10	0.130	1.213	0.158	-
1 732.5	20175	QPSK	20	21.0	20.13	0.09	Top	0	1	0	1:1	16	10	**0.489**	1.222	**0.597**	60
1 732.5	20175	QPSK	20	21.0	20.16	0.11	Top	0	18	0	1:1	16	10	0.479	1.213	0.581	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 5 Hotspot SAR- Ant.#1																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
836.5	20525	QPSK	10	25.5	24.64	-0.00	Rear	0	1	24	1:1	137	10	**0.617**	1.219	**0.752**	61
836.5	20525	QPSK	10	24.5	23.62	-0.01	Rear	1	25	12	1:1	137	10	0.496	1.225	0.607	-
836.5	20525	QPSK	10	24.5	23.64	0.02	Rear	1	50	0	1:1	137	10	0.497	1.219	0.606	-
836.5	20525	QPSK	10	25.5	24.64	0.00	Front	0	1	24	1:1	137	10	0.184	1.219	0.224	-
836.5	20525	QPSK	10	24.5	23.62	-0.02	Front	1	25	12	1:1	137	10	0.146	1.225	0.179	-
836.5	20525	QPSK	10	25.5	24.64	-0.04	Left	0	1	24	1:1	137	10	0.284	1.219	0.346	-
836.5	20525	QPSK	10	24.5	23.62	-0.02	Left	1	25	12	1:1	137	10	0.224	1.225	0.274	-
836.5	20525	QPSK	10	25.5	24.64	0.05	Right	0	1	24	1:1	137	10	0.410	1.219	0.500	-
836.5	20525	QPSK	10	24.5	23.62	0.00	Right	1	25	12	1:1	137	10	0.322	1.225	0.394	-
836.5	20525	QPSK	10	25.5	24.64	-0.01	Bottom	0	1	24	1:1	137	10	0.225	1.219	0.274	-
836.5	20525	QPSK	10	24.5	23.62	-0.02	Bottom	1	25	12	1:1	137	10	0.178	1.225	0.218	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

LTE Band 12 Hotspot SAR- Ant.#1

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
707.5	23095	QPSK	10	25.0	23.97	0.03	Rear	0	1	24	1:1	128	10	**0.302**	1.268	**0.383**	62
707.5	23095	QPSK	10	24.0	22.90	0.01	Rear	1	25	24	1:1	128	10	0.237	1.288	0.305	-
707.5	23095	QPSK	10	25.0	23.97	0.03	Front	0	1	24	1:1	128	10	0.176	1.268	0.223	-
707.5	23095	QPSK	10	24.0	22.90	-0.00	Front	1	25	24	1:1	128	10	0.147	1.288	0.189	-
707.5	23095	QPSK	10	25.0	23.97	-0.01	Left	0	1	24	1:1	128	10	0.210	1.268	0.266	-
707.5	23095	QPSK	10	24.0	22.90	0.02	Left	1	25	24	1:1	128	10	0.157	1.288	0.202	-
707.5	23095	QPSK	10	25.0	23.97	-0.07	Right	0	1	24	1:1	128	10	0.085	1.268	0.108	-
707.5	23095	QPSK	10	24.0	22.90	-0.07	Right	1	25	24	1:1	128	10	0.063	1.288	0.081	-
707.5	23095	QPSK	10	25.0	23.97	0.04	Bottom	0	1	24	1:1	128	10	0.043	1.268	0.055	-
707.5	23095	QPSK	10	24.0	22.90	-0.02	Bottom	1	25	24	1:1	128	10	0.033	1.288	0.043	-

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

LTE Band 13 Hotspot SAR - Ant.#1

Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
782	23230	QPSK	10	25.0	23.50	0.03	Rear	0	1	49	1:1	4	10	**0.475**	1.413	**0.671**	63
782	23230	QPSK	10	24.0	22.54	0.00	Rear	1	25	12	1:1	4	10	0.382	1.400	0.535	-
782	23230	QPSK	10	25.0	23.50	0.01	Front	0	1	49	1:1	4	10	0.336	1.413	0.475	-
782	23230	QPSK	10	24.0	22.54	0.01	Front	1	25	12	1:1	4	10	0.250	1.400	0.350	-
782	23230	QPSK	10	25.0	23.50	0.06	Left	0	1	49	1:1	4	10	0.329	1.413	0.465	-
782	23230	QPSK	10	24.0	22.54	0.05	Left	1	25	12	1:1	4	10	0.254	1.400	0.355	-
782	23230	QPSK	10	25.0	23.50	0.02	Right	0	1	49	1:1	4	10	0.348	1.413	0.492	-
782	23230	QPSK	10	24.0	22.54	0.02	Right	1	25	12	1:1	4	10	0.255	1.400	0.357	-
782	23230	QPSK	10	25.0	23.50	-0.04	Bottom	0	1	49	1:1	4	10	0.096	1.413	0.136	-
782	23230	QPSK	10	24.0	22.54	-0.03	Bottom	1	25	12	1:1	4	10	0.071	1.400	0.099	-

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

LTE Band 25 Hotspot SAR- Ant.#1																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 860.0	26140	QPSK	20	19.5	18.40	-0.08	Rear	0	1	49	1:1	8	10	0.525	1.288	0.676	-
1 860.0	26140	QPSK	20	19.5	18.40	0.12	Rear	0	50	25	1:1	8	10	0.526	1.288	0.678	-
1 860.0	26140	QPSK	20	19.5	18.40	0.12	Front	0	1	49	1:1	8	10	0.409	1.288	0.527	-
1 860.0	26140	QPSK	20	19.5	18.40	0.16	Front	0	50	25	1:1	8	10	0.409	1.288	0.527	-
1 860.0	26140	QPSK	20	19.5	18.40	0.16	Left	0	1	49	1:1	8	10	0.209	1.288	0.269	-
1 860.0	26140	QPSK	20	19.5	18.40	0.13	Left	0	50	25	1:1	8	10	0.212	1.288	0.273	-
1 860.0	26140	QPSK	20	19.5	18.40	0.11	Right	0	1	49	1:1	8	10	0.025	1.288	0.032	-
1 860.0	26140	QPSK	20	19.5	18.40	-0.11	Right	0	50	25	1:1	8	10	0.025	1.288	0.032	-
1 860.0	26140	QPSK	20	19.5	18.40	0.14	Bottom	0	1	49	1:1	8	10	**0.808**	1.288	1.041	64
1 882.5	26365	QPSK	20	19.5	18.16	0.19	Bottom	0	1	49	1:1	8	10	0.800	1.361	**1.089**	-
1 905.0	26590	QPSK	20	19.5	18.24	0.16	Bottom	0	1	49	1:1	8	10	0.800	1.337	1.069	-
1 860.0	26140	QPSK	20	19.5	18.40	0.19	Bottom	0	50	25	1:1	8	10	0.799	1.288	1.029	-
1 882.5	26365	QPSK	20	19.5	18.31	0.16	Bottom	0	50	25	1:1	8	10	0.747	1.315	0.982	-
1 905.0	26590	QPSK	20	19.5	18.29	0.12	Bottom	0	50	25	1:1	8	10	0.745	1.321	0.984	-
1 905.0	26590	QPSK	20	19.5	18.38	0.13	Bottom	0	100	0	1:1	8	10	0.714	1.294	0.924	-
1 860.0	26140	QPSK	20	19.5	18.40	-0.13	Bottom	0	1	49	1:1	8	10	0.799	1.288	1.029	*
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.

LTE Band 26 Hotspot SAR- Ant.#1																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
831.5	26865	QPSK	15	25.0	23.50	-0.03	Rear	0	1	74	1:1	0	10	**0.666**	1.413	**0.941**	65
831.5	26865	QPSK	15	24.0	22.48	-0.06	Rear	1	36	0	1:1	0	10	0.492	1.419	0.698	-
831.5	26865	QPSK	15	24.0	22.50	0.06	Rear	1	75	0	1:1	0	10	0.440	1.413	0.622	
831.5	26865	QPSK	15	25.0	23.50	-0.04	Front	0	1	74	1:1	0	10	0.162	1.413	0.229	-
831.5	26865	QPSK	15	24.0	22.48	-0.01	Front	1	36	0	1:1	0	10	0.108	1.419	0.153	-
831.5	26865	QPSK	15	25.0	23.50	-0.02	Left	0	1	74	1:1	0	10	0.243	1.413	0.343	-
831.5	26865	QPSK	15	24.0	22.48	0.01	Left	1	36	0	1:1	0	10	0.213	1.419	0.302	-
831.5	26865	QPSK	15	25.0	23.50	-0.00	Right	0	1	74	1:1	0	10	0.331	1.413	0.468	-
831.5	26865	QPSK	15	24.0	22.48	0.01	Right	1	36	0	1:1	0	10	0.287	1.419	0.407	-
831.5	26865	QPSK	15	25.0	23.50	-0.00	Bottom	0	1	74	1:1	0	10	0.191	1.413	0.270	-
831.5	26865	QPSK	15	24.0	22.48	-0.01	Bottom	1	36	0	1:1	0	10	0.142	1.419	0.202	-
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 SAR (Power Class 3) - Ant.#2																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 636.5	41055	QPSK	20	23.0	22.96	-0.10	Rear	0	1	0	1:1.58		10	0.388	1.009	0.392	-
2 636.5	41055	QPSK	20	23.0	22.95	-0.08	Rear	0	50	0	1:1.58		10	0.392	1.012	0.397	-
2 636.5	41055	QPSK	20	23.0	22.96	0.08	Front	0	1	0	1:1.58		10	0.302	1.009	0.305	-
2 636.5	41055	QPSK	20	23.0	22.95	0.02	Front	0	50	0	1:1.58		10	0.300	1.012	0.303	-
2 636.5	41055	QPSK	20	23.0	22.96	0.11	Left	0	1	0	1:1.58		10	0.544	1.009	0.549	-
2 636.5	41055	QPSK	20	23.0	22.95	0.01	Left	0	50	0	1:1.58		10	0.444	1.012	0.449	-
2 636.5	41055	QPSK	20	23.0	22.96	0.15	Bottom	0	1	0	1:1.58		10	0.571	1.009	0.576	-
2 636.5	41055	QPSK	20	23.0	22.95	0.12	Bottom	0	50	0	1:1.58		10	**0.588**	1.012	**0.595**	66

LTE TDD Band 41 Hotspot SAR (Power Class 2) - Ant.#2																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 636.5	41055	QPSK	20	24.5	24.49	0.16	Bottom	0	50	0	1:2.31		10	0.564	1.002	0.565	-
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 SAR- Ant.#1																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 720	132072	QPSK	20	20.5	19.98	0.12	Rear	0	1	0	1:1	23	10	0.501	1.127	0.565	-
1 720	132072	QPSK	20	20.5	19.94	0.16	Rear	0	50	25	1:1	23	10	0.501	1.138	0.570	-
1 720	132072	QPSK	20	20.5	19.98	0.15	Front	0	1	0	1:1	23	10	0.374	1.127	0.422	-
1 720	132072	QPSK	20	20.5	19.94	0.14	Front	0	50	25	1:1	23	10	0.370	1.138	0.421	-
1 720	132072	QPSK	20	20.5	19.98	0.11	Left	0	1	0	1:1	23	10	0.121	1.127	0.136	-
1 720	132072	QPSK	20	20.5	19.94	0.17	Left	0	50	25	1:1	23	10	0.119	1.138	0.135	-
1 720	132072	QPSK	20	20.5	19.98	0.15	Right	0	1	0	1:1	23	10	0.063	1.127	0.071	-
1 720	132072	QPSK	20	20.5	19.94	0.12	Right	0	50	25	1:1	23	10	0.067	1.138	0.076	-
1 720	132072	QPSK	20	20.5	19.98	0.15	Bottom	0	1	0	1:1	23	10	0.667	1.127	0.752	-
1 720	132072	QPSK	20	20.5	19.94	0.18	Bottom	0	50	25	1:1	23	10	**0.699**	1.138	**0.795**	67
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

NR Band n5 (Cell) Hotspot SAR- Ant.#1																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.84	-0.07	Rear	0	1	1	1:1	137	10	**0.472**	1.306	**0.617**	68
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.56	-0.07	Rear	0	50	28	1:1	137	10	0.430	1.393	0.599	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.84	0.03	Front	0	1	1	1:1	137	10	0.335	1.306	0.438	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.56	0.00	Front	0	50	28	1:1	137	10	0.290	1.393	0.404	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.84	0.02	Left	0	1	1	1:1	137	10	0.253	1.306	0.330	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.56	-0.02	Left	0	50	28	1:1	137	10	0.190	1.393	0.265	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.84	-0.01	Right	0	1	1	1:1	137	10	0.374	1.306	0.489	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.56	0.02	Right	0	50	28	1:1	137	10	0.307	1.393	0.428	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.84	-0.02	Bottom	0	1	1	1:1	137	10	0.149	1.306	0.195	-
836.5	167300	DFT-s OFDM QPSK	20	25.0	23.56	0.05	Bottom	0	50	28	1:1	137	10	0.124	1.393	0.173	-
836.5	167300	CP QPSK	20	23.5	22.46	0.06	Rear	1.5	1	1	1:1	137	10	0.295	1.271	0.375	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

NR Band n25 Hotspot SAR- Ant.#1																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	18.95	0.07	Rear	0	1	53	1:1	8	10	0.374	1.135	0.424	-
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	19.21	0.01	Rear	0	50	0	1:1	8	10	0.417	1.069	0.446	-
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	18.95	0.05	Front	0	1	53	1:1	8	10	0.303	1.135	0.344	-
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	19.21	-0.10	Front	0	50	0	1:1	8	10	0.318	1.069	0.340	-
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	18.95	0.17	Left	0	1	53	1:1	8	10	0.205	1.135	0.233	-
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	19.21	0.15	Left	0	50	0	1:1	8	10	0.193	1.069	0.206	-
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	18.95	0.11	Right	0	1	53	1:1	8	10	0.027	1.135	0.031	-
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	19.21	0.15	Right	0	50	0	1:1	8	10	0.020	1.069	0.021	-
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	18.95	0.14	Bottom	0	1	53	1:1	8	10	0.676	1.135	0.767	-
1 882.5	376500	DFT-s OFDM QPSK	20	19.5	19.21	0.12	Bottom	0	50	0	1:1	8	10	**0.696**	1.069	0.744	69
1 905.0	381000	CP QPSK	20	19.5	19.00	0.14	Bottom	0	1	1	1:1	8	10	0.693	1.122	**0.778**	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

.

NR Band n41 Hotspot SAR (Power class 3) - SUB Ant.#2																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.76	-0.14	Rear	0	1	137	1:1		10	0.164	1.186	0.195	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.81	-0.16	Rear	0	135	138	1:1		10	0.139	1.172	0.163	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.76	-0.16	Front	0	1	137	1:1		10	0.075	1.186	0.089	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.81	-0.17	Front	0	135	138	1:1		10	0.064	1.172	0.075	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.76	0.15	Left	0	1	137	1:1		10	0.034	1.186	0.040	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.81	0.19	Left	0	135	138	1:1		10	0.031	1.172	0.036	-
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.76	0.07	Top	0	1	137	1:1		10	**0.242**	1.186	0.287	70
2 592.99	518598	DFT-s OFDM QPSK	100	17.5	16.81	0.11	Top	0	135	138	1:1		10	0.224	1.172	0.263	-
2 592.99	518598	CP QPSK	100	17.5	16.07	0.19	Top	0	1	1	1:1		10	0.217	1.390	**0.302**	-
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 SRS Hotspot SAR																		
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
SRS #2 Main Ant.#3																	
2 592.99	518598	CW	100	15.5	14.39	0.05	Rear	0	-	-	1:1		10	0.097	1.291	0.125	-
2 592.99	518598	CW	100	15.5	14.39	0.12	Front	0	-	-	1:1		10	0.062	1.291	0.080	-
2 592.99	518598	CW	100	15.5	14.39	0.17	Left	0	-	-	1:1		10	0.092	1.291	0.119	-
2 592.99	518598	CW	100	15.5	14.39	0.03	Bottom	0	-	-	1:1		10	0.130	1.291	0.168	-
SRS #3 Sub Ant.#5																	
2 592.99	518598	CW	100	14.0	13.04	-0.13	Rear	0	-	-	1:1		10	**0.163**	1.247	**0.203**	71
2 592.99	518598	CW	100	14.0	13.04	0.00	Front	0	-	-	1:1		10	0.045	1.247	0.056	-
2 592.99	518598	CW	100	14.0	13.04	0.13	Right	0	-	-	1:1		10	0.022	1.247	0.027	-
SRS #4 Main Ant.#4																	
2 592.99	518598	CW	100	12.5	11.21	-0.06	Rear	0	-	-	1:1		10	0.058	1.346	0.078	-
2 592.99	518598	CW	100	12.5	11.21	0	Front	0	-	-	1:1		10	0	1.346	0.000	-
2 592.99	518598	CW	100	12.5	11.21	0	Left	0	-	-	1:1		10	0	1.346	0.000	-
2 592.99	518598	CW	100	12.5	11.21	0	Right	0	-	-	1:1		10	0	1.346	0.000	-
2 592.99	518598	CW	100	12.5	11.21	0.15	Bottom	0	-	-	1:1		10	0.00157	1.346	0.002	-
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 SAR- Ant.#1																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.85	0.05	Rear	0	1	1	1:1	23	10	0.609	1.161	0.707	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.92	-0.10	Rear	0	108	0	1:1	23	10	0.566	1.143	0.647	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.85	-0.02	Front	0	1	1	1:1	23	10	0.475	1.161	0.552	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.92	0.05	Front	0	108	0	1:1	23	10	0.446	1.143	0.510	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.85	0.02	Left	0	1	1	1:1	23	10	0.133	1.161	0.154	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.92	0.09	Left	0	108	0	1:1	23	10	0.144	1.143	0.165	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.85	0.07	Right	0	1	1	1:1	23	10	0.078	1.161	0.091	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.92	-0.02	Right	0	108	0	1:1	23	10	0.073	1.143	0.083	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.85	0.01	Bottom	0	1	1	1:1	23	10	0.856	1.161	0.994	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.92	0.11	Bottom	0	108	0	1:1	23	10	**0.921**	1.143	**1.053**	72
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.71	0.05	Bottom	0	216	0	1:1	23	10	0.865	1.199	1.038	-
1 745	349000	CP OFDM QPSK	40	20.5	19.32	0.02	Bottom	0	1	1	1:1	23	10	0.541	1.312	0.710	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.92	0.07	Bottom	0	108	0	1:1	23	10	0.915	1.143	1.046	*
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

Note: * Data entry indicate Variability measurement.

NR Band n66 (Upper, Sub Ant.#2) Hotspot SAR under EN-DC with LTE Band 2																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 745	349000	DFT-s OFDM QPSK	40	21.0	20.22	0.04	Rear	0	1	1	1:1	23	10	0.241	1.197	0.288	-
1 745	349000	DFT-s OFDM QPSK	40	21.0	20.31	-0.09	Rear	0	108	54	1:1	23	10	0.400	1.172	0.469	-
1 745	349000	DFT-s OFDM QPSK	40	21.0	20.22	-0.15	Front	0	1	1	1:1	23	10	0.318	1.197	0.381	-
1 745	349000	DFT-s OFDM QPSK	40	21.0	20.31	-0.16	Front	0	108	54	1:1	23	10	0.333	1.172	0.390	-
1 745	349000	DFT-s OFDM QPSK	40	21.0	20.22	0.12	Left	0	1	1	1:1	23	10	0.150	1.197	0.180	-
1 745	349000	DFT-s OFDM QPSK	40	21.0	20.31	0.13	Left	0	108	54	1:1	23	10	0.101	1.172	0.118	-
1 745	349000	DFT-s OFDM QPSK	40	21.0	20.22	0.05	Top	0	1	1	1:1	23	10	**0.517**	1.197	**0.619**	73
1 745	349000	DFT-s OFDM QPSK	40	21.0	20.31	-0.16	Top	0	108	54	1:1	23	10	0.517	1.172	0.606	-
1 745	349000	CP OFDM QPSK	40	21.0	20.30	0.02	Top	0	1	1	1:1	23	10	0.435	1.175	0.511	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

NR Band n77 Hotspot SAR (Power Class 3) - SUB Ant.#2																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
3 750	650000	DFT-s OFDM QPSK	100	16.0	14.98	0.15	Rear	0	1	137	1:1		10	0.079	1.265	0.100	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.14	0.07	Rear	0	135	0	1:1		10	0.080	1.219	0.098	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	14.98	-0.19	Front	0	1	137	1:1		10	0.053	1.265	0.067	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.14	0.03	Front	0	135	0	1:1		10	0.059	1.219	0.072	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	14.98	0.08	Left	0	1	137	1:1		10	0.008	1.265	0.010	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.14	-0.16	Left	0	135	0	1:1		10	0.008	1.219	0.010	-
3 750	650000	DFT-s OFDM QPSK	100	16.0	14.98	-0.19	Top	0	1	137	1:1		10	**0.089**	1.265	**0.113**	74
3 750	650000	DFT-s OFDM QPSK	100	16.0	15.14	-0.10	Top	0	135	0	1:1		10	0.084	1.219	0.102	-
3 750	650000	CP QPSK	100	16.0	14.77	-0.04	Top	0	1	1	1:1		10	0.082	1.327	0.109	-
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 (DoD) Hotspot SAR (Power Class 3) - SUB Ant.#2																		
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.72	0.12	Rear	0	1	271	1:1		10	0.114	1.067	0.122	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.43	-0.10	Rear	0	135	138	1:1		10	0.108	1.140	0.123	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.72	0.12	Front	0	1	271	1:1		10	0.064	1.067	0.068	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.43	-0.19	Front	0	135	138	1:1		10	0.094	1.140	0.107	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.72	-0.19	Left	0	1	271	1:1		10	0.047	1.067	0.050	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.43	-0.07	Left	0	135	138	1:1		10	0.032	1.140	0.036	-
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.72	0.11	Top	0	1	271	1:1		10	**0.124**	1.067	0.132	75
3 500.01	633334	DFT-s OFDM QPSK	100	16.0	15.43	-0.17	Top	0	135	138	1:1		10	0.121	1.140	**0.139**	-
3 500.01	633334	CP QPSK	100	16.0	15.16	0.16	Top	0	1	1	1:1		10	0.102	1.213	0.124	-
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 SRS Hotspot SAR																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
SRS #2 Main Ant.#3																	
3 930.0	662000	CW	100	14.0	13.06	-0.10	Rear	0	-	-	1:1		10	0.021	1.242	0.026	-
3 930.0	662000	CW	100	14.0	13.06	0.00	Front	0	-	-	1:1		10	0.00843	1.242	0.010	-
3 930.0	662000	CW	100	14.0	13.06	-0.19	Left	0	-	-	1:1		10	0.049	1.242	0.061	-
3 930.0	662000	CW	100	14.0	13.06	0.02	Bottom	0	-	-	1:1		10	0.011	1.242	0.014	-
SRS #3 Sub Ant.#5																	
3 930.0	662000	CW	100	14.5	14.21	-0.14	Rear	0	-	-	1:1		10	0.042	1.069	0.045	-
3 930.0	662000	CW	100	14.5	14.21	0.00	Front	0	-	-	1:1		10	0.023	1.069	0.025	-
3 930.0	662000	CW	100	14.5	14.21	-0.18	Left	0	-	-	1:1		10	0.00204	1.069	0.002	-
SRS #4 Main Ant.#4																	
3 930.0	662000	CW	100	13.5	12.47	0.00	Rear	0	-	-	1:1		10	**0.067**	1.268	**0.085**	76
3 930.0	662000	CW	100	13.5	12.47	0.00	Front	0	-	-	1:1		10	0	1.268	0.000	-
3 930.0	662000	CW	100	13.5	12.47	0.00	Left	0	-	-	1:1		10	0	1.268	0.000	-
3 930.0	662000	CW	100	13.5	12.47	0.00	Right	0	-	-	1:1		10	0	1.268	0.000	
3 930.0	662000	CW	100	13.5	12.47	-0.14	Bottom	0	-	-	1:1		10	0.012	1.268	0.015	-
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 DoD SRS Hotspot SAR																	
Frequency		Mode	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.		(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
SRS #2 Antenna E																	
3 500.01	633334	CW	100	14.0	13.24	-0.03	Rear	0	-	-	1:1		10	0.076	1.191	0.091	-
3 500.01	633334	CW	100	14.0	13.24	0.01	Front	0	-	-	1:1		10	0.031	1.191	0.037	-
3 500.01	633334	CW	100	14.0	13.24	0.05	Left	0	-	-	1:1		10	0.143	1.191	0.170	-
3 500.01	633334	CW	100	14.0	13.24	0.14	Bottom	0	-	-	1:1		10	0.065	1.191	0.077	-
SRS #3 Antenna M																	
3 500.01	633334	CW	100	14.5	14.47	-0.02	Rear	0	-	-	1:1		10	0.109	1.007	0.110	-
3 500.01	633334	CW	100	14.5	14.47	0.03	Front	0	-	-	1:1		10	0.074	1.007	0.075	-
3 500.01	633334	CW	100	14.5	14.47	0.05	Left	0	-	-	1:1		10	0.012	1.007	0.012	-
SRS #4 Antenna D																	
3 500.01	633334	CW	100	13.5	13.04	0.06	Rear	0	-	-	1:1		10	**0.245**	1.112	**0.272**	77
3 500.01	633334	CW	100	13.5	13.04	0	Front	0	-	-	1:1		10	0	1.112	0.000	-
3 500.01	633334	CW	100	13.5	13.04	0	Left	0	-	-	1:1		10	0	1.112	0.000	-
3 500.01	633334	CW	100	13.5	13.04	0.10	Right	0	-	-	1:1		10	0.00401	1.112	0.004	-
3 500.01	633334	CW	100	13.5	13.04	0.05	Bottom	0	-	-	1:1		10	0.039	1.112	0.043	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Body 1.6 W/kg Averaged over 1 gram										

DTS Hotspot SAR																	
Frequency		Mode	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Ant Config.	Duty Cycle	Distance	Area Scan Peak SAR	Meas. SAR	Scaling Factor	Scaling Factor	Reported SAR	Plot No.
MHz	Ch.		(MHz)	(Mbps)	(dBm)	(dBm)	(dB)				(mm)	(W/kg)	(W/kg)		(Duty)	(W/kg)	
2 462	11	802.11b	20	1	18.0	17.92	-0.11	Rear	WIFI2	98.8	10	0.211	0.225	1.019	1.012	0.232	-
2 462	11	802.11b	20	1	18.0	17.92	-0.03	Front	WIFI2	98.8	10	0.400	0.260	1.019	1.012	0.268	-
2 462	11	802.11b	20	1	18.0	17.92	0.17	Right	WIFI2	98.8	10	0.200	0.112	1.019	1.012	0.115	-
2 462	11	802.11b	20	1	18.0	17.92	-0.18	Top	WIFI2	98.8	10	0.0182	0.011	1.019	1.012	0.011	-
2 462	11	802.11b	20	1	21.0	20.38	0.04	Rear	MIMO	98.8	10	0.482	0.307	1.334	1.012	0.414	-
2 462	11	802.11b	20	1	21.0	20.38	0.13	Front	MIMO	98.8	10	0.634	0.413	1.334	1.012	0.557	-
2 462	11	802.11b	20	1	21.0	20.38	0.04	Left	MIMO	98.8	10	0.733	**0.444**	1.334	1.012	**0.599**	78
2 462	11	802.11b	20	1	21.0	20.38	0.15	Right	MIMO	98.8	10	0.193	0.121	1.334	1.012	0.163	-
2 462	11	802.11b	20	1	21.0	20.38	0.10	Top	MIMO	98.8	10	0.319	0.200	1.334	1.012	0.270	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Body 1.6 W/kg Averaged over 1 gram					

- For the SAR measurement results of MIMO Ant Mode(802.11b), higher power scalling factor among each SISO ANT was applied.

DTS Hotspot SAR - RSDB																	
Frequency		Mode	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Ant Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.																
2 437	6	802.11b	20	1	7	6.58	-0.11	Rear	WIFI2	98.8	10	0.0237	0.015	1.102	1.012	0.017	-
2 437	6	802.11b	20	1	7	6.58	-0.14	Front	WIFI2	98.8	10	0.0202	0.013	1.102	1.012	0.014	-
2 437	6	802.11b	20	1	7	6.58	-0.18	Right	WIFI2	98.8	10	0.00923	0.00621	1.102	1.012	0.005	-
2 437	6	802.11b	20	1	7	6.58	0.00	Top	WIFI2	98.8	10	0.0022	0.00016	1.102	1.012	0.000	-
2 462	11	802.11g	20	6	13	12.56	0.12	Rear	WIFI2	93.3	10	0.129	0.080	1.107	1.072	0.095	-
2 462	11	802.11g	20	6	13	12.56	-0.10	Front	WIFI2	93.3	10	0.148	0.090	1.107	1.072	0.107	-
2 462	11	802.11g	20	6	13	12.56	0.17	Right	WIFI2	93.3	10	0.0596	0.032	1.107	1.072	0.038	-
2 462	11	802.11g	20	6	13	12.56	0.19	Top	WIFI2	93.3	10	0.0129	0.00135	1.107	1.072	0.002	-
2 412	1	802.11b	20	1	10	9.29	0.12	Rear	MIMO	98.8	10	0.026	0.016	1.225	1.012	0.020	-
2 412	1	802.11b	20	1	10	9.29	0.16	Front	MIMO	98.8	10	0.0266	0.012	1.225	1.012	0.015	-
2 412	1	802.11b	20	1	10	9.29	0.19	Left	MIMO	98.8	10	0.0316	0.019	1.225	1.012	0.024	-
2 412	1	802.11b	20	1	10	9.29	0.02	Right	MIMO	98.8	10	0.00761	0.00458	1.225	1.012	0.006	-
2 412	1	802.11b	20	1	10	9.29	0.18	Top	MIMO	98.8	10	0.0171	0.00652	1.225	1.012	0.008	-
2 462	11	802.11g	20	6	16	15.64	-0.19	Rear	MIMO	93.3	10	0.215	**0.136**	1.107	1.072	**0.161**	79
2 462	11	802.11g	20	6	16	15.64	0.17	Front	MIMO	93.3	10	0.171	0.111	1.107	1.072	0.132	-
2 462	11	802.11g	20	6	16	15.64	0.13	Left	MIMO	93.3	10	0.21	0.130	1.107	1.072	0.154	-
2 462	11	802.11g	20	6	16	15.64	0.16	Right	MIMO	93.3	10	0.0387	0.024	1.107	1.072	0.028	-
2 462	11	802.11g	20	6	16	15.64	0.12	Top	MIMO	93.3	10	0.215	0.136	1.107	1.072	0.062	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Body 1.6 W/kg Averaged over 1 gram					

- For the SAR measurement results of MIMO Ant Mode(802.11b), higher power scalling factor among each SISO ANT was applied.

5 GHz WLAN Hotspot SAR																	
Frequency		Mode	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Ant Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.																
5 785	157	802.11a	20	6	17.0	16.95	0.03	Rear	WIFI1	93.7	10	0.625	0.248	1.012	1.067	0.268	-
5 785	157	802.11a	20	6	17.0	16.95	0.04	Front	WIFI1	93.7	10	0.305	0.077	1.012	1.067	0.083	-
5 785	157	802.11a	20	6	17.0	16.95	-0.13	Left	WIFI1	93.7	10	0.715	0.288	1.012	1.067	0.311	-
5 785	157	802.11a	20	6	17.0	16.95	0.00	Top	WIFI1	93.7	10	0.106	0.011	1.012	1.067	0.012	-
5 785	157	802.11a	20	6	20.0	19.58	0.02	Rear	MIMO	93.7	10	0.384	0.118	1.216	1.067	0.153	-
5 785	157	802.11a	20	6	20.0	19.58	0.07	Front	MIMO	93.7	10	0.193	0.051	1.216	1.067	0.066	-
5 785	157	802.11a	20	6	20.0	19.58	-0.04	Left	MIMO	93.7	10	1.06	**0.447**	1.216	1.067	**0.580**	80
5 785	157	802.11a	20	6	20.0	19.58	0.07	Right	MIMO	93.7	10	0.0749	0.017	1.216	1.067	0.022	-
5 785	157	802.11a	20	6	20.0	19.58	0.19	Top	MIMO	93.7	10	0.223	0.086	1.216	1.067	0.112	-
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 SAR_RSDB mode																	
Frequency		Mode	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Ant Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.																
5 775	155	802.11ac	80	MCS0	16.0	15.11	0.07	Rear	MIMO	92.3	10	0.143	0.032	1.288	1.083	0.045	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	0.00	Front	MIMO	92.3	10	0	0	1.288	1.083	0.000	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	0.09	Left	MIMO	92.3	10	0.273	0.028	1.288	1.083	0.039	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	0.00	Right	MIMO	92.3	10	0	0	1.288	1.083	0.000	-
5 775	155	802.11ac	80	MCS0	16.0	15.11	-0.15	Top	MIMO	92.3	10	0.134	**0.046**	1.288	1.083	**0.064**	81
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Body 1.6 W/kg Averaged over 1 gram					

DSS Tethering SAR													
Frequency		Mode	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)	
2 441	39	Bluetooth DH5	16.0	15.86	0.17	Rear	Ant.1	10	0.134	1.033	1.013	0.140	-
2 441	39	Bluetooth DH5	16.0	15.86	0.03	Front	Ant.1	10	0.076	1.033	1.013	0.080	-
2 441	39	Bluetooth DH5	16.0	15.86	0.11	Left	Ant.1	10	**0.149**	1.033	1.013	0.156	82
2 441	39	Bluetooth DH5	16.0	15.86	0.11	Top	Ant.1	10	0.066	1.033	1.013	0.069	-
2 402	0	Bluetooth DH5	16.0	15.23	-0.11	Rear	Ant.2	10	0.137	1.194	1.013	**0.166**	-
2 402	0	Bluetooth DH5	16.0	15.23	0.13	Front	Ant.2	10	0.115	1.194	1.013	0.139	-
2 402	0	Bluetooth DH5	16.0	15.23	0.13	Right	Ant.2	10	0.038	1.194	1.013	0.046	-
2 402	0	Bluetooth DH5	16.0	15.23	-0.14	Top	Ant.2	10	0.00381	1.194	1.013	0.005	-
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

GSM 1900 Phablet SAR 10g - Ant#1														
Frequency		Mode	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.													
1 880	661	GPRS 2TX	29.0	27.42	0.08	Rear	OFF	1:4.15		8	0.636	1.439	0.915	-
1 880	661	GPRS 2TX	29.0	27.42	0.15	Front	OFF	1:4.15		6	0.554	1.439	0.797	-
1 880	661	GPRS 2TX	29.0	27.42	-0.09	Left	N/A	1:4.15		0	**0.770**	1.439	**1.108**	83
1 880	661	GPRS 2TX	29.0	27.42	-0.02	Right	N/A	1:4.15		0	0.076	1.439	0.109	-
1 880	661	GPRS 2TX	29.0	27.42	0.09	Bottom	OFF	1:4.15		11	0.550	1.439	0.791	-
1 880	661	GPRS 2TX	26.0	25.09	-0.15	Rear	ON	1:4.15		0	0.744	1.233	0.917	-
1 880	661	GPRS 2TX	26.0	25.09	0.07	Front	ON	1:4.15		0	0.683	1.233	0.842	-
1 880	661	GPRS 2TX	26.0	25.09	0.06	Bottom	ON	1:4.15		0	0.471	1.233	0.581	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Hand 4.0 W/kg Averaged over 10 gram							

UMTS Band 4 Phablet SAR 10g - Ant#1														
Frequency		Mode	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.													
1 732.4	1412	RMC	24.0	23.50	0.17	Rear	OFF	1:1	18	8	1.16	1.122	1.302	-
1 732.4	1412	RMC	24.0	23.50	0.10	Front	OFF	1:1	18	6	0.982	1.122	1.102	-
1 732.4	1412	RMC	24.0	23.50	0.03	Left	N/A	1:1	18	0	0.664	1.122	0.745	-
1 732.4	1412	RMC	24.0	23.50	0.04	Right	N/A	1:1	18	0	0.356	1.122	0.399	-
1 732.4	1412	RMC	24.0	23.50	0.17	Bottom	OFF	1:1	18	11	0.811	1.122	0.910	-
1 732.4	1412	RMC	21.0	20.53	0.11	Rear	ON	1:1	18	0	**1.56**	1.114	**1.738**	84
1 732.4	1412	RMC	21.0	20.53	0.15	Front	ON	1:1	18	0	1.56	1.114	1.738	-
1 732.4	1412	RMC	21.0	20.53	0.15	Bottom	ON	1:1	18	0	1.54	1.114	1.716	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Hand 4.0 W/kg Averaged over 10 gram							

UMTS Band 2 Phablet SAR 10g- Ant#1														
Frequency		Mode	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.													
1 880.0	9400	RMC	24.0	23.29	0.01	Rear	OFF	1:1	8	8	0.931	1.178	1.096	-
1 880.0	9400	RMC	24.0	23.29	0.11	Front	OFF	1:1	8	6	0.794	1.178	0.935	-
1 880.0	9400	RMC	24.0	23.29	0.04	Left	N/A	1:1	8	0	0.780	1.178	0.919	-
1 880.0	9400	RMC	24.0	23.29	0.09	Right	N/A	1:1	8	0	0.112	1.178	0.132	-
1 880.0	9400	RMC	24.0	23.29	0.13	Bottom	OFF	1:1	8	11	0.851	1.178	1.002	-
1 880.0	9400	RMC	20.5	20.31	-0.16	Rear	ON	1:1	8	0	**1.31**	1.045	**1.369**	85
1 880.0	9400	RMC	20.5	20.31	0.16	Front	ON	1:1	8	0	1.14	1.045	1.191	-
1 880.0	9400	RMC	20.5	20.31	0.14	Bottom	ON	1:1	8	0	0.936	1.045	0.978	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Hand 4.0 W/kg Averaged over 10 gram							

LTE Band 25 Phablet SAR 10g- Ant#1																	
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																	
1 882.5	26365	QPSK	20	24.0	22.80	0.04	Rear	OFF	0	1	0	1:1	8	8	0.749	1.318	0.987	-
1 905.0	26590	QPSK	20	23.0	21.61	0.13	Rear	OFF	1	50	49	1:1	8	8	0.483	1.377	0.665	-
1 882.5	26365	QPSK	20	24.0	22.80	0.13	Front	OFF	0	1	0	1:1	8	6	0.897	1.318	1.182	-
1 905.0	26590	QPSK	20	23.0	21.61	0.13	Front	OFF	1	50	49	1:1	8	6	0.629	1.377	0.866	-
1 882.5	26365	QPSK	20	24.0	22.80	-0.01	Left	N/A	0	1	0	1:1	8	0	1.1	1.318	1.450	-
1 905.0	26590	QPSK	20	23.0	21.61	0.03	Left	N/A	1	50	49	1:1	8	0	0.577	1.377	0.795	-
1 882.5	26365	QPSK	20	24.0	22.80	0.19	Right	N/A	0	1	0	1:1	8	0	0.098	1.318	0.130	-
1 905.0	26590	QPSK	20	23.0	21.61	0.10	Right	N/A	1	50	49	1:1	8	0	0.106	1.377	0.146	-
1 882.5	26365	QPSK	20	24.0	22.80	0.14	Bottom	OFF	0	1	0	1:1	8	11	0.787	1.318	1.037	-
1 905.0	26590	QPSK	20	23.0	21.61	0.16	Bottom	OFF	1	50	49	1:1	8	11	0.643	1.377	0.886	-
1 882.5	26365	QPSK	20	20.0	18.81	0.10	Rear	ON	0	1	49	1:1	8	0	**1.51**	1.315	**1.986**	86
1 860.0	26140	QPSK	20	20.0	18.82	0.10	Rear	ON	0	50	49	1:1	8	0	1.42	1.312	1.863	-
1 882.5	26365	QPSK	20	20.0	18.81	0.00	Front	ON	0	1	49	1:1	8	0	1.18	1.315	1.552	-
1 860.0	26140	QPSK	20	20.0	18.82	0.00	Front	ON	0	50	49	1:1	8	0	1.14	1.312	1.496	-
1 882.5	26365	QPSK	20	20.0	18.81	0.17	Bottom	ON	0	1	49	1:1	8	0	1.26	1.315	1.657	-
1 860.0	26140	QPSK	20	20.0	18.82	0.11	Bottom	ON	0	50	49	1:1	8	0	1.33	1.312	1.745	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Hand 4.0 W/kg Averaged over 10 gram										

LTE Band 66 Phablet SAR 10g - Ant#1																		
Frequency		Mode	Band Width	Tune-Up Limit (dB)	Meas. Power (dB)	Power Drift (dB)	Test Position	Sensor	MPR (dB)	RB Size	RB Offset	Duty Cycle	Ant. State	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																	
1 720	132072	QPSK	20	24.0	23.07	-0.10	Rear	OFF	0	1	0	1:1	23	8	0.682	1.239	0.845	-
1 720	132072	QPSK	20	23.0	21.99	0.04	Rear	OFF	1	50	49	1:1	23	8	0.555	1.262	0.700	-
1 720	132072	QPSK	20	24.0	23.07	0.06	Front	OFF	0	1	0	1:1	23	6	0.908	1.239	1.125	-
1 720	132072	QPSK	20	23.0	21.99	0.16	Front	OFF	1	50	49	1:1	23	6	0.739	1.262	0.932	-
1 720	132072	QPSK	20	24.0	23.07	-0.12	Left	N/A	0	1	0	1:1	23	0	0.427	1.239	0.529	-
1 720	132072	QPSK	20	23.0	21.99	0.04	Left	N/A	1	50	49	1:1	23	0	0.350	1.262	0.442	-
1 720	132072	QPSK	20	24.0	23.07	0.12	Right	N/A	0	1	0	1:1	23	0	0.253	1.239	0.313	-
1 720	132072	QPSK	20	23.0	21.99	0.15	Right	N/A	1	50	49	1:1	23	0	0.202	1.262	0.255	-
1 720	132072	QPSK	20	24.0	23.07	0.12	Bottom	OFF	0	1	0	1:1	23	11	0.691	1.239	0.856	-
1 720	132072	QPSK	20	23.0	21.99	0.11	Bottom	OFF	1	50	49	1:1	23	11	0.568	1.262	0.717	-
1 720	132072	QPSK	20	20.5	20.01	0.19	Rear	ON	0	1	0	1:1	23	0	1.14	1.119	1.276	-
1 720	132072	QPSK	20	20.5	19.92	0.04	Rear	ON	0	50	25	1:1	23	0	1.18	1.143	1.349	-
1 720	132072	QPSK	20	20.5	20.01	0.00	Front	ON	0	1	0	1:1	23	0	1.29	1.119	1.444	-
1 720	132072	QPSK	20	20.5	19.92	0.00	Front	ON	0	50	25	1:1	23	0	1.32	1.143	1.509	-
1 720	132072	QPSK	20	20.5	20.01	0.18	Bottom	ON	0	1	0	1:1	23	0	**1.4**	1.119	1.567	87
1 720	132072	QPSK	20	20.5	19.92	0.12	Bottom	ON	0	50	25	1:1	23	0	1.39	1.143	**1.589**	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Hand 4.0 W/kg Averaged over 10 gram									

NR Band n25 Phablet SAR 10g- Ant.#1																		
Frequency		Mode	Band Width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	MPR	RB Size	RB Offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)			(dB)					(mm)	(W/kg)		(W/kg)	
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.57	0.08	Rear	OFF	0	1	53	1:1	8	8	0.680	1.390	0.945	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.79	-0.01	Rear	OFF	0	50	28	1:1	8	8	0.637	1.321	0.842	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.57	0.01	Front	OFF	0	1	53	1:1	8	6	0.825	1.390	1.147	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.79	0.08	Front	OFF	0	50	28	1:1	8	6	0.752	1.321	0.994	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.57	0.06	Left	N/A	0	1	53	1:1	8	0	0.856	1.390	1.190	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.79	0.05	Left	N/A	0	50	28	1:1	8	0	0.860	1.321	1.136	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.57	0.15	Right	N/A	0	1	53	1:1	8	0	0.115	1.390	0.160	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.79	-0.09	Right	N/A	0	50	28	1:1	8	0	0.113	1.321	0.149	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.57	0.01	Bottom	OFF	0	1	53	1:1	8	11	0.824	1.390	1.145	-
1 882.5	376500	DFT-s OFDM QPSK	20	24.0	22.79	0.10	Bottom	OFF	0	50	28	1:1	8	11	0.843	1.321	1.114	-
1 882.5	376500	DFT-s OFDM QPSK	20	20.0	19.35	-0.14	Rear	ON	0	1	53	1:1	8	0	1.03	1.161	1.196	-
1 882.5	376500	DFT-s OFDM QPSK	20	20.0	19.59	0.00	Rear	ON	0	50	0	1:1	8	0	**1.24**	1.099	**1.363**	88
1 882.5	376500	DFT-s OFDM QPSK	20	20.0	19.35	0.10	Front	ON	0	1	53	1:1	8	0	0.925	1.161	1.074	-
1 882.5	376500	DFT-s OFDM QPSK	20	20.0	19.59	0.00	Front	ON	0	50	0	1:1	8	0	1.21	1.099	1.330	-
1 882.5	376500	DFT-s OFDM QPSK	20	20.0	19.35	0.04	Bottom	ON	0	1	53	1:1	8	0	0.875	1.161	1.016	-
1 882.5	376500	DFT-s OFDM QPSK	20	20.0	19.59	0.07	Bottom	ON	0	50	0	1:1	8	0	0.861	1.099	0.946	-
1 882.5	376500	CP QPSK	20	20.0	19.39	-0.10	Rear	ON	0	1	1	1:1	8	0	1.05	1.151	1.208	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Hand 4.0 W/kg Averaged over 10 gram									

NR Band n41 Phablet SAR 10g_ Power class 3 - SUB Ant.#2																		
Frequency		Mode	Band Width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	MPR	RB Size	RB Offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)			(dB)					(mm)	(W/kg)		(W/kg)	
2 592.99	518598	DFT-s OFDM QPSK	100	19.5	18.74	0.19	Top	N/A	0	1	137	1:1		0	1.36	1.191	1.620	-
2 592.99	518598	DFT-s OFDM QPSK	100	19.5	18.82	0.14	Top	N/A	0	135	138	1:1		0	1.36	1.169	1.591	-
2 592.99	518598	DFT-s OFDM QPSK	100	19.5	18.71	0.18	Top	N/A	0	270	0	1:1		0	**1.43**	1.199	**1.715**	89
2 592.99	518598	CP OFDM QPSK	100	19.5	18.23	0.15	Top	N/A	0	1	1	1:1		0	0.718	1.340	0.962	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Hand 4.0 W/kg Averaged over 10 gram										

NR Band n41 SRS Phablet SAR 10g																		
Frequency		Mode	Band Width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	MPR	RB Size	RB Offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)			(dB)					(mm)	(W/kg)		(W/kg)	
SRS #2 Main Ant.#3																		
2 592.99	518598	CW	100	15.5	14.39	0.10	Bottom	0	0	-	-	1:1		0	0.306	1.291	**0.395**	90
SRS #3 Sub Ant.#5																		
2 592.99	518598	CW	100	14.0	13.04	0.00	Rear	0	0	-	-	1:1		0	0.212	1.247	0.264	-
SRS #4 Main Ant.#4																		
2 592.99	518598	CW	100	12.5	11.21	0.00	Rear	0	0	-	-	1:1		0	0.184	1.346	0.248	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Hand 4.0 W/kg Averaged over 10 gram										

NR Band n66 (PCS) Phablet SAR 10g - Ant.#1																		
Frequency		Mode	Band Width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	MPR	RB Size	RB Offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)			(dB)					(mm)	(W/kg)		(W/kg)	
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.92	0.06	Rear	OFF	0	1	1	1:1	23	8	0.885	1.282	1.135	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.77	-0.16	Rear	OFF	0	108	54	1:1	23	8	0.841	1.327	1.116	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.92	0.07	Front	OFF	0	1	1	1:1	23	6	0.940	1.282	1.205	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.77	-0.17	Front	OFF	0	108	54	1:1	23	6	0.959	1.327	1.273	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.92	0.09	Left	N/A	0	1	1	1:1	23	0	0.616	1.282	0.790	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.77	0.10	Left	N/A	0	108	54	1:1	23	0	0.654	1.327	0.868	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.92	0.04	Right	N/A	0	1	1	1:1	23	0	0.302	1.282	0.387	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.77	0.14	Right	N/A	0	108	54	1:1	23	0	0.274	1.327	0.364	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.92	0.01	Bottom	OFF	0	1	1	1:1	23	11	0.890	1.282	1.141	-
1 745	349000	DFT-s OFDM QPSK	40	24.0	22.77	0.03	Bottom	OFF	0	108	54	1:1	23	11	0.857	1.327	1.138	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.85	-0.03	Rear	ON	0	1	1	1:1	23	0	1.41	1.161	1.638	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.92	-0.06	Rear	ON	0	108	0	1:1	23	0	1.38	1.143	1.577	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.85	0.00	Front	ON	0	1	1	1:1	23	0	1.32	1.161	1.533	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.92	0.00	Front	ON	0	108	0	1:1	23	0	1.30	1.143	1.486	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.85	0.07	Bottom	ON	0	1	1	1:1	23	0	1.41	1.161	1.638	-
1 745	349000	DFT-s OFDM QPSK	40	20.5	19.92	0.07	Bottom	ON	0	108	0	1:1	23	0	1.45	1.143	1.657	-
1 745	349000	CP OFDM QPSK	40	20.5	19.32	0.01	Bottom	ON	0	1	1	1:1	23	0	**1.49**	1.312	**1.955**	91
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Hand 4.0 W/kg Averaged over 10 gram										

NR Band n77 SRS Phablet SAR 10g

Frequency		Mode	Band Width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	MPR	RB Size	RB Offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)			(dB)					(mm)	(W/kg)		(W/kg)	
SRS #4 Main Ant.#4																		
3 930.0	662000	CW	100	13.5	12.47	0.00	Rear	0	0	-	-	1:1		0	**0.472**	1.268	**0.598**	92
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Hand 4.0 W/kg Averaged over 10 gram										

NR Band n77 (DoD) SRS Phablet SAR 10g

Frequency		Mode	Band Width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	MPR	RB Size	RB Offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)			(dB)					(mm)	(W/kg)		(W/kg)	
3 500.01	633334	DFT-s OFDM QPSK	100	19.0	18.63	-0.00	Top	N/A	0	1	271	1:1		0	**1.82**	1.089	**1.982**	93
3 500.01	633334	DFT-s OFDM QPSK	100	19.0	18.46	0.03	Top	N/A	0	135	138	1:1		0	1.73	1.132	1.959	-
3 500.01	633334	DFT-s OFDM QPSK	100	19.0	18.39	0.02	Top	N/A	0	270	0	1:1		0	1.69	1.151	1.945	-
3 500.01	633334	CP OFDM QPSK	100	19.0	18.17	-0.02	Top	N/A	0	1	1	1:1		0	1.53	1.211	1.852	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Hand 4.0 W/kg Averaged over 10 gram										

NR Band n77 SRS (DoD) Phablet SAR 10g

Frequency		Mode	Band Width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Sensor	MPR	RB Size	RB Offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)			(dB)					(mm)	(W/kg)		(W/kg)	
SRS #2 Main Ant.#3																		
3 500.01	633334	CW	100	14.0	13.24	-0.14	Rear	0	0	-	-	1:1		0	0.438	1.191	0.522	-
3 500.01	633334	CW	100	14.0	13.24	0.18	Left	0	0	-	-	1:1		0	0.502	1.191	0.598	-
SRS #3 Sub Ant.#5																		
3 500.01	633334	CW	100	14.5	14.47	-0.14	Rear	0	0	-	-	1:1		0	0.602	1.007	0.606	-
SRS #4 Main Ant.#4																		
3 500.01	633334	CW	100	13.5	13.04	0.00	Rear	0	0	-	-	1:1		0	0.645	1.112	**0.717**	94
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Hand 4.0 W/kg Averaged over 10 gram										

5 GHz WLAN Phablet SAR _10g																	
Frequency		Mode	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Ant. Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																
5 300	60	802.11a	20	6	17.0	16.95	0.11	Rear	WIFI1	93.7	0	8.31	1.03	1.012	1.067	1.112	-
5 300	60	802.11a	20	6	17.0	16.95	0.09	Front	WIFI1	93.7	0	8.22	1.25	1.012	1.067	1.349	-
5 300	60	802.11a	20	6	17.0	16.95	0.18	Left	WIFI1	93.7	0	23.6	1.65	1.012	1.067	1.781	-
5 300	60	802.11a	20	6	17.0	16.95	0.08	Top	WIFI1	93.7	0	5.8	0.486	1.012	1.067	0.525	-
5 720	144	802.11a	20	6	17.0	16.70	0.19	Rear	WIFI1	93.7	0	4.64	0.566	1.072	1.067	0.647	-
5 720	144	802.11a	20	6	17.0	16.70	0.04	Front	WIFI1	93.7	0	4.79	0.645	1.072	1.067	0.737	-
5 720	144	802.11a	20	6	17.0	16.70	0.13	Left	WIFI1	93.7	0	14.2	1.16	1.072	1.067	1.326	-
5 720	144	802.11a	20	6	17.0	16.70	-0.14	Top	WIFI1	93.7	0	0.934	0.048	1.072	1.067	0.055	-
5 845	169	802.11a	20	6	17.0	16.40	-0.11	Rear	WIFI1	93.7	0	8.62	0.298	1.148	1.067	0.365	-
5 845	169	802.11a	20	6	17.0	16.40	-0.18	Front	WIFI1	93.7	0	17.1	0.413	1.148	1.067	0.506	-
5 845	169	802.11a	20	6	17.0	16.40	-0.12	Left	WIFI1	93.7	0	21.5	0.661	1.148	1.067	0.810	-
5 845	169	802.11a	20	6	17.0	16.40	-0.15	Top	WIFI1	93.7	0	1.33	0.068	1.148	1.067	0.083	-
5 300	60	802.11a	20	6	20.0	19.32	0.13	Rear	MIMO	93.7	0	4.76	0.727	1.396	1.067	1.083	-
5 300	60	802.11a	20	6	20.0	19.32	0.02	Front	MIMO	93.7	0	9.76	1.17	1.396	1.067	1.743	-
5 300	60	802.11a	20	6	20.0	19.32	0.11	Left	MIMO	93.7	0	20.4	1.59	1.396	1.067	2.369	-
5 260	52	802.11a	20	6	20.0	19.28	0.11	Left	MIMO	93.7	0	29.7	1.69	1.355	1.067	2.444	-
5 300	60	802.11a	20	6	20.0	19.32	0.12	Right	MIMO	93.7	0	3.08	0.238	1.396	1.067	0.355	-
5 300	60	802.11a	20	6	20.0	19.32	0.19	Top	MIMO	93.7	0	7.81	0.562	1.396	1.067	0.837	-
5 720	144	802.11a	20	6	20.0	19.21	0.04	Rear	MIMO	93.7	0	4.58	0.373	1.368	1.067	0.544	-
5 720	144	802.11a	20	6	20.0	19.21	0.06	Front	MIMO	93.7	0	9.13	0.611	1.368	1.067	0.892	-
5 720	144	802.11a	20	6	20.0	19.21	-0.01	Left	MIMO	93.7	0	11.3	1.1	1.368	1.067	1.605	-
5 720	144	802.11a	20	6	20.0	19.21	0.09	Right	MIMO	93.7	0	0.714	0.067	1.368	1.067	0.098	-
5 720	144	802.11a	20	6	20.0	19.21	0.18	Top	MIMO	93.7	0	1.89	0.157	1.368	1.067	0.229	-
5 845	169	802.11a	20	6	20.0	19.23	-0.19	Rear	MIMO	93.7	0	8.98	0.922	1.253	1.067	1.233	-
5 845	169	802.11a	20	6	20.0	19.23	0.00	Front	MIMO	93.7	0	11.7	0.988	1.253	1.067	1.321	-
5 845	169	802.11a	20	6	20.0	19.23	0.02	Left	MIMO	93.7	0	28.6	**1.87**	1.253	1.067	**2.500**	95
5 865	173	802.11a	20	6	20.0	19.00	0.15	Left	MIMO	93.7	0	19.6	1.24	1.387	1.067	1.835	
5 845	169	802.11a	20	6	20.0	19.23	0.00	Right	MIMO	93.7	0	2.44	0.179	1.253	1.067	0.239	-
5 845	169	802.11a	20	6	20.0	19.23	0.16	Top	MIMO	93.7	0	3.28	0.431	1.253	1.067	0.576	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Hand 4.0 W/kg Averaged over 10 gram					

5 GHz WLAN Phablet SAR (RSDB) _10g																	
Frequency		Mode	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Ant. Config.	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																
5 290	58	802.11ac	80	MCS0	16.0	14.72	0.12	Rear	MIMO	92.3	0	2.65	0.258	1.567	1.083	0.438	-
5 290	58	802.11ac	80	MCS0	16.0	14.72	0.15	Front	MIMO	92.3	0	3.14	0.211	1.567	1.083	0.358	-
5 290	58	802.11ac	80	MCS0	16.0	14.72	-0.16	Left	MIMO	92.3	0	6.5	**0.623**	1.567	1.083	**1.057**	96
5 290	58	802.11ac	80	MCS0	16.0	14.72	0.07	Right	MIMO	92.3	0	0.352	0.044	1.567	1.083	0.075	-
5 290	58	802.11ac	80	MCS0	16.0	14.72	0.14	Top	MIMO	92.3	0	1.62	0.136	1.567	1.083	0.231	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	0.08	Rear	MIMO	92.3	0	3.13	0.206	1.393	1.083	0.311	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	0.17	Front	MIMO	92.3	0	2.34	0.305	1.393	1.083	0.460	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	-0.01	Left	MIMO	92.3	0	7.52	0.484	1.393	1.083	0.730	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	0.11	Right	MIMO	92.3	0	0.771	0.046	1.393	1.083	0.069	-
5 610	122	802.11ac	80	MCS0	16.0	15.20	-0.12	Top	MIMO	92.3	0	0.633	0.048	1.393	1.083	0.072	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	0.00	Rear	MIMO	92.3	0	1.87	0.208	1.371	1.083	0.309	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	0.00	Front	MIMO	92.3	0	2.58	0.190	1.371	1.083	0.282	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	-0.10	Left	MIMO	92.3	0	7.62	0.514	1.371	1.083	0.763	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	0.00	Right	MIMO	92.3	0	0.322	0.022	1.371	1.083	0.033	-
5 855	171	802.11ac	80	MCS0	16.0	14.75	-0.13	Top	MIMO	92.3	0	0.873	0.083	1.371	1.083	0.123	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Hand 4.0 W/kg Averaged over 10 gram					

13.6 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, FCC KDB Procedure.
2. Batteries are fully charged at the beginning of the SAR measurements. A standard battery was used for all SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB 447498 D01v06.
6. Device was tested using a fixed spacing for body-worn accessory testing. A separation distance of 15 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.
7. Per FCC KDB 648474 D04v01r03, SAR was evaluated without a headset connected to the device. Since the standalone reported SAR was 1.2 W/kg, no additional SAR evaluation using a headset cable were required.
8. Per KDB 648474 D04v01r03, this device is considered a “Phablet” since the diagonal dimension is > 160 mm and < 200 mm. When hotspot mode applies, extremity SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (with tolerance) is 1 g SAR > 1.2 W/kg.
9. Per FCC KDB 865664 D01v01r04, variability SAR measurement were performed when the measured SAR results for a frequency Band were greater than or equal to 0.8 W/kg for 1g SAR and >2 for 10g SAR Please see Section 15 for variability analysis.
10. This device utilizes power reduction for some wireless mode and technologies, as outlined in sec. 4 The maximum output power allowed for each transmitter and exposure condition was evaluated for SAR compliance based on expected use conditions and simultaneous scenarios.
11. During SAR testing for the Hotspot conditions per KDB 941225 D06v02r01, the actual portable 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. This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The Highest available duty cycle for Power Class 2 operations is 43.3% using UL-DL configuration 1. Per May TCB Workshop notes, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions.
10. SAR test reduction is applied using the following criteria:
    Start with the largest channel Bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is >0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel. Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are >0.8 W/kg, testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation <1.45 W/kg. Testing for 16-QAM modulation is not required because the reported SAR for QPSK is <1.45 W/kg and its output power is not more than 0.5 dB higher than that a QPSK. Testing for the other channel Bandwidths is not required because the reported SAR for the highest channel Bandwidth is <1.45 W/kg and its output power is not more than 0.5 dB higher than that of the highest channel Bandwidth.

NR Notes:

1. This device supports SA and NSA mode for NR implemeatation. In EN-DC Mode, NR operate with the LTE Bands shown in the NR FR1 checklist acting as anchor Bands.
2. Due to Limitations of the SAR measurement equipment, SAR testing for NR and LTE achor Bands was performed separately using test mode (FTM) software.
3. More detailed specifications of the NR Bands are contained in the Technical descriptiondocument.
4. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
5. For NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power was evaluated for SAR tests.
6. SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4.

WLAN Notes:

1. For held-to-ear and hotspot operations, the initial test position procedures were applied. For initial test position, the highest extrapolated peak SAR will be used. When reported SAR for the initial test position is ≤ 0.4 W/kg for 1g SAR and ≤ 1.0 W/kg for 10g SAR, no additional testing for the remaining test positions was required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR results is ≤ 0.8 W/kg for 1g SAR and ≤ 2.0 W/kg for 10g SAR or all test position are measured.

2. Per KDB 2482227 D01v02r02 justification for test configurations of 2.4 GHzWiFi Single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11 g/n) was not required due to the maximum allowed powers and the highest reported DSSS SAR

.

3. Per KDB 2482227 D01v02r02 justification for test configurations of 5 GHzWiFi 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 ≤ 0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg or all test channels were measured.

5. The device was configured to transmit continuously at the required data rated, channel Bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated WLAN test reports.

Bluetooth Notes:

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

14. Simultaneous SAR Analysis

This device 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 ≤1.6W/kg for 1g SAR and ≤4 W/kg for 10g SAR. The different test positions in an exposure condition may be considered collectively to determine SAR exclusion according to the sum of 1g or 10g SAR.

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per FCC KDB Publication 447498 D01v06 4.3.2 and IEEE 1528-2013 Section 6.3.4.1.2, simultaneous transmission SAR test exclusion may be applied when the sum of the 1g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤1.6 W/kg. The different test positions in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1g or 10g SAR.

This device is enabled with Qualcomm® Smart Transmit Gen2 with pre-defined sub6 antenna groups (AG0 and AG1). Simultaneous transmission analysis is performed per antenna groups. Section14.2 contains analysis to demonstrate the AG0 and AG1 are operate mutually exclusive. Additional analysis is provided below to show compliance between AG0 and BT/WLAN and AG1 BT/WLAN.

When operating in the same antenna group, Qualcomm Smart Transmit algorithm in WWAN directly adds the time-averaged RF exposure from 4G, PCC and time-averaged RF exposure from 5G NR, SCC. Smart Transmit algorithm controls the total RF exposure from both 4G, PCC and 5G NR, SCC to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G(PCC+SCC) operations within an antenna group is demonstrated in the Part 2 Report during algorithm validation.

14.1 Sub6 Antenna Groups

The 2nd generation of Smart Transmit (GEN2) operates based on pre-defined sub6 antenna groups (AG). Sub6 Tx antennas in the device are grouped based on spatial variation of RF exposure distributions, where the RF exposure of one AG is mutually exclusive from other AG.
This is accomplished by demonstrating either of below conditions for all exposure scenarios:

a) Sum of SAR of one antenna from each of the sub6 AGs and the RF exposure from radios outside Smart Transmit is less than regulatory limits. This condition must be demonstrated for all antenna combinations of sub6 AGs.

(or)

b) Every antenna from each sub6 AG meets SPLSR criteria (Section 4.3.2(c) in FCC KDB 447498 D01) with every antenna from another sub6 AG. These criteria must be demonstrated for all antenna combinations for each pair of AGs.

This device supports two sub6 AG: AG0 and AG1, with AG0 having 4 antennas (Main1, Main2, Main3, Main4) and AG1 having 4 antennas (Sub1, Sub2, Sub3), and two WIFI/BT antennas outside of Smart Transmit. The conditions are verified through the following criterias:

i) (Condition#1 Sum of SAR): If SPLSR criteria is not used, then the highest reported SAR at Plimit (or Pmax when Plimit > Pmax) for each antenna should be obtained out of all supported technologies and frequency bands for each DSI. Demonstrate that the sum of reported SAR of one antenna from each of the sub6 AGs and the sum of RF exposure from all supported radios outside of Smart Transmit should be less than the regulatory limit as given below for each DSI.

1. Obtain the worst-case reported SAR for each antenna group (i.e., maximum reported SAR at Plimit (or Pmax when Plimit > Pmax) out of all supported technologies, frequency bands and antennas in AG0 and AG1), denoted as max.SAR.AG0 and max.SAR.AG1, and obtain the worst-case RF exposure for each external radio, and demonstrate that the sum of these RF exposures meets:
{ [max.SAR.AG0 + max.SAR.AG1] + WIFI/BT Ant 1 + WIFI/BT Ant 2} ≤ 1.6 (for 1g,or 4.0 for 10g).

ii) (SPLSR criteria): For each antenna, obtain the highest reported SAR value at Plimit out of all supported technologies for each frequency band. Using these values, demonstrate for a given DSI that every antenna from one sub6 AG meets SPLSR criteria with every antenna in another sub6 AG for all frequency bands. This criteria must be demonstrated for all antenna pair combinations irrespective of supported simultaneous transmission scenarios as given
below for each DSI:

a) SPLSR criteria should be met for all antenna pair combinations of AG0 and AG1:
{antenna (Main1, Main2, Main3, Main4) in AG0; antenna (Sub1, Sub2, Sub5) in AG1.
As it can be seen, these include all combinations of antenna groups, antennas, and frequency bands.

iii) (combination of SPLSR & SAR1+SAR2 criteria): If SPLSR criteria for all the combinations of sub6 antenna groups in (i) is demonstrated to show that each AG is mutually exclusive from other AGs, and if the WIFI/BT antennas supported outside of Smart Transmit do not meet SPLSR criteria, then the condition in (ii) reduces to: {max.SAR.AG0 + WIFI/BT Ant 1 + WIFI/BT Ant 2} ≤ 1.6 and {max.SAR.AG1+ WIFI/BT Ant 1 + WIFI/BT Ant 2} ≤ 1.6 for compliance demonstration (for 1g, or 4.0 for 10g).

If SPLSR criteria evaluation and analysis is needed to determine compliance for a certain DSI configuration, SPLSR is performed by taking the highest reported SAR for each of the supported technologies and bands per antenna, along with the peak SAR locations. Per Qualcomm guidance, only Y-axis coordinates are recorded in the analysis for calculation simplicity (assumes all 0mm of separation on the x-axis).

For this device, AG0 is located at the bottom of the device, AG1 is located at the Top of the device. Per April 2022 TCB Workshop Notes, AG1 was summed algebraically with the BT/WIFI Antenna for the purposes of hybrid SPLSR combination, identified in this report as the “Top set”.
The minimum distance when considering all transmissions between the top set groups and AG0 was considered when calculating the SPLSR.
The sum of the transmissions within set are less than the SAR limit

For top set (AG1+BT/WIFI Ant), Y_min coordinate represents the worst case hotspot location that is closest to the AG0.

The following formula is used to calculate the SPLSR between the AG0 and top sets for each exposure configuration:

$$\mathrm{SPLSR} = \frac{(Max\ SAR\ AG0 + Max\ SAR\ Top\ Set)^{1.5}}{|Y_{\max} - Y_{Min}|}$$

14.2 SAR Antenna Group Analysis

14.2.1 Head SAR Antenna Group Analysis

Position	AG0		AG1		WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)			
Left Touch	N/A	0.356	N/A	0.363	0.856	1.575	N/A
Left Tilt	N/A	0.219	N/A	0.537	0.342	1.092	N/A
Right Touch	-63.6	0.368	-45.8	0.750	1.210	See Sec14.2.2	
Right Tilt	N/A	0.197	N/A	0.690	0.662	1.549	N/A

14.2.2 Head SAR Group All Pair Antenna Analysis

Position	AG0			AG1			WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 1			Sub1					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	52.0	-261.4	0.368	6.8	-300.8	0.195	1.210	N/A	0.007

Position	AG0			AG1			WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 1			Sub2					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	52.0	-261.4	0.368	18.3	-324.2	0.750	1.210	N/A	0.017

Position	AG0			AG1			WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 1			Sub5					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	52.0	-261.4	0.368	64.8	-319.2	0.573	1.210	N/A	0.015

Position	AG0			AG1			WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 2			Sub1					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	N/A	N/A	0.096	N/A	N/A	0.195	1.210	1.501	N/A

Position	AG0			AG1			WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 2			Sub2					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	84.5	-225.2	0.096	18.3	-324.2	0.750	1.210	N/A	0.007

Position	AG0			AG1			WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 2			Sub5					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	84.5	-225.2	0.096	64.8	-319.2	0.573	1.210	N/A	0.006

Position	AG0			AG1			WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 3			Sub1					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	N/A	N/A	0.000	N/A	N/A	0.195	1.210	1.405	N/A

Position	AG0			AG1			WLAN/ BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 3			Sub2					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	N/A	N/A	0.000	18.3	-324.2	0.750	1.210	N/A	See Sec 14.3

Position	AG0			AG1			WLAN/ BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 3			Sub5					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	N/A	N/A	0.000	64.8	-319.2	0.573	1.210	N/A	See Sec 14.3

Position	AG0			AG1			WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 4			Sub1					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	N/A	N/A	0.000	N/A	N/A	0.195	1.210	1.405	N/A

Position	AG0			AG1			WLAN/ BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 4			Sub2					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	N/A	N/A	0.000	18.3	-324.2	0.750	1.210	N/A	See Sec 14.3

Position	AG0			AG1			WLAN/ BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Main 4			Sub5					
	X-Axis	Y-Axis	1g SAR (W/kg)	X-Axis	Y-Axis	1g SAR (W/kg)			
Right Touch	N/A	N/A	0.000	64.8	-319.2	0.573	1.210	N/A	See Sec 14.3

Notes.

1. No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLSR between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. Please see Section 14.7 for Y-axis peak locatuons.
2. The sum of AG0+AG1+WLAN/BT is less than 1.6 W/kg(1g SAR),4.0 W/kg(10g SAR) there's no further analysis required for compliance demonstration.

14.2.2 Hotspot SAR Antenna Group Analysis

Position	AG0		AG1		WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)			
Rear	-67.7	0.941	68.5	0.469	0.414	See Note 1	0.012
Front	N/A	0.648	N/A	0.390	0.557	1.595	N/A
Left	N/A	0.549	N/A	0.180	0.743	1.472	N/A
Right	N/A	0.855	N/A	0.027	0.163	1.045	N/A
Top	N/A	0.000	N/A	0.619	0.270	0.889	N/A
Bottom	N/A	1.089	N/A	0.000	0.000	1.089	N/A

14.2.3 Body-Worn SAR Antenna Group Analysis

Position	AG0		AG1		WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)			
Rear	N/A	0.704	N/A	0.284	0.648	See Note 1	0.023
Front	N/A	0.556	N/A	0.178	0.499	1.233	N/A

14.2.4 Phablet SAR Antenna Group Analysis

Position	AG0		AG1		WLAN/BT SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)	SPLSR
	Y-Coordinates	10g SAR (W/kg)	Y-Coordinates	10g SAR (W/kg)			
Rear	N/A	1.986	N/A	0.680	1.233	3.825	N/A
Front	N/A	1.738	N/A	0.000	1.743	3.481	N/A
Left	N/A	1.450	N/A	0.000	2.500	3.950	N/A
Right	N/A	0.313	N/A	0.000	0.355	0.668	N/A
Top	N/A	0.000	N/A	2.489	0.837	3.326	N/A
Bottom	N/A	1.716	N/A	0.000	0.000	1.716	N/A

Notes.

3. No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLSR between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. Please see Section 14.7 for Y-axis peak locatuons.
4. The sum of AG0+AG1+WLAN/BT is less than 1.6 W/kg(1g SAR),4.0 W/kg(10g SAR) there's no further analysis required for compliance demonstration.

14.2.5 Conclusion

The above numerical summed SAR results and SPLSR for all of the combinations of sub6 antenna groups are sufficient to show that AG0 is mutually exclusive from AG1 and that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528- 2013 Section 6.3.4.1.

14.3 Head SAR Simultaneous Transmission Analysis.

14.3.1 AG0 Highest Reported SAR

AG0 SAR (W/kg)					
Position	Main1	Main2	Main3	Main4	Max
Left Touch	0.356	0.151	0.000	0.000	0.379
Left Tilt	0.213	0.055	0.000	0.002	0.219
Right Touch	0.368	0.096	0.000	0.000	0.413
Right Tilt	0.197	0.047	0.000	0.016	0.231

14.3.2 AG1 Highest Reported SAR

AG1 SAR (W/kg)				
Position	Sub1	Sub2	Sub5	Max
Left Touch	0.293	0.363	0.359	0.363
Left Tilt	0.344	0.537	0.009	0.537
Right Touch	0.195	0.750	0.747	0.750
Right Tilt	0.187	0.690	0.044	0.690

14.3.3 Simultaneous Transmission Scenarios of WLAN/BT

WLAN/BT																		
Position	2.4 GHz WLAN Ant.2 RCV	2.4 GHz WLAN Ant.2 RSDB+ RCV	2.4 GHz WLAN MIMO RCV	2.4 GHz WLAN MIMO RSDB+ RCV	5 GHz WLAN Ant.1 RCV	5 GHz WLAN MIMO RCV	6GHz MIMO RCV	Bluetooth Ant1 RCV	Bluetooth Ant2 RCV	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR
	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)
	1	2	3	4	5	6	7	8	9	1+8	4+6	4+7	6+8	6+9	7+8	7+9	2+6+8	2+7+8
Left Touch	0.591	0.478	0.690	0.488	0.146	0.292	0.071	0.086	0.448	0.677	0.780	0.559	0.378	0.740	0.157	0.519	0.856	0.635
Left Tilt	0.106	0.074	0.103	0.121	0.136	0.210	0.045	0.058	0.071	0.164	0.331	0.166	0.268	0.281	0.103	0.116	0.342	0.177
Right Touch	0.234	0.396	0.681	0.364	0.665	0.537	0.302	0.277	0.166	0.511	0.901	0.666	0.814	0.703	0.579	0.468	1.210	0.975
Right Tilt	0.045	0.046	0.287	0.241	0.318	0.421	0.067	0.146	0.029	0.191	0.662	0.308	0.567	0.450	0.213	0.096	0.613	0.259

14.3.4 AG Verification - AG+WLAN/BT

Position	AG0 SAR (W/kg)	AG 1 SAR (W/kg)	WLAN/BT SAR (W/kg)	AG0+ WLAN/BT SAR (W/kg)	AG1+ WLAN/BT SAR (W/kg)
Left Touch	0.356	0.363	0.856	1.212	1.219
Left Tilt	0.213	0.537	0.342	0.555	0.879
Right Touch	0.368	0.750	1.210	1.578	See Sec 14.3.5
Right Tilt	0.197	0.690	0.662	0.859	1.352

14.3.5 AG Verification - AG+Volume(WLAN/BT)

Position	AG 1 SAR (W/kg)	WLAN/BT Volume SAR (W/kg)	AG1+ WLAN/BT SAR (W/kg)
Right Touch	0.750	1.13	See Sec 14.3.6

14.3.6 AG Verification - AG+Volume(WLAN/BT)

Position	AG 0 SAR (W/kg)	AG1-+ WLAN/BT Volume SAR (W/kg)	AG0+AG1+ WLAN/BT SAR (W/kg)
Right Touch	0.368	1.19	1.558

14.3.7 Enlarged zoom Scan/Volume scan Result

Configuration	Band	Masured SAR	Volume SAR	Scaled factor	Combined 1g SAR	Plot No.
Right Touch	WLAN 2.4GHz Ant2	0.334	0.460	1.186	1.13	#97
	Bluetooth Ant1	0.219	0.260	1.267		
	WLAN 5GHz MIMO	0.385	0.373	1.395		
Right Touch	WLAN 2.4GHz Ant2	0.334	0.460	1.186	1.19	#98
	Bluetooth Ant1	0.219	0.260	1.267		
	WLAN 5GHz MIMO	0.385	0.373	1.395		
	NR n77 DOD	0.658	0.526	1.140		

14.4 Hotspot SAR Simultaneous Transmission Analysis.

14.4.1 AG0 Highest Reported SAR

AG0 SAR (W/kg)					
Position	Main1	Main2	Main3	Main4	Max
Rear	0.941	0.397	0.091	0.272	0.941
Front	0.648	0.305	0.037	0.000	0.648
Left	0.529	0.549	0.170	0.000	0.549
Right	0.855			0.004	0.855
Top					0.000
Bottom	1.089	0.595	0.077	0.043	1.089

14.4.2 AG1 Highest Reported SAR

AG1 SAR (W/kg)				
Position	Sub1	Sub2	Sub5	Max
Rear	0.203	0.469	0.110	0.469
Front	0.056	0.390	0.075	0.390
Left		0.180	0.012	0.180
Right	0.027			0.027
Top	0.052	0.619		0.619
Bottom				0.000

14.4.3 Simultaneous Transmission Scenarios of WLAN/BT

WLAN/BT														
Position	2.4 GHz WLAN Ant.2	2.4 GHz WLAN MIMO	2.4 GHz WLAN Ant.2 RSBD	2.4 GHz WLAN MIMO RSDB	5 GHz WLAN Ant1	5 GHz WLAN MIMO	5 GHz WLAN MIMO RSDB	Bluetooth Ant1	Bluetooth Ant2	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR
	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)
	1	2	3	4	5	6	7	8	9	1+8	4+7	6+8	6+9	3+7+8
Rear	0.232	0.414	0.084	0.178	0.268	0.153	0.045	0.140	0.065	0.372	0.223	0.293	0.218	0.269
Front	0.268	0.557	0.094	0.146	0.083	0.066	0.000	0.080	0.067	0.348	0.146	0.146	0.133	0.174
Left		0.599		0.171	0.311	0.580	0.039	0.156		0.156	0.210	0.736	0.580	0.195
Right	0.115	0.163	0.034	0.031		0.022	0.000		0.011	0.115	0.031	0.022	0.033	0.034
Top	0.011	0.270	0.001	0.069	0.012	0.112	0.064	0.096	0.010	0.107	0.133	0.208	0.122	0.161
Bottom										0.000	0.000	0.000	0.000	0.000

14.4.4 AG Verification - AG+WLAN/BT

Position	AG0 SAR (W/kg)	AG 1 SAR (W/kg)	WLAN/BT SAR (W/kg)	AG0+ WLAN/BT SAR (W/kg)	AG1+ WLAN/BT SAR (W/kg)
Rear	0.941	0.469	0.414	1.355	0.883
Front	0.648	0.390	0.557	1.205	0.947
Left	0.549	0.180	0.736	1.285	0.916
Right	0.855	0.027	0.163	1.018	0.190
Top	0.000	0.619	0.270	0.270	0.889
Bottom	1.089	0.000	0.000	1.089	0.000

14.5 Body-Worn SAR Simultaneous Transmission Analysis.

14.4.1 AG0 Highest Reported SAR

AG0 SAR (W/kg)					
Position	Main1	Main2	Main3	Main4	Max
Rear	0.704	0.307	0.043	0.127	0.704
Front	0.556	0.288	0.018	0.000	0.556

14.5.2 AG1 Highest Reported SAR

AG1 SAR (W/kg)				
Position	Sub1	Sub2	Sub5	Max
Rear	0.054	0.284	0.052	0.284
Front	0.006	0.178	0.033	0.178

14.5.3 Simultaneous Transmission Scenarios of WLAN/BT

WLAN/BT																
Position	2.4 GHz WLAN Ant.2	2.4 GHz WLAN MIMO	5 GHz WLAN Ant1	5 GHz WLAN MIMO	6GHz MIMO	Bluetooth Ant1	Bluetooth Ant2	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR	∑ 1-g SAR
	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)
	1	2	3	4	5	6	7	1+6	2+4	2+5	4+6	4+7	5+6	5+7	1+4+6	1+5+6
Rear	0.108	0.366	0.172	0.282	0.028	0.062	0.065	0.170	0.648	0.394	0.344	0.347	0.090	0.093	0.452	0.452
Front	0.125	0.333	0.114	0.166	0.017	0.044	0.067	0.169	0.499	0.350	0.210	0.233	0.061	0.084	0.335	0.335

14.5.4 AG Verification – AG+WLAN/BT

Position	AG0 SAR (W/kg)	AG 1 SAR (W/kg)	WLAN/BT SAR (W/kg)	AG0+WLAN/BT SAR (W/kg)	AG1+WLAN/BT SAR (W/kg)
Rear	0.704	0.284	0.648	1.352	0.932
Front	0.556	0.178	0.499	1.055	0.677

14.6 Phablet SAR Simultaneous Transmission Analysis

14.6.1 AG0 Highest Reported SAR

AG0 SAR (W/kg)					
Position	Main1	Main2	Main3	Main4	Max
Rear	1.986		0.522	0.717	1.986
Front	1.738				1.738
Left	1.450		0.598		1.450
Right	0.313				0.313
Top					0.000
Bottom	1.716	0.395			1.716

14.6.2 AG1 Highest Reported SAR

AG1 SAR (W/kg)				
Position	Sub1	Sub2	Sub5	Max
Rear	0.264		0.606	0.606
Front				0.000
Left				0.000
Right				0.000
Top		2.489		2.489
Bottom				0.000

14.6.3 Simultaneous Transmission Scenarios of WLAN/BT

WLAN/BT				
Position	5 GHz WLAN Ant1 (W/kg)	5 GHz WLAN MIMO (W/kg)	6GHz MIMO (W/kg)	(W/kg)
	3	4	5	Max
Rear	1.112	1.233	0.206	1.233
Front	1.349	1.743	0.123	1.743
Left	1.781	2.500	0.771	2.500
Right		0.355	0.051	0.355
Top	0.525	0.837	0.062	0.837
Bottom				0.000

14.6.4 AG Verification - AG0+AG1+WLAN/BT

Position	AG0 SAR (W/kg)	AG 1 SAR (W/kg)	WLAN/BT SAR (W/kg)	AG0+ AG1+ WLAN/BT SAR (W/kg)
Rear	1.986	0.606	1.233	3.825
Front	1.738	0.000	1.743	3.481
Left	1.450	0.000	2.500	3.950
Right	0.313	0.000	0.355	0.668
Top	0.000	2.489	0.837	3.326
Bottom	1.716	0.000	0.000	1.716

Notes.

1. The sum of AG0+AG1+WLAN/BT is less than 4.0 W/kg(10g SAR) there's no further analysis required for compliance demonstration.

14.7 Highest Report SAR and SAR Hotspot Locations

14.7.1 Head SAR - Right Touch (X-Axis)

Mode / Band	AG0							
	Main1		Main2		Main3		Main4	
	X-Axis	1g SAR (W/kg)	X-Axis	1g SAR (W/kg)	X-Axis	1g SAR (W/kg)	X-Axis	1g SAR (W/kg)
GSM850	52.0	0.366						
GSM1900	50.9	0.086						
UMTS B5	58.7	0.297						
UMTS B4	52.5	0.145						
UMTS B2	50.7	0.132						
LTE B5	58.7	0.368						
LTE B12	61.4	0.147						
LTE B13	61.1	0.278						
LTE B25	53.1	0.153						
LTE B26	58.7	0.363						
LTE B41			84.5	0.096				
LTE B66	52.6	0.098						
NR n5	56.7	0.355						
NR n25	50.9	0.147						
NR n41 SRS#2			-	0.000				
NR n41 SRS#4							-	0.000
NR n66	50.2	0.166						
NR n77 SRS#2					-	0.000		
NR n77 SRS#4							-	0.000
NR n77 SRS#2 DOD					-	0.000		
NR n77 SRS#4 DOD							-	0.000

Mode / Band	AG1						WLAN / BT					
	Sub1		Sub2		Sub5		Ant. 1		Ant. 2		MIMO	
	X-Axis	1g SAR (W/kg)	Y-Axis	1g SAR (W/kg)	X-Axis	1g SAR (W/kg)	X-Axis	1g SAR (W/kg)	X-Axis	1g SAR (W/kg)	X-Axis	1g SAR (W/kg)
LTE B4 ULCA			18.6	0.604								
NR n41			16.7	0.509								
NR n41 SRS#3	6.8	0.195										
NR n66 UPPER			18.3	0.666								
NR n77			17.5	0.603								
NR n77 SRS#3					64.8	0.666						
NR n77 DOD			16.4	0.750								
NR n77 SRS#3 DOD					60.5	0.573						
2.4GHz Ant2									34.9	0.234		
2.4GHz Ant2 RSDB									40.9	0.396		
2.4GHz MIMO											45.8	0.681
2.4GHz MIMO RSDB											49.1	0.364
BT Ant1							46.3	0.291				
BT Ant2									36.6	0.174		
5GHz Ant1							35.0	0.665				
5GHz MIMO											30.2	0.537
6E											40.5	0.302

14.7.2 Head SAR - Right Touch (Y-Axis)

Mode / Band	AG0							
	Main1		Main2		Main3		Main4	
	Y-Axis	1g SAR (W/kg)	Y-Axis	1g SAR (W/kg)	Y-Axis	1g SAR (W/kg)	Y-Axis	1g SAR (W/kg)
GSM850	-261.4	0.366						
GSM1900	-251.9	0.086						
UMTS B5	-260.5	0.297						
UMTS B4	-253.1	0.145						
UMTS B2	-254.4	0.132						
LTE B5	-263.2	0.368						
LTE B12	-260.9	0.147						
LTE B13	-257.6	0.278						
LTE B25	-253.6	0.153						
LTE B26	-263.2	0.363						
LTE B41			-225.2	0.096				
LTE B66	-254.5	0.098						
NR n5	-261.4	0.355						
NR n25	-251.9	0.147						
NR n41 SRS#2			-	0.000				
NR n41 SRS#4							-	0.000
NR n66	-251.0	0.166						
NR n77 SRS#2					-	0.000		
NR n77 SRS#4							-	0.000
NR n77 SRS#2 DOD					-	0.000		
NR n77 SRS#4 DOD							-	0.000

Mode / Band	AG1						WLAN / BT					
	Sub1		Sub2		Sub5		Ant. 1		Ant. 2		MIMO	
	Y-Axis	1g SAR (W/kg)	Y-Axis	1g SAR (W/kg)	Y-Axis	1g SAR (W/kg)	Y-Axis	1g SAR (W/kg)	Y-Axis	1g SAR (W/kg)	Y-Axis	1g SAR (W/kg)
LTE B4 ULCA			-324.6	0.604								
NR n41			-327.5	0.509								
NR n41 SRS#3	-300.8	0.195										
NR n66 UPPER			-324.2	0.666								
NR n77			-330.3	0.603								
NR n77 SRS#3					-319.2	0.666						
NR n77 DOD			-327.4	0.750								
NR n77 SRS#3 DOD					-314.8	0.573						
2.4GHz Ant2									-247.1	0.234		
2.4GHz Ant2 RSDB									-247.7	0.396		
2.4GHz MIMO											-332.3	0.681
2.4GHz MIMO RSDB											-333.2	0.364
BT Ant1							-328.4	0.291				
BT Ant2									-247.5	0.174		
5GHz Ant1							-336.7	0.665				
5GHz MIMO											-337.6	0.537
6E											-333.8	0.302

14.7.3 Head SAR - Right Touch (Y-Coordinates)

Mode / Band	AG0							
	Main1		Main2		Main3		Main4	
	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)
GSM850	-63.6	0.366						
GSM1900	-67.4	0.086						
UMTS B5	-69.8	0.297						
UMTS B4	-68.2	0.145						
UMTS B2	-65.9	0.132						
LTE B5	-68.5	0.368						
LTE B12	-72.0	0.147						
LTE B13	-73.4	0.278						
LTE B25	-68.4	0.153						
LTE B26	-68.5	0.363						
LTE B41			-109.8	0.096				
LTE B66	-67.5	0.098						
NR n5	-67.7	0.355						
NR n25	-67.4	0.147						
NR n41 SRS#2			-	0.000				
NR n41 SRS#4							-	0.000
NR n66	-67.3	0.166						
NR n77 SRS#2					-	0.000		
NR n77 SRS#4							-	0.000
NR n77 SRS#2 DOD					-	0.000		
NR n77 SRS#4 DOD							-	0.000

Mode / Band	AG1						WLAN / BT					
	Sub1		Sub2		Sub5		Ant. 1		Ant. 2		MIMO	
	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)
LTE B4 ULCA			-3.0	0.604								
NR n41			0.1	0.509								
NR n41 SRS#3	-4.7	0.195										
NR n66 UPPER			-3.0	0.666								
NR n77			0.7	0.603								
NR n77 SRS#3					-45.8	0.666						
NR n77 DOD			0.2	0.750								
NR n77 SRS#3 DOD					-44.3	0.573						
2.4GHz Ant2									-56.0	0.234		
2.4GHz Ant2 RSDB									-60.8	0.396		
2.4GHz MIMO											-22.8	0.681
2.4GHz MIMO RSDB											-25.2	0.364
BT Ant1							-25.1	0.291				
BT Ant2									-57.2	0.174		
5GHz Ant1							-11.2	0.665				
5GHz MIMO											-6.6	0.537
Wifi 6E											-17.4	0.302

14.7.4 Hotspot SAR - Rear

Mode / Band	AG0							
	Main1		Main2		Main3		Main4	
	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)
GSM850	-63.2	0.630						
GSM1900	-77.0	0.434						
UMTS B5	-79.6	0.746						
UMTS B4	-75.5	0.683						
UMTS B2	-74.5	0.316						
LTE B5	-60.0	0.752						
LTE B12	-68.0	0.383						
LTE B13	-64.9	0.671						
LTE B25	-73.5	0.678						
LTE B26	-67.7	0.941						
LTE B41			-73.6	0.397				
LTE B66	-73.5	0.570						
NR n5	-62.4	0.617						
NR n25	-74.5	0.446						
NR n41 SRS#2			-50.8	0.125				
NR n41 SRS#4							-68.8	0.078
NR n66	-73.0	0.707						
NR n77 SRS#2					-62.4	0.026		
NR n77 SRS#4							-66.0	0.085
NR n77 SRS#2 DOD					-46.8	0.091		
NR n77 SRS#4 DOD							-55.2	0.272

Mode / Band	AG1						WLAN / BT					
	Sub1		Sub2		Sub5		Ant. 1		Ant. 2		MIMO	
	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)
LTE B4 ULCA			77.5	0.398								
NR n41			64.4	0.194								
NR n41 SRS#3	57.6	0.203										
NR n66 UPPER			68.5	0.469								
NR n77			63.0	0.100								
NR n77 SRS#3					16.8	0.050						
NR n77 DOD			58.8	0.125								
NR n77 SRS#3 DOD					28.8	0.123						
2.4GHz Ant2									28.0	0.232		
2.4GHz Ant2 RSDB									26.8	0.084		
2.4GHz MIMO											36.4	0.414
2.4GHz MIMO RSDB											34.0	0.178
BT Ant1							40.8	0.147				
BT Ant2									30.0	0.174		
5GHz Ant1							56.0	0.268				
5GHz MIMO											65.0	0.153
5GHz MIMO RSDB											74.0	0.045

14.7.5 Body Worn SAR - Rear

Mode / Band	AG0							
	Main1		Main2		Main3		Main4	
	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)
GSM850	-43.8	0.485						
GSM1900	-210.8	0.377						
UMTS B5	-80.4	0.369						
UMTS B4	-211.2	0.656						
UMTS B2	-211.2	0.562						
LTE B5	-46.8	0.477						
LTE B12	-58.7	0.226						
LTE B13	-33.8	0.446						
LTE B25	-210.2	0.608						
LTE B26	-46.8	0.397						
LTE B41			-58.8	0.302				
LTE B66	-210.2	0.653						
NR n5	-44.7	0.409						
NR n25	-73.0	0.559						
NR n41 SRS#2			-50.8	0.059				
NR n41 SRS#4							-68.8	0.026
NR n66	-206.6	0.704						
NR n77 SRS#2					-68.4	0.007		
NR n77 SRS#4							-70.0	0.015
NR n77 SRS#2 DOD					-45.6	0.043		
NR n77 SRS#4 DOD							-57.6	0.127

Mode / Band	AG1						WLAN / BT					
	Sub1		Sub2		Sub5		Ant. 1		Ant. 2		MIMO	
	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)	Y-Coordinates	1g SAR (W/kg)
LTE B4 ULCA			65.5	0.250								
NR n41			61.6	0.198								
NR n41 SRS#3	55.2	0.054										
NR n66 UPPER			32.5	0.185								
NR n77			62.2	0.118								
NR n77 SRS#3					9.6	0.012						
NR n77 DOD			67.8	0.136								
NR n77 SRS#3 DOD					26.4	0.046						
2.4GHz Ant2									29.2	0.108		
2.4GHz Ant2 RSDB									28.0	0.041		
2.4GHz MIMO											34.0	0.366
2.4GHz MIMO RSDB											32.8	0.101
BT Ant1							39.6	0.065				
BT Ant2									28.8	0.068		
5GHz Ant1							57.0	0.172				
5GHz MIMO											59.0	0.282
5GHz MIMO RSDB											59.0	0.058
Wifi 6E												0.028

15. SAR Measurement Variability and Uncertainty

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

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

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

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

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

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

Hotspot SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
㎒	Channel					
1 852.4	9262	UMTS Band 2	Bottom	0.923	0.921	1.00
1 860.0	26140	LTE Band 25	Bottom (1RB, 49Ooffset)	0.808	0.799	1.01
1 745.0	349000	NR Band n66	Bottom (108RB, 0Offset)	0.921	0.915	1.01

16. Antenna Impedance tuner testing

Per April 2019 TCB Workshop Notes, the following test procedures were followed to demonstrate that the SAR results in Section 11 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Per FCC Guidance, during NR testing the device was configured with the tuner state selected by the device in LTE mode with auto-tune active at the same frequency. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other than impedance matching.
To evaluate all the tuner states, the 60 tuner states were divided among the aggregate band, mode and exposure combinations. Single point time-sweep measurements were performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was > 1.2 W/kg for a
particular band/mode/exposure condition, point SAR measurements were made for all 60 states.
The operational description contains more information about the design and implementation of the dynamic antenna tuning.

16.1 Head SAR Configuration

GSM850		UMTS B5		UMTS B4	
GMSK GPRS 2Tx		RMC		RMC	
Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Left Cheek
Frequency (MHz)	836.6	Frequency (MHz)	836.6	Frequency (MHz)	1 732.4
Channel	190	Channel	4183	Channel	1412
Measured 1g SAR(W/kg)	0.284	Measured 1g SAR(W/kg)	0.22	Measured 1g SAR(W/kg)	0.226
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 48)	0.632	Auto-tune (State 0)	0.731	Auto-tune (State 18)	0.753
Default (State 0)	0.598	Default (State 0)	0.720	Default (State 0)	0.686
State 2	0.232	State 4	0.275	State 5	0.527
State 40	0.142	State 38	0.091	State 37	0.543
State 41	0.140	State 43	0.099	State 44	0.261
State 78	0.030	State 76	0.022	State 75	0.321
State 79	0.021	State 81	0.147	State 82	0.071
State 116	0.111	State 114	0.067	State 113	0.157
State 117	0.107	State 119	0.131	State 120	0.111
State 143	0.054	State 141	0.175	State 140	0.357

UMTS B2		LTE B12(B17)		LTE B5		LTE B66(B4)	
RMC		QPSK, 10 MHz, 1 RB, 24 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 24 RB		QPSK, 20 MHz, 1 RB, 99 RB Offset	
Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Left Cheek
Frequency (MHz)	1880	Frequency (MHz)	707.5	Frequency (MHz)	836.5	Frequency (MHz)	1720
Channel	9400	Channel	23095	Channel	20525	Channel	132072
Measured 1g SAR(W/kg)	0.224	Measured 1g SAR(W/kg)	0.135	Measured 1g SAR(W/kg)	0.302	Measured 1g SAR(W/kg)	0.166
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 8)	0.112	Auto-tune (State 128)	0.502	Auto-tune (State 137)	0.807	Auto-tune (State 23)	0.364
Default (State 0)	0.102	Default (State 0)	0.484	Default (State 0)	0.745	Default (State 0)	0.245
State 6	0.071	State 10	0.186	State 13	0.039	State 15	0.086
State 36	0.061	State 32	0.079	State 29	0.089	State 27	0.279
State 45	0.083	State 49	0.176	State 52	0.168	State 54	0.011
State 74	0.021	Sate 70	0.121	State 67	0.218	State 65	0.164
State 83	0.011	State 87	0.179	State 90	0.022	State 92	0.012
State 112	0.017	State 108	0.021	State 105	0.079	State 103	0.063
State 121	0.072	State 125	0.107	State 128	0.759	State 130	0.282
State 139	0.015						

LTE B25(B2)		LTE B26		LTE B13	
QPSK, 20 MHz, 1 RB, 0 RB Offset		QPSK, 15 MHz, 1 RB, 74 RB Offset		QPSK, 10 MHz, 1 RB, 49 RB Offset	
Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	1882.5	Frequency (MHz)	831.5	Frequency (MHz)	782
Channel	26365	Channel	26865	Channel	23230
Measured 1g SAR(W/kg)	0.216	Measured 1g SAR(W/kg)	0.257	Measured 1g SAR(W/kg)	0.197
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 8)	0.207	Auto-tune (State 0)	0.742	Auto-tune (State 4)	0.599
Default (State 0)	0.174	Default (State 0)	0.713	Default (State 0)	0.545
State 12	0.102	State 14	0.021	State 11	0.318
State 30	0.082	State 28	0.016	State 31	0.031
State 51	0.021	State 53	0.017	State 50	0.171
State 68	0.061	State 66	0.034	State 69	0.093
State 89	0.010	State 91	0.025	State 88	0.154
State 106	0.017	State 104	0.041	State 107	0.097
State 127	0.016	State 129	0.011	State 126	0.012

NR Band n5		NR Band n66		NR Band n25(n2)	
DFT-s-OFDM QPSK, 20 MHz, 1RB, 1RB offset		DFT-s-OFDM QPSK, 40 MHz, 1RB, 1 RB		DFT-s-OFDM QPSK, 20 MHz, 50RB, 28RB offset	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Tilt
Frequency (MHz)	836.5	Frequency (MHz)	1745	Frequency (MHz)	1882.5
Channel	167300	Channel	349000	Channel	376500
Measured 1g SAR(W/kg)	0.272	Measured 1g SAR (W/kg)	0.248	Measured 1g SAR (W/kg)	0.234
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 137)	0.676	Auto-tune (State 23)	0.597	Auto-tune (State 8)	0.661
Default (State 0)	0.641	Default (State 0)	0.553	Default (State 0)	0.594
State 9	0.154	State 33	0.031	State 52	0.024
State 13	0.031	State 80	0.024	State 66	0.108
State 25	0.240	State 86	0.167	State 75	0.061
State 47	0.075	State 108	0.213	State 99	0.045
State 65	0.061	State 112	0.102	State 113	0.037
State 79	0.154	State 119	0.035	State 116	0.072
State 103	0.318	State 127	0.166	State 129	0.066
State 112	0.021	State 135	0.178	State 138	0.021

LTE B4 ULCA	
QPSK, 20 MHz, 1 RB, 0 RB Offset	
Test Position	Right Tilt
Frequency (MHz)	1732.5
Channel	20175
Measured 1g SAR	0.59
Average Value of Time Sweep (W/kg)	
Auto-tune (State 12)	1.36
Default(State0)	1.252
State0	1.259
State1	1.233
State2	1.294
State3	1.270
State4	1.233
State5	1.121
State6	1.047
State7	1.031
State8	0.948
State9	0.984
State10	1.002
State11	1.264
State12	1.36
State13	1.248
State14	1.299
State15	1.264
State16	1.287
State17	1.242
State18	1.307
State19	1.273
State20	1.233
State21	1.280
State22	1.057
State23	1.084
State24	1.164
State25	1.300
State26	1.243
State27	1.114
State28	1.178
State29	1.098
State30	1.250
State31	1.241
State32	1.235
State33	1.237
State34	1.237
State35	1.295
State36	1.269
State37	1.248
State38	1.271
State39	1.304
State40	0.997
State41	1.034
State42	1.074
State43	1.255
State44	1.242
State45	1.247
State46	1.278
State47	1.276
State48	1.286
State49	1.282

State50	1.237
State51	1.265
State52	1.254
State53	1.304
State54	1.301
State55	1.243
State56	1.283
State57	1.115
State58	1.134
State59	1.289
State60	1.261
State61	1.263
State62	1.269
State63	1.233
State64	1.261
State65	1.240
State66	1.285
State67	1.295
State68	1.308
State69	1.265
State70	1.245
State71	1.300
State72	1.236
State73	1.292
State74	1.262
State75	1.259
State76	1.254
State77	1.251
State78	0.945
State79	0.974
State80	0.949
State81	0.957
State82	1.077
State83	1.265
State84	1.303
State85	1.269
State86	1.230
State87	1.273
State88	1.303
State89	1.304
State90	1.131
State91	1.155
State92	1.193
State93	1.253
State94	1.240
State95	1.283
State96	1.299
State97	1.237
State98	1.241
State99	1.244
State100	1.232
State101	1.257
State102	1.247
State103	1.307
State104	1.258
State105	1.250
State106	1.294
State107	1.246
State108	1.258
State109	0.911

State110	0.924
State111	0.975
State112	0.933
State113	0.983
State114	1.285
State115	1.236
State116	1.242
State117	1.304
State118	1.301
State118	1.242
state 119	1.298
state 120	1.275
state 121	1.274
state 122	1.234
state 123	1.246
state 124	1.033
state 125	1.054
state 126	1.131
state 127	1.104
state 128	1.087
state 129	1.164
state 130	1.241
state 131	1.237
state 132	1.255
state 133	1.231
state 134	1.293
state 135	1.234
state 136	1.275
state 137	1.242
state 138	1.257
state 139	1.269
state 140	1.236
state 141	1.241
xstate 142	1.234
state 143	1.252

16.2 Body SAR Configuration

GSM850		UMTS B5		UMTS B4	
GMSK GPRS 2Tx		RMC		RMC	
Test Position	Right	Test Position	Rear	Test Position	Bottom
Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	836.6	Frequency (MHz)	836.6	Frequency (MHz)	1732.4
Channel	190	Channel	4183	Channel	1412
Measured 1g SAR(W/kg)	0.719	Measured 1g SAR(W/kg)	0.552	Measured 1g SAR(W/kg)	0.758
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 48)	0.617	Auto-tune (State 0)	1.06	Auto-tune (State 18)	1.18
Default (State 0)	0.601	Default (State 0)	0.984	Default (State 0)	1.06
State 2	0.224	State 4	0.531	State 5	0.976
State 40	0.118	State 38	0.142	State 37	0.818
State 41	0.140	State 43	0.189	State 44	0.587
State 78	0.031	State 76	0.031	State 75	0.687
State 79	0.028	State 81	0.236	State 82	0.082
State 116	0.129	State 114	0.121	State 113	0.203
State 117	0.104	State 119	0.246	State 120	0.232
State 143	0.042	State 141	0.012	State 140	0.593

LTE B12(B17)		LTE B5		LTE B26	
QPSK, 10 MHz, 1 RB, 24 RB Offset		QPSK, 15 MHz Bandwidth, 1 RB, 24 RB		QPSK, 15 MHz, 1 RB, 74 RB Offset	
Test Position	Rear	Test Position	Rear	Test Position	Rear
Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	707.5	Frequency (MHz)	836.5	Frequency (MHz)	831.5
Channel	23095	Channel	20525	Channel	26865
Measured 1g SAR(W/kg)	0.302	Measured 1g SAR(W/kg)	0.617	Measured 1g SAR(W/kg)	0.666
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 128)	0.651	Auto-tune (State 137)	1.16	Auto-tune (State 0)	0.934
Default (State 0)	0.633	Default (State 0)	1.11	Default (State 0)	0.925
State 10	0.275	State 13	0.164	State 14	0.097
State 32	0.204	State 29	0.033	State 28	0.072
State 49	0.350	State 52	0.711	State 53	0.544
Sate 70	0.229	State 67	0.136	State 66	0.093
State 87	0.346	State 90	0.089	State 91	0.061
State 108	0.071	State 105	0.396	State 104	0.346
State 125	0.025	State 128	0.577	State 129	0.204

LTE B4 ULCA		LTE B13	
QPSK, 20 MHz, 1 RB, 0 RB Offset		QPSK, 10 MHz, 1 RB, 49 RB Offset	
Test Position	Top	Test Position	Rear
Spacing	10mm	Spacing	10mm
Frequency (MHz)	1732.5	Frequency (MHz)	782
Channel	20175	Channel	23230
Measured 1g SAR (W/kg)	0.489	Measured 1g SAR (W/kg)	0.475
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 12)	1.06	Auto-tune (State 4)	0.702
Default (State 0)	0.989	Default (State 0)	0.684
State 9	0.998	State 11	0.566
State 33	0.987	State 31	0.018
State 48	0.988	State 50	0.602
State 71	0.029	State 69	0.201
State 86	0.997	State 88	0.229
State 109	0.981	State 107	0.196
State 124	0.993	State 126	0.043
State 136	0.979		

NR Band n5	
DFT-s-OFDM QPSK, 20 MHz, 1RB, 1RB offset	
Test Position	Rear
Spacing	10mm
Frequency (MHz)	836.5
Channel	167300
Measured 1g SAR(W/kg)	0.472
Average Value of Time Sweep (W/kg)	
Auto-tune (State 137)	0.989
Default (State 0)	0.942
State 9	0.448
State 13	0.375
State 25	0.163
State 47	0.054
State 65	0.024
State 79	0.487
State 103	0.447
State 112	0.342

LTE B25(B2)		LTE B66(B4)		UMTS B2	
QPSK, 20 MHz, 1 RB, 49 RB Offset		QPSK, 20 MHz, 50 RB, 25 RB Offset		RMC	
Test Position	Bottom	TestPosition	Bottom	Test Position	Bottom
Spacing	10mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	1860	Frequency (MHz)	1720	Frequency (MHz)	1860
Channel	26140	Channel	132072	Channel	9400
Measured 1g SAR	0.808	Measured1gSAR	0.699	Measured 1g SAR	0.923
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 8)	1.721	Auto-tune(State 23)	1.503	Auto-tune (State 8)	1.93
Default(State0)	1.633	Default(State0)	1.174	Default(State0)	1.403
State0	1.671	State0	1.243	State0	1.390
State1	1.546	State1	1.283	State1	1.375
State2	1.668	State2	1.243	State2	1.347
State3	1.573	State3	1.233	State3	1.362
State4	1.447	State4	0.855	State4	1.246
State5	1.684	State5	1.180	State5	1.393
State6	1.547	State6	1.098	State6	1.266
State7	1.644	State7	0.811	State7	1.483
State8	1.643	State8	1.064	State8	1.930
State9	1.483	State9	0.991	State9	1.612
State10	1.579	State10	1.331	State10	1.078
State11	1.634	State11	0.841	State11	1.243
State12	1.475	State12	1.074	State12	1.194
State13	1.594	State13	0.884	State13	1.213
State14	1.522	State14	1.140	State14	1.411
State15	1.38	State15	1.464	State15	1.129
State16	1.596	State16	1.418	State16	1.405
State17	1.503	State17	0.868	State17	1.342
State18	1.648	State18	1.201	State18	1.397
State19	1.56	State19	0.715	State19	1.559

State20	1.52	State20	1.434	State20	1.359
State21	1.607	State21	0.879	State21	1.256
State22	1.615	State22	1.238	State22	1.404
State23	1.465	State23	1.503	State23	1.364
State24	1.548	State24	1.375	State24	1.347
State25	1.702	State25	1.397	State25	1.411
State26	1.618	State26	0.808	State26	1.617
State27	1.47	State27	0.951	State27	1.309
State28	1.66	State28	1.020	State28	1.379
State29	1.536	State29	1.009	State29	1.285
State30	1.341	State30	1.203	State30	1.080
State31	1.385	State31	0.664	State31	1.244
State32	1.62	State32	0.700	State32	1.339
State33	1.493	State33	0.921	State33	1.402
State34	1.61	State34	0.741	State34	1.389
State35	1.564	State35	1.333	State35	1.333
State36	1.484	State36	0.848	State36	1.193
State37	1.671	State37	1.378	State37	1.310
State38	1.334	State38	0.558	State38	1.083
State39	1.112	State39	1.166	State39	0.831
State40	0.914	State40	1.023	State40	0.713
State41	1.669	State41	0.606	State41	1.378
State42	1.526	State42	0.839	State42	1.255
State43	1.632	State43	1.044	State43	1.111
State44	1.529	State44	1.027	State44	1.388
State45	1.668	State45	0.510	State45	1.367
State46	1.541	State46	0.693	State46	1.430
State47	1.336	State47	0.557	State47	1.225
State48	0.089	State48	0.379	State48	0.082
State49	0.097	State49	0.395	State49	0.194
State50	0.121	State50	0.438	State50	0.170
State51	0.105	State51	0.263	State51	0.016
State52	0.106	State52	0.261	State52	0.085
State53	0.088	State53	0.253	State53	0.193
State54	0.112	State54	0.362	State54	0.059
State55	0.123	State55	0.435	State55	0.088
State56	0.131	State56	0.394	State56	0.090
State57	0.127	State57	0.333	State57	0.144
State58	0.083	State58	0.338	State58	0.058
State59	0.089	State59	0.389	State59	0.092
State60	0.131	State60	0.452	State60	0.020
State61	0.106	State61	0.106	State61	0.185
State62	0.154	State62	0.014	State62	0.087
State63	0.141	State63	0.317	State63	0.050
State64	0.686	State64	0.737	State64	0.505
State65	0.753	State65	0.894	State65	0.492
State66	0.984	State66	0.765	State66	0.743
State67	0.745	State67	0.580	State67	0.644
State68	0.679	State68	0.366	State68	0.498

State69	0.688	State69	0.459	State69	0.477
State70	0.665	State70	0.714	State70	0.374
State71	0.944	State71	0.376	State71	0.813
State72	1.035	State72	0.436	State72	0.944
State73	0.947	State73	0.481	State73	0.656
State74	1.131	State74	0.820	State74	0.900
State75	1.242	State75	0.936	State75	1.141
State76	1.131	State76	0.645	State76	0.990
State77	1.077	State77	0.748	State77	0.836
State78	0.987	State78	0.389	State78	0.756
State79	1.068	State79	0.358	State79	0.867
State80	0.121	State80	0.376	State80	0.120
State81	0.07	State81	0.362	State81	0.171
State82	0.082	State82	0.369	State82	0.089
State83	0.099	State83	0.356	State83	0.012
State84	0.056	State84	0.334	State84	0.075
State85	0.122	State85	0.365	State85	0.149
State86	0.05	State86	0.345	State86	0.191
State87	0.027	State87	0.208	State87	0.214
State88	0.087	State88	0.339	State88	0.154
State89	0.135	State89	0.119	State89	0.156
State90	0.218	State90	0.273	State90	0.063
State91	0.104	State91	0.344	State91	0.177
State92	0.139	State92	0.286	State92	0.018
State93	0.127	State93	0.299	State93	0.006
State94	0.094	State94	0.349	State94	0.047
State95	0.07	State95	0.396	State95	0.201
State96	0.311	State96	0.292	State96	0.170
State97	0.294	State97	0.343	State97	0.163
State98	0.286	State98	0.275	State98	0.195
State99	0.302	State99	0.340	State99	0.071
State100	0.314	State100	0.150	State100	0.113
State101	0.287	State101	0.039	State101	0.026
State102	0.223	State102	0.054	State102	0.338
State103	0.282	State103	0.093	State103	0.071
State104	0.288	State104	0.269	State104	0.017
State105	0.357	State105	0.205	State105	0.216
State106	0.243	State106	0.129	State106	0.032
State107	0.267	State107	0.136	State107	0.116
State108	0.253	State108	0.209	State108	0.162
State109	0.278	State109	0.109	State109	0.177
State110	0.251	State110	0.436	State110	0.060
State111	0.298	State111	0.121	State111	0.027
State112	0.442	State112	0.132	State112	0.291
State113	0.418	State113	0.113	State113	0.327
State114	0.395	State114	0.079	State114	0.304
State115	0.332	State115	0.150	State115	0.141
State116	0.368	State116	0.152	State116	0.147
State117	0.474	State117	0.016	State117	0.303

State118	0.419	State118	0.103	State118	0.298
state 119	0.456	state 119	0.032	state 119	0.285
state 120	0.59	state 120	0.004	state 120	0.459
state 121	0.531	state 121	0.238	state 121	0.440
state 122	0.524	state 122	0.172	state 122	0.263
state 123	0.481	state 123	0.206	state 123	0.330
state 124	0.496	state 124	0.256	state 124	0.245
state 125	0.545	state 125	0.136	state 125	0.424
state 126	0.511	state 126	0.158	state 126	0.310
state 127	0.479	state 127	0.250	state 127	0.298
state 128	1.54	state 128	1.363	state 128	1.309
state 129	1.3	state 129	1.403	state 129	1.069
state 130	0.967	state 130	1.093	state 130	0.716
state 131	0.073	state 131	0.315	state 131	0.198
state 132	0.54	state 132	0.903	state 132	0.349
state 133	0.078	state 133	0.335	state 133	0.083
state 134	0.172	state 134	0.156	state 134	0.159
state 135	0.175	state 135	0.173	state 135	0.096
state 136	1.551	state 136	1.303	state 136	1.160
state 137	1.283	state 137	1.403	state 137	1.092
state 138	0.763	state 138	1.273	state 138	0.552
state 139	0.081	state 139	0.464	state 139	0.070
state 140	0.703	state 140	0.623	state 140	0.432
state 141	0.097	state 141	0.344	state 141	0.104
state 142	0.175	state 142	0.068	state 142	0.166
state 143	0.182	state 143	0.136	state 143	0.259

NR Band n25(n2)		NR Band n66	
DFT-s-OFDM QPSK, 20 MHz, 50RB, 56RB offset		DFT-s-OFDM QPSK, 40 MHz, 108RB, 0RB offset	
Test Position	Bottom	TestPosition	Bottom
Spacing	10mm	Spacing	10mm
Frequency (MHz)	1860	Frequency (MHz)	1745
Channel	372000	Channel	349000
Measured 1g SAR	0.949	Measured1gSAR	0.921
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 8)	1.703	Auto-tune(State 23)	1.952
Default(State0)	1.566	Default(State0)	1.783
State0	1.629	State0	1.694
State1	1.493	State1	1.644
State2	1.624	State2	1.666
State3	1.554	State3	1.643
State4	1.408	State4	1.252
State5	1.632	State5	1.553
State6	1.469	State6	1.609
State7	1.621	State7	1.317
State8	1.639	State8	1.478
State9	1.465	State9	1.408

State10	1.556	State10	1.720
State11	1.565	State11	1.312
State12	1.473	State12	1.523
State13	1.516	State13	1.318
State14	1.500	State14	1.605
State15	1.340	State15	1.888
State16	1.538	State16	1.793
State17	1.480	State17	1.350
State18	1.625	State18	1.678
State19	1.553	State19	1.268
State20	1.474	State20	1.900
State21	1.602	State21	1.326
State22	1.569	State22	1.571
State23	1.409	State23	1.330
State24	1.533	State24	1.700
State25	1.636	State25	1.844
State26	1.570	State26	1.252
State27	1.429	State27	1.389
State28	1.619	State28	1.410
State29	1.469	State29	1.383
State30	1.310	State30	1.672
State31	1.336	State31	1.190
State32	1.612	State32	1.216
State33	1.457	State33	1.371
State34	1.560	State34	1.089
State35	1.506	State35	1.675
State36	1.426	State36	1.257
State37	1.658	State37	1.839
State38	1.305	State38	1.093
State39	1.075	State39	1.553
State40	0.845	State40	1.437
State41	1.600	State41	1.134
State42	1.479	State42	1.216
State43	1.571	State43	1.370
State44	1.449	State44	1.538
State45	1.607	State45	0.915
State46	1.491	State46	1.219
State47	1.299	State47	0.912
State48	0.081	State48	0.083
State49	0.054	State49	0.089
State50	0.059	State50	0.051
State51	0.053	State51	0.073
State52	0.079	State52	0.119
State53	0.067	State53	0.108
State54	0.069	State54	0.107
State55	0.114	State55	0.065
State56	0.096	State56	0.121
State57	0.092	State57	0.175
State58	0.023	State58	0.165
State59	0.065	State59	0.168
State60	0.069	State60	0.058

State61	0.058	State61	0.333
State62	0.080	State62	0.447
State63	0.101	State63	0.804
State64	0.658	State64	1.078
State65	0.677	State65	1.370
State66	0.916	State66	1.204
State67	0.713	State67	1.015
State68	0.606	State68	0.811
State69	0.678	State69	0.933
State70	0.621	State70	1.129
State71	0.906	State71	0.845
State72	1.021	State72	0.834
State73	0.890	State73	0.871
State74	1.093	State74	1.182
State75	1.181	State75	1.353
State76	1.095	State76	1.085
State77	1.038	State77	1.068
State78	0.985	State78	0.891
State79	1.016	State79	0.104
State80	0.062	State80	0.092
State81	0.030	State81	0.000
State82	0.067	State82	0.085
State83	0.051	State83	0.122
State84	0.030	State84	0.151
State85	0.044	State85	0.120
State86	-0.016	State86	0.160
State87	-0.022	State87	0.173
State88	0.077	State88	0.150
State89	0.103	State89	0.232
State90	0.182	State90	0.090
State91	0.068	State91	0.125
State92	0.117	State92	0.151
State93	0.074	State93	0.140
State94	0.025	State94	0.142
State95	0.015	State95	0.091
State96	0.296	State96	0.068
State97	0.258	State97	0.025
State98	0.258	State98	0.103
State99	0.266	State99	0.085
State100	0.278	State100	0.398
State101	0.282	State101	0.330
State102	0.186	State102	0.420
State103	0.234	State103	0.221
State104	0.280	State104	0.237
State105	0.343	State105	0.200
State106	0.240	State106	0.332
State107	0.192	State107	0.241
State108	0.239	State108	0.253
State109	0.264	State109	0.247
State110	0.189	State110	0.055
State111	0.273	State111	0.270

State112	0.405	State112	0.238
State113	0.349	State113	0.276
State114	0.349	State114	0.314
State115	0.317	State115	0.396
State116	0.356	State116	0.329
State117	0.443	State117	0.343
State118	0.390	State118	0.459
state 119	0.387	state 119	0.507
state 120	0.566	state 120	0.445
state 121	0.479	state 121	0.579
state 122	0.492	state 122	0.588
state 123	0.445	state 123	0.493
state 124	0.454	state 124	0.582
state 125	0.543	state 125	0.245
state 126	0.504	state 126	0.618
state 127	0.420	state 127	0.711
state 128	1.504	state 128	1.789
state 129	1.267	state 129	1.907
state 130	0.945	state 130	1.583
state 131	0.061	state 131	0.087
state 132	0.493	state 132	1.296
state 133	0.030	state 133	0.086
state 134	0.098	state 134	0.252
state 135	0.098	state 135	0.305
state 136	1.507	state 136	1.722
state 137	1.208	state 137	1.909
state 138	0.759	state 138	1.763
state 139	0.022	state 139	0.036
state 140	0.655	state 140	1.138
state 141	0.094	state 141	0.078
state 142	0.113	state 142	0.294
state 143	0.140	state 143	0.285

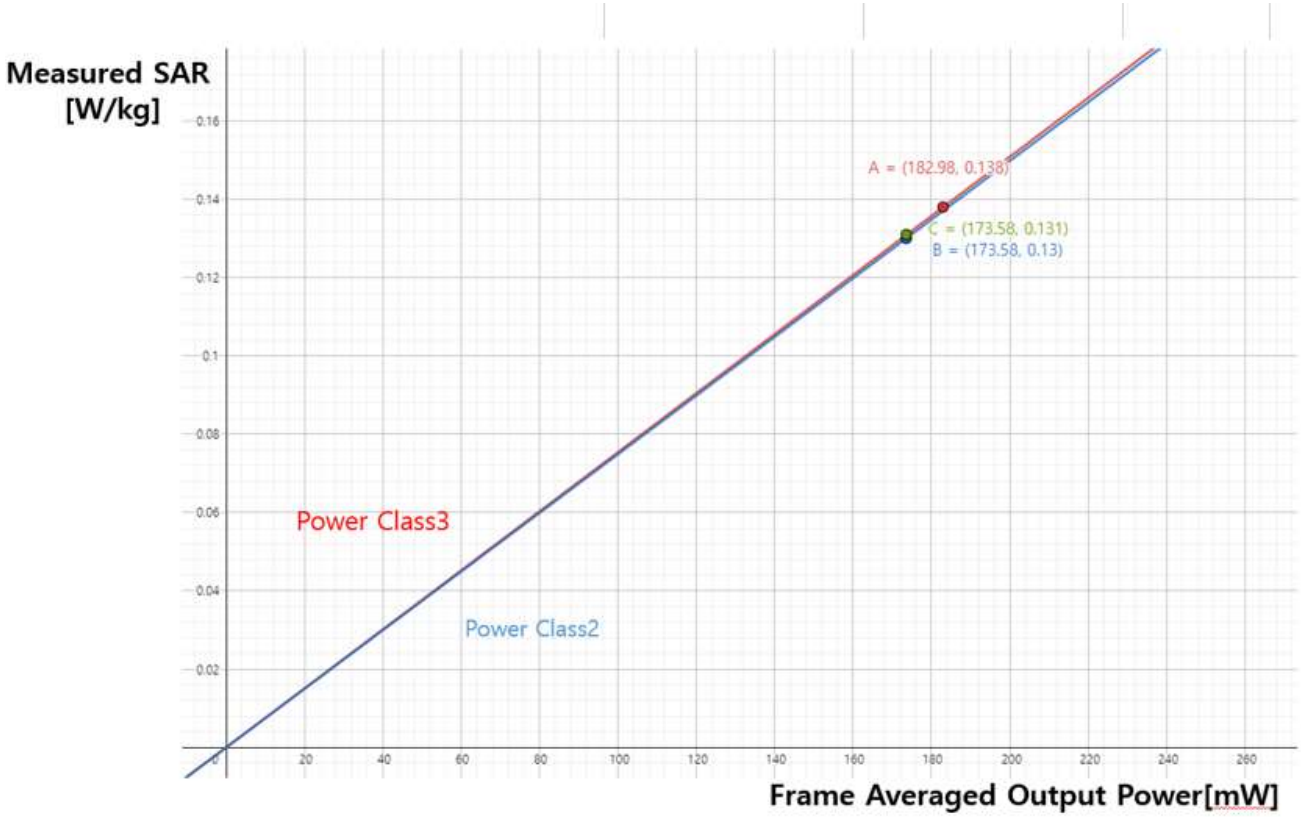
17. LTE TDD Band 41 Power Class 2 and Power class 3 Linearity

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

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

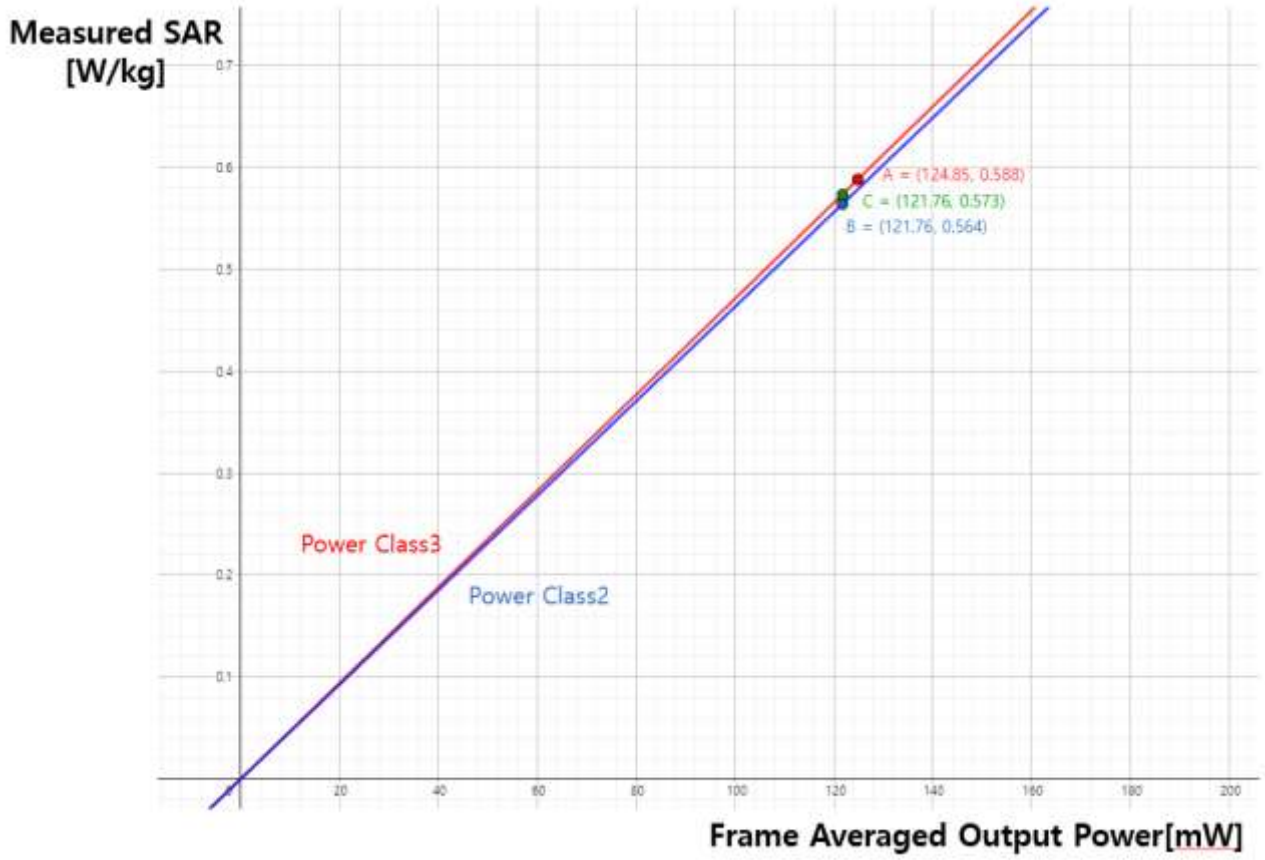
Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes as less than 10 % and all reported SAR values were < 1.4 W/kg.

LTE TDD Band 41 Head Linearity Data Table		
	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	25	26.5
Measured Output Power[dBm]	24.61	26.03
Measured SAR[W/kg]	0.138	0.13
Measured Power[mW]	289.07	400.87
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	182.98	173.58
% deviation from expected linearity		-0.70



LTE TDD Band 41 BodyWorn Linearity Data Table		
	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	25	26.5
Measured Output Power[dBm]	24.61	26.03
Measured SAR[W/kg]	0.276	0.265
Measured Power[mW]	289.07	400.87
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	182.98	173.58
% deviation from expected linearity		1.21

LTE TDD Band 41 Hotspot Linearity Data Table		
	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	23	24.5
Measured Output Power[dBm]	22.95	24.49
Measured SAR[W/kg]	0.588	0.564
Measured Power[mW]	197.24	281.19
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	124.85	121.76
% deviation from expected linearity		-1.65



18. 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.

19. SAR Test Equipment

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	SAM Phantom	-	N/A	N/A	N/A
HP	SAR System Control PC	-	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F17/ 59RAA1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F13/ 5R4XF1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F08/5AJ0A1/C/01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F13/ 5SD0A1/ C/ 01	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F10/5FN3A1/C/01	N/A	N/A	N/A
Staubli	CS9spe-TX2-60	F/21/0029002/C/001	N/A	N/A	N/A
Staubli	TX90 XLspeag	F17/ 59CHA1/ A/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F13/ 5R4XF1/ A/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F08/5AJ0A1/A/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F13/ 5SD0A1/ A/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F10/5FN3A1/A/01	N/A	N/A	N/A
Staubli	TX2-60 Lspe	F/21/0029002/A/001	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	010963	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-1338 1332	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-0008	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	001729	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	D21142602	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	D21144507C	N/A	N/A	N/A
TESTO	175-H1/Thermometer	40331915309	01/04/2022	Annual	01/04/2023
TESTO	175-H1/Thermometer	40332651310	01/04/2022	Annual	01/04/2023
TESTO	175-H1/Thermometer	40331949309	01/04/2022	Annual	01/04/2023
TESTO	608-H1/Thermometer	83348029	04/29/2022	Annual	04/29/2023
TESTO	608-H1/Thermometer	2183499992	12/09/2021	Annual	12/09/2022
TESTO	608-H1/Thermometer	83239085	11/15/2021	Annual	11/15/2022
SPEAG	DAE4	1225	12/01/2021	Annual	12/01/2022
SPEAG	DAE4	466	05/02/2022	Annual	05/02/2023
SPEAG	DAE4	504	03/01/2022	Annual	03/01/2023
SPEAG	DAE4	780	06/14/2022	Annual	06/14/2023
SPEAG	DAE4	1687	07/18/2022	Annual	07/18/2023
SPEAG	DAE4	1464	06/15/2022	Annual	06/15/2023
SPEAG	DAE4	1686	05/31/2022	Annual	05/31/2023
SPEAG	DAE4	652	01/24/2022	Annual	01/24/2023
SPEAG	E-Field Probe EX3DV4	3903	03/29/2022	Annual	03/29/2023
SPEAG	E-Field Probe EX3DV4	7622	11/24/2021	Annual	11/24/2022
SPEAG	E-Field Probe EX3DV4	7370	08/19/2022	Annual	08/19/2023
SPEAG	E-Field Probe EX3DV4	7655	06/20/2022	Annual	06/20/2023
SPEAG	E-Field Probe EX3DV4	7679	08/19/2022	Annual	08/19/2023
SPEAG	E-Field Probe EX3DV4	7702	01/20/2022	Annual	01/20/2023
SPEAG	E-Field Probe EX3DV4	7654	05/31/2022	Annual	05/31/2023
SPEAG	E-Field Probe EX3DV4	7681	12/14/2021	Annual	12/14/2022
SPEAG	Dipole D750V3	1014	05/25/2022	Annual	05/25/2023
SPEAG	Dipole D835V2	441	07/15/2022	Annual	07/15/2023
SPEAG	Dipole D1800V2	2d007	07/18/2022	Annual	07/18/2023
SPEAG	Dipole D1900V2	5d032	01/28/2022	Annual	01/28/2023
SPEAG	Dipole D2450V2	743	05/31/2022	Annual	05/31/2023
SPEAG	Dipole D2600V2	1015	07/15/2022	Annual	07/15/2023
SPEAG	Dipole D3500V2	1132	01/24/2022	Annual	01/24/2023
SPEAG	Dipole D3700V2	1105	11/22/2021	Annual	11/22/2022
SPEAG	Dipole D3900V2	1086	05/25/2022	Annual	05/25/2023
SPEAG	Dipole D5GHzV2	1253	05/31/2022	Annual	05/31/2023
SPEAG	Dipole D5GHzV2	1107	07/19/2022	Annual	07/19/2023
Agilent	Power Meter E4419B	MY41291386	09/27/2022	Annual	09/27/2023
Agilent	Power Meter N1911A	MY45101406	06/27/2022	Annual	06/27/2023
Agilent	Power Sensor 8481A	SG1091286	09/272022	Annual	09/27/2023
H.P	Power Sensor 8481A	MY41090873	02/07/2022	Annual	02/07/2023

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
Agilent	Power Sensor 8481A	MY41090675	09/27/2022	Annual	09/27/2023
Agilent	Wideband Power Sensor N1921A	MY55220026	08/02/2022	Annual	08/02/2023
Agilent	11636B/Power Divider	58698	02/24/2022	Annual	02/24/2023
SPEAG	DAKS 3.5	1038	03/28/2022	Annual	03/28/2023
H.P	Network Analyzer /8753ES	JP39240221	01/05/2022	Annual	01/05/2023
Agilent	WIRELESS COMMUNICATION E5515C	MY48361100	09/27/2022	Annual	09/27/2023
Agilent	WIRELESS COMMUNICATION E5515C	MY48360252	08/08/2022	Annual	08/08/2023
R&S	Wireless Communication Test Set CMW500	115733	04/14/2022	Annual	04/14/2023
Agilent	SIGNAL GENERATOR N5182A	MY47070230	04/28/2022	Annual	04/28/2023
EMPOWER	RF Power Amplifier	1084	06/20/2022	Annual	06/20/2023
EMPOWER	RF Power Amplifier	1041D/C0508	06/20/2022	Annual	06/20/2023
EMPOWER	RF Power Amplifier	1011	10/06/2021	Annual	10/06/2022
EMPOWER	RF Power Amplifier	1011	09/27/2022	Annual	09/27/2023
MICRO LAB	LP Filter / LA-15N	10453	09/27/2022	Annual	09/27/2023
MICRO LAB	LP Filter / LA-30N	-	09/27/2022	Annual	09/27/2023
MICRO LAB	LP Filter / LA-60N	32011	09/27/2022	Annual	09/27/2023
Agilent	Attenuator (3dB) 8693B	MY39260298	08/25/2022	Annual	08/25/2023
HP	Attenuator (3dB) 33340A	02427	08/25/2022	Annual	08/25/2023
HP	Attenuator (20dB) 8493C	09271	08/25/2022	Annual	08/25/2023
Agilent	Directional Bridge 86205A	3140A04581	05/262022	Annual	05/26/2023
OSI	Power Divider	#3	06/17/2022	Annual	06/17/2023
Agilent	MXA Signal Analyzer N9020A	MY50510407	06/07/2022	Annual	06/07/2023
HP	Dual Directional Coupler	16072	09/27/2022	Annual	09/27/2023
Anritsu	Radio Communication Test Station MT8000A	6262036812	12/20/2021	Annual	12/20/2022
Anritsu	Radio Communication Tester MT8820C	6201074225	02/24/2022	Annual	02/24/2023
Anritsu	Radio Communication Tester MT8820C	6200695605	04/15/2022	Annual	04/15/2023
Anritsu	Radio Communication Tester MT8821C	6201502997	06/27/2022	Annual	06/27/2023
Anritsu	Radio Communication Tester MT8821C	6262044720	12/20/2021	Annual	12/20/2022
Anritsu	Radio Communication Tester MT8821C	6201664725	02/11/2022	Annual	02/11/2023
Agilent	WIRELESS COMMUNICATION E5515C	MY50260992	06/27/2022	Annual	06/27/2023
ROHDE&SCHWARZ	BLUETOOTH TESTER CBT	100272	02/28/2022	Annual	02/28/2023

* 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.

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

21. References

[1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation, Aug. 1996.

[2] ANSI/IEEE C95.1 - 2005 , American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300 kHz to 300 GHz, New York: IEEE, Sept. 1992

[3] ANSI/IEEE C 95.1 - 2005, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3 kHz to 300 GHz, New York: IEEE, 2006

[4 ANSI/IEEE C95.3 - 2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave, New York: December 2002.

[5] IEEE Standards Coordinating Committee 34 – IEEE Std. 1528-2013, IEEE Recommended Practice or Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices

[6] NCRP, National Council on Radiation Protection and Measurements, Biological Effects and Exposure Criteria for Radio Frequency Electromagnetic Fields, NCRP Report No. 86, 1986. Reprinted Feb. 1995.

[7] T. Schmid, O. Egger, N. Kuster, Automated E-field scanning system for dosimetric assessments, IEEE Transaction on Microwave Theory and Techniques, vol. 44, Jan. 1996, pp. 105-113.

[8] K. Pokovic, T. Schmid, N. Kuster, Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequencies, ICECOM97, Oct. 1997, pp. 120-124.

[9] K. Pokovic, T. Schmid, and N. Kuster, E-field Probe with improved isotropy in brain simulating liquids, Proceedings of the ELMAR, Zadar, Croatia, June 23-25, 1996, pp. 172-175.

[10] Schmid& Partner Engineering AG, Application Note: Data Storage and Evaluation, June 1998, p2.

[11] V. Hombach, K. Meier, M. Burkhardt, E. Kuhn, N. Kuster, The Dependence of EM Energy Absorption upon Human Head Modeling at 900 MHz, IEEE Transaction on Microwave Theory and Techniques, vol. 44 no. 10, Oct. 1996, pp. 1865-1873.

[12] N. Kuster and Q. Balzano, Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300 MHz, IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.

[13] G. Hartsgrove, A. Kraszewski, A. Surowiec, Simulated Biological Materials for Electromagnetic Radiation Absorption Studies, University of Ottawa, Bioelectro magnetics, Canada: 1987, pp. 29-36.

[14] Q. Balzano, O. Garay, T. Manning Jr., Electromagnetic Energy Exposure of Simulated Users of Portable Cellular Telephones, IEEE Transactions on Vehicular Technology, vol. 44, no.3, Aug. 1995.

[15] W. Gander, Computer mathematick, Birkhaeuser, Basel, 1992.

[16] W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, Numerical Recepies in C, The Art of Scientific Computing, Second edition, Cambridge University Press, 1992.

[17] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.

[18] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10 kHz-300 GHz, Jan. 1995.

[19] Prof. Dr. Niels Kuster, ETH, EidgenØssischeTechnischeHoschschuleZòrich, Dosimetric Evaluation of the Cellular Phone.

[20] IEC 62209-1, Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation and procedures – Part 1:Procedure to determine the

specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz), July. 2016..

[21] IEC 62209-2, Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz) Mar. 2010.

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

[23] Health Canada Safety Code 6 Limits of Human Exposure to Radio Frequency Electromagnetic Fields in the Frequency Rage from 3 kHz – 300 GHz, 2009

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

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

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

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

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

[29] FCC General RF Exposure Guidance and SAR procedures for Dongles, KDB 447498 D01,D02.

Appendix *A.* DUT Ant. Information & SETUP PHOTO

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

Report No.
HCT-SR-2210-FC004-R1-P