



中国认可  
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检测  
TESTING  
CNAS L0310



## FCC SAR Compliance Test Report

**Product Name:** Smart Phone

**Model:** LYA-L29,LYA-L09

**Report No.:** SYBH(Z-SAR) 20200307029001-2

**FCC ID:** QISLYA-LX9

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DATE	2020-04-24	2020-04-24

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※ ※ **Modified History** ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	2020-04-24	Sun Shaobin

# 1 General Information

## 1.1 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for LYA-L29, LYA-L09 are as below Table 1.

Band	Max Reported SAR(W/kg)			
	1-g Head	1-g Body-worn (15mm) *	1-g Hotspot (10mm)	Product Specific 10-g SAR (0mm)**
<b>GSM850</b>	0.42	0.24	0.52	/
<b>GSM1900</b>	0.35	0.37	0.50	2.37
<b>UMTS Band II</b>	0.40	<b>0.81</b>	<b>0.77</b>	<b>3.17</b>
<b>UMTS Band IV</b>	0.23	0.78	0.67	2.95
<b>UMTS Band V</b>	0.56	0.27	0.39	/
<b>LTE Band 2</b>	0.29	0.80	0.72	2.86
<b>LTE Band 4</b>	0.37	0.80	0.58	3.05
<b>LTE Band 5</b>	0.52	0.28	0.46	/
<b>LTE Band 7</b>	0.57	0.28	0.76	/
<b>LTE Band 12</b>	0.55	0.25	0.43	/
<b>LTE Band 17</b>	/	/	/	/
<b>LTE Band 26</b>	<b>0.58</b>	0.32	0.40	/
<b>LTE Band 38</b>	0.42	0.16	0.52	/
<b>LTE Band 41</b>	0.46	0.23	0.64	/
<b>WiFi 2.4G</b>	0.31	0.14	0.33	/
<b>WiFi 5G</b>	0.27	0.48	0.40	1.25
<b>BT</b>	0.09	/	/	0.13
<b>The highest reported SAR for Head, Body Worn, Hotspot, Simultaneous transmission and Product Specific 10-g SAR exposure conditions are 0.58 W/kg, 0.81 W/kg, 0.77 W/kg, 1.53W/kg and 3.17 W/kg respectively per KDB690783 D01.</b>				

Table 1: Summary of test result

Note:

- 1)\* For body worn operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions the handset a minimum of 15mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.
- 2)\*\* For Product Specific 10-g SAR operation, this device has been tested and meets the 10-g SAR limits of 4.0 W/kg for general population/ uncontrolled exposure according to ANSI C95.1:1992/IEEE C95.1:1991
- 3) Main and Second Antenna SAR for LTE Band 17 (Frequency range:704-716 MHz) is covered by LTE Band 12 (Frequency range:699-716 MHz) due to similar frequency range,same maximum tune up limit and same channel bandwidth.

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits according to the FCC rule §2.1093, the ANSI C95.1:1992/IEEE C95.1:1991, the NCRP Report Number 86 for uncontrolled environment, and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013.

## 1.2 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
<b>Spatial Peak SAR*</b> (Brain/Body/Arms/Legs)	<b>1.60 W/kg</b>	8.00 W/kg
<b>Spatial Average SAR**</b> (Whole Body)	0.08 W/kg	0.40 W/kg
<b>Spatial Peak SAR***</b> (Hands/Feet/Ankle/Wrist)	<b>4.00 W/kg</b>	20.00 W/kg

Table 2: RF exposure limits

The limit applied in this test report is shown in **bold** letters

### Notes:

- \* The Spatial Peak value of the SAR averaged over any 1 gram 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 grams 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.

**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



### 1.3 EUT Description

Device Information:			
Product Name:	Smart Phone		
Model:	LYA-L29,LYA-L09		
FCC ID :	QISLYA-LX9		
SN:	1#:LHS0118721000118 2#:LHS0118721000026 3#:LHS0118721000002 4#:LHS0118721000022 5#:LHS0118721000025 6#:LHS0118721000053 7#: LHS0219920000166		
Device Type :	Portable device		
Device Phase:	Identical Prototype		
Exposure Category:	Uncontrolled environment / general population		
Hardware Version :	HL2LAYAM		
Software Version :	10.1.0.162(C432E7R1P5log)		
Antenna Type :	Internal antenna		
Others Accessories	Headset		
Device Operating Configurations:			
Supporting Mode(s)	GSM850/1900, UMTS Band II/IV/V, LTE Band 2/4/5/7/12/17/26/38/41, WiFi 2.4G/5G; BT, NFC		
Test Modulation	GSM(GMSK/8PSK),UMTS(QPSK), LTE(QPSK/16QAM/64QAM), WiFi(DSSS/OFDM),BT(GFSK)		
Device Class	B		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	GSM850	824-849	869 - 894
	GSM1900	1850-1910	1930-1990
	UMTS Band II	1850-1910	1930-1990
	UMTS Band IV	1710-1755	2110-2115
	UMTS Band V	824-849	869 - 894
	LTE Band 2	1850-1910	1930-1990
	LTE Band 4	1710-1755	2110-2155
	LTE Band 5	824-849	869-894
	LTE Band 7	2500-2570	2620 -2690
	LTE Band 12	699-716	729-746
	LTE Band 17	704-716	734-746
	LTE Band 26	814-849	859-894
	LTE Band 38	2570-2620	
	LTE Band 41	2545-2655	
	BT	2400-2483.5	
	WiFi 2.4G	2400-2472	
	WiFi 5G	5150-5250	
5250-5350			
5470-5725			
5725-5850			
NFC	13.56	13.56	
Wireless Charging	110kHz-148kHz		
GPRS Multislot Class(12)	Max Number of Timeslots in Uplink:	4	
	Max Number of Timeslots in Downlink:	4	

	Max Total Timeslot:	5
EGPRS Multislot Class(12)	Max Number of Timeslots in Uplink:	4
	Max Number of Timeslots in Downlink:	4
	Max Total Timeslot:	5
HSDPA UE Category	14	
HSUPA UE Category	6	
DC-HSDPA UE Category	24	
Power Class:	4, tested with power level 5(GSM850)	
	1, tested with power level 0(GSM1900)	
	3, tested with power control "all 1"(UMTS Band II)	
	3, tested with power control "all 1"(UMTS Band IV)	
	3, tested with power control "all 1"(UMTS Band V)	
	3, tested with power control all Max.(LTE Band 2)	
	3, tested with power control all Max.(LTE Band 4)	
	3, tested with power control all Max.(LTE Band 5)	
	3, tested with power control all Max.(LTE Band 7)	
	3, tested with power control all Max.(LTE Band 12)	
	3, tested with power control all Max.(LTE Band 17)	
	3, tested with power control all Max.(LTE Band 26)	
	3, tested with power control all Max.(LTE Band 38)	
	3, tested with power control all Max.(LTE Band 41)	
Test Channels (low-mid-high):	128-190-251(GSM850)	
	512-661-810(GSM1900)	
	1312-1413-1513(UMTS Band II)	
	9262-9400-9538(UMTS Band IV)	
	4132-4182-4233(UMTS Band V)	
	18607-18900-19193(LTE Band 2 BW=1.4MHz)	
	18615-18900-19185(LTE Band 2 BW=3MHz)	
	18625-18900-19175(LTE Band 2 BW=5MHz)	
	18650-18900-19150(LTE Band 2 BW=10MHz)	
	18675-18900-19125(LTE Band 2 BW=15MHz)	
	18700-18900-19100(LTE Band 2 BW=20MHz)	
	19957-20175-20393(LTE Band 4 BW=1.4MHz)	
	19965-20175-20385(LTE Band 4 BW=3MHz)	
	19975-20175-20375(LTE Band 4 BW=5MHz)	
	20000-20175-20350(LTE Band 4 BW=10MHz)	
	20025-20175-20325(LTE Band 4 BW=15MHz)	
	20050-20175-20300(LTE Band 4 BW=20MHz)	
	20407-20525-20643(LTE Band 5 BW=1.4MHz)	
	20415-20525-20635(LTE Band 5 BW=3MHz)	
	20425-20525-20625(LTE Band 5 BW=5MHz)	
	20450-20525-20600(LTE Band 5 BW=10MHz)	
	20775-21100-21425(LTE Band 7 BW=5MHz)	
	20800-21100-21400(LTE Band 7 BW=10MHz)	
	20825-21100-21375(LTE Band 7 BW=15MHz)	
	20850-21100-21350(LTE Band 7 BW=20MHz)	
	23017-23095-23173(LTE Band 12 BW=1.4MHz)	
	23025-23095-23165(LTE Band 12 BW=3MHz)	
	23035-23095-23155(LTE Band 12 BW=5MHz)	
23060-23095-23130(LTE Band 12 BW=10MHz)		
23755-23790-23825(LTE Band 17 BW=5MHz)		
23780-23790-23800(LTE Band 17 BW=10MHz)		
26697-26865-27033(LTE Band 26 BW=1.4MHz)		

26705-26865-27025(LTE Band 26 BW=3MHz)
26715-26865-27015(LTE Band 26 BW=5MHz)
26750-26865-26990(LTE Band 26 BW=10MHz)
26775-26865-26965(LTE Band 26 BW=15MHz)
37775-38000-38225(LTE Band 38 BW=5MHz)
37800-38000-38200(LTE Band 38 BW=10MHz)
37825-38000-38175(LTE Band 38 BW=15MHz)
37850-38000-38150(LTE Band 38 BW=20MHz)
40165-40515-40865-41215(LTE Band 41 BW=5MHz)
40190-40523-40856-41190(LTE Band 41 BW=10MHz)
40215-40523-40840-41165(LTE Band 41 BW=15MHz)
40240-40540-40840-41140(LTE Band 41 BW=20MHz)
802.11b/g/n 20M:1-6-11 (WiFi 2.4G) 40M:3-4-6-8-9(WiFi 2.4G)
802.11a/n/ac 20M: 36-40-44-48-52-56-60-64-100-104-108-112-116-120- 124-128-132-136-140-149-153-157-161-165 (WiFi 5G)
802.11 n/ac 40M: 38-46-54-62-102-110-118-126-134-151-159 (WiFi 5G)
802.11ac 80M: 42-58-106-122-155 (WiFi 5G)
802.11ac 160M: 50-114 (WiFi 5G)
BT :0-3-5-6-10-11-19-31-32-33-34-35-37-39-41-70-71-75-78

Table 3:Device information and operating configuration

Note:

- 1)\*For WiFi 5G,the device does not support channel 144(20M), channel 142(40M) and channel 138(80M).
- 2)\*For WiFi 5G,U-NII-2A and U-NII-2C does not support hotspot function.
- 3)\*\* RF exposure test results for Wireless Charging are not included in this report.Please refer to the Partial Wireless Charging RF exposure test report for details.

### 1.3.1 General Description

LYA-L29 is a subscriber equipment in the GSM/WCDMA/LTE system. The GSM frequency band includes GSM850 and GSM900 and DCS1800 and PCS1900. The UMTS frequency band is B1 and B2 and B4 and B5 and B6 and B8 and B19. The LTE frequency band is B1 and B2 and B3 and B4 and B5 and B6 and B7 and B8 and B9 and B12 and B17 and B18 and B19 and B20 and B26 and B28 and B32 and B34 and B38 and B39 and B40 and B41. But only GSM850 and GSM1900, UMTS frequency B2 and B4 and B5, LTE frequency B2 and B4 and B5 and B7 and B12 and B17 and B26 and B38 and B41 bands test data included in this report. The Mobile Phone implements such functions as RF signal receiving/transmitting, LTE/HSPA/UMTS and GSM/GPRS/EDGE protocol processing, voice, video MMS service, GPS, Bluetooth, NFC, Wi-Fi and Wirelessly Charging etc. SUE-L29 is a dual SIM smart phone, and one of the SIM card interfaces could be used as HUAWEI nano SD card interface. Externally it provides type C USB charging port, and the port could be used as the earphone port or data-transfer port.

LYA-L09 is a subscriber equipment in the GSM/WCDMA/LTE system. The GSM frequency band includes GSM850 and GSM900 and DCS1800 and PCS1900. The UMTS frequency band is B1 and B2 and B4 and B5 and B6 and B8 and B19. The LTE frequency band is B1 and B2 and B3 and B4 and B5 and B6 and B7 and B8 and B9 and B12 and B17 and B18 and B19 and B20 and B26 and B28 and B32 and B34 and B38 and B39 and B40 and B41. But only GSM850 and GSM1900, UMTS frequency B2 and B4 and B5, LTE frequency B2 and B4 and B5 and B7 and B12 and B17 and B26 and B38 and B41 bands test data included in this report. The Mobile Phone implements such functions as RF signal receiving/transmitting, LTE/HSPA/UMTS and GSM/GPRS/EDGE protocol processing, voice, video MMS service, GPS, Bluetooth, NFC, Wi-Fi and Wirelessly Charging etc. LYA-L09 provides one SIM card interface and one HUAWEI nano SD card interface. Externally it provides type C USB charging port, and the port could be used as the earphone port or data-transfer port.

#### The difference between LYA-L29 and LYA-L09:

The only difference between LYA-L29 and LYA-L09 is that LYA-L09 deletes into single SIM card by software. Other parts of the two models are the same.

According to the difference above, According to the difference description above, full test is performed on LYA-L29. The model LYA-L09 shares the same test data of LYA-L29 for the same frequency bands and operation modes.

#### Battery information:

Name	Manufacturer/trademark	Description
Li-ion Polymer Battery	HuaweiTechnologies Co., Ltd. (Manufacturer: SCUD)	Battery Model: HB486486ECW Rated capacity: 4100mAh
	HuaweiTechnologies Co., Ltd. (Manufacturer: Desay)	Nominal Voltage: $\text{---} +3.82\text{V}$ Charging Voltage: $\text{---} +4.4\text{V}$

**Difference Description:**

The BT change LYA-L29/LYA-L09 New and LYA-L29/LYA-L09 Old:

Item	LYA-L29/LYA-L09 old	LYA-L29/LYA-L09 new
BT Function	Not support BT UHD function	Support BT UHD function by upgrade software, BT UHD has 5 kinds mode, which are BLE UHD 1M GFSK, BLE UHD 2M GFSK, BLE UHD 2M $\pi/4$ -DQPSK, BLE UHD 4M $\pi/4$ -DQPSK, BLE UHD 2M 8DQPSK

**According to the difference description above:**

- 1) The test plan for LYA-L29/LYA-L09 new is as below:
  - a) Additional conducted power tests are performed for BT UHD. SAR for BT UHD is not required because the maximum power of BT UHD is not higher than BT-DH5.
  - b) For other frequency bands, LYA-L29/LYA-L09 new shares the same test data of LYA-L29/LYA-L09 old(report no.: SYBH(Z-SAR)20180706013002-2)
- 2) The test plan for LYA-L09: full test is performed on LYA-L29. The model LYA-L09 shares the same test data of LYA-L29 for the same frequency bands and operation modes.

### 1.3.2 Dynamic antenna switching specification

The device has two 2G/3G/4G Tx antennas (Main Antenna and Second Antenna). It can transmit from either Main Antenna or Second Antenna, but they can not transmit simultaneously.

SAR test procedure for dynamic antenna switching is as below:

During the SAR test, the Main Antenna (Ant 1) and Second Antenna (Ant2) are set to the MAX transmit power level respectively and test the SAR respectively in all applicable RF exposure conditions. Some AT commands are supplied to fix the operation state and choose the antenna so that only one TX antenna tested at a time. We can ensure that all independent antennas and modem are completely covered by the appropriate SAR measurements and all simultaneous transmission possibilities are fully considered.

#### 1.4 Test specification(s)

ANSI C95.1:1992 /IEEE C95.1:1991	Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.
IEEE Std 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
KDB941225 D01	3G SAR Procedures v03r01
KDB941225 D05	SAR for LTE Devices v02r05
KDB941225 D05A	LTE Rel.10 KDB Inquiry Sheet v01r02
KDB941225 D06	Hotspot SAR v02r01
KDB447498 D01	General RF Exposure Guidance v06
KDB648474 D04	Handsets SAR v01r03
KDB248227 D01	SAR Guidance for IEEE 802.11 Wi-Fi SAR v02r02
KDB865664 D01	SAR measurement 100 MHz to 6 GHz v01r04
KDB865664 D02	RF Exposure Reporting v01r02
KDB690783 D01	SAR Listings on Grants v01r03
KDB616217 D04	SAR for laptop and tablets v01r02

### 1.5 Testing laboratory

Test Site	Reliability Laboratory of Huawei Technologies Co., Ltd.
Test Location	NO.2 New City Avenue Songshan Lake Sci. & Tech. Industry Park, Dongguan, Guangdong, P.R.C
Telephone	+86 755 28780808
Fax	+86 769 23837628
State of accreditation	The Test laboratory (area of testing) is accredited according to ISO/IEC 17025. CNAS Registration number: L0310 A2LA TESTING CERT # 2174.01 & 2174.02 & 2174.03

### 1.6 Applicant and Manufacturer

Company Name	HUAWEI TECHNOLOGIES CO., LTD
Address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

### 1.7 Application details

Start Date of test	2018-08-02	2020-04-20
End Date of test	2018-08-21	2020-04-20

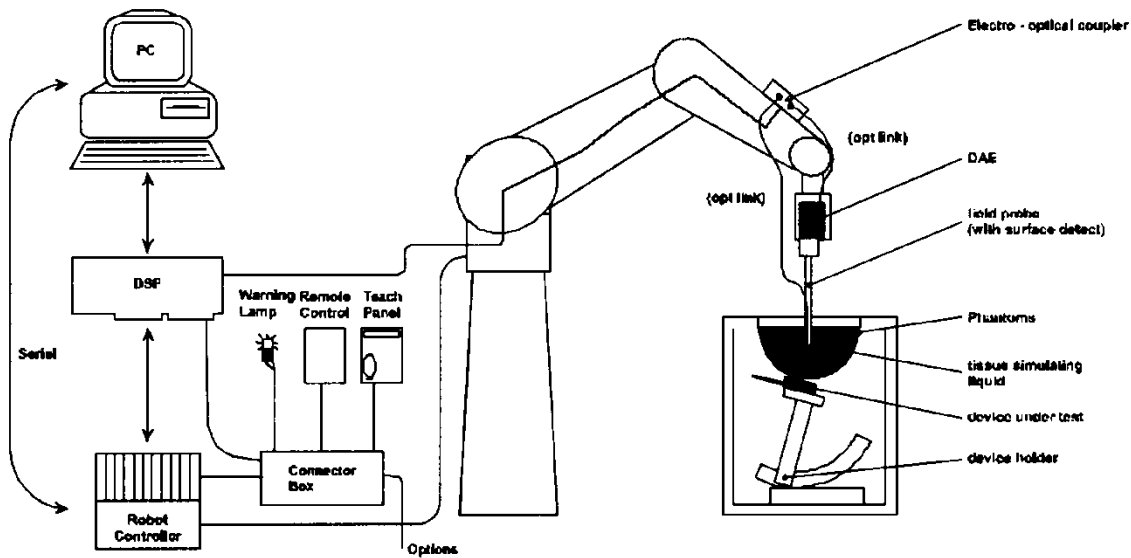
### 1.8 Ambient Condition

Ambient temperature	18°C – 25°C
Relative Humidity	30% – 70%



## 2 SAR Measurement System

### 2.1 SAR Measurement Set-up



The DAS system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- A unit to operate the optical surface detector which is connected to the EOC.
- The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DAS measurement server.
- The DAS measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 7.
- DAS software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- System check dipoles allowing to validate the proper functioning of the system.

## 2.2 Test environment

The DASY measurement system is placed at the head end of a room with dimensions: 5 x 2.5 x 3 m<sup>3</sup>, the SAM phantom is placed in a distance of 75 cm from the side walls and 1.1m from the rear wall. Above the test system a 1.5 x 1.5 m<sup>2</sup> array of pyramid absorbers is installed to reduce reflections from the ceiling.

Picture 1 of the photo documentation shows a complete view of the test environment.


The system allows the measurement of SAR values larger than 0.005 mW/g.

## 2.3 Data Acquisition Electronics description

The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.


### DAE4

Input Impedance	200MOhm	
The Inputs	symmetrical and floating	
Common mode rejection	above 80 dB	


## 2.4 Probe description

These probes are specially designed and calibrated for use in liquids with high permittivities. They should not be used in air, since the spherical isotropy in air is poor ( $\pm 2$  dB). The dosimetric probes have special calibrations in various liquids at different frequencies.

### Isotropic E-Field Probe ES3DV3 for Dosimetric Measurements


Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration	ISO/IEC 17025 calibration service available.	
Frequency	10 MHz to 4 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 4 GHz)	
Directivity	$\pm 0.2$ dB in HSL (rotation around probe axis) $\pm 0.3$ dB in tissue material (rotation normal to probe axis)	
Dynamic range	5 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 3.9 mm (Body: 12 mm) Distance from probe tip to dipole centers: 2.0 mm	
Application	General dosimetry up to 4 GHz Dosimetry in strong gradient fields Compliance tests of mobile phones	

### Isotropic E-Field Probe EX3DV4 for Dosimetric Measurements

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration	ISO/IEC 17025 calibration service available.	
Frequency	10 MHz to >6 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 6 GHz)	
Directivity	$\pm 0.3$ dB in HSL (rotation around probe axis) $\pm 0.5$ dB in tissue material (rotation normal to probe axis)	
Dynamic range	10 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB (noise: typically < 1 $\mu$ W/g)	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%	

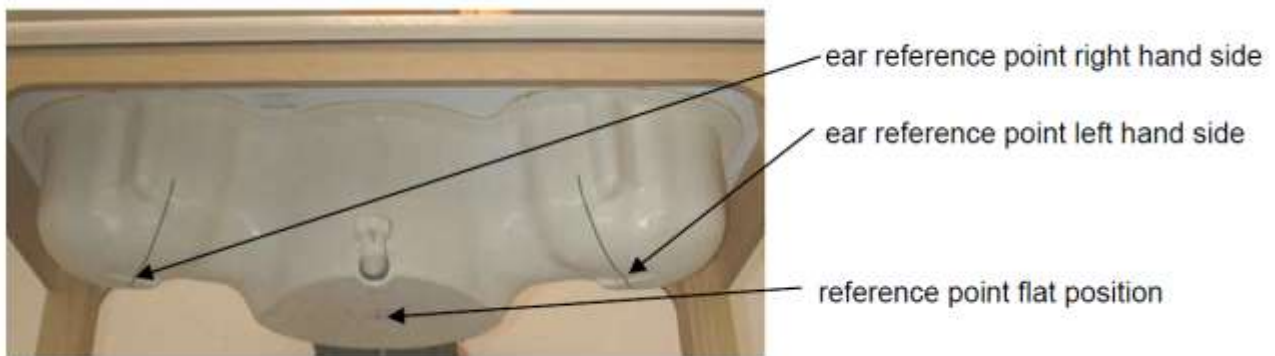
## 2.5 Phantom description

### SAM Twin Phantom


Shell Thickness	2mm±0.2mm;The ear region:6.0±0.2mm	
Filling Volume	Approximately 25 liters	
Dimensions	Length:1000mm; Width:500mm; Height: adjustable feet	
Measurement Areas	Left hand Right hand Flat phantom	

The bottom plate contains three pairs of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to cover the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. Free space scans of devices on top of this phantom cover are possible. Three reference marks are provided on the phantom counter. These reference marks are used to teach the absolute phantom position relative to the robot.

The following figure shows the definition of reference point:




### ELI4 Phantom

Shell Thickness	2mm±0.2mm	
Filling Volume	Approximately 30 liters	
Dimensions	Major axis:600mm; Minor axis:400mm;	
Measurement Areas	Flat phantom	

The ELI4 phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30MHz to 6GHz. ELI4 is fully compatible with the latest draft of the standard IEC 62209-2 and all known tissue simulating liquids.

The phantom shell material is resistant to all ingredients used in the tissue-equivalent liquid recipes. The shell of the phantom including ear spacers is constructed from low permittivity and low loss material, with a relative permittivity  $2 \leq \epsilon_r \leq 5$  at  $\leq 3$  GHz,  $3 \leq \epsilon_r \leq 4$  at  $> 3$  GHz and a loss tangent  $\leq 0.05$ .

## Modular Triple Flat Phantom

Shell Thickness (bottom plate)	2mm±0.2mm	
Filling Volume (Module)	approx. 8.1 liters (filling height: 155 mm)	
Dimensions	Length: 292 mm Width: 178 mm Height: 178 mm Useable area: 280 × 175 mm	
Measurement Areas	Flat phantom	
<p>The Modular Flat Phantom consists of three identical modules that can be installed and removed separately without emptying the liquid. It is used for compliance testing of small wireless devices in body-worn configurations according to IEC 62209-2, etc.</p>		

### 2.6 Device holder description

The DASY device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA's only. If necessary an additional support of polystyrene material is used.



The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity  $\epsilon = 3$  and loss tangent  $\sigma = 0.02$ . The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

The device holder permits the device to be positioned with a tolerance of  $\pm 1^\circ$  in the tilt angle.

Larger DUT's (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values.

Therefore those devices are normally only tested at the flat part of the SAM.

## 2.7 Test Equipment List

This table gives a complete overview of the SAR measurement equipment.

Devices used during the test described are marked

	Manufacturer	Device	Type	Serial number	Date of last calibration	Valid period
<input checked="" type="checkbox"/>	SPEAG	Dosimetric E-Field Probe	EX3DV4	7489	2018-01-09	One year
<input checked="" type="checkbox"/>	SPEAG	Dosimetric E-Field Probe	EX3DV4	3736	2018-04-27	One year
<input checked="" type="checkbox"/>	SPEAG	Dosimetric E-Field Probe	EX3DV4	3743	2017-11-23	One year
<input checked="" type="checkbox"/>	SPEAG	Dosimetric E-Field Probe	EX3DV4	7381	2017-10-24	One year
<input checked="" type="checkbox"/>	SPEAG	750 MHz Dipole	D750V3	1044	2017-09-21	Three years
<input checked="" type="checkbox"/>	SPEAG	835 MHz Dipole	D835V2	4d059	2016-04-20	Three years
<input checked="" type="checkbox"/>	SPEAG	1750 MHz Dipole	D1750V2	1123	2017-07-27	Three years
<input checked="" type="checkbox"/>	SPEAG	1900 MHz Dipole	D1900V2	5d143	2017-09-20	Three years
<input checked="" type="checkbox"/>	SPEAG	2450 MHz Dipole	D2450V2	860	2017-11-15	Three years
<input checked="" type="checkbox"/>	SPEAG	2600 MHz Dipole	D2600V2	1058	2018-06-19	Three years
<input checked="" type="checkbox"/>	SPEAG	5GHz Dipole	D5GHzV2	1155	2018-06-08	Three years
<input checked="" type="checkbox"/>	SPEAG	Data acquisition electronics	DAE4	852	2018-04-23	One year
<input checked="" type="checkbox"/>	SPEAG	Data acquisition electronics	DAE3	360	2017-11-02	One year
<input checked="" type="checkbox"/>	SPEAG	Data acquisition electronics	DAE3	393	2017-08-10	One year
<input checked="" type="checkbox"/>	SPEAG	Data acquisition electronics	DAE4	918	2018-06-20	One year
<input checked="" type="checkbox"/>	SPEAG	Data acquisition electronics	DAE4	1235	2017-11-16	One year
<input checked="" type="checkbox"/>	SPEAG	Software	DASY 5	N/A	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM1	1475	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM2	1474	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM3	1597	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM4	1620	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM5	1894	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM6	1892	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	SAM7	1594	NCR	NCR
<input checked="" type="checkbox"/>	SPEAG	Twin Phantom	Triple Flat Phantom 5.1C	1176/2	NCR	NCR
<input checked="" type="checkbox"/>	R & S	Universal Radio Communication Tester	CMU 200	111379	2017-12-30	One year
<input checked="" type="checkbox"/>	R & S	Universal Radio Communication Tester	CMW 500	159271	2017-09-27	One year
<input checked="" type="checkbox"/>	R & S	Universal Radio Communication Tester	CMW 500	158850	2018-05-08	One year
<input checked="" type="checkbox"/>	R & S	Universal Radio Communication Tester	CMW 500	116265	2018-03-05	One year
<input checked="" type="checkbox"/>	Anritsu	Singal Analyser	MS2690A	6261767335	2017-10-24	One year
<input checked="" type="checkbox"/>	Anritsu	Radio Communication Analyser	MT8821C	6201735100	2018-03-15	One year
<input checked="" type="checkbox"/>	Anritsu	Radio Communication Analyser	MT8821C	6201830585	2018-05-30	One year
<input checked="" type="checkbox"/>	Agilent	Network Analyser	E5071C	MY46107368	2017-10-27	One year
<input checked="" type="checkbox"/>	Agilent	Dielectric Probe Kit	85070E	2484	NCR	NCR
<input checked="" type="checkbox"/>	Keysight	Signal Generator	E8257D	MY56440071	2017-12-25	One year
<input checked="" type="checkbox"/>	MINI-CIRCUITS	Amplifier	ZHL-42W	QA1402001	NCR	NCR
<input checked="" type="checkbox"/>	MINI-CIRCUITS	Amplifier	ZVE-8G+	188163	NCR	NCR

<input checked="" type="checkbox"/>	SHX	Dual Directional Coupler	DDTO-4-20	17121801	2018-01-02	One year
<input checked="" type="checkbox"/>	Agilent	Dual Directional Coupler	772D	MY52180173	2018-01-08	One year
<input checked="" type="checkbox"/>	Keysight	Power Meter	E4417A	MY57160005	2018-03-15	One year
<input checked="" type="checkbox"/>	Keysight	Power Meter	E9321A	MY57150002	2018-03-15	One year
<input checked="" type="checkbox"/>	R & S	Power Meter Sensor	NRP-Z11	106288	2018-07-17	One year
<input checked="" type="checkbox"/>	R & S	Power Meter Sensor	NRP-Z11	100740	2018-07-17	One year

Table 4: List of Test and Measurement Equipment (2018-08-02 to 2018-08-21)

	Manufacturer	Device	Type	Serial number	Date of last calibration	Valid period
<input checked="" type="checkbox"/>	R & S	Power Meter	NRP	100740	2019-07-04	One year
<input checked="" type="checkbox"/>	R & S	Power Meter Sensor	NRP-Z11	106288	2019-07-04	One year

Table 5: List of Test and Measurement Equipment (2020-04-20)

Note:

1) Per KDB865664D01 requirements for dipole calibration, the test laboratory has adopted three-year extended calibration interval. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.

- a) There is no physical damage on the dipole;
- b) System check with specific dipole is within 10% of calibrated value;
- c) The most recent return-loss result, measured at least annually, deviates by no more than 20% from the previous measurement.
- d) The most recent measurement of the real or imaginary parts of the impedance, measured at least annually is within  $5\Omega$  from the previous measurement.

2) Network analyzer probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.

## 3 SAR Measurement Procedure

### 3.1 Scanning procedure

The DASY installation includes predefined files with recommended procedures for measurements and system check. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

- The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT’s output power and should vary max. +/- 5 %.
- For power drift measurement, DASY software supports that the reference position can be either the selected section’s grid reference point or a user point. If the E-field of power reference measurement in the default grid reference point is very small, the test lab may set the reference position to the user point near the hotspot location to avoid large measurement uncertainty.
- The “surface check” measurement tests the optical surface detection system of the DASY system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above  $\pm 0.1\text{mm}$ ). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within  $\pm 30^\circ$ .)
- The “area scan” measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement. Standard grid spacing for head measurements is 15 mm in x- and y- dimension( $\leq 2\text{GHz}$ ), 12 mm in x- and y- dimension(2-4 GHz) and 10mm in x- and y- dimension(4-6GHz). If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation. Results of this coarse scan are shown in Appendix B.
- A “zoom scan” measures the field in a volume around the 2D peak SAR value acquired in the previous “coarse” scan. This is a fine grid with maximum scan spatial resolution:  $\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}} \leq 2\text{GHz} - \leq 8\text{mm}$ , 2-4GHz -  $\leq 5\text{ mm}$  and 4-6 GHz- $\leq 4\text{mm}$ ;  $\Delta z_{\text{zoom}} \leq 3\text{GHz} - \leq 5\text{ mm}$ , 3-4 GHz-  $\leq 4\text{mm}$  and 4-6GHz- $\leq 2\text{mm}$  where the robot additionally moves the probe along the z-axis away from the bottom of the Phantom. DASY is also able to perform repeated zoom scans if more than 1 peak is found during area scan. In this document, the evaluated peak 1g and 10g averaged SAR values are shown in the 2D-graphics in Appendix B. Test results relevant for the specified standard (see chapter 1.4.) are shown in table form in chapter 7.2.
- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2 mm steps. This measurement shows the continuity of the liquid and can - depending in the field strength – also show the liquid depth. A z-axis scan of the measurement with maximum SAR value is shown in Appendix B.

The following table summarizes the area scan and zoom scan resolutions per FCC KDB 865664D01:



Frequency	Maximun Area Scan resolution ( $\Delta x_{area}, \Delta y_{area}$ )	Maximun Zoom Scan spatial resolution ( $\Delta x_{Zoom}, \Delta y_{Zoom}$ )	Maximun Zoom Scan spatial resolution			Minimum zoom scan volume (x,y,z)
			Uniform Grid	Graded Grad		
			$\Delta z_{Zoom}(n)$	$\Delta z_{Zoom}(1)^*$	$\Delta z_{Zoom}(n>1)^*$	
≤2GHz	≤15mm	≤8mm	≤5mm	≤4mm	$\leq 1.5 * \Delta z_{Zoom}(n-1)$	≥30mm
2-3GHz	≤12mm	≤5mm	≤5mm	≤4mm	$\leq 1.5 * \Delta z_{Zoom}(n-1)$	≥30mm
3-4GHz	≤12mm	≤5mm	≤4mm	≤3mm	$\leq 1.5 * \Delta z_{Zoom}(n-1)$	≥28mm
4-5GHz	≤10mm	≤4mm	≤3mm	≤2.5mm	$\leq 1.5 * \Delta z_{Zoom}(n-1)$	≥25mm
5-6GHz	≤10mm	≤4mm	≤2mm	≤2mm	$\leq 1.5 * \Delta z_{Zoom}(n-1)$	≥22mm

### 3.2 Spatial Peak SAR Evaluation

The spatial peak SAR - value for 1 and 10 g is evaluated after the Cube measurements have been done. The basis of the evaluation are the SAR values measured at the points of the fine cube grid consisting of 5 x 5 x 7 points( with 8mm horizontal resolution) or 7 x 7 x 7 points( with 5mm horizontal resolution) or 8 x 8 x 7 points( with 4mm horizontal resolution). The algorithm that finds the maximal averaged volume is separated into three different stages.

- The data between the dipole center of the probe and the surface of the phantom are extrapolated. This data cannot be measured since the center of the dipole is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is about 1 mm (see probe calibration sheet). The extrapolated data from a cube measurement can be visualized by selecting ‘Graph Evaluated’.
- The maximum interpolated value is searched with a straight-forward algorithm. Around this maximum the SAR - values averaged over the spatial volumes (1g or 10 g) are computed using the 3d-spline interpolation algorithm. If the volume cannot be evaluated (i.e., if a part of the grid was cut off by the boundary of the measurement area) the evaluation will be started on the corners of the bottom plane of the cube.
- All neighboring volumes are evaluated until no neighboring volume with a higher average value is found.

#### Extrapolation

The extrapolation is based on a least square algorithm [W. Gander, Computermathematik, p.168-180]. Through the points in the first 3 cm along the z-axis, polynomials of order four are calculated. These polynomials are then used to evaluate the points between the surface and the probe tip. The points, calculated from the surface, have a distance of 1 mm from each other.

#### Interpolation

The interpolation of the points is done with a 3d-Spline. The 3d-Spline is composed of three one-dimensional splines with the "Not a knot"-condition [W. Gander, Computermathematik, p.141-150] (x, y and z -direction) [Numerical Recipes in C, Second Edition, p.123ff ].

#### Volume Averaging

At First the size of the cube is calculated. Then the volume is integrated with the trapezoidal algorithm. 8000 points (20x20x20) are interpolated to calculate the average.

#### Advanced Extrapolation

DASY uses the advanced extrapolation option which is able to compansate boundary effects on E-field probes.

### 3.3 Data Storage and Evaluation

#### Data Storage

The DASY software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension "DAE4". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm<sup>2</sup>], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

#### Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	- Sensitivity	Norm <sub>i</sub> , a <sub>10</sub> , a <sub>11</sub> , a <sub>12</sub>
	- Conversion factor	ConvF <sub>i</sub>
	- Diode compression point	Dcpi
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	σ
	- Density	ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot cf/dcp_i$$

with	V <sub>i</sub>	= compensated signal of channel i	(i = x, y, z)
	U <sub>i</sub>	= input signal of channel i	(i = x, y, z)
	cf	= crest factor of exciting field	(DASY parameter)
	dcp <sub>i</sub>	= diode compression point	(DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes:  $E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$   
H-field probes:  $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1}f + a_{i2}f^2)/f$

- with  $V_i$  = compensated signal of channel i (i = x, y, z)  
 $Norm_i$  = sensor sensitivity of channel i (i = x, y, z)  
[mV/(V/m)<sup>2</sup>] for E-field Probes  
ConvF = sensitivity enhancement in solution  
 $a_{ij}$  = sensor sensitivity factors for H-field probes  
f = carrier frequency [GHz]  
 $E_i$  = electric field strength of channel i in V/m  
 $H_i$  = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (E_{tot}^2 \cdot \sigma) / (\rho \cdot 1000)$$

- with SAR = local specific absorption rate in mW/g  
 $E_{tot}$  = total field strength in V/m  
 $\sigma$  = conductivity in [mho/m] or [Siemens/m]  
 $\rho$  = equivalent tissue density in g/cm<sup>3</sup>

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^2 / 3770 \quad \text{or} \quad P_{pwe} = H_{tot}^2 \cdot 37.7$$

- with  $P_{pwe}$  = equivalent power density of a plane wave in mW/cm<sup>2</sup>  
 $E_{tot}$  = total electric field strength in V/m  
 $H_{tot}$  = total magnetic field strength in A/m

## 4 System Verification Procedure

### 4.1 Tissue Verification

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within  $\pm 5\%$  of the target values.

The following materials are used for producing the tissue-equivalent materials.

Ingredients (% of weight)	Head Tissue					
Frequency Band (MHz)	750	835	1750	1900	2450	2600
Water	39.2	41.45	52.64	55.242	62.7	55.242
Salt (NaCl)	2.7	1.45	0.36	0.306	0.5	0.306
Sugar	57.0	56.0	0.0	0.0	0.0	0.0
HEC	0.0	1.0	0.0	0.0	0.0	0.0
Bactericide	0.0	0.1	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	47.0	44.542	36.8	44.452
Ingredients (% of weight)	Body Tissue					
Frequency Band (MHz)	750	835	1750	1900	2450	2600
Water	50.3	52.4	69.91	69.91	73.2	64.493
Salt (NaCl)	1.60	1.40	0.13	0.13	0.04	0.024
Sugar	47.0	45.0	0.0	0.0	0.0	0.0
HEC	0.0	1.0	0.0	0.0	0.0	0.0
Bactericide	0.0	0.1	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	29.96	29.96	26.7	32.252

Table 6: Tissue Dielectric Properties

Salt: 99+% Pure Sodium Chloride; Sugar: 98+% Pure Sucrose; Water: De-ionized, 16M $\Omega$ + resistivity  
 HEC: Hydroxyethyl Cellulose; DGBE: 99+% Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy)ethanol]  
 Triton X-100(ultra pure): Polyethylene glycol mono [4-(1,1,3,3-tetramethylbutyl)phenyl]ether

#### Simulating Head Liquid (HBBL600-6000MHz), Manufactured by SPEAG:

Ingredients	(% by weight)
Water	50-65%
Esters, Emulsifiers, Inhibitors	10-30%
Sodium salt	8-25%

#### Simulating Body Liquid (MBBL600-6000MHz), Manufactured by SPEAG:

Ingredients	(% by weight)
Water	60-80%
Esters, Emulsifiers, Inhibitors	20-40%
Sodium salt	0-1.5%

Tissue Type	Target Frequency	Target Tissue		Measured Tissue		Deviation (Within +/-5% )		Liquid Temp.	Test Date
		Permittivity	Conductivity [S/m]	Permittivity	Conductivity [S/m]	$\Delta\epsilon_r$	$\Delta\sigma$		
750MHz Head	705	42.14	0.89	42.08	0.848	-0.14%	-4.76%	22.8°C	2018/8/13
	710	42.11	0.89	42.06	0.849	-0.12%	-4.62%		
	750	41.90	0.89	41.90	0.862	0.00%	-3.15%		
835MHz Head	825	41.60	0.90	42.75	0.864	2.76%	-3.98%	21.0°C	2018/8/2
	835	41.50	0.90	42.71	0.868	2.94%	-3.60%		
	850	41.50	0.92	42.66	0.874	2.80%	-4.99%		
835MHz Head	825	41.60	0.90	41.37	0.887	-0.55%	-1.49%	22.7°C	2018/8/6
	835	41.50	0.90	41.33	0.890	-0.41%	-1.10%		
	850	41.50	0.92	41.28	0.896	-0.53%	-2.60%		
835MHz Head	825	41.60	0.90	43.03	0.906	3.44%	0.69%	22.0°C	2018/8/15
	835	41.50	0.90	43.00	0.909	3.61%	1.02%		
	850	41.50	0.92	42.95	0.914	3.49%	-0.62%		
1750MHz Head	1710	40.10	1.35	38.70	1.313	-3.49%	-2.74%	22.5°C	2018/8/3
	1730	40.10	1.36	38.69	1.324	-3.52%	-2.65%		
	1750	40.10	1.37	38.68	1.335	-3.54%	-2.55%		
	1800	40.00	1.40	38.65	1.368	-3.38%	-2.29%		
1750MHz Head	1710	40.10	1.35	38.67	1.385	-3.57%	2.59%	21.8°C	2018/8/10
	1730	40.10	1.36	38.64	1.397	-3.64%	2.72%		
	1750	40.10	1.37	38.61	1.410	-3.72%	2.92%		
	1800	40.00	1.40	38.51	1.445	-3.73%	3.21%		
1900MHz Head	1850	40.00	1.40	39.35	1.367	-1.63%	-2.36%	21.4°C	2018/8/3
	1880	40.00	1.40	39.31	1.382	-1.72%	-1.29%		
	1900	40.00	1.40	39.28	1.392	-1.80%	-0.57%		
	1910	40.00	1.40	39.27	1.398	-1.82%	-0.14%		
1900MHz Head	1850	40.00	1.40	40.23	1.331	0.57%	-4.93%	21.4°C	2018/8/6
	1880	40.00	1.40	40.05	1.344	0.12%	-4.00%		
	1900	40.00	1.40	40.03	1.366	0.08%	-2.43%		
	1910	40.00	1.40	40.09	1.373	0.23%	-1.93%		
2450MHz Head	2410	39.30	1.76	38.22	1.787	-2.75%	1.53%	22.0°C	2018/8/13
	2435	39.20	1.79	38.19	1.805	-2.58%	0.84%		
	2450	39.20	1.80	38.18	1.818	-2.60%	1.00%		
	2460	39.20	1.81	38.17	1.824	-2.63%	0.77%		
2450MHz Head	2410	39.30	1.76	40.03	1.724	1.86%	-2.05%	22.0°C	2018/8/13
	2435	39.20	1.79	40.01	1.738	2.07%	-2.91%		
	2450	39.20	1.80	40.00	1.748	2.04%	-2.89%		
	2460	39.20	1.81	40.00	1.755	2.04%	-3.04%		
2450MHz Head	2410	39.30	1.76	40.19	1.688	2.26%	-4.09%	22.0°C	2018/8/20
	2435	39.20	1.79	40.17	1.704	2.47%	-4.80%		
	2450	39.20	1.80	40.16	1.713	2.45%	-4.83%		
	2460	39.20	1.81	40.16	1.721	2.45%	-4.92%		
2600MHz Head	2510	39.12	1.86	40.52	1.798	3.58%	-3.33%	21.4°C	2018/8/6
	2535	39.10	1.89	40.49	1.820	3.55%	-3.70%		
	2560	39.00	1.92	40.46	1.842	3.74%	-3.91%		
	2600	39.00	1.96	40.41	1.874	3.62%	-4.39%		
2600MHz Head	2510	39.12	1.86	37.47	1.845	-4.22%	-0.81%	21.8°C	2018/8/7
	2535	39.10	1.89	37.46	1.866	-4.19%	-1.27%		
	2560	39.00	1.92	37.44	1.888	-4.00%	-1.51%		
	2600	39.00	1.96	37.38	1.918	-4.15%	-2.14%		
	2510	39.12	1.86	37.80	1.852	-3.37%	-0.43%	21.8°C	2018/8/15

2600MHz Head	2535	39.10	1.89	37.78	1.873	-3.38%	-0.90%		
	2560	39.00	1.92	37.74	1.890	-3.23%	-1.41%		
	2600	39.00	1.96	37.65	1.919	-3.46%	-2.09%		
5G Hz Head	5250	35.90	4.71	34.95	4.799	-2.65%	1.89%	21.6°C	2018/8/15
	5600	35.50	5.07	34.58	5.088	-2.59%	0.36%		
	5750	35.40	5.22	35.75	5.221	0.99%	0.02%		
750MHz Body	705	55.70	0.96	57.32	0.947	2.91%	-1.34%	21.8°C	2018/8/11
	710	55.70	0.96	57.30	0.949	2.87%	-1.15%		
	750	55.50	0.96	57.18	0.964	3.03%	0.46%		
835MHz Body	825	55.20	0.97	56.34	0.943	2.07%	-2.80%	22.1°C	2018/8/7
	835	55.20	0.97	56.32	0.947	2.03%	-2.40%		
	850	55.20	0.99	56.28	0.953	1.96%	-3.78%		
835MHz Body	825	55.20	0.97	54.84	0.979	-0.65%	0.96%	23.5°C	2018/8/15
	835	55.20	0.97	54.79	0.982	-0.74%	1.19%		
	850	55.20	0.99	54.70	0.988	-0.91%	-0.16%		
1750MHz Body	1710	53.50	1.46	54.15	1.478	1.21%	1.23%	21.8°C	2018/8/8
	1730	53.50	1.48	54.13	1.493	1.18%	0.88%		
	1750	53.40	1.49	54.11	1.508	1.33%	1.21%		
	1800	53.30	1.52	54.00	1.549	1.31%	1.91%		
1900MHz Body	1850	53.30	1.52	53.69	1.540	0.73%	1.32%	22.5°C	2018/8/8
	1880	53.30	1.52	53.65	1.560	0.66%	2.63%		
	1900	53.30	1.52	53.62	1.573	0.60%	3.49%		
	1910	53.30	1.52	53.60	1.579	0.56%	3.88%		
1900MHz Body	1850	53.30	1.52	55.13	1.549	3.43%	1.91%	23°C	2018/8/12
	1880	53.30	1.52	55.09	1.570	3.36%	3.29%		
	1900	53.30	1.52	55.06	1.580	3.30%	3.95%		
	1910	53.30	1.52	55.04	1.587	3.26%	4.41%		
2450MHz Body	2410	52.80	1.91	50.79	1.987	-3.81%	4.03%	23°C	2018/8/14
	2435	52.70	1.94	50.76	2.028	-3.68%	4.54%		
	2450	52.70	1.95	50.75	2.041	-3.70%	4.67%		
	2460	52.70	1.96	50.74	2.049	-3.72%	4.54%		
2600MHz Body	2510	52.62	2.03	53.66	2.107	1.98%	3.79%	23°C	2018/8/13
	2535	52.59	2.07	53.62	2.129	1.96%	2.85%		
	2560	52.57	2.09	53.58	2.153	1.92%	3.01%		
	2600	52.50	2.16	53.54	2.192	1.98%	1.48%		
2600MHz Body	2510	52.62	2.03	53.53	2.071	1.73%	2.02%	21.8°C	2018/8/15
	2535	52.59	2.07	53.51	2.096	1.75%	1.26%		
	2560	52.57	2.09	53.44	2.121	1.65%	1.48%		
	2600	52.50	2.16	53.37	2.164	1.66%	0.19%		
2600MHz Body	2510	52.62	2.03	52.97	2.064	0.67%	1.67%	23°C	2018/8/16
	2535	52.59	2.07	52.94	2.089	0.67%	0.92%		
	2560	52.57	2.09	52.89	2.116	0.61%	1.24%		
	2600	52.50	2.16	52.83	2.159	0.63%	-0.05%		
5G Hz Body	5250	48.90	5.36	47.92	5.268	-2.00%	-1.72%	21.8°C	2018/8/16
	5600	48.50	5.77	47.45	5.757	-2.16%	-0.23%		
	5750	48.30	5.94	46.50	6.049	-3.73%	1.84%		

Table 7: Measured Tissue Parameter

Note: 1) The dielectric parameters of the tissue-equivalent liquid should be measured under similar ambient conditions and within 2 °C of the conditions expected during the SAR evaluation to satisfy protocol requirements.

2) KDB 865664 was ensured to be applied for probe calibration frequencies greater than or equal to 50MHz of the EUT frequencies.

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3) The above measured tissue parameters were used in the DASY software to perform interpolation via the DASY software to determine actual dielectric parameters at the test frequencies. The SAR test plots may slightly differ from the table above since the DASY rounds to three significant digits.

## 4.2 System Check

The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The system check is performed with tissue equivalent material according to IEEE 1528 (described above). The following table shows system check results for all frequency bands and tissue liquids used during the tests(Graphic Plot(s) see Appendix A).

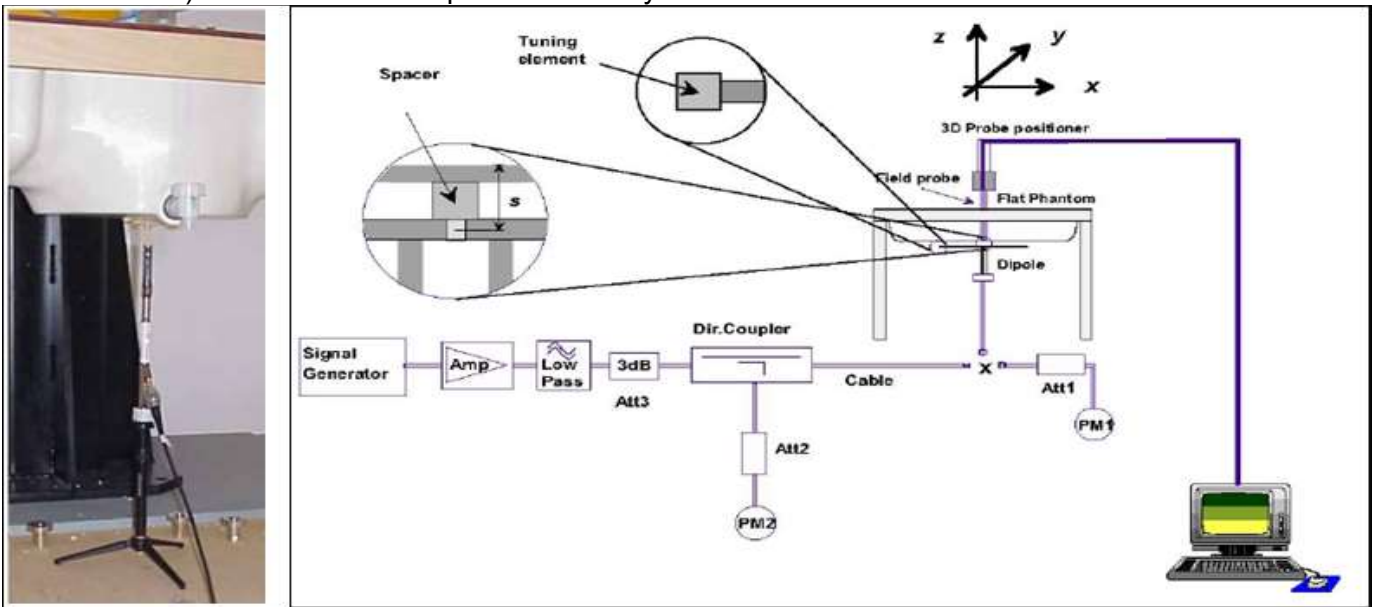
System Check	Target SAR (Normalized to 1W)		Measured SAR (Normalized to 1W)		Deviation (Within +/-10% )		Test Date
	1-g (mW/g)	10-g (mW/g)	1-g (mW/g)	10-g (mW/g)	Δ1-g	Δ10-g	
750MHz Head	8.26	5.35	8.36	5.56	1.21%	3.93%	2018/8/13
835MHz Head	9.30	6.05	9.36	6.24	0.65%	3.14%	2018/8/2
835MHz Head	9.30	6.05	9.60	6.36	3.23%	5.12%	2018/8/6
835MHz Head	9.30	6.05	9.96	6.52	7.10%	7.77%	2018/8/15
1750MHz Head	36.60	19.40	36.92	20.08	0.87%	3.51%	2018/8/3
1750MHz Head	36.60	19.40	37.80	20.56	3.28%	5.98%	2018/8/10
1900MHz Head	39.10	20.50	38.76	20.04	-0.87%	-2.24%	2018/8/3
1900MHz Head	39.10	20.50	40.40	21.16	3.32%	3.22%	2018/8/6
2450MHz Head	51.20	23.90	50.80	24.20	-0.78%	1.26%	2018/8/13
2450MHz Head	51.20	23.90	52.00	24.32	1.56%	1.76%	2018/8/13
2450MHz Head	51.20	23.90	51.60	23.88	0.78%	-0.08%	2018/8/20
2600MHz Head	55.80	25.10	56.40	25.36	1.08%	1.04%	2018/8/6
2600MHz Head	55.80	25.10	56.40	25.44	1.08%	1.35%	2018/8/7
2600MHz Head	55.80	25.10	54.80	25.44	-1.79%	1.35%	2018/8/15
5250MHz Head	81.40	23.50	84.20	24.60	3.44%	4.68%	2018/8/15
5600MHz Head	85.20	24.30	89.80	25.90	5.40%	6.58%	2018/8/15
5750MHz Head	78.40	22.30	78.60	22.80	0.26%	2.24%	2018/8/15
750MHz Body	8.56	5.64	8.44	5.64	-1.40%	0.00%	2018/8/11
835MHz Body	9.41	6.20	9.60	6.24	2.02%	0.65%	2018/8/15
835MHz Body	9.41	6.20	9.60	6.40	2.02%	3.23%	2018/8/7
1750MHz Body	36.40	19.40	36.28	19.52	-0.33%	0.62%	2018/8/8
1900MHz Body	39.40	20.80	42.40	21.76	7.61%	4.62%	2018/8/8
1900MHz Body	39.40	20.80	40.40	20.92	2.54%	0.58%	2018/8/12
2450MHz Body	50.10	23.50	54.00	24.72	7.78%	5.19%	2018/8/14
2600MHz Body	54.40	24.40	57.60	25.44	5.88%	4.26%	2018/8/13
2600MHz Body	54.40	24.40	52.00	24.16	-4.41%	-0.98%	2018/8/15
2600MHz Body	54.40	24.40	55.60	24.88	2.21%	1.97%	2018/8/16
5250MHz Body	74.70	20.90	72.30	20.50	-3.21%	-1.91%	2018/8/16
5600MHz Body	79.60	22.10	74.80	21.20	-6.03%	-4.07%	2018/8/16
5750MHz Body	73.30	20.40	68.20	19.20	-6.96%	-5.88%	2018/8/16

Table 8: System Check Results



### 4.3 System check Procedure

The system check is performed by using a system check dipole which is positioned parallel to the planar part of the SAM phantom at the reference point. The distance of the dipole to the SAM phantom is determined by a plexiglass spacer. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SAM. It is fed with a power of 250 mW (below 3GHz) or 100mW (3-6GHz). To adjust this power, a power meter is used. The power sensor is connected to the cable before the system check to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the system check to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test (result on plot). System check results have to be equal or near the values determined during dipole calibration (target SAR in table above) with the relevant liquids and test system.



## 5 SAR measurement variability and uncertainty

### 5.1 SAR measurement variability

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. The 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.

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

The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

The detailed repeated measurement results are shown in Section 7.2.

### 5.2 SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is  $< 1.5$  W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

## 6 SAR Test Configuration

### 6.1 Test Positions Configuration

#### 6.1.1 General considerations

Per IEEE 1528-2013, two imaginary lines on the handset were established: the vertical centerline and the horizontal line (See Figure 1).

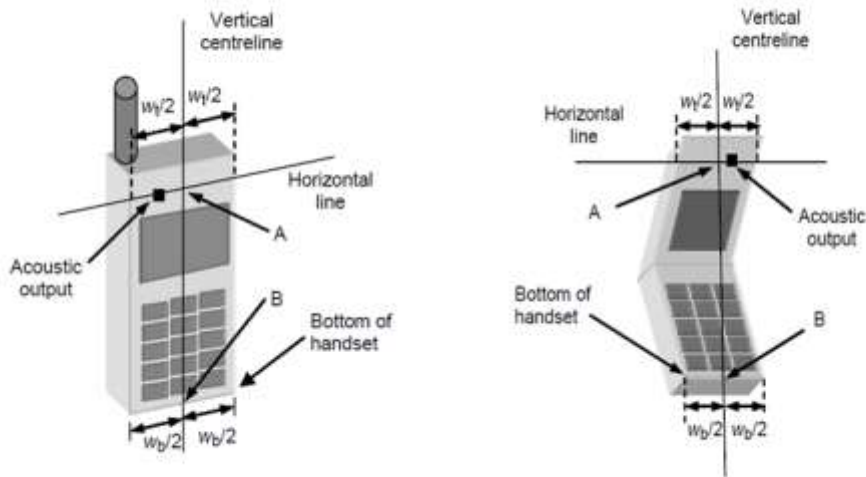


Figure 1 Hand Vertical Center & Horizontal Line Reference Points

#### 6.1.2 Head Exposure Condition

Per IEEE 1528-2013, Head SAR measurements were made in the “cheek” position (See Figure 2) and the “tilt” position (See Figure 3). The device should be tested in both positions on left and right sides of the SAM phantom.

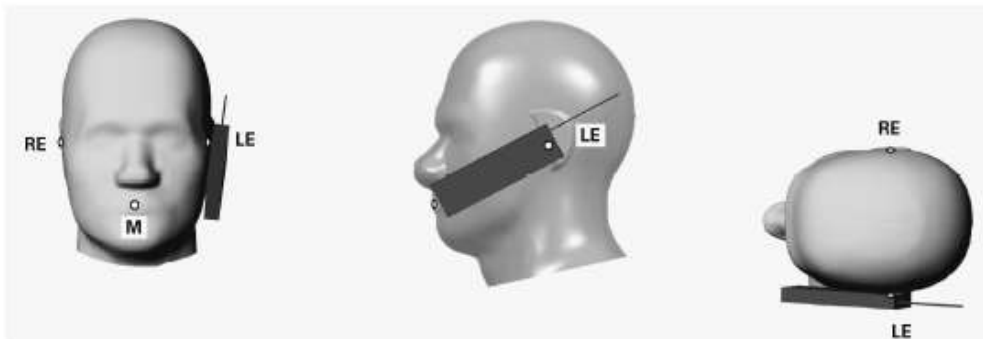


Figure 2 Front, Side and Top View of Cheek Position

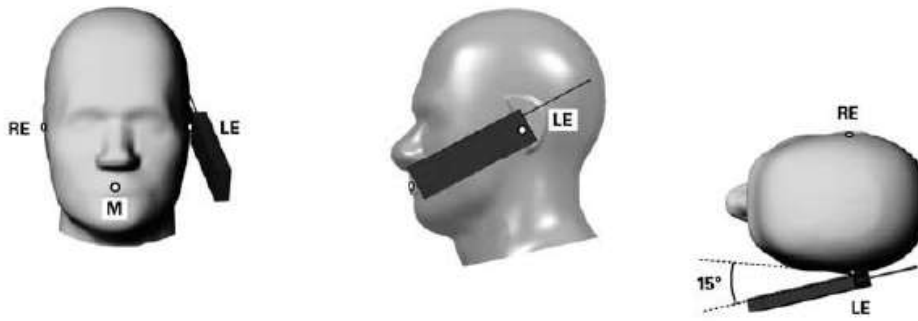


Figure 3 Front, Side and Top View of Tilt 15° Position

Note:

M Mouth reference point

LE Left ear reference point (ERP)

RE Right ear reference point(ERP)

### 6.1.3 Body-worn Exposure Condition

Body-worn operating configurations are tested with the holder attached to the device and positioned against a flat phantom with test separation distance of 15mm in a normal use configuration (See Figure 4). Per FCC KDB648474 D04, 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 447498 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  $> 1.2 \text{ W/kg}$ , 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.

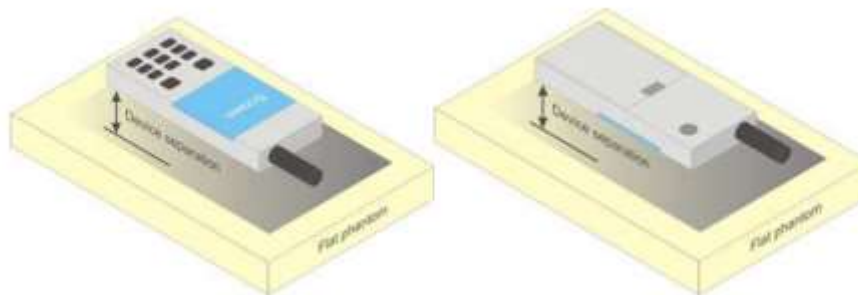


Figure 4 Test position for Body-Worn device

### 6.1.4 Hotspot Exposure Condition

Per FCC KDB 941225D06, the SAR test separation distance for hotspot mode is determined according to device form factor. When the overall length and width of a device is  $> 9 \text{ cm} \times 5 \text{ cm}$ , a test separation distance of 10 mm is required for hotspot mode SAR measurements. A test separation distance of 5 mm or less is required for smaller devices. Hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge; for the data modes, wireless technologies and frequency bands supporting hotspot mode. The SAR results are used to determine simultaneous transmission SAR test exclusion for hotspot mode; otherwise, simultaneous transmission SAR measurement is required.

### 6.1.5 Product Specific 10-g SAR Exposure Condition

Per FCC KDB 648474D04, 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 device is marketed as “Phablet”.

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at  $\leq 25$  mm from that surface or edge, in direct contact with a flat phantom, for Product Specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR  $> 1.2$  W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.

### 6.2 3G SAR Test Reduction Procedure

Per KDB941225 D01, in the following procedures, the mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as “otherwise” in the applicable procedures; SAR measurement is required for the secondary mode.

### 6.3 GSM Test Configuration

SAR tests for GSM850 and GSM1900, a communication link is set up with a base station by air link. Using CMU200 the power level is set to “5” and “0” in SAR of GSM850 and GSM1900. The tests in the band of GSM850 and GSM1900 are performed in the mode of GPRS/EGPRS function. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslot is 5. The EGPRS class is 12 for this EUT, it has at most 4 timeslots in uplink, and at most 4 timeslots in downlink, the maximum total timeslot is 5.

When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8PSK.

## 6.4 UMTS Test Configuration

### 1) Output Power Verification

Maximum output power is verified on the high, middle and low channels according to procedures described in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all “1’s” for WCDMA/HSDPA or by 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, HSDPA, HSPA) are required in the SAR report. All configurations that are not supported by the handset or cannot be measured due to technical or equipment limitations must be clearly identified.

### 2) WCDMA

#### a. Head SAR Measurements

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode.

#### b. Body SAR Measurements

SAR for body-worn accessory configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. 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

### 3) HSDPA

SAR for body exposure configurations is measured according to the “Body SAR Measurements” procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as “otherwise” in the applicable procedures; SAR measurement is required for the secondary mode.

Per KDB941225 D01, the 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures for the highest reported SAR body exposure configuration in 12.2 kbps RMC.

HSDPA should be configured according to UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HAPRQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission condition, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. The  $\beta_c$  and  $\beta_d$  gain factors for DPCCH and DPDCH were set according to the values in the below table,  $\beta_{hs}$  for HS-DPCCH is set automatically to the correct value when  $\Delta ACK, \Delta NACK, \Delta CQI = 8$ . The variation of the  $\beta_c / \beta_d$  ratio causes a power reduction at sub-tests 2 - 4.

Sub-test <sup>Ⓢ</sup>	$\beta_c$ <sup>Ⓢ</sup>	$\beta_d$ <sup>Ⓢ</sup>	$\beta_d$ (SF) <sup>Ⓢ</sup>	$\beta_c/\beta_d$ <sup>Ⓢ</sup>	$\beta_{hs}$ (1) <sup>Ⓢ</sup>	CM(dB)(2) <sup>Ⓢ</sup>	MPR (dB) <sup>Ⓢ</sup>
1 <sup>Ⓢ</sup>	2/15 <sup>Ⓢ</sup>	15/15 <sup>Ⓢ</sup>	64 <sup>Ⓢ</sup>	2/15 <sup>Ⓢ</sup>	4/15 <sup>Ⓢ</sup>	0.0 <sup>Ⓢ</sup>	0 <sup>Ⓢ</sup>
2 <sup>Ⓢ</sup>	12/15(3) <sup>Ⓢ</sup>	15/15(3) <sup>Ⓢ</sup>	64 <sup>Ⓢ</sup>	12/15(3) <sup>Ⓢ</sup>	24/15 <sup>Ⓢ</sup>	1.0 <sup>Ⓢ</sup>	0 <sup>Ⓢ</sup>
3 <sup>Ⓢ</sup>	15/15 <sup>Ⓢ</sup>	8/15 <sup>Ⓢ</sup>	64 <sup>Ⓢ</sup>	15/8 <sup>Ⓢ</sup>	30/15 <sup>Ⓢ</sup>	1.5 <sup>Ⓢ</sup>	0.5 <sup>Ⓢ</sup>
4 <sup>Ⓢ</sup>	15/15 <sup>Ⓢ</sup>	4/15 <sup>Ⓢ</sup>	64 <sup>Ⓢ</sup>	15/4 <sup>Ⓢ</sup>	30/15 <sup>Ⓢ</sup>	1.5 <sup>Ⓢ</sup>	0.5 <sup>Ⓢ</sup>

Note 1:  $\Delta$ ACK,  $\Delta$ NACK and  $\Delta$ CQI = 8      $A_{hs} = \beta_{hs}/\beta_c = 30/15$       $\beta_{hs} = 30/15 * \beta_c$ <sup>Ⓢ</sup>  
Note 2 : CM=1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.<sup>Ⓢ</sup>  
Note 3 : For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 11/15$  and  $\beta_d = 15/15$ <sup>Ⓢ</sup>

Table 9: Sub-tests for UMTS Release 5 HSDPA

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.

Parameter	Value
Nominal average inf. bit rate	534 kbit/s
Inter-TTI Distance	3 TTI's
Number of HARQ Processes	2 Processes
Information Bit Payload	3202 Bits
MAC-d PDU size	336 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	4800 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	9600 SMLs
Coding Rate	0.67
Number of Physical Channel Codes	5

Table 10: settings of required H-Set 1 QPSK acc. to 3GPP 34.121

HS-DSCH Category	Maximum HS-DSCH Codes Received	Minimum Inter-TTI Interval	Maximum HS-DSCH Transport Block Bits/HS-DSCH TTI	Total Soft Channel Bits
1	5	3	7298	19200
2	5	3	7298	28800
3	5	2	7298	28800
4	5	2	7298	38400
5	5	1	7298	57600
6	5	1	7298	67200
7	10	1	14411	115200
8	10	1	14411	134400
9	15	1	25251	172800
10	15	1	27952	172800
11	5	2	3630	14400
12	5	1	3630	28800
13	15	1	34800	259200
14	15	1	42196	259200
15	15	1	23370	345600
16	15	1	27952	345600

Table 11:HSDPA UE category

#### 4) HSUPA

SAR for body exposure configurations is measured according to the “Body SAR Measurements” procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the secondary mode.

Per KDB941225 D01, 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, SAR is measured for HSPA using the HSPA body SAR procedures for the highest reported body exposure SAR configuration in 12.2 kbps RMC.

Due to inner loop power control requirements in HSDPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSDPA should be configured according to the values indicated below as well as other applicable procedures described in the ‘WCDMA Handset’ and ‘Release 5 HSDPA Data Device’ sections of 3G device.

Sub-test <sup>⌘</sup>	$\beta_c$ <sup>⌘</sup>	$\beta_d$ <sup>⌘</sup>	$\beta_d$ (SF) <sup>⌘</sup>	$\beta_c/\beta_d$ <sup>⌘</sup>	$\beta_{hs}^{(1)}$ <sup>⌘</sup>	$\beta_{ec}$ <sup>⌘</sup>	$\beta_{ed}$ <sup>⌘</sup>	$\beta_e$ <sup>⌘</sup> (SF) <sup>⌘</sup>	$\beta_{ed}$ <sup>⌘</sup> (code) <sup>⌘</sup>	CM <sup>(2)</sup> <sup>⌘</sup> (dB) <sup>⌘</sup>	MP R <sup>⌘</sup> (dB) <sup>⌘</sup>	AG <sup>(4)</sup> Inde <sup>x</sup> <sup>⌘</sup>	E-TFC I <sup>⌘</sup>
1 <sup>⌘</sup>	11/15 <sup>(3)</sup> <sup>⌘</sup>	15/15 <sup>(3)</sup> <sup>⌘</sup>	64 <sup>⌘</sup>	11/15 <sup>(3)</sup> <sup>⌘</sup>	22/15 <sup>⌘</sup>	209/225 <sup>⌘</sup>	1039/225 <sup>⌘</sup>	4 <sup>⌘</sup>	1 <sup>⌘</sup>	1.0 <sup>⌘</sup>	0.0 <sup>⌘</sup>	20 <sup>⌘</sup>	75 <sup>⌘</sup>
2 <sup>⌘</sup>	6/15 <sup>⌘</sup>	15/15 <sup>⌘</sup>	64 <sup>⌘</sup>	6/15 <sup>⌘</sup>	12/15 <sup>⌘</sup>	12/15 <sup>⌘</sup>	94/75 <sup>⌘</sup>	4 <sup>⌘</sup>	1 <sup>⌘</sup>	3.0 <sup>⌘</sup>	2.0 <sup>⌘</sup>	12 <sup>⌘</sup>	67 <sup>⌘</sup>
3 <sup>⌘</sup>	15/15 <sup>⌘</sup>	9/15 <sup>⌘</sup>	64 <sup>⌘</sup>	15/9 <sup>⌘</sup>	30/15 <sup>⌘</sup>	30/15 <sup>⌘</sup>	$\beta_{ed1}:47/15$ <sup>⌘</sup> $\beta_{ed2}:47/15$ <sup>⌘</sup>	4 <sup>⌘</sup>	2 <sup>⌘</sup>	2.0 <sup>⌘</sup>	1.0 <sup>⌘</sup>	15 <sup>⌘</sup>	92 <sup>⌘</sup>
4 <sup>⌘</sup>	2/15 <sup>⌘</sup>	15/15 <sup>⌘</sup>	64 <sup>⌘</sup>	2/15 <sup>⌘</sup>	4/15 <sup>⌘</sup>	2/15 <sup>⌘</sup>	56/75 <sup>⌘</sup>	4 <sup>⌘</sup>	1 <sup>⌘</sup>	3.0 <sup>⌘</sup>	2.0 <sup>⌘</sup>	17 <sup>⌘</sup>	71 <sup>⌘</sup>
5 <sup>⌘</sup>	15/15 <sup>(4)</sup> <sup>⌘</sup>	15/15 <sup>(4)</sup> <sup>⌘</sup>	64 <sup>⌘</sup>	15/15 <sup>(4)</sup> <sup>⌘</sup>	30/15 <sup>⌘</sup>	24/15 <sup>⌘</sup>	134/15 <sup>⌘</sup>	4 <sup>⌘</sup>	1 <sup>⌘</sup>	1.0 <sup>⌘</sup>	0.0 <sup>⌘</sup>	21 <sup>⌘</sup>	81 <sup>⌘</sup>

Note 1:  $\Delta ACK, \Delta NACK$  and  $\Delta CQI = 8$      $A_{hs} = \beta_{hs}/\beta_c = 30/15$      $\beta_{hs} = 30/15 * \beta_c$ <sup>⌘</sup>

Note 2: CM = 1 for  $\beta_c/\beta_d = 12/15, \beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference<sup>⌘</sup>

Note 3 : For subtest 1 the  $\beta_c/\beta_d$  ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 10/15$  and  $\beta_d = 15/15$ <sup>⌘</sup>

Note 4 : For subtest 5 the  $\beta_c/\beta_d$  ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 14/15$  and  $\beta_d = 15/15$ <sup>⌘</sup>

Note 5 : Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g<sup>⌘</sup>

Note 6:  $\beta_{ed}$  can not be set directly; it is set by Absolute Grant Value.<sup>⌘</sup>

Table 12:Subtests for UMTS Release 6 HSUPA



UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCH TTI(ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	10	2SF2&2S	11484	5.76
	4	4	2	F4	20000	2.00
7 (No DPDCH)	4	8	2	2SF2&2S	22996	?
	4	4	10	F4	20000	?

NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE categories 1 to 6 support QPSK only. UE category 7 supports QPSK and 16QAM. (TS25.306-7.3.0).

Table 13: HSUPA UE category

### 5) DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a Second serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0. A summary of these settings are illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0

**Table E.5.0: Levels for HSDPA connection setup**

Parameter During Connection setup	Unit	Value
P-CPICH_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH_Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.

The measurements were performed with a Fixed Reference Channel (FRC) H-Set 12 with QPSK

Parameter	Value
Nominal average inf. bit rate	60 kbit/s
Inter-TTI Distance	1 TTI's
Number of HARQ Processes	6 Processes
Information Bit Payload	120 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	960 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	3200 SMLs
Coding Rate	0.15
Number of Physical Channel Codes	1

Table 14: settings of required H-Set 12 QPSK acc. to 3GPP 34.121

Note:

- 1.The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table above.
- 2.Maximum number of transmission is limited to 1,i.e.,retransmission is not allowed. The redundancy and constellation version 0 shall be used.

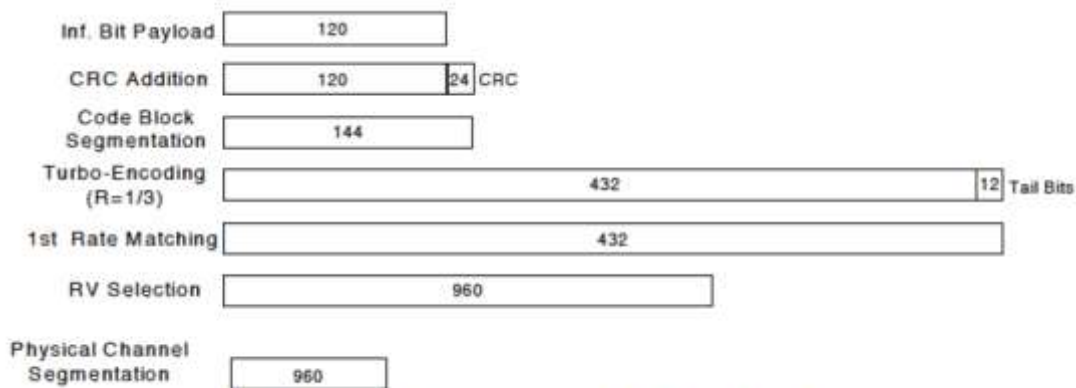


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

The following 4 Sub-tests for HSDPA were completed according to Release 5 procedures. A summary of subtest settings are illustrated below:

Sub-test <sup>1</sup>	$\beta_c$ <sup>2</sup>	$\beta_d$ <sup>2</sup>	$\beta_d$ (SF) <sup>2</sup>	$\beta_c/\beta_d$ <sup>2</sup>	$\beta_{hs}(1)$ <sup>2</sup>	CM(dB)(2) <sup>2</sup>	MPR (dB) <sup>2</sup>
1 <sup>2</sup>	2/15 <sup>2</sup>	15/15 <sup>2</sup>	64 <sup>2</sup>	2/15 <sup>2</sup>	4/15 <sup>2</sup>	0.0 <sup>2</sup>	0 <sup>2</sup>
2 <sup>2</sup>	12/15(3) <sup>2</sup>	15/15(3) <sup>2</sup>	64 <sup>2</sup>	12/15(3) <sup>2</sup>	24/15 <sup>2</sup>	1.0 <sup>2</sup>	0 <sup>2</sup>
3 <sup>2</sup>	15/15 <sup>2</sup>	8/15 <sup>2</sup>	64 <sup>2</sup>	15/8 <sup>2</sup>	30/15 <sup>2</sup>	1.5 <sup>2</sup>	0.5 <sup>2</sup>
4 <sup>2</sup>	15/15 <sup>2</sup>	4/15 <sup>2</sup>	64 <sup>2</sup>	15/4 <sup>2</sup>	30/15 <sup>2</sup>	1.5 <sup>2</sup>	0.5 <sup>2</sup>

Note 1:  $\Delta$  ACK,  $\Delta$  NACK and  $\Delta$  CQI=8  $A_{hs}=\beta_{hs}/\beta_c=30/15$   $\beta_{hs}=30/15*\beta_c$   
 Note 2: CM=1 for  $\beta_c/\beta_d=12/15$ ,  $\beta_{hs}/\beta_c=24/15$ . For all other combinations of DPDCH, DPCCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.  
 Note 3: For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c=11/15$  and  $\beta_d=15/15$

Up commands are set continuously to set the UE to Max power.

Note:

- 1.The Dual Carriers transmission only applies to HSDPA physical channels
- 2.The Dual Carriers belong to the same Node and are on adjacent carriers.
- 3.The Dual Carriers do not support MIMO to serve UEs configured for dual cell operation
- 4.The Dual Carriers operate in the same frequency band .
- 5.The device doesn't support the modulation of 16QAM in uplink but 64QAM in downlink for DC-HSDPA mode.
- 6.The device doesn't support carrier aggregation for it just can operate in Release 8.



## 6.5 LTE Test Configuration

SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices. The CMW500 WideBand Radio Communication Tester was 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 test were performed with the same number of RB and RB offsets transmitting on all TTI frames(Maximum TTI)

### 1) Spectrum Plots for RB configurations

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

### 2) MPR

When MPR is implemented permanently within the UE, regardless of network requirements, only those RB configurations allowed by 3GPP for the channel bandwidth and modulation combinations may be tested with MPR active. Configurations with RB allocations less than the RB thresholds required by 3GPP must be tested without MPR.

The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3

Modulation	Channel bandwidth / Transmission bandwidth ( $N_{RB}$ )						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	$\leq 1$
16 QAM	$\leq 5$	$\leq 4$	$\leq 8$	$\leq 12$	$\leq 16$	$\leq 18$	$\leq 1$
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	$\leq 2$
64 QAM	$\leq 5$	$\leq 4$	$\leq 8$	$\leq 12$	$\leq 16$	$\leq 18$	$\leq 2$
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	$\leq 3$

### 3) A-MPR

A-MPR(Additional MPR) has been disabled for all SAR tests by using Network Signalling Value of "NS\_01" on the base station simulator.

### 4) LTE procedures for SAR testing

A) Largest channel bandwidth standalone SAR test requirements

i) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is  $\leq 0.8$  W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is  $> 1.45$  W/kg, SAR is required for all three RB offset configurations for that required test channel.

ii) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in i) are applied to measure the SAR for QPSK with 50% RB allocation.

iii) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 %

RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in i) and ii) are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.

iv) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is  $> \frac{1}{2}$  dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is  $> 1.45$  W/kg.

B) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is  $> \frac{1}{2}$  dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is  $> 1.45$  W/kg.

5) TDD LTE test configuration

According to KDB 941225 D05 SAR for LTE Devices v02r03, 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.

TDD LTE Band 41 supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Figure 4.2-1: Frame structure type 2

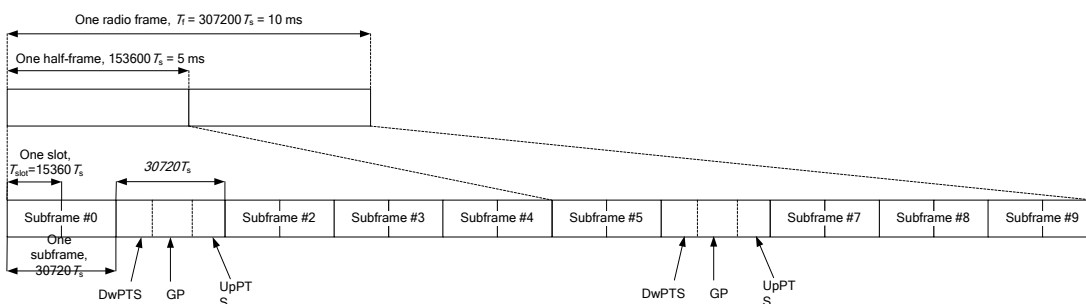


Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

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

**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	

According to Figure 4.2-1, one radio frame is configured by 10 subframes, which consist of Uplink-subframe, Downlink-subframe and Special subframe. For TDD-LTE, the Duty Cycle should be calculated on Uplink-subframes and Special subframes, due to Special subframe containing both Uplink transmissions. So for one radio frame, Duty Cycle can be calculated with formula as below. The count of Uplink subframes are according to Table 4.2-2:

$$\text{Duty cycle} = (30720T_s \cdot \text{Ups} + \text{Uplink Component} \cdot \text{Specials}) / (307200T_s)$$

About the uplink component of Special subframes, we can figure out by Table 4.2-1:

$$\text{Uplink Component} = \text{UpPTS}$$

In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below .all these sets are ok when we test, or we can set as below.

$$\text{Duty cycle} = [(30720T_s \cdot \text{Ups}) + \text{UpPTS} \cdot \text{Specials}] / (307200T_s)$$

And we can get different Duty cycles under different configurations:

Uplink-Downlink configuration	Subframe number			Configuration of special subframe							
				Normal cyclice prefix in downlink				Extended cyclice prefix in downlink			
				Normal cyclice prefix in uplink		Extended cyclice prefix in uplink		Normal cyclice prefix in uplink		Extended cyclice prefix in uplink	
	D	S	U	configuration				configuration			
				0~4	5~9	0~4	5~9	0~3	4~7	0~3	4~7
0	2	2	6	61.43%	62.85%	61.67%	<b>63.33%</b>	61.43%	62.85%	61.67%	<b>63.33%</b>
1	4	2	4	41.43%	42.85%	41.67%	43.33%	41.43%	42.85%	41.67%	43.33%
2	6	2	2	21.43%	22.85%	21.67%	23.33%	21.43%	22.85%	21.67%	23.33%
3	6	1	3	30.71%	31.43%	30.83%	31.67%	30.71%	31.43%	30.83%	31.67%
4	7	1	2	20.71%	21.43%	20.83%	21.67%	20.71%	21.43%	20.83%	21.67%
5	8	1	1	10.71%	11.43%	10.83%	11.67%	10.71%	11.43%	10.83%	11.67%
6	3	2	5	51.43%	52.85%	51.67%	53.33%	51.43%	52.85%	51.67%	53.33%

For TDD LTE, SAR should be tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7 for Frame structure type 2.

## 6.6 WiFi Test Configuration

For WiFi SAR testing, a communication link is set up with the testing software for WiFi mode test. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode. The RF signal utilized in SAR measurement has 100% duty cycle and its crest factor is 1. The test procedures in KDB 248227D01v02 are applied. (Refer to KDB 248227D01 for more details)

### 6.6.1 Initial Test Position Procedure

For exposure condition with multiple test position, such as handsets operating next to the ear, devices with hotspot mode or UMPC mini-tablet, procedures for initial test position can be applied. Using the transmission mode determined by the DSSS procedure or initial test configuration, area scans are measured for all position in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When reported SAR for the initial test position is  $\leq 0.4\text{W/kg}$ , no additional testing for the remaining test position is required. Otherwise, SAR is evaluated at the subsequent highest peak SAR position until the reported SAR result is  $\leq 0.8\text{W/kg}$  or all test position are measured. For all positions/configurations tested using the initial test position and subsequent test positions, when the *reported* SAR is  $> 0.8\text{W/kg}$ , SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the *reported* SAR is  $\leq 1.2\text{W/kg}$  or all required channels are tested.

### 6.6.2 Initial Test Configuration Procedure

An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. For configurations with the same specified or measured maximum output power, additional transmission mode and test channel selection procedures are required (see section 5.3.2 of KDB 248227D01). SAR test reduction of subsequent highest output test channels is based on the *reported* SAR of the initial test configuration.

For next to the ear, hotspot mode and UMC mini-tablet exposure configurations where multiple test positions are required, the initial test position procedure is applied to minimize the number of test positions required for SAR measurement using the initial test configuration transmission mode. For fixed exposure conditions that do not have multiple SAR test positions, SAR is measured in the transmission mode determined by the initial test configuration.

When the *reported* SAR of the initial test configuration is  $> 0.8\text{W/kg}$ , SAR measurement is required for the subsequent next highest measured output power channel(s) in the initial test configuration until the *reported* SAR is  $\leq 1.2\text{W/kg}$  or all required channels are tested.

### 6.6.3 Sub Test Configuration Procedure

SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units.

When the highest reported SAR for the initial test configuration, according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is  $\leq 1.2\text{W/kg}$ , SAR is not required for that subsequent test configuration.



#### 6.6.4 WiFi 2.4G SAR Test Procedures

Separate SAR procedures are applied to DSSS and OFDM configurations in the 2.4 GHz band to simplify DSSS test requirements. For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions.

##### A) 802.11b DSSS SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either a 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 (section 3.1 of of KDB 248227D01) for the exposure configuration is  $\leq 0.8$  W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
- 2) When the *reported* SAR is  $> 0.8$  W/kg, SAR is required for that exposure configuration 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.

##### B) 2.4GHz 802.11g/n OFDM SAR Test Exclusion Requirements

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3 of of KDB 248227D01). SAR is not required for the following 2.4 GHz OFDM conditions.

- 1) When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.
- 2) When the highest *reported* SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg.

##### C) SAR Test Requirements for OFDM configurations

When SAR measurement is required for 802.11 a/g/n/ac OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. When the same transmitter and antenna(s) are used for U-NII-1 and U-NII-2A bands, additional SAR test reduction applies. When band gap channels between U-NII-2C band and 5.8 GHz U-NII-3 or §15.247 band are supported, the highest maximum output power transmission mode configuration and maximum output power channel across the bands must be used to determine SAR test reduction, according to the initial test configuration and subsequent test configuration requirements. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.

### 6.6.5 U-NII-1 and U-NII-2A Bands

For devices that operate in only one of the U-NII-1 and U-NII-2A bands, the normally required SAR procedures for OFDM configurations are applied. For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following:

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest *reported* SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, both bands are tested independently for SAR.
- 2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest *reported* SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is  $\leq 1.2$  W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, both bands are tested independently for SAR.
- 3) The two U-NII bands may be aggregated to support a 160 MHz channel on channel number 50. Without additional testing, the maximum output power for this is limited to the lower of the maximum output power certified for the two bands. When SAR measurement is required for at least one of the bands and the highest *reported* SAR adjusted by the ratio of specified maximum output power of aggregated to standalone band is  $> 1.2$  W/kg, SAR is required for the 160 MHz channel. This procedure does not apply to an aggregated band with maximum output higher than the standalone band(s); the aggregated band must be tested independently for SAR. SAR is not required when the 160 MHz channel is operating at a reduced maximum power and also qualifies for SAR test exclusion.

### 6.6.6 U-NII-2C and U-NII-3 Bands

The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification to avoid SAR requirements.<sup>10</sup> TDWR restriction does not apply under the new rules; all channels that operate at 5.60 – 5.65 GHz must be included to apply the SAR test reduction and measurement procedures.

When the same transmitter and antenna(s) are used for U-NII-2C band and U-NII-3 band or 5.8 GHz band of §15.247, the bands may be aggregated to enable additional channels with 20, 40 or 80 MHz bandwidth to span across the band gap, as illustrated in Appendix B. The maximum output power for the additional band gap channels is limited to the lower of those certified for the bands. Unless band gap channels are permanently disabled, they must be considered for SAR testing. The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. To maintain SAR measurement accuracy and to facilitate test reduction, the channels in U-NII-2C band above 5.65 GHz may be grouped with the 5.8 GHz channels in U-NII-3 or §15.247 band to enable two SAR probe calibration frequency points to cover the bands, including the band gap channels.<sup>11</sup> When band gap channels are supported and the bands are not aggregated for SAR testing, band gap channels must be considered independently in each band according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

### 6.6.7 OFDM Transmission Mode SAR Test Channel Selection Requirements

For 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. When the maximum output power of a channel is the same for equivalent OFDM configurations (for example 802.11a, 802.11n and 802.11ac, or 802.11g and 802.11n, with the same channel bandwidth, modulation, and data rate, etc), the lower order 802.11 mode (i.e., 802.11a is chosen over 802.11n then 802.11ac, or 802.11g is chosen over 802.11n) is used for SAR measurement. When the maximum output power are the same for multiple test channel, either according to the default or additional power measurement requirement, 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.

### **6.6.8 MIMO SAR Considerations**

Per KDB 248227D01v02, simultaneous transmission provisions in KDB Publication 447498 should be used to determine simultaneous transmission SAR test exclusion for WiFi MIMO. If the sum of 1-g SAR single transmission SAR measurement is  $< 1.6\text{W/kg}$ , no additional SAR measurements for MIMO are required. Alternatively, SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation.

## 6.7 LTE CA and downlink 4 x 4 MIMO specification

### 6.7.1 LTE CA combinations specification

The device supports downlink LTE Carrier Aggregation (CA) for Intra-band and inter-band, and uplink LTE Carrier Aggregation (CA) for Intra-band .

a) The LTE release and version numbers of the 3GPP documents used to implement the specific device(s): Release 13, 3GPP TS 36.211 V13.3.0 (2016-09)

b) The associated 3GPP release and version numbers required for power measurements and RF test setup conditions:

Release 13, 3GPP TS 36.521-1 V13.3.0 (2016-09)

Release 14, 3GPP TS 36.101 V14.4.0 (2017-06)

The device supports parts of uplink and downlink Release 14 LTE carrier aggregations and the device does not support full CA features on 3GPP Release 14.

1) The device supports Intra-band uplink LTE CA for CA\_7C, CA\_38C, CA\_41C with two component carriers in the uplink.

2) The device supports Intra-band and inter-band downlink LTE CA (See the table below)

3) The device does not support full CA features on 3GPP Release 13 nor Release 14. All other uplink communications are identical to the release 8 specifications. Other LTE Rel.10 or higher features are not supported, including Enhanced SC-FDMA, Uplink MIMO or other antenna diversity configurations, Wi-Fi offloading using LTE-U, LAA or LWA related protocols etc.

### Intra-band contiguous CA operating bands

E-UTRA CA configuration / Bandwidth combination set									
E-UTRA CA configuration	Uplink CA configurations (NOTE 3)	Component carriers in order of increasing carrier frequency				Maximum aggregated bandwidth [MHz]	Bandwidth combination set		
		Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]				
		CA_2C	NA	5 10 15 20	20 15, 20 10, 15, 20 5, 10, 15, 20				
CA_5B	NA	5, 10 10	10 5			20	0		
CA_7C	CA_7C	15 20	15 20			40	0		
		10 15 20	20 15, 20 10, 15, 20			40	1		
		15 20	10, 15 15, 20			40	2		
		CA_12B	NA	5, 10			15	0	
		CA_38C	CA_38C	15 20	15 20			40	0
				CA_41C	CA_41C	10 15 20	20 15, 20 10, 15, 20		
5, 10 15 20	20 15, 20 5, 10, 15, 20					40	1		
10 15 20	15, 20 10, 15, 20 10, 15, 20					40	2		
10 20	20 20					40	3		
CA_41D	NA	10 10 15 15 20 20	20 15, 20 20 10, 15, 20 15, 20 10, 15, 20			15 20 10, 15 20 10		60	0
		20	10, 15, 20			15, 20			

NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.  
NOTE 2: For the supported CC bandwidth combinations, the CC downlink and uplink bandwidths are equal.  
NOTE 3: Uplink CA configurations are the configurations supported by the present release of specifications.

**Intra-band non-contiguous CA operating bands (with two sub-blocks)**

		E-UTRA CA configuration / Bandwidth combination set						
E-UTRA CA configuration	Uplink CA configurations (NOTE 1)	Component carriers in order of increasing carrier frequency					Maximum aggregated bandwidth [MHz]	Bandwidth combination set
		Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]		
CA_7A-7A	-	5, 10, 15, 20	5, 10, 15, 20				40	0

NOTE 1: Uplink CA configurations are the configurations supported by the present release of specifications.

**Inter-band CA operating bands (two bands)**

E-UTRA CA configuration / Bandwidth combination set										
E-UTRA CA Configuration	Uplink CA configurations (NOTE 4)	E-UTRA Bands	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	Maximum aggregated bandwidth [MHz]	Bandwidth combination set
CA_5A-7A	-	5	Yes	Yes	Yes	Yes			30	0
		7				Yes	Yes	Yes		
		5			Yes	Yes			30	1
		7				Yes	Yes	Yes		

NOTE 1: The CA Configuration refers to a combination of an operating band and a CA bandwidth class specified in Table 5.4.2A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.

NOTE 2: For each band combination, all combinations of indicated bandwidths belong to the set.

NOTE 3: For the supported CC bandwidth combinations, the CC downlink and uplink bandwidths are equal.

NOTE 4: Uplink CA configurations are the configurations supported by the present release of specifications.

NOTE 5: For TDD inter-band Carrier Aggregation only non-simultaneous Rx/Tx uplink CA configurations can be supported by UE supporting corresponding DL CA configuration without simultaneous Rx/Tx.

NOTE 6: Void

NOTE 7: Power imbalance between downlink carriers on Band 20 and Band 28 is assumed to be within [6dB].

NOTE 8: For the corresponding CA configuration, UE may not support Pcell transmissions in this E-UTRA band

Note:

- 1) The channel spacing and aggregated channel bandwidth for CA are identical to the associated specification in 3GPP TS 36.101 V14.4.0 (2017-06)
- 2) The reference test frequencies for CA refers to 3GPP TS 36.508 V13.1.0

### 6.7.2 Test procedure for downlink CA

According to 201804 FCC RF Exposure TCB workshop slides, the guidance does not consider Intra-band DL CA and inter-band DL CA separately.

In applying the power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the CA configuration with the largest aggregated DL CA bandwidth in each frequency band group need consideration (independently for contiguous and non-contiguous CA). When the same frequency band is used for both contiguous and non-contiguous CA, power may be measured using the configuration with the largest aggregated bandwidth “and” maximum output power among the contiguous and non-contiguous CA configurations, otherwise, these are considered separately. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need consideration. the configurations that require power measurements are in the table as below:

DL Intra-band	DL Inter-band
CA_5B	CA_5A-7C
CA_7C	
CA_12B	
CA_38C	
CA_41C	
CA_41D	
CA_7A-7A	

Refer to section 7.1.19 of this report for detailed DL CA conducted power measurement results

### 6.7.3 Test procedure for Intra-band uplink CA

For Intra-band uplink LTE CA measurement (Uplink CA\_7C, CA\_38C, CA\_41C), the following procedure according to 201711 FCC RF Exposure TCB workshop slides is applied:

- 1) Maximum output power is measured for each UL CA configuration for the required test channels described in KDB 941225 D05 (Rel. 8)
  - UL PCC configuration is determined by the required test channel
  - SCC and subsequent CCs are added alternatively to either side of the PCC or within the transmission band for channels at the ends of a frequency band.
- 2) SAR for UL CA is required in each exposure condition and frequency band combination
- 3) For this device , as the maximum output for Intra-band uplink LTE CA (Uplink CA\_7C, CA\_38C, CA\_41C) is  $\leq$  standalone LTE mode (without CA),
  - PCC is configured according to the highest standalone SAR configuration tested.
  - SCC and subsequent CCs are configured according to procedures used for power measurement and parameters (BW, RB etc.) similar to that used for the PCC
- 4) When the reported SAR for UL CA configuration, described above, is  $> 1.2$  W/kg, UL CA SAR is also required for all required test channels(PCC based)
- 5) UL CA SAR is also required for standalone SAR configurations  $> 1.2$  W/kg when they are scaled to the UL CA power level.

Refer to section 7.1 of this report for detailed UL CA conducted power measurement results.

### 6.7.4 LTE Downlink 4 x 4 MIMO specification and Test procedure

LTE B7 of this device support downlink 4\*4 MIMO , the information are tabulated below:

LTE Band support DL 4*4MIMO	B7
<b>Intra-band contiguous CA With DL 4*4MIMO</b>	<b>4*4MIMO Band</b>
CA_7C	B7(single card only)
<b>Inter-band CA (two bands) With DL 4*4MIMO</b>	<b>4*4MIMO Band</b>
CA_5A-7A	B7(single card only)

According to 201705 FCC RF Exposure TCB workshop slides, SAR test exclusion for LTE DL 4x4 MIMO should be determined by UL power measurements with and without DL MIMO using the highest UL output power configuration without DL MIMO to confirm that UL output with DL MIMO is  $< \frac{1}{4}$  dB higher. For DL MIMO with carrier aggregation, the same SAR test exclusion procedure should be considered.

Refer to section 7.1 of this report for detailed DL 4\*4 MIMO conducted power measurement results.



## 6.8 Power Reduction Specification

This device uses the following power reduction features to reduce the transmit power and ensure SAR compliance. These power reduction features are implemented using a single fixed level of reduction through static table look-up for some wireless operating modes or frequency bands and triggered by a single event or operation. The published RF exposure KDB procedures are applicable to the specific implementation and applied for testing. So PAG is not required for these features.

- 1) A fixed level power reduction is applied for some frequency bands when hotspot mode becomes active. When the hotspot is disabled, the power value will be recovered.
- 2) A fixed level power reduction is applied for some frequency bands when 2G/3G/4G and WIFI transmit simultaneously.
- 3) This device uses the receiver to indicate whether the user is making a voice call in head scenario or not. The selection between head and body power levels is based on the receiver detection mechanism. A fixed level power reduction is applied for some frequency bands when the audio receiver is on.
- 4) This device uses the mobile country code (MCC) to indicate whether the users in CE countries or FCC countries. The selection between CE countries and FCC countries power levels is based on the country code detection mechanism. It can determine the countries where users are and set the relevant power level for WiFi antennas accordingly.

<b>Antenna</b>	<b>MCC OF CE COUNTRY (CE standard)</b>	<b>MCC OF FCC COUNTRY (FCC standard)</b>
WiFi 2.4G Ant	Power Level A1	Power Level B1
WiFi 5G Ant	Power Level A2	Power Level B2

- 5) This device uses a proximity sensor that shares the same metallic electrode as the 2G/3G/4G main transmitting antenna to reduce the maximum output power in selected wireless modes and operating configurations to ensure SAR compliance. The procedures in KDB 616217 are applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions.

### 6.8.1 Power Reduction Specification of 2G/3G/4G Second Antenna

The following tables summarize the key power reduction information of 2G/3G/4G second antenna triggered by specific use conditions. The detailed full power and reduced conducted power measurement results are provided in Section 7 of this report:

Band	Second Antenna Power Reduction Level Amount (dB)			
	Second Antenna only		Second Antenna+WiFi Antenna simultaneous transmission	
	Receiver off (Full Power)	Receiver on	Receiver off	Receiver on
GSM1900	0	1.0	0	1.0
UMTS Band II	0	7.0	2.0	9.0
UMTS Band IV	0	8.5	1.0	9.5
UMTS Band V	0	4.5	0	4.5
LTE Band 2	0	7.0	1.0	7.5
LTE Band 4	0	7.0	1.5	8.5
LTE Band 5	0	4.5	0	4.5
LTE Band 7	0	6.0	0	6.0
LTE Band 12	0	4.0	0	4.0
LTE Band 17	0	4.0	0	4.0
LTE Band 26	0	4.5	0	4.5
LTE Band 38	0	6.5	1.0	7.5
LTE Band 41	0	8.5	2.5	11.0

Note: For Head SAR test of 2G/3G/4G Second Antenna, Standalone Head SAR should be evaluated at with audio receiver on. As the audio receiver only works in voice mode when the user is making a call in head scenario, and the lack of the third-party VoIP server and the unstandardized VOIP operating characteristics, so a test script may be used to trigger the receiver on during the test. The test script function is only used to trigger audio receiver on and simulate voice and VOIP usage scene. It can be ensured that the unmodified settings in production units, including maximum output power, amplifier gain and other RF performance or tuning parameters, are used for SAR measurement.

## 6.8.2 Power Reduction Specification of WiFi Antenna

The following tables summarize the key power reduction information of WiFi antennas. The detailed full power and reduced conducted power measurement results are provided in section 7 of this report:

Power Reduction Level Amount (dB)				
Band/Mode(Ant)	WiFi Antenna			
	MCC OF CE COUNTRY		MCC OF FCC COUNTRY	
	Receiver on	Receiver off (Full Power)	Receiver on	Receiver off (Full Power)
WiFi 2.4G 802.11b (Ant1/Ant2)	4.0	0	5.0	0
WiFi 2.4G 802.11g (Ant1/Ant2/CDD)	4.0	0	5.0	0
WiFi 2.4G 802.11n(20M) (Ant1/Ant2/MIMO)	3.0	0	4.0	0
WiFi 2.4G 802.11n(40M) (Ant1/Ant2/MIMO)	2.5	0	2.5	0
WiFi 5G 802.11a Ant1	1.5	0	5.0	0
WiFi 5G 802.11a Ant2	0.5	0	4.0	0
WiFi 5G 802.11a CDD	1.0	0	4.5	0
WiFi 5G 802.11n(20M) Ant1	0.5	0	4.0	0
WiFi 5G 802.11n (20M)Ant2	0	0	3.0	0
WiFi 5G 802.11n (20M)MIMO	0.3	0	3.5	0
WiFi 5G 802.11 n(40M) Ant1	0	0	4.5	0
WiFi 5G 802.11n(40M) Ant2	0	0	3.5	0
WiFi 5G 802.11 n(40M) MIMO	0	0	4.0	0
WiFi 5G 802.11ac(20M) Ant1	0.5	0	4.0	0
WiFi 5G 802.11ac(20M) Ant2	0	0	3.0	0
WiFi 5G 802.11ac(20M) MIMO	0.3	0	3.5	0
WiFi 5G 802.11ac(40M) Ant1	1.0	0	4.5	0
WiFi 5G 802.11 ac(40M) Ant2	0	0	3.5	0
WiFi 5G 802.11 ac(40M) MIMO	0.5	0	4.0	0
WiFi 5G 802.11 ac(80M) Ant1	0	0	0	0
WiFi 5G 802.11 ac(80M) Ant2	0	0	0	0
WiFi 5G 802.11 ac(80M) MIMO	0	0	0	0
WiFi 5G 802.11 ac(160M) Ant1	0	0	0	0
WiFi 5G 802.11 ac(160M) Ant2	0	0	0	0
WiFi 5G 802.11 ac(160M) MIMO	0	0	0	0

For FCC SAR test, WIFI SAR test should be evaluated at the power level of FCC mobile country code for each exposure conditions

### 6.8.3 Power Reduction Specification of 2G/3G/4G Main Antenna

The following tables summarize the key power reduction information of 2G/3G/4G main antenna. The detailed full power and reduced conducted power measurement results are provided in section 7 of this report:

Band	2G/3G/4G Main Antenna Power Reduction Level Amount (dB)					
	Full power (Other conditions)	Receiver off				
		hotspot off		hotspot on		
		sensor on*		sensor off	sensor on**	
	Power Level D3	Power Level D1	Power Level D2	Power Level D4	Power Level D5	Power Level D6
GSM1900	0	0	1.5	5.0	5.0	6.5
UMTS Band II	0	0	3.5	7.0	7.0	10.5
UMTS Band IV	0	0	4.5	6.5	6.5	11.0
LTE Band 2	0	0	3.5	7.0	7.0	10.5
LTE Band 4	0	0	3.5	6.0	6.0	9.5
LTE Band 7	0	2.0	3.5	2.5	4.5	6.0
UL CA_7C	0	2.0	3.5	2.5	4.5	6.0
LTE Band 38	0	0	1.0	0	0	1.0
UL CA_38C	0	0	1.0	0	0	1.0

Note:

- 1) \* Sensor power level 1 or power level 2 is determined by different sensor Trigger Distance range when hotspot is off;
- 2) \*\* Sensor power level 5 or power level 6 is determined by different sensor Trigger Distance range when hotspot is on;
- 3) For some frequency bands, the power reduction level amount value 0 means there is no power reduction in this frequency band and exposure conditions. The power level is the same as full power level D3.
- 4) Please refer to section 6.8.4 for detailed Proximity sensor power reduction test configuration and validation results per KDB616217.

## 6.8.4 Proximity sensor Power Reduction Test configuration and validation

Due to the operating configurations and exposure conditions required by the device, the proximity sensor is used to indicate when the device is held close to a user's body/hotspot exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes of main antenna to ensure SAR compliance.

The following tables summarize the key power reduction information for proximity sensor. The test procedures in KDB 616217 should be applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions. To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for movements to and from the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

2G/3G/4G Main antenna (hotspot off)					
Band	Test position	Sensor Trigger Distance range(DUT to Phantom)	Power reduction amount(dB)	Max Power level (dBm)	Power level
GSM 1900	Bottom side	$0\text{mm} \leq \text{distance} \leq 9\text{mm}$	1.5	28	Level D2
		$9\text{mm} < \text{distance}$	0	29.5	Level D3
	Back side	$0\text{mm} \leq \text{distance} \leq 5\text{mm}$	1.5	28	Level D2
		$5\text{mm} < \text{distance}$	0	29.5	Level D3
	Front side	$0\text{mm} \leq \text{distance} \leq 4\text{mm}$	1.5	28	Level D2
		$4\text{mm} < \text{distance}$	0	29.5	Level D3
	Left side	ALL	0	29.5	Level D3
	Right side	ALL	0	29.5	Level D3
	Top side	ALL	0	29.5	Level D3
	WCDMA B2	Bottom side	$0\text{mm} \leq \text{distance} \leq 9\text{mm}$	3.5	20.5
$9\text{mm} < \text{distance}$			0	24	Level D3
Back side		$0\text{mm} \leq \text{distance} \leq 5\text{mm}$	3.5	20.5	Level D2
		$5\text{mm} < \text{distance}$	0	24	Level D3
Front side		$0\text{mm} \leq \text{distance} \leq 4\text{mm}$	3.5	20.5	Level D2
		$4\text{mm} < \text{distance}$	0	24	Level D3
Left side		ALL	0	24	Level D3
Right side		ALL	0	24	Level D3
Top side		ALL	0	24	Level D3

WCDMA B4	Bottom side	$0\text{mm} \leq \text{distance} \leq 9\text{mm}$	4.5	19.5	Level D2
		$9\text{mm} < \text{distance}$	0	24	Level D3
	Back side	$0\text{mm} \leq \text{distance} \leq 5\text{mm}$	4.5	19.5	Level D2
		$5\text{mm} < \text{distance}$	0	24	Level D3
	Front side	$0\text{mm} \leq \text{distance} \leq 4\text{mm}$	4.5	19.5	Level D2
		$4\text{mm} < \text{distance}$	0	24	Level D3
	Left side	ALL	0	24	Level D3
	Right side	ALL	0	24	Level D3
Top side	ALL	0	24	Level D3	
LTE B2	Bottom side	$0\text{mm} \leq \text{distance} \leq 9\text{mm}$	3.5	20	Level D2
		$9\text{mm} < \text{distance}$	0	23.5	Level D3
	Back side	$0\text{mm} \leq \text{distance} \leq 5\text{mm}$	3.5	20	Level D2
		$5\text{mm} < \text{distance}$	0	23.5	Level D3
	Front side	$0\text{mm} \leq \text{distance} \leq 4\text{mm}$	3.5	20	Level D2
		$4\text{mm} < \text{distance}$	0	23.5	Level D3
	Left side	ALL	0	23.5	Level D3
	Right side	ALL	0	23.5	Level D3
Top side	ALL	0	23.5	Level D3	
LTE B4	Bottom side	$0\text{mm} \leq \text{distance} \leq 9\text{mm}$	3.5	20	Level D2
		$9\text{mm} < \text{distance}$	0	23.5	Level D3
	Back side	$0\text{mm} \leq \text{distance} \leq 5\text{mm}$	3.5	20	Level D2
		$5\text{mm} < \text{distance}$	0	23.5	Level D3
	Front side	$0\text{mm} \leq \text{distance} \leq 4\text{mm}$	3.5	20	Level D2
		$4\text{mm} < \text{distance}$	0	23.5	Level D3
	Left side	ALL	0	23.5	Level D3
	Right side	ALL	0	23.5	Level D3
Top side	ALL	0	23.5	Level D3	
LTE B7	Bottom side	$0\text{mm} \leq \text{distance} \leq 9\text{mm}$	3.5	20	Level D2
		$9\text{mm} < \text{distance} \leq 17\text{mm}$	2	21.5	Level D1
		$\text{distance} > 17\text{mm}$	0	23.5	Level D3

	Back side	0mm ≤ distance ≤ 5mm	3.5	20	Level D2
		5mm < distance ≤ 12mm	2	21.5	Level D1
		distance > 12mm	0	23.5	Level D3
	Front side	0mm ≤ distance ≤ 4mm	3.5	20	Level D2
		4mm < distance ≤ 11mm	2	21.5	Level D1
		distance > 11mm	0	23.5	Level D3
	Left side	ALL	0	23.5	Level D3
	Right side	ALL	0	23.5	Level D3
	Top side	ALL	0	23.5	Level D3
	LTE B38	Bottom side	0mm ≤ distance ≤ 9mm	1	22.5
9mm < distance ≤ 17mm			0	23.5	Level D2
distance > 17mm			0	23.5	Level D3
Back side		0mm ≤ distance ≤ 5mm	1	22.5	Level D2
		5mm < distance ≤ 12mm	0	23.5	Level D2
		distance > 12mm	0	23.5	Level D3
Front side		0mm ≤ distance ≤ 4mm	1	22.5	Level D2
		4mm < distance ≤ 11mm	0	23.5	Level D2
		distance > 11mm	0	23.5	Level D3
Left side		ALL	0	23.5	Level D3
Right side		ALL	0	23.5	Level D3
Top side		ALL	0	23.5	Level D3

Note:

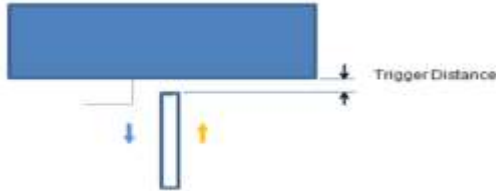
1) To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering and sensor coverage for normal and tilt positions for all usage conditions and applicable sides, minus 1 mm, must be used as the test separation distance for additional SAR testing of each higher power stage.

For the other sides or other frequency bands of the device, SAR is still tested at the maximum full power level with sensor off.

### 1) Procedures for determining proximity sensor triggering distances

The device was tested by the test lab to determine the proximity sensor triggering distances for the front side, back side and bottom side of the device. To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering minus 1 mm, must be used as the test separation distance for SAR testing.

the proximity sensor triggering distance measurement method are as below:



Picture: Proximity sensor triggering distances assessment Bottom Side



Picture: Proximity sensor triggering distances assessment Front Side and Back side

**Table: Summary of Trigger Distances(hotspot off)**

Band	Power Level*	Trigger distance-Front Side		Trigger distance-Back Side		Trigger distance-Bottom Side	
		Moving toward phantom	Moving away from phantom	Moving toward phantom	Moving away from phantom	Moving toward phantom	Moving away from phantom
GSM1900	D2	4mm	5mm	5mm	6mm	9mm	10mm
UMTS Band II	D2	4mm	5mm	5mm	6mm	9mm	10mm
UMTS Band IV	D2	4mm	5mm	5mm	6mm	9mm	10mm
LTE Band 2	D2	4mm	5mm	5mm	6mm	9mm	10mm
LTE Band 4	D2	4mm	5mm	5mm	6mm	9mm	10mm
LTE Band 7	D2	4mm	5mm	5mm	6mm	9mm	10mm
	D1	11mm	12mm	12mm	13mm	17mm	18mm
UL CA_7C	D2	4mm	5mm	5mm	6mm	9mm	10mm
	D1	11mm	12mm	12mm	13mm	17mm	18mm
LTE Band 38	D2	4mm	5mm	5mm	6mm	9mm	10mm
UL CA_38C	D2	4mm	5mm	5mm	6mm	9mm	10mm

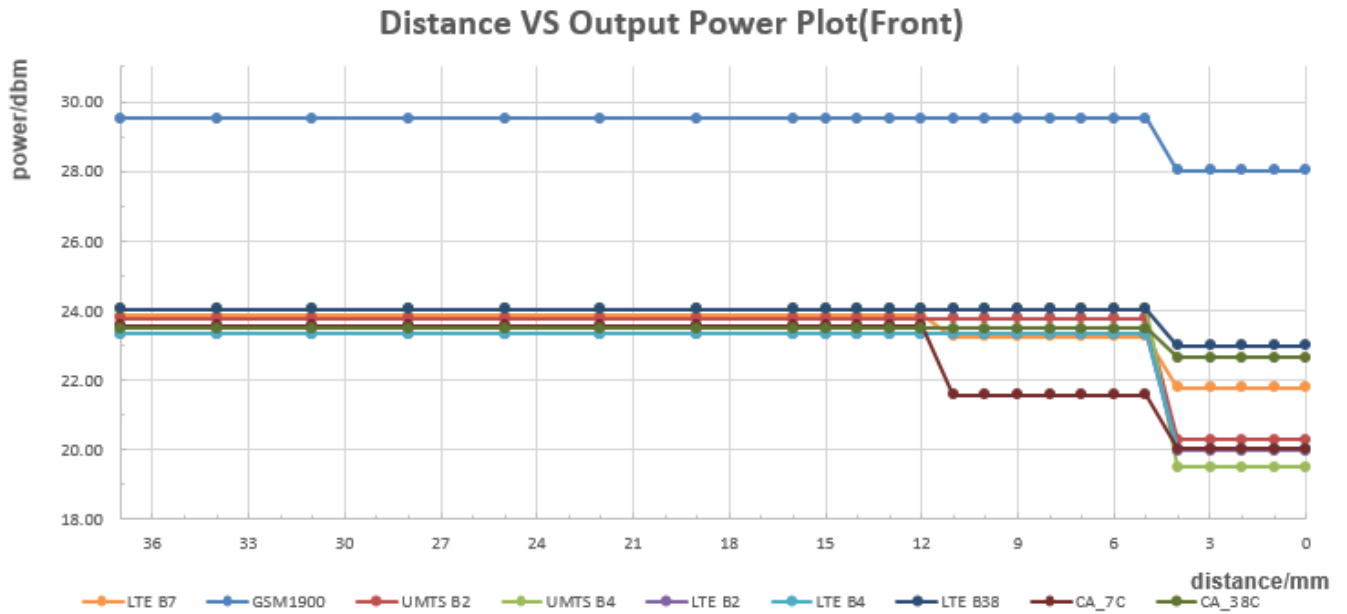
Note:

- 1) \* The sensor Trigger Distance of D5(hotspot on) and D1 (hotspot off) are the same.
- 2) \* The sensor Trigger Distance of D6(hotspot on) and D2 (hotspot off) are the same.

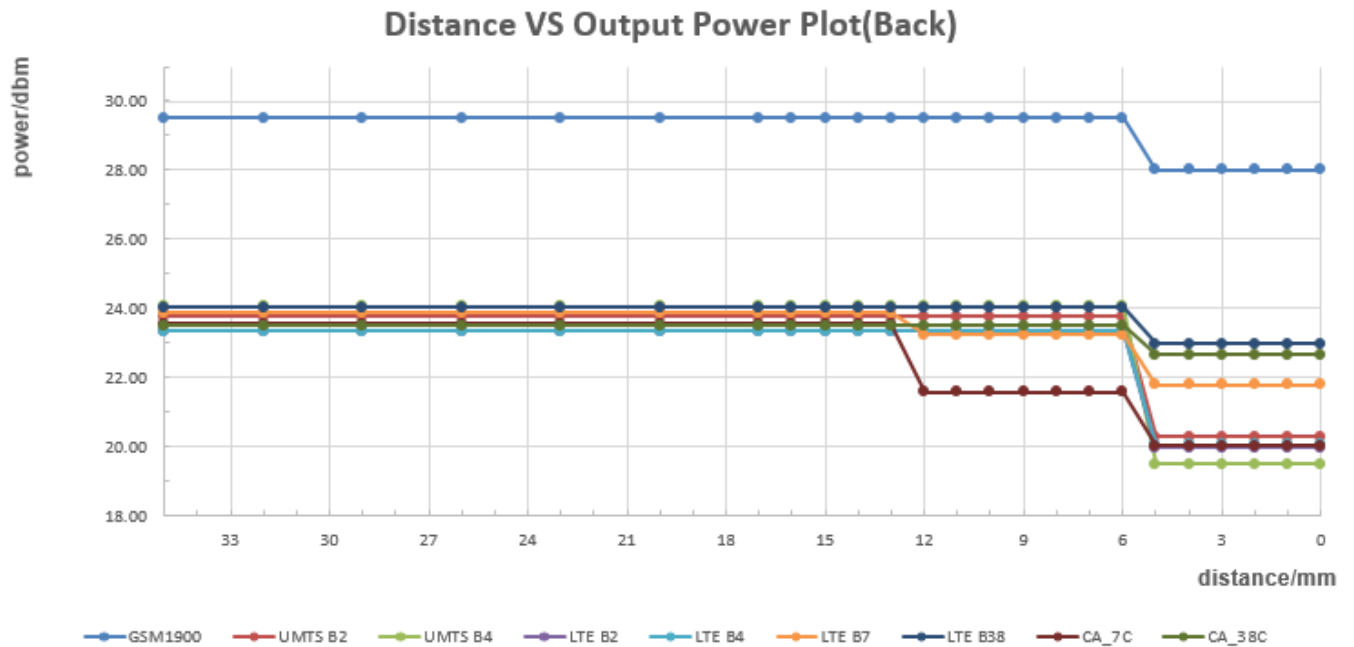


The detailed conducted power measurement data to determine the triggering distances is as below:

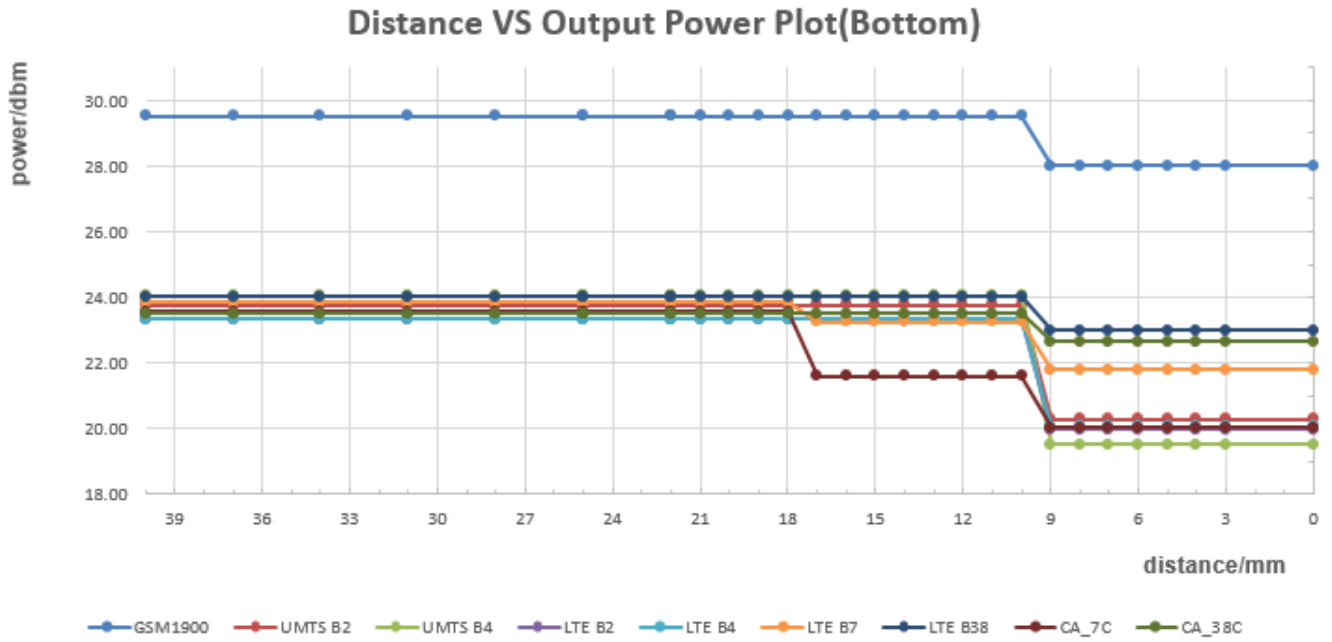
The DUT(Front side) is moved towards the flat phantom(Hotspot off):



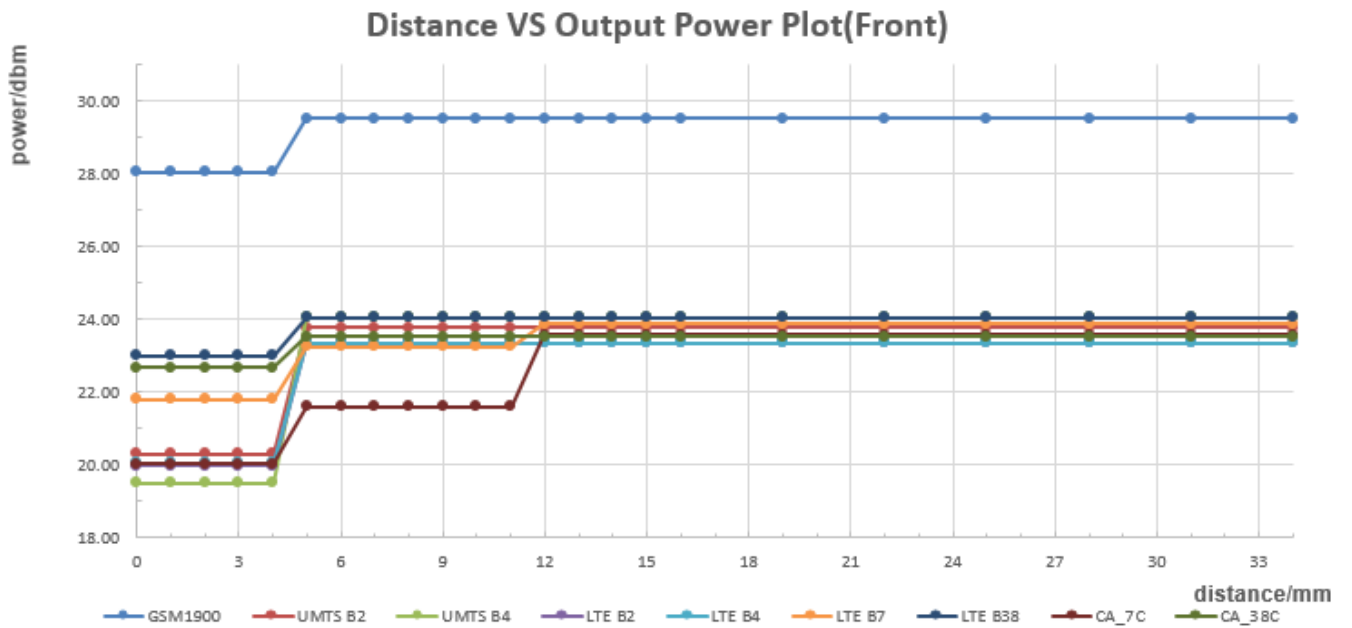
The DUT(Back side) is moved towards the flat phantom(Hotspot off):



The DUT(Bottom side) is moved towards the flat phantom(Hotspot off):

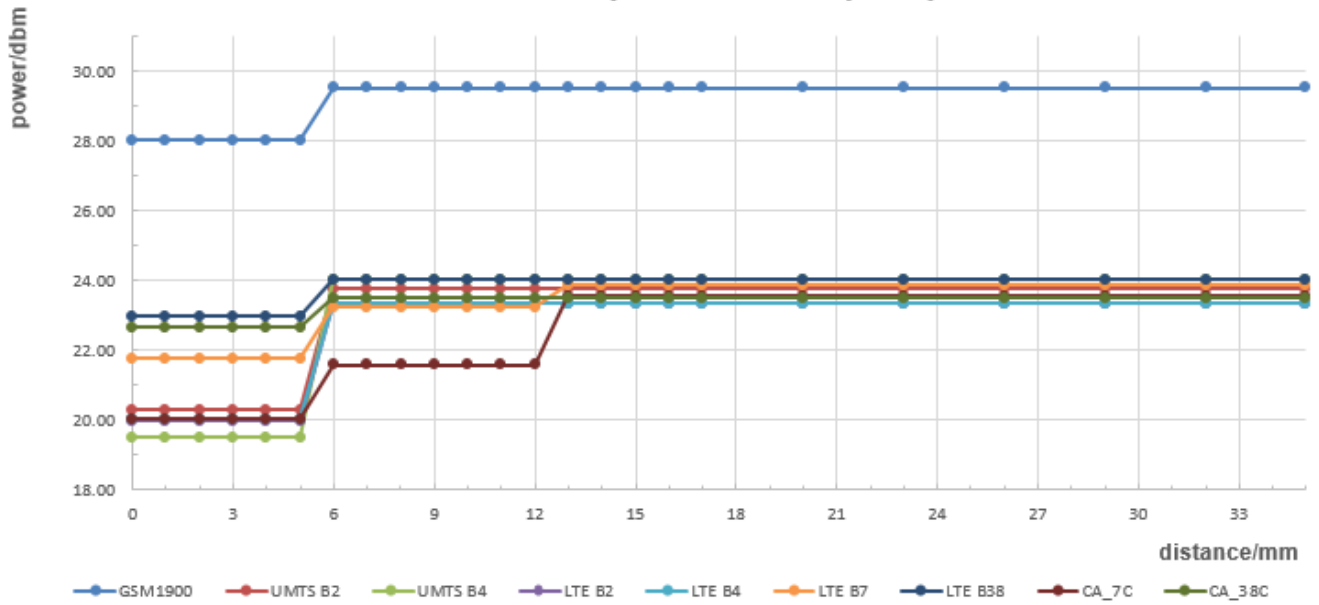


The DUT(Front side) is moved away from the flat phantom(Hotspot off):



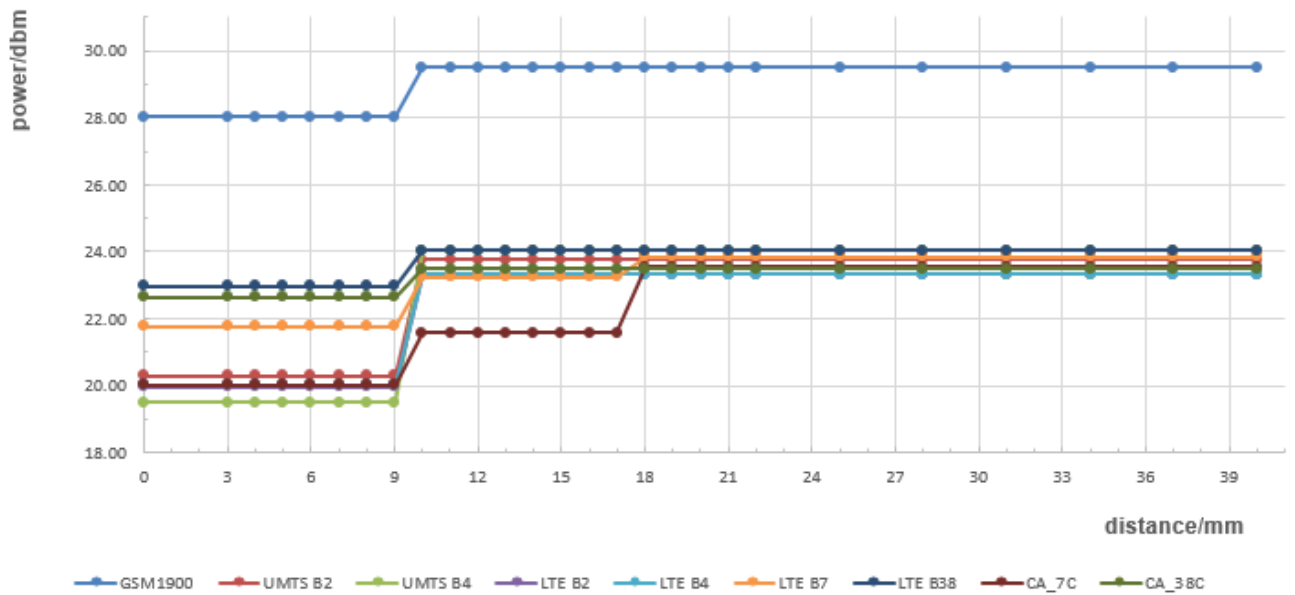
The DUT(Back side) is moved away from the flat phantom(Hotspot off):

**Distance VS Output Power Plot(Back)**



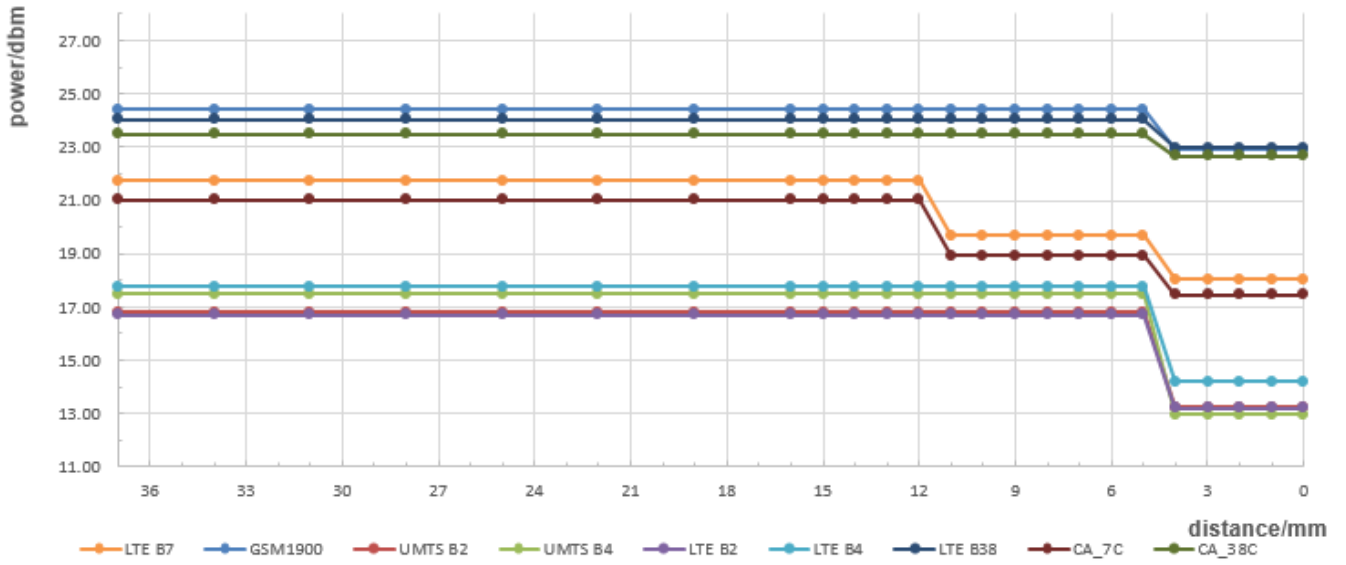
The DUT(Bottom side) is moved away from the flat phantom(Hotspot off):

**Distance VS Output Power Plot(Bottom)**



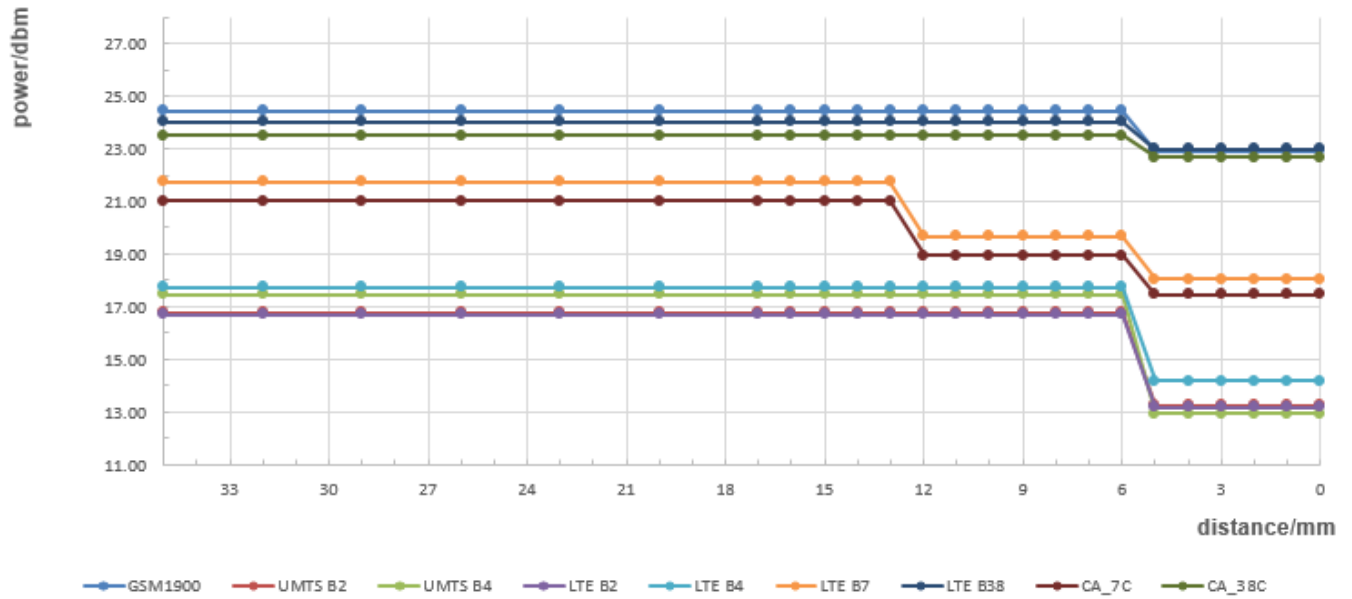
The DUT(Front side) is moved towards the flat phantom(Hotspot on):

Distance VS Output Power Plot(Front)

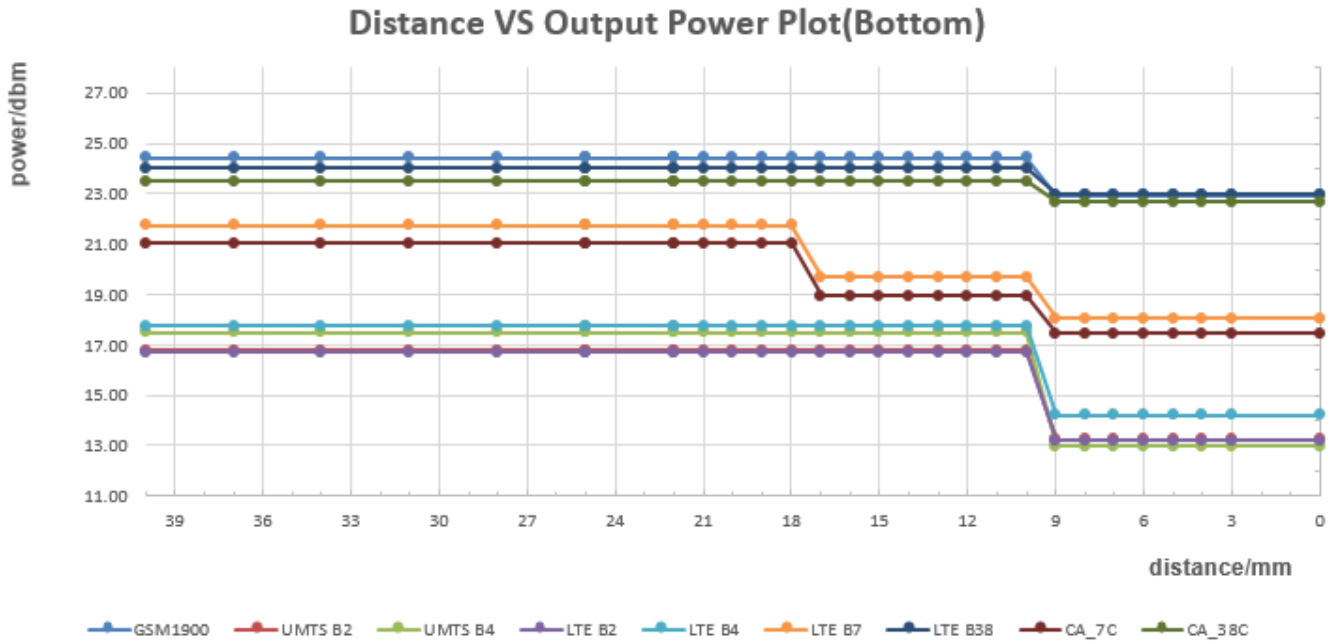


The DUT(Back side) is moved towards the flat phantom(Hotspot on):

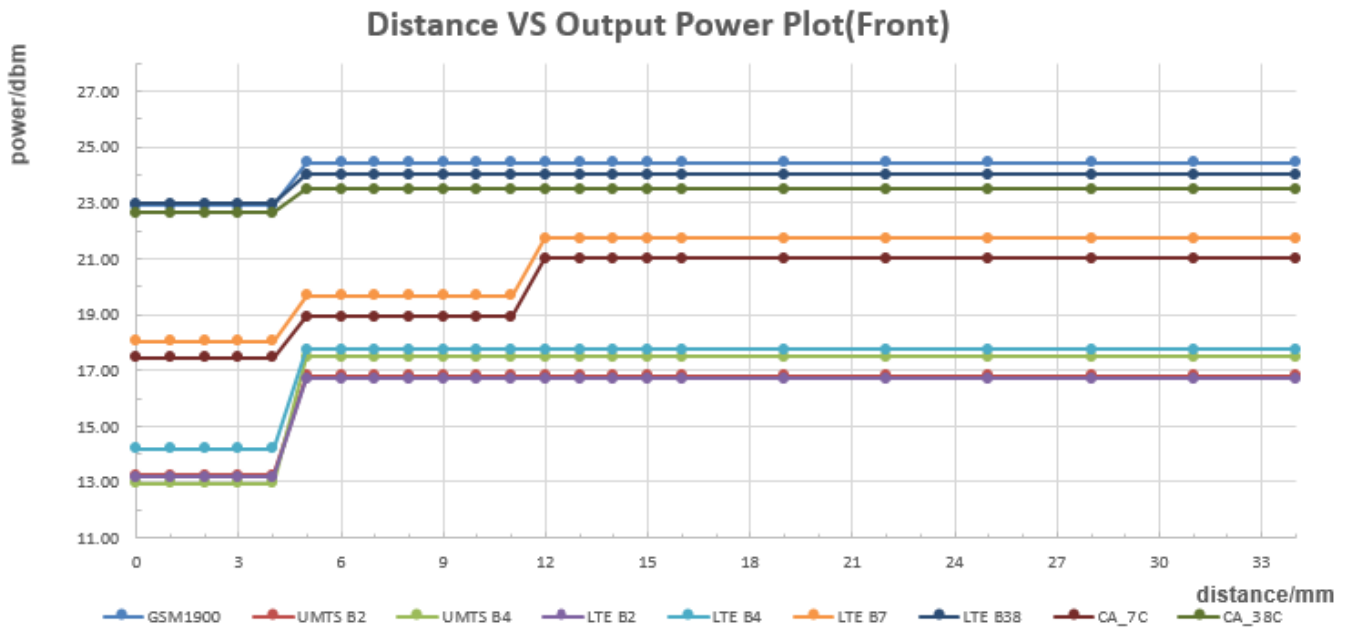
Distance VS Output Power Plot(Back)



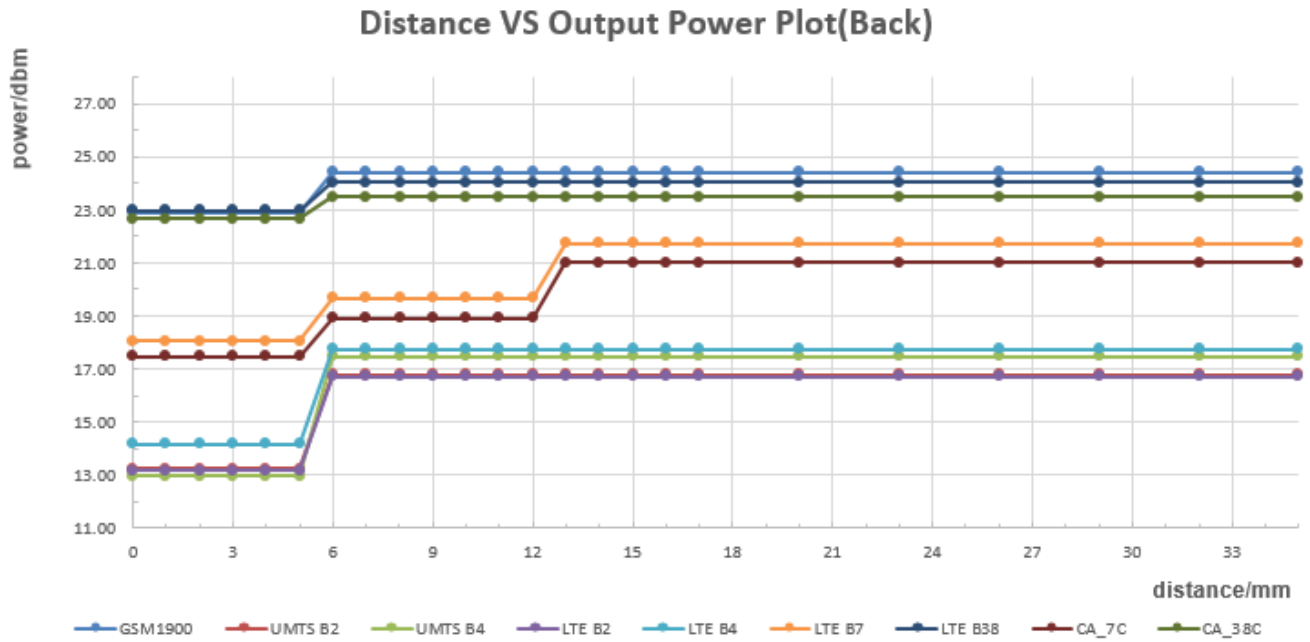
The DUT(Bottom side) is moved towards the flat phantom(Hotspot on):



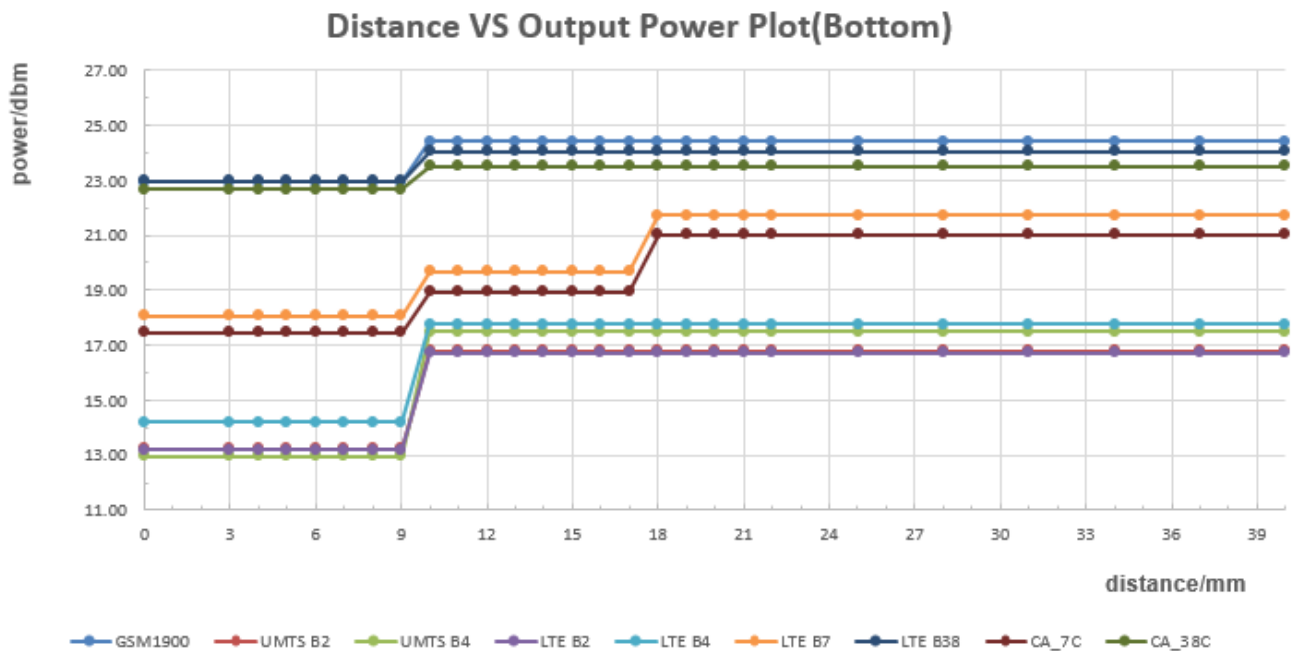
The DUT(Front side) is moved away from the flat phantom(Hotspot on):



The DUT(Back side) is moved away from the flat phantom(Hotspot on):



The DUT(Bottom side) is moved away from the flat phantom(Hotspot on):



**Conclusion:** It can be ensured that the proximity sensor can be valid triggered for the body exposure condition. (GSM 1900,UMTS Band II/IV,LTE Band 2/4/7/38, UL CA\_7C, UL CA\_38C with Main Antenna)

## 2) Procedures for determining antenna and proximity sensor coverage

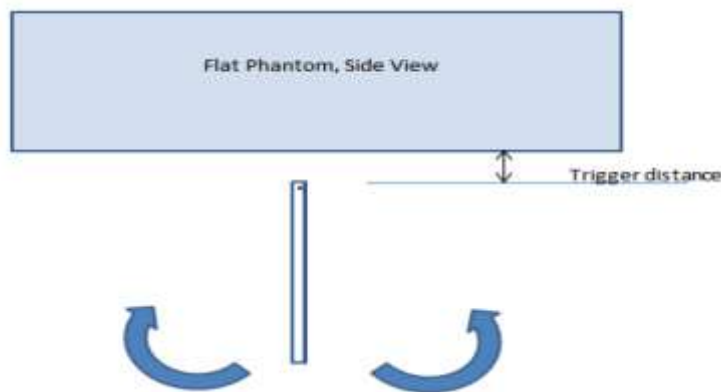
There is no spatial offset between the Main antenna and the proximity sensor element, so procedures for determining the proximity sensor coverage does not need to be assessed per KDB616217.

## 3) Procedures for determining device tilt angle influences to proximity sensor triggering

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom side parallel to the base of the flat phantom for each band.

The EUT was rotated about Bottom side for angles up to +/- 45°. If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated. This procedure was repeated until the power remained reduced for all angles up to +/- 45°.

The proximity sensor triggering tilt angle measurement method are as below:



**Table: Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering(Bottom side)**

Band(MHz)	Minimum trigger distance at which power reduction was maintained over $\pm 45^\circ$	Power Reduction Status											
		-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°	
GSM1900	9mm	on	on	on	on	on	on	on	on	on	on	on	on
UMTS Band II	9mm	on	on	on	on	on	on	on	on	on	on	on	on
UMTS Band IV	9mm	on	on	on	on	on	on	on	on	on	on	on	on
LTE Band 2	9mm	on	on	on	on	on	on	on	on	on	on	on	on
LTE Band 4	9mm	on	on	on	on	on	on	on	on	on	on	on	on
LTE Band 7	9mm/17mm	on	on	on	on	on	on	on	on	on	on	on	on
UL CA_7C	9mm/17mm	on	on	on	on	on	on	on	on	on	on	on	on
LTE Band 38	9mm	on	on	on	on	on	on	on	on	on	on	on	on
UL CA_38C	9mm	on	on	on	on	on	on	on	on	on	on	on	on

**Conclusion:** It can be ensured that the proximity sensor can be valid triggered for the DUT tilt coverage exposure condition (GSM 1900,UMTS Band II/IV,LTE Band 2/4/7/38, UL CA\_7C, UL CA\_38C with Main Antenna)

## 7 SAR Measurement Results

### 7.1 Conducted power measurements

For the measurements a Radio Communication Tester was used.

SAR drift measured at the same position in liquid before and after each SAR test as below 7.2 chapter.

Note: Radio Communication Tester measures GSM peak and average output power for active timeslots.

For SAR the timebased average power is relevant. The difference in between depends on the duty cycle of the TDMA signal :

No. of timeslots	1	2	3	4
Duty Cycle	1:8.3	1:4.1	1:2.77	1:2.08
timebased avg. power compared to slotted avg. power	-9.19dB	-6.13dB	-4.42dB	-3.18dB

The signalling modes differ as follows:

mode	coding scheme	modulation
GPRS	CS1 to CS4	GMSK
EDGE	MCS1 to MCS4	GMSK
EDGE	MCS5 to MCS9	8PSK

Apart from modulation change (GMSK/8PSK) coding schemes differ in code rate without influence on the RF signal. Therefore, one coding scheme per mode was selected for conducted power measurements.

A Radio Communication Tester was 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.

The Radio Communication Tester measures LTE TDD peak and average output power for active timeslots. LTE TDD peak and average output power for active timeslots. For SAR the time-based average power is relevant. The difference in between depends on the duty cycle of the TDMA signal:

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.

No. of Configuration	0	1	2	3	4	5	6
Duty Cycle	0.6333	0.4333	0.2333	0.3167	0.2167	0.1167	0.5333
Time-based avg. power compared to slotted avg. power	-1.98dB	-3.63dB	-6.32dB	-4.99dB	-6.64dB	-9.33 dB	-2.73dB

Note: According to duty cycle of configuration 0 to 6, Max output power should be Configuration 0, so we just tested the conduction power and SAR of configuration 0.



### 7.1.1 Conducted power measurements of GSM850 (Second Antenna)

GSM850		Tune-up	Burst-Averaged output Power (dBm)			Division Factors	Tune-up	Frame-Averaged output Power (dBm)		
		Max.	128CH	190CH	251CH		Max.	128CH	190CH	251CH
GSM (CS)		28.80	<b>27.42</b>	<b>27.54</b>	<b>27.57</b>	-9.19	19.61	18.23	18.35	18.38
GPRS/EDGE (GMSK)	1 Tx Slot	28.80	27.46	27.56	27.57	-9.19	19.61	18.27	18.37	18.38
	2 Tx Slots	26.80	25.22	<b>25.45</b>	25.46	-6.13	20.67	19.09	19.32	19.33
	3 Tx Slots	24.80	23.16	23.23	23.28	-4.42	20.38	18.74	18.81	18.86
	4 Tx Slots	22.80	21.13	21.19	21.18	-3.18	19.62	17.95	18.01	18.00
EDGE (8PSK)	1 Tx Slot	22.50	21.25	21.23	21.22	-9.19	13.31	12.06	12.04	12.03
	2 Tx Slots	20.50	18.98	19.16	19.10	-6.13	14.37	12.85	13.03	12.97
	3 Tx Slots	18.00	16.81	16.88	16.82	-4.42	13.58	12.39	12.46	12.40
	4 Tx Slots	16.00	15.08	15.19	15.17	-3.18	12.82	11.90	12.01	11.99

Table 15: Conducted power measurement results of GSM850

Note:

- 1) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 2) Per KDB941225 D01, 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.

### 7.1.2 Conducted power measurements of GSM850 (Main Antenna)

GSM850		Tune-up Max.	Burst-Averaged output Power (dBm)			Division Factors	Tune-up Max.	Frame-Averaged output Power (dBm)		
			128CH	190CH	251CH			128CH	190CH	251CH
GSM (CS)		33.80	<b>32.97</b>	<b>33.17</b>	<b>33.23</b>	-9.19	24.61	23.78	23.98	24.04
GPRS/EDGE (GMSK)	1 Tx Slot	33.80	32.91	33.16	33.26	-9.19	24.61	23.72	23.97	24.07
	2 Tx Slots	31.80	30.56	<b>30.70</b>	30.81	-6.13	25.67	24.43	24.57	24.68
	3 Tx Slots	29.80	28.30	28.41	28.41	-4.42	25.38	23.88	23.99	23.99
	4 Tx Slots	27.80	26.14	26.23	26.19	-3.18	24.62	22.96	23.05	23.01
EDGE (8PSK)	1 Tx Slot	27.50	26.65	26.73	26.68	-9.19	18.31	17.46	17.54	17.49
	2 Tx Slots	25.50	24.27	24.36	24.30	-6.13	19.37	18.14	18.23	18.17
	3 Tx Slots	23.00	21.72	21.79	21.74	-4.42	18.58	17.30	17.37	17.32
	4 Tx Slots	21.00	19.59	19.62	19.63	-3.18	17.82	16.41	16.44	16.45

Table 16: Conducted power measurement results of GSM850

Note:

- 1) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 2) Per KDB941225 D01, 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.

### 7.1.3 Conducted power measurements of GSM1900 (Second Antenna)

GSM1900		Tune-up	Burst-Averaged output Power (dBm)			Division Factors	Tune-up	Frame-Averaged output Power (dBm)		
		Max.	512CH	661CH	810CH		Max.	512CH	661CH	810CH
GSM (CS)		26.50	25.43	<b>25.30</b>	25.23	-9.19	17.31	16.24	16.11	16.04
GPRS/EDGE (GMSK)	1 Tx Slot	26.50	25.53	25.49	25.40	-9.19	17.31	16.34	16.30	16.21
	2 Tx Slots	24.50	23.38	<b>23.32</b>	23.22	-6.13	18.37	17.25	17.19	17.09
	3 Tx Slots	22.50	21.29	21.22	21.07	-4.42	18.08	16.87	16.80	16.65
	4 Tx Slots	20.50	19.21	19.14	18.99	-3.18	17.32	16.03	15.96	15.81
EDGE (8PSK)	1 Tx Slot	22.50	21.38	21.30	21.16	-9.19	13.31	12.19	12.11	11.97
	2 Tx Slots	20.50	19.17	19.03	18.87	-6.13	14.37	13.04	12.90	12.74
	3 Tx Slots	18.50	16.93	16.78	16.61	-4.42	14.08	12.51	12.36	12.19
	4 Tx Slots	16.00	14.55	14.30	14.28	-3.18	12.82	11.37	11.12	11.10

Table 17: Conducted power measurement results of GSM1900(Full Power)

GSM1900		Tune-up	Burst-Averaged output Power (dBm)			Division Factors	Tune-up	Frame-Averaged output Power (dBm)		
		Max.	512CH	661CH	810CH		Max.	512CH	661CH	810CH
GSM (CS)		25.50	<b>24.41</b>	<b>24.26</b>	<b>24.19</b>	-9.19	16.31	15.22	15.07	15.00
GPRS/EDGE (GMSK)	1 Tx Slot	25.50	24.53	24.46	24.33	-9.19	16.31	15.34	15.27	15.14
	2 Tx Slots	23.50	22.34	22.26	22.14	-6.13	17.37	16.21	16.13	16.01
	3 Tx Slots	21.50	20.37	20.28	20.15	-4.42	17.08	15.95	15.86	15.73
	4 Tx Slots	19.50	18.22	18.14	17.99	-3.18	16.32	15.04	14.96	14.81
EDGE (8PSK)	1 Tx Slot	21.50	20.43	20.35	20.19	-9.19	12.31	11.24	11.16	11.00
	2 Tx Slots	19.50	18.19	18.07	17.89	-6.13	13.37	12.06	11.94	11.76
	3 Tx Slots	17.50	15.86	15.79	15.61	-4.42	13.08	11.44	11.37	11.19
	4 Tx Slots	15.00	13.51	13.40	13.21	-3.18	11.82	10.33	10.22	10.03

Table 18: Conducted power measurement results of GSM1900(Receiver ON)

Note:

- 1) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 2) Per KDB941225 D01, 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.

### 7.1.4 Conducted power measurements of GSM1900 (Main Antenna)

GSM1900		Tune-up	Burst-Averaged output Power (dBm)			Division Factors	Tune-up	Frame-Averaged output Power (dBm)		
		Max.	512CH	661CH	810CH		Max.	512CH	661CH	810CH
GSM (CS)		30.50	<b>29.43</b>	<b>29.51</b>	<b>29.56</b>	-9.19	21.31	20.24	20.32	20.37
GPRS/EDGE (GMSK)	1 Tx Slot	30.50	29.41	29.51	29.57	-9.19	21.31	20.22	20.32	20.38
	2 Tx Slots	28.50	27.07	27.32	27.44	-6.13	22.37	20.94	21.19	21.31
	3 Tx Slots	26.50	24.94	25.11	25.22	-4.42	22.08	20.52	20.69	20.80
	4 Tx Slots	24.50	22.78	22.96	23.09	-3.18	21.32	19.60	19.78	19.91
EDGE (8PSK)	1 Tx Slot	26.50	25.42	25.56	25.70	-9.19	17.31	16.23	16.37	16.51
	2 Tx Slots	24.50	22.69	22.80	22.88	-6.13	18.37	16.56	16.67	16.75
	3 Tx Slots	22.50	20.47	20.66	20.75	-4.42	18.08	16.05	16.24	16.33
	4 Tx Slots	20.50	19.25	19.35	19.52	-3.18	17.32	16.07	16.17	16.34

Table 19: Conducted power measurement results of GSM1900(Full Power)

GSM1900		Tune-up	Burst-Averaged output Power (dBm)			Division Factors	Tune-up	Frame-Averaged output Power (dBm)		
		Max.	512CH	661CH	810CH		Max.	512CH	661CH	810CH
GSM (CS)		29.00	27.88	28.02	28.14	-9.19	19.81	18.69	18.83	18.95
GPRS/EDGE (GMSK)	1 Tx Slot	29.00	27.85	28.03	28.16	-9.19	19.81	18.66	18.84	18.97
	2 Tx Slots	27.00	<b>25.56</b>	<b>25.74</b>	<b>25.90</b>	-6.13	20.87	19.43	19.61	19.77
	3 Tx Slots	25.00	23.49	23.65	23.78	-4.42	20.58	19.07	19.23	19.36
	4 Tx Slots	23.00	21.34	21.53	21.66	-3.18	19.82	18.16	18.35	18.48
EDGE (8PSK)	1 Tx Slot	25.00	23.32	23.48	23.61	-9.19	15.81	14.13	14.29	14.42
	2 Tx Slots	23.00	21.17	21.27	21.37	-6.13	16.87	15.04	15.14	15.24
	3 Tx Slots	21.00	18.88	19.05	19.15	-4.42	16.58	14.46	14.63	14.73
	4 Tx Slots	19.00	17.62	17.76	17.87	-3.18	15.82	14.44	14.58	14.69

Table 20: Conducted power measurement results of GSM1900(Reduced Power Level D2)

GSM1900		Tune-up	Burst-Averaged output Power (dBm)			Division Factors	Tune-up	Frame-Averaged output Power (dBm)		
		Max.	512CH	661CH	810CH		Max.	512CH	661CH	810CH
GSM (CS)		25.50	24.21	24.43	24.63	-9.19	16.31	15.02	15.24	15.44
GPRS/EDGE (GMSK)	1 Tx Slot	25.50	24.24	24.52	24.55	-9.19	16.31	15.05	15.33	15.36
	2 Tx Slots	23.50	22.17	<b>22.34</b>	22.45	-6.13	17.37	16.04	16.21	16.32
	3 Tx Slots	21.50	20.09	20.27	20.42	-4.42	17.08	15.67	15.85	16.00
	4 Tx Slots	19.50	17.93	18.12	18.28	-3.18	16.32	14.75	14.94	15.10
EDGE (8PSK)	1 Tx Slot	21.50	19.95	20.10	20.23	-9.19	12.31	10.76	10.91	11.04
	2 Tx Slots	19.50	17.74	17.92	18.03	-6.13	13.37	11.61	11.79	11.90
	3 Tx Slots	17.50	15.49	15.57	15.76	-4.42	13.08	11.07	11.15	11.34
	4 Tx Slots	15.50	14.20	14.27	14.37	-3.18	12.32	11.02	11.09	11.19

Table 21: Conducted power measurement results of GSM1900(Reduced Power D4/D5)

GSM1900		Tune-up	Burst-Averaged output Power (dBm)			Division Factors	Tune-up	Frame-Averaged output Power (dBm)		
		Max.	512CH	661CH	810CH		Max.	512CH	661CH	810CH
GSM (CS)		24.00	22.71	22.92	23.09	-9.19	14.81	13.52	13.73	13.90
GPRS/EDGE (GMSK)	1 Tx Slot	24.00	22.74	22.92	23.06	-9.19	14.81	13.55	13.73	13.87
	2 Tx Slots	22.00	20.70	20.88	21.03	-6.13	15.87	14.57	14.75	14.90
	3 Tx Slots	20.00	18.58	18.78	18.95	-4.42	15.58	14.16	14.36	14.53
	4 Tx Slots	18.00	16.53	16.72	16.88	-3.18	14.82	13.35	13.54	13.70
EDGE (8PSK)	1 Tx Slot	20.00	18.51	18.65	18.79	-9.19	10.81	9.32	9.46	9.60
	2 Tx Slots	18.00	16.24	16.34	16.55	-6.13	11.87	10.11	10.21	10.42
	3 Tx Slots	16.00	13.92	14.01	14.16	-4.42	11.58	9.50	9.59	9.74
	4 Tx Slots	14.00	12.37	12.47	12.65	-3.18	10.82	9.19	9.29	9.47

Table 22: Conducted power measurement results of GSM1900(Reduced Power Level D6)

Note:

- 1) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
- 2) Per KDB941225 D01, 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.

### 7.1.5 Conducted power measurements of UMTS Band II (Second Antenna)

UMTS Band 2		Tune-up	Average Power (dBm)		
		Max.	9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	22.00	20.74	<b>20.71</b>	20.83
	12.2kbps AMR	22.00	20.80	20.78	20.87
HSDPA	Subtest 1	21.50	20.24	20.22	20.31
	Subtest 2	20.70	19.47	19.45	19.55
	Subtest 3	21.50	18.96	18.98	19.06
	Subtest 4	20.00	18.95	18.96	19.06
HSUPA	Subtest 1	20.50	18.68	18.98	19.28
	Subtest 2	17.50	16.42	16.64	16.57
	Subtest 3	18.50	17.23	17.34	17.31
	Subtest 4	17.50	16.33	16.69	16.56
	Subtest 5	20.00	18.76	18.76	18.84
DC-HSDPA	Subtest 1	21.50	20.15	20.26	20.11
	Subtest 2	20.70	19.35	19.57	19.51
	Subtest 3	21.50	19.05	18.88	18.92
	Subtest 4	20.00	19.12	18.86	19.09

Table 23: Conducted power measurement results of UMTS Band II (Full Power)

UMTS Band 2		Tune-up	Average Power (dBm)		
		Max.	9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	15.00	<b>13.72</b>	<b>13.70</b>	<b>13.82</b>
	12.2kbps AMR	15.00	13.74	13.72	13.83
HSDPA	Subtest 1	14.50	13.18	13.19	13.28
	Subtest 2	13.70	12.45	12.43	12.52
	Subtest 3	14.50	11.95	11.91	12.04
	Subtest 4	13.00	11.94	11.93	12.00
HSUPA	Subtest 1	14.00	13.24	12.88	12.85
	Subtest 2	10.50	10.43	8.83	8.83
	Subtest 3	11.50	11.17	9.55	9.46
	Subtest 4	10.50	10.17	9.27	9.43
	Subtest 5	14.50	13.72	13.72	13.81
DC-HSDPA	Subtest 1	14.50	13.04	13.18	13.37
	Subtest 2	13.70	12.54	12.34	12.34
	Subtest 3	14.50	12.08	12.10	12.17
	Subtest 4	13.00	11.76	11.95	11.84

Table 24: Conducted power measurement results of UMTS Band II (Receiver ON)

UMTS Band 2		Tune-up	Average Power (dBm)		
		Max.	9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	13.00	11.74	11.71	11.78
	12.2kbps AMR	13.00	11.71	11.72	11.81
HSDPA	Subtest 1	12.50	11.21	10.79	11.03
	Subtest 2	11.70	10.46	10.44	10.52
	Subtest 3	12.50	9.95	9.91	10.01
	Subtest 4	11.00	9.95	9.92	10.00
HSUPA	Subtest 1	12.00	11.23	11.25	10.95
	Subtest 2	8.50	8.44	6.61	6.80
	Subtest 3	9.50	9.18	7.36	7.47
	Subtest 4	8.50	8.08	6.99	7.19
	Subtest 5	12.00	11.73	11.71	11.81
DC-HSDPA	Subtest 1	12.50	11.11	10.91	10.92
	Subtest 2	11.70	10.43	10.48	10.46
	Subtest 3	12.50	9.90	9.89	10.10
	Subtest 4	11.00	9.83	9.91	10.09

Table 25: Conducted power measurement results of UMTS Band II (Second Antenna+WiFi Antenna, Receiver ON)

UMTS Band 2		Tune-up	Average Power (dBm)		
		Max.	9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	20.00	18.74	<b>18.73</b>	18.81
	12.2kbps AMR	20.00	18.77	18.75	18.82
HSDPA	Subtest 1	19.50	18.22	18.22	18.32
	Subtest 2	18.70	17.45	17.43	17.51
	Subtest 3	19.50	16.94	16.94	17.01
	Subtest 4	18.00	16.92	16.92	17.03
HSUPA	Subtest 1	18.50	16.58	17.03	17.20
	Subtest 2	15.50	14.36	14.54	14.80
	Subtest 3	16.50	15.14	15.41	15.33
	Subtest 4	15.50	14.12	14.60	14.75
	Subtest 5	18.00	16.74	16.73	16.83
DC-HSDPA	Subtest 1	19.50	18.18	18.29	18.38
	Subtest 2	18.70	17.38	17.42	17.53
	Subtest 3	19.50	16.88	17.12	16.95
	Subtest 4	18.00	17.07	17.05	17.15

Table 26: Conducted power measurement results of UMTS Band II (Second Antenna+WiFi Antenna, Receiver OFF)

Note:

- 1) The bolded 12.2kbps RMC mode was selected for SAR testing (the primary mode).
- 2) Per KDB941225 D01, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

### 7.1.6 Conducted power measurements of UMTS Band II (Main Antenna)

UMTS Band 2		Tune-up	Average Power (dBm)		
		Max.	9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	25.00	<b>24.15</b>	<b>23.77</b>	<b>24.25</b>
	12.2kbps AMR	25.00	23.91	23.79	23.83
HSDPA	Subtest 1	24.50	23.34	23.29	23.39
	Subtest 2	23.70	22.56	22.52	22.62
	Subtest 3	24.50	22.05	22.02	22.10
	Subtest 4	23.00	22.07	22.02	22.10
HSUPA	Subtest 1	23.50	21.78	21.62	22.26
	Subtest 2	20.50	19.94	19.87	18.95
	Subtest 3	21.50	20.72	20.68	20.62
	Subtest 4	20.50	19.70	19.84	19.09
	Subtest 5	23.00	21.85	21.79	21.89
DC-HSDPA	Subtest 1	24.50	23.38	23.17	23.54
	Subtest 2	23.70	22.65	22.70	22.63
	Subtest 3	24.50	22.13	21.82	22.20
	Subtest 4	23.00	22.06	21.96	21.94

Table 27: Conducted power measurement results of UMTS Band II (Full Power)

UMTS Band 2		Tune-up	Average Power (dBm)		
		Max.	9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	21.50	<b>20.34</b>	<b>20.29</b>	<b>20.38</b>
	12.2kbps AMR	21.50	20.40	20.31	20.38
HSDPA	Subtest 1	21.00	19.83	19.81	19.86
	Subtest 2	20.20	19.05	19.01	19.08
	Subtest 3	21.00	18.58	18.51	18.59
	Subtest 4	19.50	18.56	18.51	18.56
HSUPA	Subtest 1	20.00	18.66	18.69	18.80
	Subtest 2	17.00	16.05	16.32	16.28
	Subtest 3	18.00	16.75	17.00	16.95
	Subtest 4	17.00	15.92	16.17	16.35
	Subtest 5	19.50	18.38	18.30	18.36
DC-HSDPA	Subtest 1	21.00	19.82	19.71	19.93
	Subtest 2	20.20	19.13	18.89	18.93
	Subtest 3	21.00	18.44	18.48	18.64
	Subtest 4	19.50	18.67	18.36	18.62

Table 28: Conducted power measurement results of UMTS Band II (Reduced Power Level D2)



UMTS Band 2		Tune-up	Average Power (dBm)		
		Max.	9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	18.00	16.84	<b>16.79</b>	16.85
	12.2kbps AMR	18.00	16.83	16.80	16.85
HSDPA	Subtest 1	17.50	16.29	16.24	16.31
	Subtest 2	16.70	15.55	15.49	15.54
	Subtest 3	17.50	15.04	14.96	15.05
	Subtest 4	16.00	15.07	14.96	15.04
HSUPA	Subtest 1	16.50	15.10	15.22	15.28
	Subtest 2	13.50	12.09	12.75	12.88
	Subtest 3	14.50	13.86	13.47	13.53
	Subtest 4	13.50	12.84	12.68	12.91
	Subtest 5	16.00	14.84	14.79	14.84
DC-HSDPA	Subtest 1	17.50	16.20	16.16	16.12
	Subtest 2	16.70	15.53	15.40	15.54
	Subtest 3	17.50	15.15	14.80	15.20
	Subtest 4	16.00	14.92	14.83	14.97

Table 29: Conducted power measurement results of UMTS Band II (Reduced Power D4/D5)

UMTS Band 2		Tune-up	Average Power (dBm)		
		Max.	9262CH	9400CH	9538CH
WCDMA	12.2kbps RMC	14.50	13.33	13.24	13.29
	12.2kbps AMR	14.50	13.37	13.25	13.31
HSDPA	Subtest 1	14.00	12.80	12.71	12.79
	Subtest 2	13.20	12.03	11.96	12.03
	Subtest 3	14.00	11.54	11.46	11.52
	Subtest 4	12.50	11.55	11.45	11.50
HSUPA	Subtest 1	14.00	12.87	12.39	12.52
	Subtest 2	10.00	9.16	9.36	9.43
	Subtest 3	11.00	10.84	10.09	10.07
	Subtest 4	10.50	9.84	9.74	9.70
	Subtest 5	14.00	13.34	13.25	13.32
DC-HSDPA	Subtest 1	14.00	12.92	12.89	12.96
	Subtest 2	13.20	12.04	11.95	11.96
	Subtest 3	14.00	11.71	11.32	11.56
	Subtest 4	12.50	11.51	11.47	11.46

Table 30: Conducted power measurement results of UMTS Band II (Reduced Power Level D6)

Note:

- 1) The bolded 12.2kbps RMC mode was selected for SAR testing (the primary mode).
- 2) Per KDB941225 D01, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

### 7.1.7 Conducted power measurements of UMTS Band IV (Second Antenna)

UMTS Band 4		Tune-up	Average Power (dBm)		
		Max.	1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	22.50	21.27	<b>21.35</b>	21.24
	12.2kbps AMR	22.50	21.33	21.38	21.23
HSDPA	Subtest 1	22.00	20.77	20.83	20.72
	Subtest 2	21.20	19.97	20.02	19.93
	Subtest 3	22.00	19.47	19.52	19.43
	Subtest 4	20.50	19.48	19.55	19.42
HSUPA	Subtest 1	21.00	19.17	19.73	19.65
	Subtest 2	18.00	17.16	17.32	16.24
	Subtest 3	19.00	17.89	17.96	18.06
	Subtest 4	18.00	16.97	17.48	17.20
	Subtest 5	20.50	19.30	19.36	19.23
DC-HSDPA	Subtest 1	22.00	20.78	20.97	20.72
	Subtest 2	21.20	19.97	19.94	20.12
	Subtest 3	22.00	19.56	19.60	19.40
	Subtest 4	20.50	19.54	19.66	19.28

Table 31: Conducted power measurement results of UMTS Band IV (Full Power)

UMTS Band 4		Tune-up	Average Power (dBm)		
		Max.	1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	14.00	<b>12.74</b>	<b>12.80</b>	<b>12.66</b>
	12.2kbps AMR	14.00	12.76	12.82	12.67
HSDPA	Subtest 1	13.50	12.24	12.29	12.17
	Subtest 2	12.70	11.36	11.50	11.39
	Subtest 3	13.50	10.95	10.93	10.88
	Subtest 4	12.00	10.92	10.95	10.89
HSUPA	Subtest 1	13.00	11.81	11.94	11.41
	Subtest 2	9.50	8.95	7.49	9.05
	Subtest 3	11.50	11.35	9.02	11.40
	Subtest 4	10.00	9.46	7.86	9.52
	Subtest 5	13.00	12.75	12.81	12.67
DC-HSDPA	Subtest 1	13.50	12.30	12.17	12.22
	Subtest 2	12.70	11.46	11.35	11.21
	Subtest 3	13.50	10.95	11.06	10.77
	Subtest 4	12.00	10.87	10.79	10.96

Table 32: Conducted power measurement results of UMTS Band IV (Receiver ON)

UMTS Band 4		Tune-up	Average Power (dBm)		
		Max.	1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	21.50	20.25	20.38	20.22
	12.2kbps AMR	21.50	20.33	20.38	20.26
HSDPA	Subtest 1	21.00	19.78	19.86	19.65
	Subtest 2	20.20	18.96	19.04	18.92
	Subtest 3	21.00	18.43	18.51	18.40
	Subtest 4	19.50	18.46	18.52	18.44
HSUPA	Subtest 1	20.00	18.68	18.58	18.71
	Subtest 2	17.00	16.14	16.31	16.15
	Subtest 3	18.00	16.98	17.05	16.87
	Subtest 4	17.00	15.94	16.30	16.02
	Subtest 5	19.50	18.30	18.34	18.21
DC-HSDPA	Subtest 1	21.00	19.71	19.71	19.79
	Subtest 2	20.20	19.07	18.98	18.77
	Subtest 3	21.00	18.54	18.68	18.57
	Subtest 4	19.50	18.40	18.32	18.45

Table 33: Conducted power measurement results of UMTS Band IV (Second Antenna+WiFi Antenna, Receiver OFF)

UMTS Band 4		Tune-up	Average Power (dBm)		
		Max.	1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	13.00	11.74	11.79	11.70
	12.2kbps AMR	13.00	11.81	11.82	11.73
HSDPA	Subtest 1	12.50	11.24	11.04	11.39
	Subtest 2	11.70	10.45	10.51	10.39
	Subtest 3	12.50	9.91	9.92	9.88
	Subtest 4	11.00	9.93	9.98	9.92
HSUPA	Subtest 1	13.00	11.43	11.06	12.77
	Subtest 2	8.50	8.45	6.52	8.38
	Subtest 3	10.50	10.22	8.07	10.44
	Subtest 4	9.00	8.56	6.87	8.72
	Subtest 5	12.00	11.78	11.79	11.69
DC-HSDPA	Subtest 1	12.50	11.24	10.98	11.44
	Subtest 2	11.70	10.27	10.48	10.56
	Subtest 3	12.50	9.83	10.03	10.06
	Subtest 4	11.00	10.12	10.02	10.04

Table 34: Conducted power measurement results of UMTS Band IV (Second Antenna+WiFi Antenna, Receiver ON)

Note:

- 1) The bolded 12.2kbps RMC mode was selected for SAR testing (the primary mode).
- 2) Per KDB941225 D01, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

### 7.1.8 Conducted power measurements of UMTS Band IV (Main Antenna)

UMTS Band 4		Tune-up	Average Power (dBm)		
		Max.	1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	25.00	<b>23.90</b>	<b>24.04</b>	<b>23.87</b>
	12.2kbps AMR	25.00	24.01	24.08	23.91
HSDPA	Subtest 1	24.50	23.40	23.51	23.37
	Subtest 2	23.70	22.62	22.75	22.55
	Subtest 3	24.50	22.10	22.27	22.08
	Subtest 4	23.00	22.11	22.26	22.05
HSUPA	Subtest 1	23.50	22.19	22.34	22.18
	Subtest 2	20.50	19.29	19.17	19.93
	Subtest 3	21.50	21.01	20.92	20.69
	Subtest 4	20.50	20.04	20.20	20.01
	Subtest 5	23.00	21.93	22.04	21.86
DC-HSDPA	Subtest 1	24.50	23.44	23.51	23.34
	Subtest 2	23.70	22.65	22.61	22.68
	Subtest 3	24.50	22.00	22.27	22.21
	Subtest 4	23.00	22.23	22.33	22.11

Table 35: Conducted power measurement results of UMTS Band IV (Full Power)

UMTS Band 4		Tune-up	Average Power (dBm)		
		Max.	1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	20.50	<b>19.45</b>	<b>19.80</b>	<b>19.45</b>
	12.2kbps AMR	20.50	19.49	19.59	19.36
HSDPA	Subtest 1	20.00	18.94	19.04	18.97
	Subtest 2	19.20	18.09	18.21	18.12
	Subtest 3	20.00	17.58	17.67	17.61
	Subtest 4	18.50	17.60	17.65	17.64
HSUPA	Subtest 1	19.00	17.33	17.99	17.85
	Subtest 2	16.00	15.10	15.52	15.38
	Subtest 3	17.00	15.95	16.08	16.09
	Subtest 4	16.00	14.92	15.44	15.35
	Subtest 5	18.50	17.44	17.51	17.43
DC-HSDPA	Subtest 1	20.00	18.81	18.85	18.99
	Subtest 2	19.20	17.95	18.10	18.02
	Subtest 3	20.00	17.53	17.73	17.41
	Subtest 4	18.50	17.75	17.80	17.65

Table 36: Conducted power measurement results of UMTS Band IV (Reduced Power Level D2)

UMTS Band 4		Tune-up	Average Power (dBm)		
		Max.	1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	18.50	17.42	<b>17.48</b>	17.45
	12.2kbps AMR	18.50	17.45	17.50	17.44
HSDPA	Subtest 1	18.00	16.91	16.95	16.90
	Subtest 2	17.20	16.09	16.16	16.13
	Subtest 3	18.00	15.59	15.66	15.61
	Subtest 4	16.50	15.60	15.68	15.64
HSUPA	Subtest 1	17.00	15.20	15.63	15.83
	Subtest 2	14.00	13.09	13.45	12.57
	Subtest 3	15.00	13.90	14.14	13.99
	Subtest 4	14.00	12.87	13.44	13.38
DC-HSDPA	Subtest 1	18.00	16.93	16.96	16.84
	Subtest 2	17.20	15.90	16.22	16.02
	Subtest 3	18.00	15.44	15.77	15.72
	Subtest 4	16.50	15.60	15.59	15.64

Table 37: Conducted power measurement results of UMTS Band IV (Reduced Power Level D4/D5)

UMTS Band 4		Tune-up	Average Power (dBm)		
		Max.	1312CH	1413CH	1513CH
WCDMA	12.2kbps RMC	14.00	12.93	12.96	12.91
	12.2kbps AMR	14.00	12.91	13.04	12.93
HSDPA	Subtest 1	13.50	12.41	12.45	12.39
	Subtest 2	12.70	11.57	11.67	11.62
	Subtest 3	13.50	11.05	11.08	11.11
	Subtest 4	12.00	11.09	11.13	11.09
HSUPA	Subtest 1	14.50	12.00	12.23	12.07
	Subtest 2	9.50	8.89	8.88	8.42
	Subtest 3	10.50	9.96	9.54	9.22
	Subtest 4	9.50	8.65	9.13	8.80
DC-HSDPA	Subtest 1	13.50	12.50	12.52	12.26
	Subtest 2	12.70	11.65	11.60	11.51
	Subtest 3	13.50	11.03	11.10	11.26
	Subtest 4	12.00	11.22	11.05	11.16

Table 38: Conducted power measurement results of UMTS Band IV (Reduced Power Level D6)

Note:

- 1) The bolded 12.2kbps RMC mode was selected for SAR testing (the primary mode).
- 2) Per KDB941225 D01, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

### 7.1.9 Conducted power measurements of UMTS Band V (Second Antenna)

UMTS Band 5		Tune-up	Average Power (dBm)		
		Max.	4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	25.00	23.58	<b>23.55</b>	23.54
	12.2kbps AMR	25.00	23.59	23.55	23.54
HSDPA	Subtest 1	24.50	23.03	23.03	23.02
	Subtest 2	23.70	22.56	22.53	22.54
	Subtest 3	24.50	22.17	22.11	22.17
	Subtest 4	23.00	22.13	22.12	22.15
HSUPA	Subtest 1	23.50	22.83	22.30	22.27
	Subtest 2	20.50	20.19	19.39	19.48
	Subtest 3	21.50	20.85	21.11	21.05
	Subtest 4	20.50	20.04	19.73	19.76
	Subtest 5	23.00	21.57	21.50	21.49
DC-HSDPA	Subtest 1	24.50	23.02	23.15	23.07
	Subtest 2	23.70	22.71	22.40	22.43
	Subtest 3	24.50	22.24	22.19	22.00
	Subtest 4	23.00	22.03	22.10	22.28

Table 39: Conducted power measurement results of UMTS Band V (Full Power)

UMTS Band 5		Tune-up	Average Power (dBm)		
		Max.	4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	20.50	<b>19.02</b>	<b>18.99</b>	<b>18.98</b>
	12.2kbps AMR	20.50	19.02	18.99	18.97
HSDPA	Subtest 1	20.00	18.54	18.50	18.49
	Subtest 2	19.20	18.04	18.01	18.00
	Subtest 3	20.00	17.63	17.59	17.57
	Subtest 4	18.50	17.64	17.61	17.60
HSUPA	Subtest 1	19.00	18.06	17.81	17.66
	Subtest 2	15.50	15.27	14.89	14.93
	Subtest 3	17.00	16.93	16.42	16.47
	Subtest 4	16.50	16.05	14.25	15.09
	Subtest 5	18.50	17.04	16.98	16.97
DC-HSDPA	Subtest 1	20.00	18.57	18.43	18.52
	Subtest 2	19.20	17.89	18.08	18.02
	Subtest 3	20.00	17.67	17.52	17.46
	Subtest 4	18.50	17.59	17.76	17.56

Table 40: Conducted power measurement results of UMTS Band V (Receiver ON)

Note:

- 1) The bolded 12.2kbps RMC mode was selected for SAR testing (the primary mode).
- 2) Per KDB941225 D01, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

### 7.1.10 Conducted power measurements of UMTS Band V (Main Antenna)

UMTS Band 5		Tune-up	Average Power (dBm)		
		Max.	4132CH	4182CH	4233CH
WCDMA	12.2kbps RMC	25.00	<b>24.47</b>	<b>24.55</b>	<b>24.42</b>
	12.2kbps AMR	25.00	24.05	24.00	23.94
HSDPA	Subtest 1	24.50	23.53	23.44	23.46
	Subtest 2	23.70	23.02	22.97	22.97
	Subtest 3	24.50	22.60	22.57	22.56
	Subtest 4	23.00	22.62	22.56	22.57
HSUPA	Subtest 1	23.50	23.22	22.74	22.53
	Subtest 2	20.50	20.46	19.83	19.84
	Subtest 3	21.50	21.35	20.45	21.43
	Subtest 4	20.50	20.02	20.17	20.01
	Subtest 5	23.00	22.01	21.95	21.93
DC-HSDPA	Subtest 1	24.50	23.58	23.37	23.46
	Subtest 2	23.70	23.02	23.15	22.78
	Subtest 3	24.50	22.65	22.77	22.41
	Subtest 4	23.00	22.56	22.43	22.46

Table 41: Conducted power measurement results of UMTS Band V

Note:

- 1) The bolded 12.2kbps RMC mode was selected for SAR testing (the primary mode).
- 2) Per KDB941225 D01, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest *reported* SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

### 7.1.11 Conducted power measurements of LTE Band 2 (Second Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	18607CH	18900CH	19193CH	
1.4MHz	QPSK	1	0	19.50	18.22	17.94	18.24	
		1	3	19.50	17.71	17.93	18.28	
		1	5	19.50	18.20	18.02	18.29	
		3	0	19.50	18.12	17.87	18.21	
		3	2	19.50	18.10	17.91	18.20	
		3	3	19.50	18.10	17.95	18.19	
		6	0	19.50	18.09	17.89	18.24	
	16QAM	1	0	19.50	18.31	17.99	18.30	
		1	3	19.50	18.21	18.07	18.35	
		1	5	19.50	18.21	18.05	18.34	
		3	0	19.50	18.07	18.01	18.22	
		3	2	19.50	18.14	17.93	18.32	
		3	3	19.50	18.17	17.91	18.09	
		6	0	19.50	18.15	17.94	18.15	
	64QAM	1	0	19.50	18.19	17.99	18.25	
		1	3	19.50	18.20	18.25	18.24	
		1	5	19.50	18.18	17.92	18.39	
		3	0	19.50	18.06	17.92	18.16	
		3	2	19.50	18.05	17.93	18.20	
		3	3	19.50	18.05	17.90	18.11	
		6	0	19.50	18.05	17.99	18.22	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
	3MHz	QPSK	1	0	19.50	18.17	17.97	18.06
			1	7	19.50	18.18	17.96	18.04
1			14	19.50	18.22	17.98	18.07	
8			0	19.50	18.16	18.06	18.12	
8			4	19.50	18.13	17.94	18.07	
8			7	19.50	18.16	17.93	18.05	
15			0	19.50	18.23	17.97	18.10	
16QAM		1	0	19.50	18.35	18.24	18.29	
		1	7	19.50	18.34	18.25	18.34	
		1	14	19.50	18.36	18.11	18.18	
		8	0	19.50	18.15	17.89	18.03	
		8	4	19.50	18.15	17.93	18.03	
		8	7	19.50	18.15	17.96	18.02	
		15	0	19.50	18.19	17.88	18.09	
64QAM		1	0	19.50	18.34	18.00	18.18	
		1	7	19.50	18.27	18.26	18.05	
		1	14	19.50	18.31	17.98	18.13	
		8	0	19.50	18.16	17.95	18.12	
		8	4	19.50	18.16	17.98	18.12	
		8	7	19.50	18.20	17.96	18.10	
		15	0	19.50	18.19	17.95	18.17	
Bandwidth		Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					Max.	18615CH	18900CH	19185CH



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18625CH	18900CH	19175CH
5MHz	QPSK	1	0	19.50	18.24	18.05	18.28
		1	13	19.50	18.24	18.05	18.27
		1	24	19.50	18.20	18.00	18.29
		12	0	19.50	18.27	18.03	18.12
		12	6	19.50	18.28	18.15	18.16
		12	13	19.50	18.28	18.06	18.10
		25	0	19.50	18.26	18.04	18.15
	16QAM	1	0	19.50	18.47	18.25	18.50
		1	13	19.50	18.49	18.30	18.47
		1	24	19.50	18.39	18.22	18.38
		12	0	19.50	18.16	18.04	18.12
		12	6	19.50	18.20	18.05	18.13
		12	13	19.50	18.18	18.09	18.18
		25	0	19.50	18.19	18.03	18.09
	64QAM	1	0	19.50	18.31	18.12	18.32
		1	13	19.50	18.33	18.19	18.27
		1	24	19.50	18.33	18.08	18.35
		12	0	19.50	18.23	18.03	18.12
		12	6	19.50	18.23	18.04	18.15
		12	13	19.50	18.25	18.03	18.11
		25	0	19.50	18.21	17.94	18.10
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	19.50	18.23	18.10	18.69
		1	25	19.50	18.24	18.13	18.81
		1	49	19.50	18.26	18.13	18.81
		25	0	19.50	18.30	18.03	18.35
		25	13	19.50	18.31	18.05	18.28
		25	25	19.50	18.30	18.03	18.34
		50	0	19.50	18.37	18.02	18.13
	16QAM	1	0	19.50	18.31	18.24	19.18
		1	25	19.50	18.25	18.17	19.07
		1	49	19.50	18.32	18.15	19.04
		25	0	19.50	18.23	17.97	18.28
		25	13	19.50	18.22	17.97	18.22
		25	25	19.50	18.25	17.94	18.24
		50	0	19.50	18.35	17.95	18.13
	64QAM	1	0	19.50	18.27	18.24	19.13
		1	25	19.50	18.33	18.39	18.95
		1	49	19.50	18.28	18.30	18.97
		25	0	19.50	18.26	18.00	18.30
		25	13	19.50	18.29	18.01	18.18
		25	25	19.50	18.25	18.02	18.29
		50	0	19.50	18.38	18.06	18.14
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18650CH	18900CH	19150CH

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18675CH	18900CH	19125CH
15MHz	QPSK	1	0	19.50	18.27	18.32	18.49
		1	38	19.50	18.22	18.32	18.47
		1	74	19.50	18.26	18.30	18.47
		36	0	19.50	18.35	18.08	18.11
		36	18	19.50	18.37	18.09	18.25
		36	39	19.50	18.36	18.15	18.25
		75	0	19.50	18.54	18.14	18.51
	16QAM	1	0	19.50	18.28	18.35	18.84
		1	38	19.50	18.33	18.47	18.80
		1	74	19.50	18.43	18.45	18.72
		36	0	19.50	18.31	18.04	18.16
		36	18	19.50	18.31	18.09	18.17
		36	39	19.50	18.29	18.04	18.16
		75	0	19.50	18.63	18.08	17.97
	64QAM	1	0	19.50	18.25	18.39	18.25
		1	38	19.50	18.36	18.47	18.30
		1	74	19.50	18.24	18.41	18.75
		36	0	19.50	18.33	18.07	18.20
		36	18	19.50	18.32	18.07	18.19
		36	39	19.50	18.34	18.08	18.08
		75	0	19.50	18.66	18.03	18.32
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18700CH	18900CH	19100CH
20MHz	QPSK	1	0	19.50	18.44	18.38	<b>18.60</b>
		1	50	19.50	18.44	18.39	18.58
		1	99	19.50	18.45	18.33	18.56
		50	0	19.50	18.45	18.15	<b>18.57</b>
		50	25	19.50	18.55	18.15	18.28
		50	50	19.50	18.56	18.15	18.27
		100	0	19.50	18.64	18.15	17.70
	16QAM	1	0	19.50	18.65	18.59	18.39
		1	50	19.50	18.66	18.54	18.22
		1	99	19.50	18.63	18.60	18.75
		50	0	19.50	18.48	18.10	18.24
		50	25	19.50	18.60	18.09	18.22
		50	50	19.50	18.63	18.10	18.21
		100	0	19.50	18.65	18.07	17.92
	64QAM	1	0	19.50	18.60	18.39	18.56
		1	50	19.50	18.54	18.30	18.08
		1	99	19.50	18.60	18.42	18.62
		50	0	19.50	18.64	18.19	18.23
		50	25	19.50	18.67	18.15	18.24
		50	50	19.50	18.65	18.18	18.24
		100	0	19.50	18.52	18.11	18.42

Table 42: Conducted power measurement results of LTE Band 2 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	18607CH	18900CH	19193CH	
1.4MHz	QPSK	1	0	12.50	10.60	10.42	10.65	
		1	3	12.50	10.66	10.38	10.67	
		1	5	12.50	10.68	10.53	10.65	
		3	0	12.50	10.56	10.28	10.61	
		3	2	12.50	10.59	10.32	10.60	
		3	3	12.50	10.57	10.29	10.60	
	16QAM	6	0	12.50	10.61	10.32	10.66	
		1	0	12.50	10.74	10.45	10.83	
		1	3	12.50	10.78	10.47	10.74	
		1	5	12.50	10.80	10.51	10.88	
		3	0	12.50	10.55	10.28	10.65	
		3	2	12.50	10.54	10.34	10.60	
	64QAM	3	3	12.50	10.55	10.31	10.59	
		6	0	12.50	10.58	10.31	10.47	
		1	0	12.50	10.75	10.59	10.52	
		1	3	12.50	10.73	10.50	10.64	
		1	5	12.50	10.76	10.51	10.74	
		3	0	12.50	10.62	10.28	10.67	
	3MHz	QPSK	3	2	12.50	10.61	10.28	10.55
			3	3	12.50	10.59	10.48	10.69
			6	0	12.50	10.45	10.39	10.54
			1	0	12.50	10.67	10.41	10.58
			1	7	12.50	10.66	10.41	10.54
			1	14	12.50	10.65	10.43	10.55
8			0	12.50	10.61	10.46	10.55	
16QAM		8	4	12.50	10.62	10.33	10.52	
		8	7	12.50	10.60	10.32	10.53	
		15	0	12.50	10.57	10.44	10.57	
		1	0	12.50	10.70	10.64	10.77	
		1	7	12.50	10.66	10.52	10.75	
		1	14	12.50	10.78	10.48	10.69	
		8	0	12.50	10.58	10.29	10.47	
64QAM		8	4	12.50	10.46	10.45	10.50	
		8	7	12.50	10.58	10.36	10.51	
		15	0	12.50	10.59	10.34	10.46	
		1	0	12.50	10.81	10.37	10.69	
	1	7	12.50	10.75	10.68	10.55		
	1	14	12.50	10.84	10.53	10.58		
	8	0	12.50	10.51	10.34	10.51		
	8	4	12.50	10.52	10.33	10.51		
	8	7	12.50	10.52	10.29	10.50		
	15	0	12.50	10.44	10.38	10.50		

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18625CH	18900CH	19175CH
5MHz	QPSK	1	0	12.50	10.72	10.45	10.70
		1	13	12.50	10.72	10.55	10.69
		1	24	12.50	10.71	10.45	10.69
		12	0	12.50	10.70	10.45	10.60
		12	6	12.50	10.71	10.44	10.62
		12	13	12.50	10.71	10.44	10.65
		25	0	12.50	10.65	10.44	10.58
	16QAM	1	0	12.50	10.98	10.58	10.91
		1	13	12.50	10.94	10.56	11.00
		1	24	12.50	11.00	10.67	10.97
		12	0	12.50	10.67	10.41	10.56
		12	6	12.50	10.66	10.42	10.55
		12	13	12.50	10.60	10.40	10.60
		25	0	12.50	10.61	10.44	10.52
	64QAM	1	0	12.50	10.79	10.42	10.59
		1	13	12.50	10.72	10.46	10.63
		1	24	12.50	10.76	10.57	10.74
		12	0	12.50	10.63	10.42	10.47
		12	6	12.50	10.61	10.50	10.71
		12	13	12.50	10.57	10.40	10.58
		25	0	12.50	10.57	10.37	10.47
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18650CH	18900CH	19150CH
10MHz	QPSK	1	0	12.50	10.72	10.50	11.41
		1	25	12.50	10.69	10.50	11.56
		1	49	12.50	10.72	10.49	11.56
		25	0	12.50	10.72	10.42	10.79
		25	13	12.50	10.81	10.43	10.78
		25	25	12.50	10.67	10.51	10.78
		50	0	12.50	10.80	10.44	10.73
	16QAM	1	0	12.50	10.72	10.64	11.35
		1	25	12.50	10.88	10.70	11.12
		1	49	12.50	10.79	10.68	11.37
		25	0	12.50	10.64	10.37	10.64
		25	13	12.50	10.64	10.36	10.60
		25	25	12.50	10.56	10.35	10.63
		50	0	12.50	10.62	10.35	10.54
	64QAM	1	0	12.50	10.79	10.68	11.12
		1	25	12.50	10.86	10.65	11.17
		1	49	12.50	10.80	10.68	11.01
		25	0	12.50	10.59	10.43	10.65
		25	13	12.50	10.59	10.42	10.67
		25	25	12.50	10.63	10.40	10.68
		50	0	12.50	10.56	10.41	10.53

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18675CH	18900CH	19125CH
15MHz	QPSK	1	0	12.50	10.75	10.64	12.07
		1	38	12.50	10.74	10.57	12.06
		1	74	12.50	10.60	10.66	12.07
		36	0	12.50	10.96	10.53	11.39
		36	18	12.50	10.96	10.55	11.40
		36	39	12.50	10.96	10.55	11.37
		75	0	12.50	11.13	10.50	10.76
	16QAM	1	0	12.50	10.91	10.88	12.01
		1	38	12.50	10.87	10.90	11.85
		1	74	12.50	10.98	10.80	11.96
		36	0	12.50	10.73	10.47	11.23
		36	18	12.50	10.71	10.44	11.22
		36	39	12.50	10.73	10.44	11.21
		75	0	12.50	10.89	10.43	10.63
	64QAM	1	0	12.50	10.66	10.79	11.66
		1	38	12.50	10.91	10.79	11.75
		1	74	12.50	10.80	10.67	11.68
		36	0	12.50	10.68	10.48	11.21
		36	18	12.50	10.66	10.48	11.20
		36	39	12.50	10.69	10.46	11.19
		75	0	12.50	10.65	10.45	10.71
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18700CH	18900CH	19100CH
20MHz	QPSK	1	0	12.50	10.96	<b>10.77</b>	<b>11.90</b>
		1	50	12.50	<b>10.97</b>	10.75	11.88
		1	99	12.50	10.94	10.69	11.90
		50	0	12.50	11.15	10.56	<b>11.79</b>
		50	25	12.50	11.09	10.56	11.79
		50	50	12.50	11.16	10.56	11.79
		100	0	12.50	11.15	10.56	11.02
	16QAM	1	0	12.50	11.07	10.99	12.06
		1	50	12.50	11.15	10.93	12.13
		1	99	12.50	11.19	10.98	12.01
		50	0	12.50	10.90	10.50	11.29
		50	25	12.50	10.85	10.49	11.17
		50	50	12.50	10.82	10.52	11.19
		100	0	12.50	11.01	10.50	10.68
	64QAM	1	0	12.50	10.92	10.73	11.63
		1	50	12.50	10.93	10.85	11.60
		1	99	12.50	10.95	10.77	11.64
		50	0	12.50	10.70	10.55	11.15
		50	25	12.50	10.69	10.53	11.15
		50	50	12.50	10.69	10.51	11.16
		100	0	12.50	10.69	10.52	10.59

Table 43: Conducted power measurement results of LTE Band 2(Receiver ON)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18607CH	18900CH	19193CH
1.4MHz	QPSK	1	0	12.00	10.19	8.95	9.75
		1	3	12.00	10.12	8.95	9.74
		1	5	12.00	10.12	8.94	9.77
		3	0	12.00	10.14	8.96	10.08
		3	2	12.00	10.16	8.97	10.08
		3	3	12.00	10.18	8.97	10.07
		6	0	12.00	9.91	8.85	10.13
	16QAM	1	0	12.00	10.05	8.87	9.84
		1	3	12.00	10.12	8.98	9.93
		1	5	12.00	10.02	8.90	9.86
		3	0	12.00	10.01	8.92	10.15
		3	2	12.00	10.03	8.95	10.15
		3	3	12.00	10.04	8.94	10.11
		6	0	12.00	9.94	8.87	10.14
	64QAM	1	0	12.00	10.07	9.02	9.84
		1	3	12.00	10.08	9.14	10.06
		1	5	12.00	10.15	9.05	9.91
		3	0	12.00	10.07	8.94	10.18
		3	2	12.00	10.07	8.95	10.13
		3	3	12.00	10.04	8.97	10.14
		6	0	12.00	10.03	8.93	9.71
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
3MHz	QPSK	1	0	12.00	9.94	9.06	9.05
		1	7	12.00	9.95	8.93	9.05
		1	14	12.00	9.96	8.95	9.06
		8	0	12.00	9.96	8.75	9.44
		8	4	12.00	9.96	8.75	9.44
		8	7	12.00	9.95	8.74	9.46
		15	0	12.00	9.92	8.87	9.60
	16QAM	1	0	12.00	10.11	9.05	9.16
		1	7	12.00	10.14	8.94	9.10
		1	14	12.00	10.01	9.05	9.25
		8	0	12.00	9.94	8.73	9.46
		8	4	12.00	10.00	8.74	9.45
		8	7	12.00	9.97	8.73	9.45
		15	0	12.00	9.89	8.81	9.56
	64QAM	1	0	12.00	9.97	8.95	9.12
		1	7	12.00	9.92	8.94	9.22
		1	14	12.00	10.07	8.82	9.17
		8	0	12.00	10.01	8.79	9.24
		8	4	12.00	9.98	8.77	9.24
		8	7	12.00	10.02	8.76	9.28
		15	0	12.00	9.93	8.85	9.14

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18625CH	18900CH	19175CH
5MHz	QPSK	1	0	12.00	10.16	9.08	9.75
		1	13	12.00	10.15	9.10	9.73
		1	24	12.00	10.16	9.07	9.75
		12	0	12.00	10.07	8.83	9.37
		12	6	12.00	10.07	8.84	9.36
		12	13	12.00	10.08	8.84	9.37
		25	0	12.00	10.02	8.91	9.45
	16QAM	1	0	12.00	10.43	9.20	9.95
		1	13	12.00	10.43	9.29	10.03
		1	24	12.00	10.39	9.17	10.01
		12	0	12.00	10.06	8.80	9.35
		12	6	12.00	10.09	8.80	9.35
		12	13	12.00	10.08	8.85	9.38
		25	0	12.00	10.00	8.88	9.43
	64QAM	1	0	12.00	10.23	8.99	9.93
		1	13	12.00	10.23	8.97	9.75
		1	24	12.00	10.28	9.00	9.75
		12	0	12.00	10.12	8.78	9.28
		12	6	12.00	10.10	8.76	9.29
		12	13	12.00	10.10	8.75	9.29
		25	0	12.00	10.04	8.83	9.29
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	12.00	10.23	9.68	11.21
		1	25	12.00	10.21	9.57	11.21
		1	49	12.00	10.30	9.57	11.21
		25	0	12.00	10.45	8.95	10.23
		25	13	12.00	10.45	8.95	10.23
		25	25	12.00	10.45	8.95	10.24
		50	0	12.00	10.50	8.82	9.73
	16QAM	1	0	12.00	10.30	9.71	11.39
		1	25	12.00	10.34	9.77	11.35
		1	49	12.00	10.22	9.70	11.32
		25	0	12.00	10.37	8.88	10.18
		25	13	12.00	10.38	8.87	10.17
		25	25	12.00	10.39	8.88	10.17
		50	0	12.00	10.42	8.77	9.66
	64QAM	1	0	12.00	10.35	9.75	10.96
		1	25	12.00	10.46	9.79	10.91
		1	49	12.00	10.39	9.72	11.02
		25	0	12.00	10.22	9.05	9.75
		25	13	12.00	10.23	8.91	9.76
		25	25	12.00	10.23	8.94	9.73
		50	0	12.00	10.26	8.78	9.23

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18675CH	18900CH	19125CH
15MHz	QPSK	1	0	12.00	10.35	10.19	11.75
		1	38	12.00	10.37	10.19	11.72
		1	74	12.00	10.36	10.21	11.74
		36	0	12.00	10.60	9.16	11.43
		36	18	12.00	10.59	9.17	11.42
		36	39	12.00	10.60	9.03	11.42
		75	0	12.00	10.78	8.91	10.25
	16QAM	1	0	12.00	10.67	10.38	11.89
		1	38	12.00	10.51	10.27	11.88
		1	74	12.00	10.48	10.41	11.84
		36	0	12.00	10.54	9.09	10.96
		36	18	12.00	10.56	8.97	10.94
		36	39	12.00	10.56	8.97	10.93
		75	0	12.00	10.73	8.84	10.18
	64QAM	1	0	12.00	10.40	10.19	11.61
		1	38	12.00	10.41	10.22	11.61
		1	74	12.00	10.39	10.20	11.56
		36	0	12.00	10.37	9.00	10.86
		36	18	12.00	10.37	9.01	10.86
		36	39	12.00	10.36	8.98	10.86
		75	0	12.00	10.53	8.85	9.78
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	12.00	10.59	10.18	11.36
		1	50	12.00	10.59	10.18	11.33
		1	99	12.00	10.59	10.17	11.35
		50	0	12.00	10.77	9.37	11.23
		50	25	12.00	10.77	9.37	11.25
		50	50	12.00	10.78	9.36	11.25
		100	0	12.00	10.75	9.23	10.50
	16QAM	1	0	12.00	10.74	10.11	11.56
		1	50	12.00	10.80	10.10	11.61
		1	99	12.00	10.70	10.11	11.53
		50	0	12.00	10.50	9.31	11.20
		50	25	12.00	10.48	9.31	11.19
		50	50	12.00	10.49	9.31	11.32
		100	0	12.00	10.60	9.15	10.58
	64QAM	1	0	12.00	10.70	10.19	11.45
		1	50	12.00	10.63	9.92	11.43
		1	99	12.00	10.58	10.01	11.31
		50	0	12.00	10.54	9.36	10.73
		50	25	12.00	10.53	9.33	10.71
		50	50	12.00	10.54	9.34	10.73
		100	0	12.00	10.71	9.19	10.03
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18700CH	18900CH	19100CH

Table 44: Conducted power measurement results of LTE Band 2 (Second Antenna+WiFi Antenna, Receiver ON)



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	18607CH	18900CH	19193CH	
1.4MHz	QPSK	1	0	18.50	17.21	16.94	17.13	
		1	3	18.50	17.18	16.93	17.11	
		1	5	18.50	17.18	16.94	17.12	
		3	0	18.50	17.14	16.91	17.21	
		3	2	18.50	17.17	16.88	17.18	
		3	3	18.50	17.14	16.88	17.14	
	16QAM	6	0	18.50	17.08	16.83	17.19	
		1	0	18.50	17.19	16.95	17.10	
		1	3	18.50	17.21	17.06	17.34	
		1	5	18.50	17.19	17.00	17.16	
		3	0	18.50	17.08	16.90	17.12	
		3	2	18.50	17.07	16.83	17.11	
	64QAM	3	3	18.50	17.08	16.89	17.14	
		6	0	18.50	17.12	16.89	17.25	
		1	0	18.50	17.21	17.08	17.35	
		1	3	18.50	17.36	17.03	17.22	
		1	5	18.50	17.31	17.10	17.36	
		3	0	18.50	17.17	17.00	17.22	
	3MHz	QPSK	3	2	18.50	17.15	16.95	17.15
			3	3	18.50	17.11	16.89	17.19
			6	0	18.50	17.15	16.93	17.12
1			0	18.50	17.19	16.99	17.11	
1			7	18.50	17.21	17.01	17.04	
1			14	18.50	17.21	16.99	17.05	
8			0	18.50	17.15	16.93	17.08	
16QAM		8	4	18.50	17.14	16.92	17.07	
		8	7	18.50	17.18	16.96	17.07	
		15	0	18.50	17.19	17.00	17.14	
		1	0	18.50	17.39	17.18	17.31	
		1	7	18.50	17.32	17.01	17.26	
		1	14	18.50	17.29	17.08	17.22	
		8	0	18.50	17.17	16.94	17.05	
64QAM		8	4	18.50	17.17	16.94	17.04	
		8	7	18.50	17.15	16.96	17.06	
		15	0	18.50	17.13	16.89	17.05	
		1	0	18.50	17.28	16.98	17.20	
		1	7	18.50	17.25	17.03	17.18	
		1	14	18.50	17.20	17.04	17.10	
		8	0	18.50	17.10	17.01	17.06	
	8	4	18.50	17.08	16.95	17.09		
	8	7	18.50	17.13	16.93	17.09		
	15	0	18.50	17.18	16.94	17.09		

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18625CH	18900CH	19175CH
5MHz	QPSK	1	0	18.50	17.23	17.03	17.23
		1	13	18.50	17.24	17.02	17.23
		1	24	18.50	17.24	16.99	17.22
		12	0	18.50	17.22	16.98	17.13
		12	6	18.50	17.25	16.98	17.13
		12	13	18.50	17.26	16.98	17.12
		25	0	18.50	17.16	16.90	17.13
	16QAM	1	0	18.50	17.36	17.16	17.22
		1	13	18.50	17.32	17.17	17.50
		1	24	18.50	17.40	17.21	17.42
		12	0	18.50	17.17	16.93	17.08
		12	6	18.50	17.24	16.97	17.12
		12	13	18.50	17.25	17.04	17.08
		25	0	18.50	17.17	16.94	17.07
	64QAM	1	0	18.50	17.39	17.16	17.28
		1	13	18.50	17.26	17.01	17.23
		1	24	18.50	17.24	17.13	17.33
		12	0	18.50	17.23	17.07	17.12
		12	6	18.50	17.15	16.97	17.13
		12	13	18.50	17.24	17.05	17.14
		25	0	18.50	17.16	16.94	17.06
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18650CH	18900CH	19150CH
10MHz	QPSK	1	0	18.50	17.23	17.02	17.79
		1	25	18.50	17.22	17.03	17.72
		1	49	18.50	17.25	17.04	17.77
		25	0	18.50	17.28	16.98	17.33
		25	13	18.50	17.28	16.98	17.34
		25	25	18.50	17.28	16.98	17.34
		50	0	18.50	17.29	16.98	17.14
	16QAM	1	0	18.50	17.18	17.00	17.89
		1	25	18.50	17.27	17.16	17.95
		1	49	18.50	17.22	17.20	18.01
		25	0	18.50	17.24	16.91	17.26
		25	13	18.50	17.12	16.93	17.18
		25	25	18.50	17.14	16.94	17.26
		50	0	18.50	17.31	16.94	17.07
	64QAM	1	0	18.50	17.27	17.14	18.15
		1	25	18.50	17.37	17.23	18.01
		1	49	18.50	17.33	17.22	18.11
		25	0	18.50	17.13	16.97	17.31
		25	13	18.50	17.29	16.96	17.30
		25	25	18.50	17.26	16.97	17.18
		50	0	18.50	17.37	16.95	17.21

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	18675CH	18900CH	19125CH	
15MHz	QPSK	1	0	18.50	17.27	17.28	17.47	
		1	38	18.50	17.27	17.24	17.47	
		1	74	18.50	17.29	17.27	17.45	
		36	0	18.50	17.29	17.02	17.10	
		36	18	18.50	17.36	17.03	17.10	
		36	39	18.50	17.35	17.02	17.10	
		75	0	18.50	17.54	17.00	16.96	
	16QAM	1	0	18.50	17.37	17.35	17.72	
		1	38	18.50	17.33	17.38	17.75	
		1	74	18.50	17.41	17.37	17.72	
		36	0	18.50	17.32	17.01	17.06	
		36	18	18.50	17.29	17.02	17.07	
		36	39	18.50	17.30	17.05	17.05	
		75	0	18.50	17.61	17.06	16.99	
	64QAM	1	0	18.50	17.37	17.35	17.47	
		1	38	18.50	17.33	17.48	17.65	
		1	74	18.50	17.32	17.43	17.54	
		36	0	18.50	17.34	17.09	17.07	
		36	18	18.50	17.35	17.12	17.06	
		36	39	18.50	17.34	17.09	17.16	
		75	0	18.50	17.66	17.09	17.33	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
	20MHz	QPSK	1	0	18.50	17.42	17.39	17.47
			1	50	18.50	17.45	17.40	17.25
1			99	18.50	17.38	17.37	17.36	
50			0	18.50	17.34	17.13	17.40	
50			25	18.50	17.34	17.14	17.32	
50			50	18.50	17.34	17.13	17.22	
100			0	18.50	17.54	17.16	16.57	
16QAM		1	0	18.50	17.62	17.56	17.59	
		1	50	18.50	17.62	17.59	17.49	
		1	99	18.50	17.64	17.59	17.61	
		50	0	18.50	17.61	17.08	16.99	
		50	25	18.50	17.57	17.06	17.10	
		50	50	18.50	17.61	17.06	17.09	
		100	0	18.50	17.59	17.08	16.50	
64QAM		1	0	18.50	17.46	17.52	17.50	
		1	50	18.50	17.54	17.44	17.42	
		1	99	18.50	17.60	17.48	17.44	
		50	0	18.50	17.68	17.18	17.10	
		50	25	18.50	17.69	17.18	17.11	
		50	50	18.50	17.68	17.19	17.10	
		100	0	18.50	17.65	17.06	17.17	
Bandwidth		Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					Max.	18700CH	18900CH	19100CH

Table 45: Conducted power measurement results of LTE Band 2 (Second Antenna+WiFi Antenna, Receiver OFF)

### 7.1.12 Conducted power measurements of LTE Band 2 (Main Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	18607CH	18900CH	19193CH	
1.4MHz	QPSK	1	0	24.50	23.38	23.28	23.23	
		1	3	24.50	23.32	23.27	23.29	
		1	5	24.50	23.32	23.28	23.28	
		3	0	24.50	23.17	23.12	23.11	
		3	2	24.50	23.23	23.27	23.11	
		3	3	24.50	23.30	23.22	23.11	
	16QAM	6	0	23.50	22.17	22.15	22.11	
		1	0	23.50	22.39	22.33	22.35	
		1	3	23.50	22.30	22.37	22.30	
		1	5	23.50	22.37	22.37	22.07	
		3	0	23.50	22.34	22.35	22.14	
		3	2	23.50	22.24	22.25	22.11	
	64QAM	3	3	23.50	22.28	22.28	22.18	
		6	0	22.50	21.15	21.19	21.07	
		1	0	22.50	21.41	21.29	21.36	
		1	3	22.50	21.36	21.44	21.36	
		1	5	22.50	21.39	21.31	21.28	
		3	0	22.50	21.33	21.22	21.19	
	3MHz	QPSK	3	2	22.50	21.21	21.31	21.18
			3	3	22.50	21.32	21.38	21.14
			6	0	21.50	20.15	20.25	20.16
			1	0	24.50	23.24	23.16	23.18
			1	7	24.50	23.32	23.20	23.15
			1	14	24.50	23.29	23.22	23.13
16QAM		8	0	23.50	22.19	22.17	22.09	
		8	4	23.50	22.28	22.19	22.11	
		8	7	23.50	22.19	22.21	22.11	
		15	0	23.50	22.31	22.25	22.25	
		1	0	23.50	22.28	22.31	22.23	
		1	7	23.50	22.23	22.40	22.30	
64QAM	1	14	23.50	22.34	22.36	22.27		
	8	0	22.50	21.10	21.15	21.09		
	8	4	22.50	21.17	21.15	21.07		
	8	7	22.50	21.14	21.21	21.02		
	15	0	22.50	21.27	21.26	21.13		
	1	0	22.50	21.50	21.27	21.43		
64QAM	1	7	22.50	21.27	21.29	21.49		
	1	14	22.50	21.40	21.21	21.36		
	8	0	21.50	20.19	20.25	20.13		
	8	4	21.50	20.24	20.31	20.14		
	8	7	21.50	20.20	20.33	20.14		
	15	0	21.50	20.37	20.36	20.27		

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18625CH	18900CH	19175CH
5MHz	QPSK	1	0	24.50	23.29	23.20	23.26
		1	13	24.50	23.24	23.18	23.23
		1	24	24.50	23.23	23.18	23.14
		12	0	23.50	22.29	22.22	22.30
		12	6	23.50	22.32	22.25	22.29
		12	13	23.50	22.32	22.25	22.28
		25	0	23.50	22.26	22.21	22.14
	16QAM	1	0	23.50	22.46	22.34	22.37
		1	13	23.50	22.37	22.37	22.52
		1	24	23.50	22.36	22.31	22.33
		12	0	22.50	21.30	21.26	21.21
		12	6	22.50	21.35	21.25	21.16
		12	13	22.50	21.21	21.26	21.17
		25	0	22.50	21.17	21.16	21.11
	64QAM	1	0	22.50	21.37	21.31	21.35
		1	13	22.50	21.29	21.26	21.38
		1	24	22.50	21.32	21.36	21.39
		12	0	21.50	20.25	20.26	20.27
		12	6	21.50	20.28	20.26	20.31
		12	13	21.50	20.29	20.24	20.29
		25	0	21.50	20.22	20.32	20.20
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18650CH	18900CH	19150CH
10MHz	QPSK	1	0	24.50	23.25	23.17	23.28
		1	25	24.50	23.22	23.18	23.30
		1	49	24.50	23.18	23.23	23.20
		25	0	23.50	22.22	22.17	22.11
		25	13	23.50	22.22	22.18	22.12
		25	25	23.50	22.20	22.21	22.23
		50	0	23.50	22.25	22.32	22.11
	16QAM	1	0	23.50	22.37	22.22	22.24
		1	25	23.50	22.20	22.27	22.42
		1	49	23.50	22.29	22.27	22.35
		25	0	22.50	21.13	21.10	21.09
		25	13	22.50	21.11	21.11	21.11
		25	25	22.50	21.08	21.12	21.11
		50	0	22.50	21.11	21.15	21.05
	64QAM	1	0	22.50	21.24	21.31	21.31
		1	25	22.50	21.38	21.21	21.19
		1	49	22.50	21.33	21.33	21.29
		25	0	21.50	20.17	20.26	20.14
		25	13	21.50	20.28	20.29	20.12
		25	25	21.50	20.17	20.28	20.14
		50	0	21.50	20.18	20.31	20.17

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18675CH	18900CH	19125CH
15MHz	QPSK	1	0	24.50	23.23	23.21	23.14
		1	38	24.50	23.18	23.20	23.17
		1	74	24.50	23.17	23.19	23.16
		36	0	23.50	22.35	22.18	22.18
		36	18	23.50	22.34	22.20	22.19
		36	39	23.50	22.36	22.21	22.18
		75	0	23.50	22.19	22.29	22.14
	16QAM	1	0	23.50	22.14	22.28	22.33
		1	38	23.50	22.22	22.27	22.26
		1	74	23.50	22.32	22.30	22.33
		36	0	22.50	21.17	21.15	21.15
		36	18	22.50	21.15	21.16	21.16
		36	39	22.50	21.17	21.15	21.16
		75	0	22.50	21.15	21.24	21.07
	64QAM	1	0	22.50	21.23	21.34	21.29
		1	38	22.50	21.33	21.32	21.29
		1	74	22.50	21.28	21.25	21.22
		36	0	21.50	20.33	20.17	20.18
		36	18	21.50	20.22	20.18	20.18
		36	39	21.50	20.23	20.32	20.19
		75	0	21.50	20.21	20.14	20.09
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18700CH	18900CH	19100CH
20MHz	QPSK	1	0	24.50	23.32	23.34	23.27
		1	50	24.50	23.36	<b>23.35</b>	<b>23.40</b>
		1	99	24.50	<b>23.37</b>	23.34	23.40
		50	0	23.50	22.23	22.21	22.13
		50	25	23.50	<b>22.36</b>	<b>22.22</b>	<b>22.22</b>
		50	50	23.50	22.23	22.22	22.18
		100	0	23.50	22.22	22.17	22.14
	16QAM	1	0	23.50	22.43	22.57	22.45
		1	50	23.50	22.57	22.56	22.49
		1	99	23.50	22.61	22.48	22.54
		50	0	22.50	21.24	21.16	21.10
		50	25	22.50	21.10	21.16	21.14
		50	50	22.50	21.13	21.15	21.17
		100	0	22.50	21.14	21.16	21.07
	64QAM	1	0	22.50	21.68	21.38	21.32
		1	50	22.50	21.39	21.44	21.25
		1	99	22.50	21.59	21.48	21.34
		50	0	21.50	20.30	20.20	20.14
		50	25	21.50	20.17	20.18	20.07
		50	50	21.50	20.32	20.28	20.10
		100	0	21.50	20.18	20.20	20.12

Table 46: Conducted power measurement results of LTE Band 2(Full power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	18607CH	18900CH	19193CH	
1.4MHz	QPSK	1	0	21.00	19.78	19.77	19.66	
		1	3	21.00	19.77	19.65	19.84	
		1	5	21.00	19.78	19.76	19.87	
		3	0	21.00	19.69	19.58	19.59	
		3	2	21.00	19.73	19.66	19.65	
		3	3	21.00	19.70	19.56	19.68	
	16QAM	6	0	21.00	19.69	19.75	19.72	
		1	0	21.00	19.86	19.78	19.77	
		1	3	21.00	19.96	19.77	19.76	
		1	5	21.00	20.02	19.72	19.73	
		3	0	21.00	19.67	19.69	19.63	
		3	2	21.00	19.70	19.64	19.69	
	64QAM	3	3	21.00	19.78	19.73	19.71	
		6	0	21.00	19.66	19.75	19.51	
		1	0	21.00	19.84	19.94	19.83	
		1	3	21.00	19.69	19.71	19.93	
		1	5	21.00	19.81	19.86	19.88	
		3	0	21.00	19.78	19.67	19.53	
	3MHz	QPSK	3	2	21.00	19.80	19.75	19.75
			3	3	21.00	19.68	19.72	19.53
			6	0	21.00	19.66	19.60	19.52
1			0	21.00	19.92	19.71	19.85	
1			7	21.00	19.76	19.69	19.67	
1			14	21.00	19.77	19.72	19.82	
8			0	21.00	19.71	19.67	19.69	
16QAM		8	4	21.00	19.67	19.79	19.61	
		8	7	21.00	19.72	19.76	19.67	
		15	0	21.00	19.91	19.72	19.83	
		1	0	21.00	19.85	19.84	19.96	
		1	7	21.00	20.01	19.90	19.85	
		1	14	21.00	19.89	19.85	19.97	
		8	0	21.00	19.68	19.78	19.73	
64QAM		8	4	21.00	19.70	19.75	19.70	
		8	7	21.00	19.83	19.83	19.69	
		15	0	21.00	19.69	19.77	19.60	
		1	0	21.00	19.97	19.87	19.79	
		1	7	21.00	19.96	19.84	19.64	
		1	14	21.00	19.80	19.82	19.80	
		8	0	21.00	19.67	19.65	19.70	
		8	4	21.00	19.71	19.75	19.68	
		8	7	21.00	19.72	19.69	19.67	
		15	0	21.00	19.86	19.83	19.69	
		15	0	21.00	19.86	19.83	19.69	

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18625CH	18900CH	19175CH
5MHz	QPSK	1	0	21.00	19.81	19.83	19.69
		1	13	21.00	19.79	19.71	19.86
		1	24	21.00	19.78	19.71	19.87
		12	0	21.00	19.96	19.89	19.84
		12	6	21.00	19.95	19.77	19.84
		12	13	21.00	19.95	19.89	19.84
		25	0	21.00	19.92	19.78	19.76
	16QAM	1	0	21.00	20.05	20.26	20.56
		1	13	21.00	20.00	20.27	20.53
		1	24	21.00	20.08	20.36	20.66
		12	0	21.00	19.93	19.95	19.91
		12	6	21.00	19.95	20.04	19.79
		12	13	21.00	19.91	20.05	19.90
		25	0	21.00	19.79	19.81	19.76
	64QAM	1	0	21.00	19.97	20.25	20.37
		1	13	21.00	20.02	20.20	20.36
		1	24	21.00	20.04	20.21	20.31
		12	0	21.00	19.90	20.04	19.90
		12	6	21.00	19.89	20.05	19.88
		12	13	21.00	19.88	20.06	19.85
		25	0	21.00	19.80	19.86	19.79
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	21.00	19.91	20.21	20.23
		1	25	21.00	19.87	20.22	20.23
		1	49	21.00	19.86	20.10	20.15
		25	0	21.00	19.86	19.97	20.04
		25	13	21.00	19.92	19.97	20.04
		25	25	21.00	19.89	19.94	19.99
		50	0	21.00	19.80	19.93	19.81
	16QAM	1	0	21.00	19.87	20.26	20.22
		1	25	21.00	19.94	20.34	20.33
		1	49	21.00	19.99	20.17	20.36
		25	0	21.00	19.73	19.91	19.98
		25	13	21.00	19.77	19.91	19.97
		25	25	21.00	19.83	19.92	19.99
		50	0	21.00	19.77	19.84	19.74
	64QAM	1	0	21.00	20.08	20.31	20.35
		1	25	21.00	19.97	20.37	20.34
		1	49	21.00	20.02	20.43	20.35
		25	0	21.00	19.85	19.88	19.96
		25	13	21.00	19.85	19.86	19.92
		25	25	21.00	19.87	19.91	19.94
		50	0	21.00	19.79	19.88	19.78



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18675CH	18900CH	19125CH
15MHz	QPSK	1	0	21.00	19.85	20.19	19.86
		1	38	21.00	19.93	20.29	19.74
		1	74	21.00	19.92	20.30	19.83
		36	0	21.00	19.93	19.91	19.89
		36	18	21.00	19.91	19.95	19.77
		36	39	21.00	19.91	19.91	19.89
		75	0	21.00	19.87	19.89	19.86
	16QAM	1	0	21.00	20.04	20.43	20.02
		1	38	21.00	20.11	20.50	19.95
		1	74	21.00	20.01	20.40	19.92
		36	0	21.00	19.84	19.86	19.86
		36	18	21.00	19.85	19.85	19.86
		36	39	21.00	19.86	19.82	19.85
		75	0	21.00	19.81	19.81	19.76
	64QAM	1	0	21.00	19.85	20.42	19.83
		1	38	21.00	19.91	20.40	19.79
		1	74	21.00	19.92	20.36	19.89
		36	0	21.00	19.86	19.76	19.77
		36	18	21.00	19.86	19.90	19.82
		36	39	21.00	19.84	19.92	19.79
		75	0	21.00	19.81	19.82	19.76
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	21.00	20.08	19.97	19.98
		1	50	21.00	<b>20.11</b>	19.97	19.99
		1	99	21.00	20.09	19.98	19.97
		50	0	21.00	<b>20.11</b>	19.79	<b>20.35</b>
		50	25	21.00	19.91	<b>20.13</b>	20.12
		50	50	21.00	19.80	19.81	19.90
		100	0	21.00	19.88	19.79	19.84
	16QAM	1	0	21.00	20.11	20.28	20.19
		1	50	21.00	20.20	20.19	20.31
		1	99	21.00	19.98	20.42	20.15
		50	0	21.00	19.94	19.71	19.68
		50	25	21.00	19.95	19.84	19.67
		50	50	21.00	19.95	19.86	19.68
		100	0	21.00	19.89	19.78	19.72
	64QAM	1	0	21.00	20.18	20.14	20.21
		1	50	21.00	20.28	20.07	20.09
		1	99	21.00	20.19	20.18	19.95
		50	0	21.00	19.86	19.76	19.85
		50	25	21.00	19.81	19.88	19.87
		50	50	21.00	19.79	19.90	19.84
		100	0	21.00	19.92	19.72	19.75

Table 47: Conducted power measurement results of LTE Band 2 (Reduced Power Level D2)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18607CH	18900CH	19193CH
1.4MHz	QPSK	1	0	17.50	16.49	16.62	16.65
		1	3	17.50	16.52	16.60	16.65
		1	5	17.50	16.53	16.62	16.65
		3	0	17.50	16.42	16.40	16.48
		3	2	17.50	16.42	16.42	16.46
		3	3	17.50	16.47	16.42	16.44
		6	0	17.50	16.47	16.54	16.41
	16QAM	1	0	17.50	16.70	16.58	16.68
		1	3	17.50	16.58	16.72	16.56
		1	5	17.50	16.49	16.67	16.58
		3	0	17.50	16.50	16.44	16.47
		3	2	17.50	16.52	16.53	16.47
		3	3	17.50	16.47	16.43	16.38
		6	0	17.50	16.34	16.49	16.45
	64QAM	1	0	17.50	16.78	16.68	16.57
		1	3	17.50	16.90	16.52	16.54
		1	5	17.50	16.86	16.62	16.45
		3	0	17.50	16.47	16.65	16.35
		3	2	17.50	16.46	16.46	16.41
		3	3	17.50	16.64	16.61	16.45
		6	0	17.50	16.41	16.30	16.39
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18615CH	18900CH	19185CH
3MHz	QPSK	1	0	17.50	16.71	16.52	16.65
		1	7	17.50	16.71	16.51	16.46
		1	14	17.50	16.72	16.52	16.47
		8	0	17.50	16.46	16.58	16.59
		8	4	17.50	16.52	16.57	16.56
		8	7	17.50	16.49	16.56	16.52
		15	0	17.50	16.67	16.56	16.54
	16QAM	1	0	17.50	16.73	16.64	16.72
		1	7	17.50	16.78	16.57	16.52
		1	14	17.50	16.78	16.63	16.59
		8	0	17.50	16.56	16.38	16.57
		8	4	17.50	16.62	16.43	16.46
		8	7	17.50	16.58	16.39	16.49
		15	0	17.50	16.46	16.51	16.44
	64QAM	1	0	17.50	16.81	16.67	16.45
		1	7	17.50	16.81	16.65	16.50
		1	14	17.50	16.82	16.49	16.37
		8	0	17.50	16.53	16.38	16.37
		8	4	17.50	16.55	16.37	16.40
		8	7	17.50	16.56	16.47	16.43
		15	0	17.50	16.48	16.52	16.45

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18625CH	18900CH	19175CH
5MHz	QPSK	1	0	17.50	16.65	16.59	16.62
		1	13	17.50	16.53	16.49	16.66
		1	24	17.50	16.66	16.49	16.66
		12	0	17.50	16.72	16.65	16.47
		12	6	17.50	16.72	16.51	16.51
		12	13	17.50	16.74	16.61	16.54
		25	0	17.50	16.67	16.53	16.60
	16QAM	1	0	17.50	16.73	16.72	16.63
		1	13	17.50	16.77	16.72	16.59
		1	24	17.50	16.73	16.63	16.58
		12	0	17.50	16.66	16.62	16.51
		12	6	17.50	16.69	16.57	16.49
		12	13	17.50	16.66	16.64	16.50
		25	0	17.50	16.61	16.58	16.56
	64QAM	1	0	17.50	16.78	16.58	16.52
		1	13	17.50	16.70	16.70	16.60
		1	24	17.50	16.84	16.66	16.59
		12	0	17.50	16.68	16.58	16.50
		12	6	17.50	16.70	16.59	16.49
		12	13	17.50	16.73	16.57	16.48
		25	0	17.50	16.64	16.54	16.56
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	17.50	16.55	16.52	16.64
		1	25	17.50	16.58	16.53	16.65
		1	49	17.50	16.70	16.52	16.68
		25	0	17.50	16.71	16.49	16.66
		25	13	17.50	16.73	16.50	16.63
		25	25	17.50	16.72	16.50	16.64
		50	0	17.50	16.67	16.59	16.48
	16QAM	1	0	17.50	16.58	16.58	16.65
		1	25	17.50	16.62	16.59	16.68
		1	49	17.50	16.59	16.68	16.67
		25	0	17.50	16.64	16.56	16.45
		25	13	17.50	16.61	16.56	16.46
		25	25	17.50	16.63	16.57	16.49
		50	0	17.50	16.63	16.57	16.40
	64QAM	1	0	17.50	16.59	16.59	16.74
		1	25	17.50	16.72	16.59	16.72
		1	49	17.50	16.61	16.60	16.73
		25	0	17.50	16.68	16.57	16.46
		25	13	17.50	16.67	16.59	16.45
		25	25	17.50	16.65	16.61	16.46
		50	0	17.50	16.63	16.59	16.38
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18650CH	18900CH	19150CH

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18675CH	18900CH	19125CH
15MHz	QPSK	1	0	17.50	16.57	16.61	16.58
		1	38	17.50	16.57	16.64	16.58
		1	74	17.50	16.57	16.60	16.56
		36	0	17.50	16.74	16.58	16.66
		36	18	17.50	16.74	16.59	16.66
		36	39	17.50	16.74	16.58	16.65
		75	0	17.50	16.73	16.54	16.56
	16QAM	1	0	17.50	16.58	16.59	16.70
		1	38	17.50	16.69	16.81	16.49
		1	74	17.50	16.74	16.75	16.58
		36	0	17.50	16.68	16.65	16.57
		36	18	17.50	16.66	16.67	16.59
		36	39	17.50	16.69	16.64	16.58
		75	0	17.50	16.64	16.61	16.47
	64QAM	1	0	17.50	16.61	16.73	16.65
		1	38	17.50	16.76	16.66	16.50
		1	74	17.50	16.62	16.72	16.52
		36	0	17.50	16.71	16.66	16.57
		36	18	17.50	16.73	16.60	16.60
		36	39	17.50	16.73	16.65	16.58
		75	0	17.50	16.68	16.60	16.48
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	17.50	16.71	16.71	16.65
		1	50	17.50	16.71	16.69	16.67
		1	99	17.50	<b>16.74</b>	16.72	16.69
		50	0	17.50	<b>16.76</b>	16.58	16.68
		50	25	17.50	16.74	16.59	16.66
		50	50	17.50	16.74	16.60	16.66
		100	0	17.50	16.72	16.53	16.71
	16QAM	1	0	17.50	16.85	16.90	17.05
		1	50	17.50	16.74	16.93	16.95
		1	99	17.50	16.90	16.89	16.91
		50	0	17.50	16.69	16.49	16.61
		50	25	17.50	16.69	16.60	16.61
		50	50	17.50	16.69	16.60	16.62
		100	0	17.50	16.65	16.51	16.45
	64QAM	1	0	17.50	16.94	16.75	16.80
		1	50	17.50	16.80	16.80	16.77
		1	99	17.50	16.81	16.90	16.75
		50	0	17.50	16.72	16.59	16.62
		50	25	17.50	16.74	16.61	16.60
		50	50	17.50	16.70	16.60	16.59
		100	0	17.50	16.68	16.50	16.47

Table 48: Conducted power measurement results of LTE Band 2 (Reduced Power Level D4/D5)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18607CH	18900CH	19193CH
1.4MHz	QPSK	1	0	14.00	12.95	12.87	12.99
		1	3	14.00	12.93	12.82	12.90
		1	5	14.00	12.93	12.90	12.93
		3	0	14.00	12.82	12.75	12.80
		3	2	14.00	12.85	12.77	12.87
		3	3	14.00	12.83	12.76	12.79
		6	0	14.00	13.02	12.84	12.93
	16QAM	1	0	14.00	12.99	12.93	13.08
		1	3	14.00	13.02	12.91	13.10
		1	5	14.00	12.98	12.92	12.93
		3	0	14.00	12.80	12.78	12.77
		3	2	14.00	12.91	12.81	12.88
		3	3	14.00	12.91	12.78	12.86
		6	0	14.00	12.81	12.79	12.80
	64QAM	1	0	14.00	13.08	12.96	13.01
		1	3	14.00	13.19	12.97	13.08
		1	5	14.00	13.09	13.01	13.02
		3	0	14.00	13.00	12.81	12.70
		3	2	14.00	12.98	12.71	12.80
		3	3	14.00	12.97	12.72	12.72
		6	0	14.00	12.84	12.76	12.67
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
3MHz	QPSK	1	0	14.00	13.00	12.85	12.97
		1	7	14.00	12.97	12.82	12.95
		1	14	14.00	12.96	12.85	12.95
		8	0	14.00	12.92	12.82	12.93
		8	4	14.00	13.02	12.85	12.92
		8	7	14.00	12.91	12.82	12.92
		15	0	14.00	12.97	12.85	12.92
	16QAM	1	0	14.00	13.02	13.00	13.07
		1	7	14.00	13.16	12.93	12.91
		1	14	14.00	13.03	13.00	12.95
		8	0	14.00	12.97	12.78	12.79
		8	4	14.00	12.92	12.77	12.79
		8	7	14.00	12.84	12.72	12.81
		15	0	14.00	12.90	12.76	12.76
	64QAM	1	0	14.00	13.12	12.92	13.03
		1	7	14.00	13.02	12.94	13.03
		1	14	14.00	13.11	13.00	13.02
		8	0	14.00	12.88	12.70	12.76
		8	4	14.00	12.88	12.72	12.77
		8	7	14.00	12.86	12.76	12.78
		15	0	14.00	12.92	12.81	12.86

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18625CH	18900CH	19175CH
5MHz	QPSK	1	0	14.00	12.96	12.85	12.89
		1	13	14.00	12.99	12.83	12.88
		1	24	14.00	12.95	12.83	12.89
		12	0	14.00	12.97	12.99	12.90
		12	6	14.00	12.97	12.98	12.89
		12	13	14.00	12.98	12.96	12.91
		25	0	14.00	12.95	12.83	12.87
	16QAM	1	0	14.00	13.23	13.12	13.05
		1	13	14.00	13.17	13.08	13.22
		1	24	14.00	13.23	13.14	13.08
		12	0	14.00	12.93	12.92	12.89
		12	6	14.00	12.96	12.94	12.88
		12	13	14.00	12.94	12.96	12.87
		25	0	14.00	12.90	12.87	12.79
	64QAM	1	0	14.00	13.12	12.98	12.98
		1	13	14.00	12.99	13.02	13.08
		1	24	14.00	13.09	12.94	12.99
		12	0	14.00	12.99	12.82	12.96
		12	6	14.00	12.98	12.86	12.91
		12	13	14.00	13.00	12.82	12.87
		25	0	14.00	12.88	12.84	12.84
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	14.00	12.95	12.91	12.92
		1	25	14.00	12.90	12.90	12.96
		1	49	14.00	12.97	12.88	12.92
		25	0	14.00	13.06	12.84	12.91
		25	13	14.00	13.06	12.83	12.92
		25	25	14.00	13.04	12.83	12.92
		50	0	14.00	12.99	12.96	12.84
	16QAM	1	0	14.00	12.96	13.05	12.94
		1	25	14.00	13.05	12.91	13.12
		1	49	14.00	12.96	12.78	13.00
		25	0	14.00	12.86	12.76	12.80
		25	13	14.00	12.97	12.86	12.80
		25	25	14.00	12.99	12.76	12.81
		50	0	14.00	12.89	12.90	12.80
	64QAM	1	0	14.00	13.09	13.00	12.97
		1	25	14.00	13.20	12.95	13.13
		1	49	14.00	13.13	12.94	13.08
		25	0	14.00	12.92	12.84	12.88
		25	13	14.00	12.94	12.85	12.88
		25	25	14.00	12.88	12.87	12.88
		50	0	14.00	12.90	12.82	12.89
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18650CH	18900CH	19150CH

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	18675CH	18900CH	19125CH
15MHz	QPSK	1	0	14.00	12.94	12.90	12.93
		1	38	14.00	12.93	12.91	12.89
		1	74	14.00	12.92	12.92	12.95
		36	0	14.00	13.10	13.02	12.98
		36	18	14.00	13.11	13.00	13.00
		36	39	14.00	13.10	13.01	13.00
		75	0	14.00	13.00	12.98	12.94
	16QAM	1	0	14.00	13.09	13.24	13.24
		1	38	14.00	13.08	13.12	13.12
		1	74	14.00	13.04	13.17	13.25
		36	0	14.00	12.91	12.96	13.03
		36	18	14.00	12.94	13.01	13.08
		36	39	14.00	12.94	12.98	13.04
		75	0	14.00	12.90	12.98	12.95
	64QAM	1	0	14.00	13.05	13.17	13.14
		1	38	14.00	13.13	13.15	13.11
		1	74	14.00	13.15	13.12	13.08
		36	0	14.00	13.03	13.06	13.10
		36	18	14.00	13.03	13.05	13.09
		36	39	14.00	13.03	13.06	13.10
		75	0	14.00	12.99	12.93	12.95
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	14.00	13.27	13.19	13.16
		1	50	14.00	13.27	13.21	13.16
		1	99	14.00	13.28	13.20	13.18
		50	0	14.00	13.15	13.03	12.99
		50	25	14.00	13.14	13.02	12.99
		50	50	14.00	13.14	13.02	12.99
		100	0	14.00	13.11	13.12	13.07
	16QAM	1	0	14.00	13.41	13.47	13.45
		1	50	14.00	13.42	13.44	13.46
		1	99	14.00	13.37	13.38	13.47
		50	0	14.00	13.07	12.91	12.96
		50	25	14.00	13.06	13.02	13.00
		50	50	14.00	13.04	12.89	12.97
		100	0	14.00	13.00	12.94	12.97
	64QAM	1	0	14.00	13.42	13.22	13.21
		1	50	14.00	13.31	13.25	13.19
		1	99	14.00	13.48	13.21	13.24
		50	0	14.00	13.09	12.94	12.98
		50	25	14.00	13.11	12.99	12.96
		50	50	14.00	13.11	13.03	12.98
		100	0	14.00	13.13	12.95	12.98

Table 49: Conducted power measurement results of LTE Band 2 (Reduced Power Level D6)

### 7.1.13 Conducted power measurements of LTE Band 4 (Second Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	21.00	19.73	19.58	19.80
		1	3	21.00	19.77	19.53	19.79
		1	5	21.00	19.68	19.51	19.74
		3	0	21.00	19.74	19.44	19.63
		3	2	21.00	19.75	19.48	19.68
		3	3	21.00	19.72	19.46	19.60
		6	0	21.00	19.71	19.56	19.64
	16QAM	1	0	21.00	19.80	19.70	19.93
		1	3	21.00	19.90	19.51	19.88
		1	5	21.00	19.72	19.57	19.86
		3	0	21.00	19.75	19.52	19.65
		3	2	21.00	19.62	19.51	19.67
		3	3	21.00	19.72	19.57	19.68
		6	0	21.00	19.66	19.46	19.56
	64QAM	1	0	21.00	19.77	19.67	19.81
		1	3	21.00	19.76	19.59	19.88
		1	5	21.00	19.82	19.65	19.85
		3	0	21.00	19.68	19.54	19.66
		3	2	21.00	19.71	19.55	19.65
		3	3	21.00	19.67	19.65	19.68
		6	0	21.00	19.79	19.47	19.59
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
3MHz	QPSK	1	0	21.00	19.78	19.49	20.03
		1	7	21.00	19.79	19.45	19.91
		1	14	21.00	19.78	19.40	20.03
		8	0	21.00	19.73	19.54	19.82
		8	4	21.00	19.74	19.62	19.81
		8	7	21.00	19.74	19.52	19.81
		15	0	21.00	19.78	19.55	19.75
	16QAM	1	0	21.00	19.78	19.59	20.08
		1	7	21.00	20.02	19.66	19.99
		1	14	21.00	19.93	19.60	20.11
		8	0	21.00	19.71	19.66	19.63
		8	4	21.00	19.72	19.48	19.73
		8	7	21.00	19.76	19.48	19.74
		15	0	21.00	19.63	19.37	19.66
	64QAM	1	0	21.00	19.79	19.58	19.93
		1	7	21.00	19.72	19.62	19.96
		1	14	21.00	19.96	19.68	19.97
		8	0	21.00	19.78	19.42	19.76
		8	4	21.00	19.77	19.46	19.80
		8	7	21.00	19.73	19.44	19.84
		15	0	21.00	19.65	19.38	19.76
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19965CH	20175CH	20385CH



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19975CH	20175CH	20375CH
5MHz	QPSK	1	0	21.00	19.79	19.61	20.02
		1	13	21.00	19.82	19.63	20.05
		1	24	21.00	19.84	19.62	20.06
		12	0	21.00	19.85	19.72	19.87
		12	6	21.00	19.86	19.65	20.01
		12	13	21.00	19.85	19.65	20.01
		25	0	21.00	19.81	19.61	19.83
	16QAM	1	0	21.00	20.06	19.88	20.22
		1	13	21.00	19.96	19.94	20.22
		1	24	21.00	19.98	19.71	20.06
		12	0	21.00	19.82	19.53	19.90
		12	6	21.00	19.78	19.53	19.90
		12	13	21.00	19.76	19.54	19.86
		25	0	21.00	19.72	19.56	19.75
	64QAM	1	0	21.00	19.89	19.77	19.93
		1	13	21.00	19.87	19.76	19.91
		1	24	21.00	19.83	19.83	19.92
		12	0	21.00	19.80	19.51	19.98
		12	6	21.00	19.84	19.58	19.96
		12	13	21.00	19.77	19.50	19.97
		25	0	21.00	19.76	19.43	19.78
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20000CH	20175CH	20350CH
10MHz	QPSK	1	0	21.00	19.80	18.83	19.79
		1	25	21.00	19.79	18.73	19.78
		1	49	21.00	19.73	18.75	19.80
		25	0	21.00	19.76	19.52	19.66
		25	13	21.00	19.77	19.57	19.75
		25	25	21.00	19.80	19.51	19.74
		50	0	21.00	19.69	19.48	19.65
	16QAM	1	0	21.00	19.73	18.76	19.82
		1	25	21.00	19.62	18.60	19.77
		1	49	21.00	19.79	18.55	19.67
		25	0	21.00	19.59	19.34	19.60
		25	13	21.00	19.55	19.34	19.51
		25	25	21.00	19.55	19.33	19.59
		50	0	21.00	19.50	19.34	19.58
	64QAM	1	0	21.00	19.85	18.67	19.81
		1	25	21.00	19.70	18.65	19.80
		1	49	21.00	19.70	18.76	19.79
		25	0	21.00	19.77	19.44	19.67
		25	13	21.00	19.78	19.57	19.74
		25	25	21.00	19.79	19.45	19.66
		50	0	21.00	19.60	19.42	19.66

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20025CH	20175CH	20325CH
15MHz	QPSK	1	0	21.00	19.91	19.52	19.68
		1	38	21.00	19.90	19.53	19.71
		1	74	21.00	19.92	19.52	19.62
		36	0	21.00	19.85	19.36	19.74
		36	18	21.00	19.87	19.35	19.70
		36	39	21.00	19.87	19.35	19.76
		75	0	21.00	19.65	19.58	19.64
	16QAM	1	0	21.00	20.00	19.81	19.72
		1	38	21.00	19.94	19.71	19.75
		1	74	21.00	19.93	19.79	19.89
		36	0	21.00	19.77	19.30	19.69
		36	18	21.00	19.75	19.31	19.68
		36	39	21.00	19.76	19.31	19.68
		75	0	21.00	19.59	19.47	19.64
	64QAM	1	0	21.00	19.88	19.64	19.76
		1	38	21.00	19.95	19.71	19.77
		1	74	21.00	19.84	19.59	19.75
		36	0	21.00	19.91	19.23	19.73
		36	18	21.00	19.83	19.20	19.68
		36	39	21.00	19.85	19.25	19.74
		75	0	21.00	19.54	19.50	19.70
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20050CH	20175CH	20300CH
20MHz	QPSK	1	0	21.00	19.97	19.70	19.85
		1	50	21.00	<b>20.25</b>	19.67	19.86
		1	99	21.00	20.24	19.68	19.88
		50	0	21.00	19.76	19.67	19.70
		50	25	21.00	<b>19.78</b>	19.58	19.66
		50	50	21.00	19.68	19.66	19.70
		100	0	21.00	19.59	19.59	19.71
	16QAM	1	0	21.00	20.22	19.86	20.02
		1	50	21.00	20.12	19.75	19.98
		1	99	21.00	20.23	19.90	20.04
		50	0	21.00	19.67	19.51	19.65
		50	25	21.00	19.64	19.52	19.64
		50	50	21.00	19.61	19.55	19.64
		100	0	21.00	19.49	19.55	19.63
	64QAM	1	0	21.00	19.96	19.66	19.80
		1	50	21.00	20.20	19.74	19.78
		1	99	21.00	19.94	19.78	19.81
		50	0	21.00	19.77	19.46	19.65
		50	25	21.00	19.75	19.46	19.66
		50	50	21.00	19.72	19.45	19.67
		100	0	21.00	19.53	19.54	19.69

Table 50: Conducted power measurement results of LTE Band 4 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	14.00	12.70	12.51	12.66
		1	3	14.00	12.74	12.52	12.71
		1	5	14.00	12.75	12.52	12.70
		3	0	14.00	12.76	12.49	12.64
		3	2	14.00	12.75	12.41	12.63
		3	3	14.00	12.75	12.50	12.63
		6	0	14.00	12.70	12.43	12.57
	16QAM	1	0	14.00	12.94	12.60	12.80
		1	3	14.00	12.76	12.68	12.78
		1	5	14.00	12.88	12.67	12.77
		3	0	14.00	12.76	12.47	12.67
		3	2	14.00	12.77	12.57	12.59
		3	3	14.00	12.73	12.51	12.69
		6	0	14.00	12.64	12.36	12.57
	64QAM	1	0	14.00	12.88	12.69	12.76
		1	3	14.00	12.81	12.53	12.68
		1	5	14.00	12.87	12.52	12.87
		3	0	14.00	12.75	12.64	12.61
		3	2	14.00	12.68	12.48	12.64
		3	3	14.00	12.77	12.41	12.59
		6	0	14.00	12.74	12.52	12.65
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19965CH	20175CH	20385CH
3MHz	QPSK	1	0	14.00	12.71	12.45	12.97
		1	7	14.00	12.67	12.41	13.05
		1	14	14.00	12.75	12.39	12.95
		8	0	14.00	12.73	12.41	12.93
		8	4	14.00	12.76	12.45	12.94
		8	7	14.00	12.76	12.51	12.92
		15	0	14.00	12.67	12.48	12.61
	16QAM	1	0	14.00	12.90	12.48	13.30
		1	7	14.00	12.76	12.52	13.33
		1	14	14.00	12.86	12.71	13.25
		8	0	14.00	12.58	12.43	12.83
		8	4	14.00	12.75	12.38	12.94
		8	7	14.00	12.71	12.47	12.86
		15	0	14.00	12.70	12.40	12.64
	64QAM	1	0	14.00	12.82	12.58	13.31
		1	7	14.00	12.90	12.58	13.24
		1	14	14.00	12.94	12.42	13.28
		8	0	14.00	12.70	12.54	12.97
		8	4	14.00	12.73	12.55	12.94
		8	7	14.00	12.76	12.53	12.97
		15	0	14.00	12.73	12.56	12.68

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19975CH	20175CH	20375CH
5MHz	QPSK	1	0	14.00	12.77	12.56	13.01
		1	13	14.00	12.78	12.54	13.01
		1	24	14.00	12.78	12.55	13.01
		12	0	14.00	12.81	12.54	13.05
		12	6	14.00	12.75	12.54	13.05
		12	13	14.00	12.87	12.54	13.06
		25	0	14.00	12.84	12.57	12.79
	16QAM	1	0	14.00	12.96	12.80	13.29
		1	13	14.00	12.93	12.77	13.33
		1	24	14.00	12.93	12.75	13.26
		12	0	14.00	12.88	12.51	13.06
		12	6	14.00	12.86	12.49	13.00
		12	13	14.00	12.88	12.53	13.01
		25	0	14.00	12.82	12.44	12.77
	64QAM	1	0	14.00	12.82	12.75	13.08
		1	13	14.00	12.86	12.63	13.03
		1	24	14.00	12.79	12.72	13.15
		12	0	14.00	12.91	12.50	12.99
		12	6	14.00	12.91	12.52	12.94
		12	13	14.00	12.89	12.53	13.04
		25	0	14.00	12.87	12.49	12.75
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20000CH	20175CH	20350CH
10MHz	QPSK	1	0	14.00	12.69	12.34	12.72
		1	25	14.00	12.81	12.22	12.86
		1	49	14.00	12.66	12.25	12.73
		25	0	14.00	13.06	12.56	13.04
		25	13	14.00	13.05	12.53	13.00
		25	25	14.00	13.06	12.55	13.03
		50	0	14.00	12.78	12.50	12.87
	16QAM	1	0	14.00	13.04	12.40	13.02
		1	25	14.00	12.78	12.26	12.92
		1	49	14.00	12.97	12.30	13.14
		25	0	14.00	13.03	12.47	12.93
		25	13	14.00	13.01	12.49	12.98
		25	25	14.00	13.00	12.51	12.94
		50	0	14.00	12.70	12.43	12.81
	64QAM	1	0	14.00	13.02	12.36	13.12
		1	25	14.00	12.93	12.20	13.19
		1	49	14.00	13.04	12.30	13.10
		25	0	14.00	13.11	12.55	12.94
		25	13	14.00	13.10	12.57	13.03
		25	25	14.00	13.07	12.57	13.02
		50	0	14.00	12.67	12.50	12.87

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20025CH	20175CH	20325CH
15MHz	QPSK	1	0	14.00	12.78	12.57	12.69
		1	38	14.00	12.85	12.55	12.72
		1	74	14.00	12.84	12.54	12.64
		36	0	14.00	13.26	12.53	12.81
		36	18	14.00	13.26	12.60	12.81
		36	39	14.00	13.26	12.54	12.81
		75	0	14.00	12.73	12.59	12.80
	16QAM	1	0	14.00	13.16	12.64	12.88
		1	38	14.00	13.16	12.76	12.86
		1	74	14.00	13.14	12.76	12.80
		36	0	14.00	13.20	12.44	12.70
		36	18	14.00	13.20	12.47	12.77
		36	39	14.00	13.08	12.51	12.77
		75	0	14.00	12.67	12.49	12.77
	64QAM	1	0	14.00	13.01	12.56	12.76
		1	38	14.00	13.08	12.73	12.82
		1	74	14.00	13.03	12.72	12.76
		36	0	14.00	13.24	12.66	12.81
		36	18	14.00	13.20	12.56	12.76
		36	39	14.00	13.13	12.56	12.78
		75	0	14.00	12.68	12.55	12.82
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20050CH	20175CH	20300CH
20MHz	QPSK	1	0	14.00	13.05	12.63	12.81
		1	50	14.00	13.05	12.67	<b>12.87</b>
		1	99	14.00	<b>13.12</b>	<b>12.68</b>	12.86
		50	0	14.00	<b>12.87</b>	12.59	12.75
		50	25	14.00	12.86	12.59	12.75
		50	50	14.00	12.84	12.58	12.74
		100	0	14.00	12.68	12.59	12.78
	16QAM	1	0	14.00	13.49	12.94	13.13
		1	50	14.00	13.55	12.92	13.07
		1	99	14.00	13.51	12.84	13.13
		50	0	14.00	12.97	12.53	12.65
		50	25	14.00	12.96	12.52	12.70
		50	50	14.00	12.88	12.50	12.70
		100	0	14.00	12.57	12.57	12.71
	64QAM	1	0	14.00	13.36	12.80	13.07
		1	50	14.00	13.33	12.70	12.98
		1	99	14.00	13.33	12.80	13.00
		50	0	14.00	12.99	12.64	12.70
		50	25	14.00	13.01	12.58	12.72
		50	50	14.00	12.99	12.57	12.74
		100	0	14.00	12.70	12.58	12.68

Table 51: Conducted power measurement results of LTE Band 4(Receiver ON)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	12.50	11.23	10.97	11.24
		1	3	12.50	11.25	11.03	11.22
		1	5	12.50	11.18	10.95	11.21
		3	0	12.50	11.19	10.94	11.13
		3	2	12.50	11.20	10.90	11.09
		3	3	12.50	11.20	10.93	11.11
		6	0	12.50	11.20	10.91	11.03
	16QAM	1	0	12.50	11.35	10.93	11.23
		1	3	12.50	11.26	11.10	11.29
		1	5	12.50	11.37	11.12	11.27
		3	0	12.50	11.23	11.00	11.05
		3	2	12.50	11.14	10.92	11.11
		3	3	12.50	11.18	10.97	11.13
		6	0	12.50	11.19	10.89	10.96
	64QAM	1	0	12.50	11.23	11.17	11.13
		1	3	12.50	11.28	11.06	11.28
		1	5	12.50	11.31	11.21	11.33
		3	0	12.50	11.11	10.98	11.16
		3	2	12.50	11.25	10.91	11.20
		3	3	12.50	11.19	10.97	11.06
		6	0	12.50	11.20	10.90	11.03
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19965CH	20175CH	20385CH
3MHz	QPSK	1	0	12.50	11.22	10.93	11.33
		1	7	12.50	11.18	10.92	11.38
		1	14	12.50	11.21	10.91	11.42
		8	0	12.50	11.11	10.93	11.13
		8	4	12.50	11.21	10.91	11.23
		8	7	12.50	11.21	10.95	11.26
		15	0	12.50	11.11	10.92	11.17
	16QAM	1	0	12.50	11.33	11.01	11.41
		1	7	12.50	11.37	11.06	11.61
		1	14	12.50	11.38	11.03	11.57
		8	0	12.50	11.21	10.96	11.04
		8	4	12.50	11.22	10.93	11.27
		8	7	12.50	11.24	10.93	11.25
		15	0	12.50	11.20	10.94	11.11
	64QAM	1	0	12.50	11.25	11.13	11.66
		1	7	12.50	11.38	10.96	11.46
		1	14	12.50	11.26	11.07	11.51
		8	0	12.50	11.22	10.93	11.29
		8	4	12.50	11.18	10.95	11.22
		8	7	12.50	11.21	10.94	11.28
		15	0	12.50	11.19	11.00	11.07

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19975CH	20175CH	20375CH
5MHz	QPSK	1	0	12.50	11.24	11.01	11.31
		1	13	12.50	11.24	11.03	11.33
		1	24	12.50	11.24	11.02	11.37
		12	0	12.50	11.24	11.06	11.38
		12	6	12.50	11.32	11.01	11.39
		12	13	12.50	11.33	11.03	11.40
		25	0	12.50	11.22	10.95	11.17
	16QAM	1	0	12.50	11.37	11.21	11.52
		1	13	12.50	11.32	11.08	11.54
		1	24	12.50	11.39	11.15	11.62
		12	0	12.50	11.32	10.96	11.21
		12	6	12.50	11.29	11.01	11.29
		12	13	12.50	11.29	10.95	11.21
		25	0	12.50	11.19	10.95	11.16
	64QAM	1	0	12.50	11.38	11.10	11.36
		1	13	12.50	11.37	11.10	11.42
		1	24	12.50	11.37	11.04	11.40
		12	0	12.50	11.27	10.97	11.26
		12	6	12.50	11.30	10.99	11.40
		12	13	12.50	11.32	10.97	11.34
		25	0	12.50	11.16	10.98	11.08
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	12.50	11.32	10.76	11.24
		1	25	12.50	11.31	10.71	11.20
		1	49	12.50	11.24	10.81	11.23
		25	0	12.50	11.23	11.01	11.26
		25	13	12.50	11.35	11.01	11.30
		25	25	12.50	11.30	11.08	11.30
		50	0	12.50	11.24	10.97	11.24
	16QAM	1	0	12.50	11.31	10.88	11.28
		1	25	12.50	11.35	10.80	11.30
		1	49	12.50	11.36	10.76	11.40
		25	0	12.50	11.29	10.95	11.22
		25	13	12.50	11.27	10.95	11.12
		25	25	12.50	11.28	10.93	11.23
		50	0	12.50	11.21	10.92	11.17
	64QAM	1	0	12.50	11.30	10.81	11.26
		1	25	12.50	11.42	10.83	11.25
		1	49	12.50	11.44	10.72	11.27
		25	0	12.50	11.42	10.97	11.28
		25	13	12.50	11.36	11.01	11.38
		25	25	12.50	11.41	10.99	11.24
		50	0	12.50	11.20	10.93	11.18

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20025CH	20175CH	20325CH
15MHz	QPSK	1	0	12.50	11.34	11.07	11.16
		1	38	12.50	11.32	11.02	11.17
		1	74	12.50	11.34	11.02	11.18
		36	0	12.50	11.55	11.02	11.27
		36	18	12.50	11.42	11.01	11.27
		36	39	12.50	11.55	11.01	11.22
		75	0	12.50	11.21	11.03	11.24
	16QAM	1	0	12.50	11.38	11.05	11.21
		1	38	12.50	11.36	11.27	11.18
		1	74	12.50	11.47	11.18	11.24
		36	0	12.50	11.43	10.98	11.20
		36	18	12.50	11.48	10.94	11.20
		36	39	12.50	11.38	10.96	11.21
		75	0	12.50	11.08	10.97	11.12
	64QAM	1	0	12.50	11.35	11.10	11.15
		1	38	12.50	11.53	11.19	11.32
		1	74	12.50	11.49	11.21	11.27
		36	0	12.50	11.63	10.97	11.16
		36	18	12.50	11.64	11.08	11.20
		36	39	12.50	11.62	11.01	11.21
		75	0	12.50	11.14	10.98	11.10
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20050CH	20175CH	20300CH
20MHz	QPSK	1	0	12.50	11.58	11.15	11.31
		1	50	12.50	11.59	11.14	11.29
		1	99	12.50	11.58	11.14	11.30
		50	0	12.50	11.37	11.05	11.21
		50	25	12.50	11.37	11.05	11.22
		50	50	12.50	11.33	11.05	11.19
		100	0	12.50	11.11	11.05	11.21
	16QAM	1	0	12.50	11.66	11.44	11.46
		1	50	12.50	11.72	11.37	11.44
		1	99	12.50	11.71	11.43	11.39
		50	0	12.50	11.28	11.01	11.14
		50	25	12.50	11.27	10.99	11.14
		50	50	12.50	11.21	11.01	11.11
		100	0	12.50	11.05	11.00	11.13
	64QAM	1	0	12.50	11.61	11.32	11.26
		1	50	12.50	11.61	11.17	11.36
		1	99	12.50	11.69	11.12	11.24
		50	0	12.50	11.35	11.07	11.14
		50	25	12.50	11.36	11.00	11.14
		50	50	12.50	11.36	10.99	11.20
		100	0	12.50	11.07	11.02	11.19

Table 52: Conducted power measurement results of LTE Band 4 (Second Antenna+WiFi Antenna, Receiver ON)



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	19.50	18.25	18.15	18.29
		1	3	19.50	18.27	18.17	18.29
		1	5	19.50	18.24	18.21	18.29
		3	0	19.50	18.17	17.99	18.26
		3	2	19.50	18.23	17.98	18.18
		3	3	19.50	18.28	18.07	18.22
		6	0	19.50	18.25	18.05	18.21
	16QAM	1	0	19.50	18.31	18.04	18.38
		1	3	19.50	18.36	18.14	18.37
		1	5	19.50	18.32	18.15	18.34
		3	0	19.50	18.19	18.06	18.09
		3	2	19.50	18.22	18.03	18.17
		3	3	19.50	18.22	18.06	18.20
		6	0	19.50	18.02	17.98	18.04
	64QAM	1	0	19.50	18.34	18.28	18.23
		1	3	19.50	18.36	18.16	18.29
		1	5	19.50	18.41	18.15	18.34
		3	0	19.50	18.14	18.04	18.18
		3	2	19.50	18.19	18.04	18.22
		3	3	19.50	18.34	18.00	18.11
		6	0	19.50	18.19	18.06	18.02
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
3MHz	QPSK	1	0	19.50	18.25	18.19	18.56
		1	7	19.50	18.27	18.11	18.56
		1	14	19.50	18.29	18.20	18.53
		8	0	19.50	18.24	18.04	18.26
		8	4	19.50	18.24	18.07	18.35
		8	7	19.50	18.23	18.09	18.36
		15	0	19.50	18.24	18.07	18.21
	16QAM	1	0	19.50	18.32	18.09	18.64
		1	7	19.50	18.31	18.05	18.65
		1	14	19.50	18.33	18.14	18.55
		8	0	19.50	18.22	18.00	18.24
		8	4	19.50	18.18	18.03	18.26
		8	7	19.50	18.19	18.00	18.26
		15	0	19.50	18.11	17.91	18.17
	64QAM	1	0	19.50	18.33	18.23	18.60
		1	7	19.50	18.36	18.17	18.38
		1	14	19.50	18.27	18.27	18.41
		8	0	19.50	18.22	18.04	18.22
		8	4	19.50	18.15	18.03	18.26
		8	7	19.50	18.20	17.99	18.24
		15	0	19.50	18.20	17.98	18.15
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19965CH	20175CH	20385CH

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19975CH	20175CH	20375CH
5MHz	QPSK	1	0	19.50	18.26	18.11	18.50
		1	13	19.50	18.25	18.11	18.48
		1	24	19.50	18.24	18.12	18.49
		12	0	19.50	18.32	18.12	18.37
		12	6	19.50	18.32	18.13	18.51
		12	13	19.50	18.32	18.12	18.50
		25	0	19.50	18.27	18.07	18.25
	16QAM	1	0	19.50	18.49	18.26	18.71
		1	13	19.50	18.49	18.38	18.67
		1	24	19.50	18.46	18.36	18.71
		12	0	19.50	18.29	18.01	18.30
		12	6	19.50	18.27	18.06	18.31
		12	13	19.50	18.29	18.09	18.30
		25	0	19.50	18.17	17.98	18.19
	64QAM	1	0	19.50	18.33	18.18	18.43
		1	13	19.50	18.34	18.29	18.40
		1	24	19.50	18.28	18.21	18.28
		12	0	19.50	18.26	18.10	18.30
		12	6	19.50	18.27	18.14	18.32
		12	13	19.50	18.18	18.09	18.29
		25	0	19.50	18.22	18.02	18.18
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	19.50	18.20	17.50	18.28
		1	25	19.50	18.28	17.54	18.32
		1	49	19.50	18.31	17.45	18.22
		25	0	19.50	18.27	18.08	18.23
		25	13	19.50	18.22	18.09	18.20
		25	25	19.50	18.29	18.09	18.33
		50	0	19.50	18.22	18.18	18.28
	16QAM	1	0	19.50	18.41	17.43	18.31
		1	25	19.50	18.33	17.61	18.45
		1	49	19.50	18.37	17.47	18.45
		25	0	19.50	18.25	18.04	18.24
		25	13	19.50	18.25	18.00	18.24
		25	25	19.50	18.25	18.01	18.21
		50	0	19.50	18.15	17.99	18.17
	64QAM	1	0	19.50	18.28	17.48	18.35
		1	25	19.50	18.32	17.50	18.27
		1	49	19.50	18.37	17.47	18.46
		25	0	19.50	18.15	18.06	18.24
		25	13	19.50	18.24	18.11	18.26
		25	25	19.50	18.27	18.13	18.18
		50	0	19.50	18.23	17.99	18.14
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20000CH	20175CH	20350CH

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20025CH	20175CH	20325CH
15MHz	QPSK	1	0	19.50	18.34	18.15	18.30
		1	38	19.50	18.33	18.14	18.29
		1	74	19.50	18.32	18.15	18.28
		36	0	19.50	18.36	18.16	18.28
		36	18	19.50	18.37	18.10	18.31
		36	39	19.50	18.36	18.10	18.32
		75	0	19.50	18.12	18.19	18.31
	16QAM	1	0	19.50	18.54	18.23	18.27
		1	38	19.50	18.42	18.23	18.34
		1	74	19.50	18.30	18.19	18.27
		36	0	19.50	18.32	17.81	18.26
		36	18	19.50	18.31	17.86	18.24
		36	39	19.50	18.31	17.87	18.27
		75	0	19.50	18.06	18.10	18.18
	64QAM	1	0	19.50	18.50	18.23	18.35
		1	38	19.50	18.36	18.17	18.41
		1	74	19.50	18.38	18.07	18.32
		36	0	19.50	18.33	17.85	18.31
		36	18	19.50	18.23	17.87	18.26
		36	39	19.50	18.33	17.89	18.24
		75	0	19.50	18.12	18.08	18.20
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	19.50	18.58	18.29	18.47
		1	50	19.50	<b>18.60</b>	18.29	18.44
		1	99	19.50	18.52	18.28	18.47
		50	0	19.50	18.34	18.18	18.32
		50	25	19.50	18.30	18.21	18.30
		50	50	19.50	<b>18.35</b>	18.19	18.30
		100	0	19.50	18.22	18.22	18.32
	16QAM	1	0	19.50	18.75	18.41	18.66
		1	50	19.50	18.60	18.39	18.71
		1	99	19.50	18.68	18.44	18.59
		50	0	19.50	18.21	18.09	18.26
		50	25	19.50	18.28	18.07	18.27
		50	50	19.50	18.28	18.09	18.26
		100	0	19.50	18.11	18.06	18.25
	64QAM	1	0	19.50	18.65	18.42	18.54
		1	50	19.50	18.58	18.47	18.59
		1	99	19.50	18.60	18.23	18.47
		50	0	19.50	18.27	18.08	18.30
		50	25	19.50	18.27	18.10	18.31
		50	50	19.50	18.29	18.09	18.31
		100	0	19.50	18.14	18.09	18.26

Table 53: Conducted power measurement results of LTE Band 4 (Second Antenna+WiFi Antenna, Receiver OFF)

### 7.1.14 Conducted power measurements of LTE Band 4 (Main Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	19957CH	20175CH	20393CH	
1.4MHz	QPSK	1	0	24.50	23.22	23.32	23.35	
		1	3	24.50	23.26	23.35	23.34	
		1	5	24.50	23.19	23.34	23.20	
		3	0	24.50	23.11	23.17	23.13	
		3	2	24.50	23.14	23.28	23.11	
		3	3	24.50	23.03	23.23	23.09	
	16QAM	6	0	23.50	22.13	22.28	22.16	
		1	0	23.50	22.23	22.42	22.49	
		1	3	23.50	22.32	22.16	22.23	
		1	5	23.50	22.25	22.42	22.40	
		3	0	23.50	22.13	22.34	22.20	
		3	2	23.50	22.10	22.29	22.20	
	64QAM	3	3	23.50	22.09	22.37	22.17	
		6	0	22.50	21.03	21.19	21.05	
		1	0	22.50	21.33	21.22	21.33	
		1	3	22.50	21.40	21.39	21.56	
		1	5	22.50	21.42	21.46	21.42	
		3	0	22.50	21.13	21.24	21.09	
	3MHz	QPSK	3	2	22.50	21.16	21.33	21.14
			3	3	22.50	21.20	21.29	21.23
			6	0	21.50	20.18	20.26	20.15
1			0	24.50	23.09	23.24	23.29	
1			7	24.50	23.06	23.28	23.15	
1			14	24.50	23.05	23.26	23.11	
8			0	23.50	22.07	22.30	22.04	
16QAM	8	4	23.50	22.08	22.29	22.15		
	8	7	23.50	22.04	22.30	22.14		
	15	0	23.50	22.15	22.29	22.10		
	1	0	23.50	22.18	22.36	22.22		
	1	7	23.50	22.23	22.39	22.30		
	1	14	23.50	22.27	22.35	22.11		
	8	0	22.50	21.00	21.27	21.04		
64QAM	8	4	22.50	21.03	21.32	21.10		
	8	7	22.50	21.07	21.28	21.04		
	15	0	22.50	21.04	21.13	21.17		
	1	0	22.50	21.35	21.54	21.37		
	1	7	22.50	21.39	21.49	21.35		
	1	14	22.50	21.25	21.40	21.39		
	8	0	21.50	20.21	20.20	20.13		
3MHz	64QAM	8	4	21.50	20.08	20.21	20.17	
		8	7	21.50	20.13	20.24	20.15	
		15	0	21.50	20.17	20.21	20.10	
		15	0	21.50	20.17	20.21	20.10	

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19975CH	20175CH	20375CH
5MHz	QPSK	1	0	24.50	23.06	23.23	23.22
		1	13	24.50	23.05	23.12	23.17
		1	24	24.50	23.03	23.14	23.15
		12	0	23.50	22.18	22.35	22.15
		12	6	23.50	22.22	22.36	22.15
		12	13	23.50	22.22	22.34	22.14
		25	0	23.50	22.18	22.27	22.09
	16QAM	1	0	23.50	22.11	22.27	22.34
		1	13	23.50	22.15	22.31	22.32
		1	24	23.50	22.07	22.27	22.30
		12	0	22.50	21.07	21.28	21.06
		12	6	22.50	21.09	21.31	21.13
		12	13	22.50	21.10	21.27	21.08
		25	0	22.50	21.06	21.19	21.04
	64QAM	1	0	22.50	21.16	21.36	21.15
		1	13	22.50	21.25	21.37	21.27
		1	24	22.50	21.22	21.40	21.25
		12	0	21.50	20.05	20.21	20.10
		12	6	21.50	20.06	20.23	20.09
		12	13	21.50	20.05	20.24	20.10
		25	0	21.50	20.06	20.13	20.07
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20000CH	20175CH	20350CH
10MHz	QPSK	1	0	24.50	23.09	23.21	23.14
		1	25	24.50	23.10	23.15	23.11
		1	49	24.50	23.02	23.17	23.13
		25	0	23.50	22.18	22.18	22.24
		25	13	23.50	22.18	22.30	22.23
		25	25	23.50	22.18	22.30	22.15
		50	0	23.50	22.18	22.25	22.22
	16QAM	1	0	23.50	22.27	22.34	22.19
		1	25	23.50	22.25	22.35	22.20
		1	49	23.50	22.15	22.41	22.14
		25	0	22.50	21.10	21.23	21.18
		25	13	22.50	21.12	21.21	21.05
		25	25	22.50	21.14	21.22	21.05
		50	0	22.50	21.11	21.15	21.15
	64QAM	1	0	22.50	21.20	21.35	21.41
		1	25	22.50	21.22	21.51	21.37
		1	49	22.50	21.15	21.49	21.36
		25	0	21.50	20.06	20.24	20.24
		25	13	21.50	20.04	20.28	20.21
		25	25	21.50	20.03	20.23	20.24
		50	0	21.50	20.08	20.12	20.04

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20025CH	20175CH	20325CH
15MHz	QPSK	1	0	24.50	23.16	23.31	23.17
		1	38	24.50	23.11	23.19	23.15
		1	74	24.50	23.13	23.19	23.17
		36	0	23.50	22.23	22.27	22.17
		36	18	23.50	22.22	22.28	22.17
		36	39	23.50	22.23	22.29	22.16
		75	0	23.50	22.09	22.16	22.27
	16QAM	1	0	23.50	22.36	22.32	22.22
		1	38	23.50	22.28	22.34	22.16
		1	74	23.50	22.31	22.36	22.24
		36	0	22.50	21.14	21.15	21.24
		36	18	22.50	21.15	21.18	21.21
		36	39	22.50	21.15	21.16	21.23
		75	0	22.50	21.14	21.17	21.21
	64QAM	1	0	22.50	21.30	21.36	21.32
		1	38	22.50	21.30	21.42	21.36
		1	74	22.50	21.27	21.32	21.28
		36	0	21.50	20.19	20.19	20.18
		36	18	21.50	20.20	20.24	20.20
		36	39	21.50	20.14	20.21	20.21
		75	0	21.50	20.14	20.16	20.21
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20050CH	20175CH	20300CH
20MHz	QPSK	1	0	24.50	<b>23.41</b>	23.34	<b>23.45</b>
		1	50	24.50	23.30	<b>23.38</b>	23.44
		1	99	24.50	23.28	23.36	23.44
		50	0	23.50	22.29	<b>22.47</b>	22.25
		50	25	23.50	22.25	22.43	22.26
		50	50	23.50	22.26	22.45	22.26
		100	0	23.50	22.32	22.41	22.32
	16QAM	1	0	23.50	22.57	22.74	22.60
		1	50	23.50	22.46	22.65	22.67
		1	99	23.50	22.47	22.57	22.67
		50	0	22.50	21.17	21.36	21.22
		50	25	22.50	21.20	21.36	21.24
		50	50	22.50	21.27	21.38	21.32
		100	0	22.50	21.19	21.24	21.35
	64QAM	1	0	22.50	21.57	21.47	21.69
		1	50	22.50	21.45	21.35	21.70
		1	99	22.50	21.39	21.61	21.65
		50	0	21.50	20.31	20.41	20.31
		50	25	21.50	20.27	20.42	20.30
		50	50	21.50	20.32	20.41	20.27
		100	0	21.50	20.20	20.29	20.29

Table 54: Conducted power measurement results of LTE Band 4(Full power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	19957CH	20175CH	20393CH	
1.4MHz	QPSK	1	0	21.00	19.55	19.72	19.67	
		1	3	21.00	19.68	19.72	19.71	
		1	5	21.00	19.64	19.74	19.68	
		3	0	21.00	19.58	19.71	19.62	
		3	2	21.00	19.57	19.74	19.65	
		3	3	21.00	19.54	19.79	19.62	
	16QAM	6	0	21.00	19.50	19.69	19.56	
		1	0	21.00	19.57	19.89	19.73	
		1	3	21.00	19.68	19.81	19.66	
		1	5	21.00	19.62	19.70	19.82	
		3	0	21.00	19.56	19.77	19.64	
		3	2	21.00	19.64	19.76	19.54	
	64QAM	3	3	21.00	19.55	19.77	19.64	
		6	0	21.00	19.45	19.61	19.55	
		1	0	21.00	19.84	19.77	19.87	
		1	3	21.00	19.86	19.75	19.85	
		1	5	21.00	19.80	19.85	19.88	
		3	0	21.00	19.57	19.80	19.67	
	3MHz	QPSK	3	2	21.00	19.59	19.81	19.62
			3	3	21.00	19.67	19.69	19.62
			6	0	21.00	19.50	19.60	19.55
1			0	21.00	19.58	19.71	19.73	
1			7	21.00	19.62	19.71	19.72	
1			14	21.00	19.60	19.72	19.70	
8			0	21.00	19.58	19.63	19.63	
16QAM		8	4	21.00	19.66	19.66	19.77	
		8	7	21.00	19.63	19.73	19.57	
		15	0	21.00	19.66	19.83	19.72	
		1	0	21.00	19.80	19.77	19.84	
		1	7	21.00	19.62	19.94	19.90	
		1	14	21.00	19.71	19.84	19.84	
		8	0	21.00	19.60	19.77	19.70	
64QAM		8	4	21.00	19.68	19.71	19.77	
		8	7	21.00	19.56	19.79	19.76	
		15	0	21.00	19.63	19.67	19.66	
		1	0	21.00	19.91	19.88	19.96	
		1	7	21.00	19.81	20.01	19.79	
		1	14	21.00	19.74	19.89	19.89	
		8	0	21.00	19.53	19.72	19.57	
QPSK	8	4	21.00	19.56	19.79	19.60		
	8	7	21.00	19.58	19.72	19.68		
	15	0	21.00	19.57	19.72	19.62		

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19975CH	20175CH	20375CH
5MHz	QPSK	1	0	21.00	19.63	19.68	19.68
		1	13	21.00	19.61	19.78	19.65
		1	24	21.00	19.68	19.71	19.63
		12	0	21.00	19.64	19.86	19.66
		12	6	21.00	19.65	19.85	19.69
		12	13	21.00	19.64	19.86	19.69
		25	0	21.00	19.61	19.81	19.65
	16QAM	1	0	21.00	19.76	20.00	19.90
		1	13	21.00	19.74	19.86	19.82
		1	24	21.00	19.86	19.81	19.78
		12	0	21.00	19.64	19.82	19.64
		12	6	21.00	19.64	19.82	19.64
		12	13	21.00	19.63	19.85	19.66
		25	0	21.00	19.53	19.69	19.70
	64QAM	1	0	21.00	19.80	20.06	19.83
		1	13	21.00	19.71	19.81	19.79
		1	24	21.00	19.72	19.89	19.89
		12	0	21.00	19.65	19.78	19.68
		12	6	21.00	19.62	19.79	19.66
		12	13	21.00	19.61	19.81	19.67
		25	0	21.00	19.62	19.65	19.61
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	21.00	19.63	19.74	19.73
		1	25	21.00	19.64	19.74	19.67
		1	49	21.00	19.62	19.71	19.74
		25	0	21.00	19.67	19.88	19.72
		25	13	21.00	19.69	19.86	19.72
		25	25	21.00	19.65	19.87	19.72
		50	0	21.00	19.63	19.81	19.66
	16QAM	1	0	21.00	19.75	19.75	19.88
		1	25	21.00	19.76	19.77	19.82
		1	49	21.00	19.59	19.81	19.72
		25	0	21.00	19.62	19.78	19.73
		25	13	21.00	19.58	19.76	19.72
		25	25	21.00	19.60	19.78	19.74
		50	0	21.00	19.56	19.71	19.67
	64QAM	1	0	21.00	19.81	19.90	19.98
		1	25	21.00	19.80	19.89	19.94
		1	49	21.00	19.74	19.77	20.04
		25	0	21.00	19.60	19.81	19.63
		25	13	21.00	19.59	19.79	19.66
		25	25	21.00	19.60	19.83	19.63
		50	0	21.00	19.60	19.67	19.71
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20000CH	20175CH	20350CH



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20025CH	20175CH	20325CH
15MHz	QPSK	1	0	21.00	19.65	19.86	19.74
		1	38	21.00	19.62	19.88	19.73
		1	74	21.00	19.62	19.91	19.71
		36	0	21.00	19.78	19.88	19.79
		36	18	21.00	19.79	19.87	19.78
		36	39	21.00	19.79	19.88	19.83
		75	0	21.00	19.68	19.85	19.73
	16QAM	1	0	21.00	19.90	19.91	19.82
		1	38	21.00	19.83	20.00	19.98
		1	74	21.00	19.83	19.88	19.86
		36	0	21.00	19.68	19.79	19.72
		36	18	21.00	19.67	19.80	19.72
		36	39	21.00	19.69	19.80	19.73
		75	0	21.00	19.61	19.78	19.78
	64QAM	1	0	21.00	19.78	20.00	20.01
		1	38	21.00	19.77	20.05	19.92
		1	74	21.00	19.79	20.00	20.00
		36	0	21.00	19.75	19.77	19.84
		36	18	21.00	19.73	19.76	19.80
		36	39	21.00	19.76	19.73	19.82
		75	0	21.00	19.62	19.74	19.65
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20050CH	20175CH	20300CH
20MHz	QPSK	1	0	21.00	19.95	20.04	<b>20.18</b>
		1	50	21.00	19.93	<b>20.08</b>	20.11
		1	99	21.00	<b>19.97</b>	20.06	20.13
		50	0	21.00	19.82	19.98	19.88
		50	25	21.00	<b>19.83</b>	19.97	19.90
		50	50	21.00	19.82	<b>20.01</b>	<b>19.91</b>
		100	0	21.00	19.85	19.88	<b>19.99</b>
	16QAM	1	0	21.00	20.09	20.30	20.34
		1	50	21.00	20.14	20.21	20.46
		1	99	21.00	20.23	20.29	20.43
		50	0	21.00	19.80	19.95	19.80
		50	25	21.00	19.80	19.94	19.87
		50	50	21.00	19.85	19.96	19.81
		100	0	21.00	19.77	19.80	19.85
	64QAM	1	0	21.00	20.09	20.22	20.29
		1	50	21.00	20.20	20.25	20.33
		1	99	21.00	20.23	20.04	20.30
		50	0	21.00	19.84	19.97	19.96
		50	25	21.00	19.84	19.95	19.95
		50	50	21.00	19.81	19.96	20.00
		100	0	21.00	19.79	19.83	19.85

Table 55: Conducted power measurement results of LTE Band 4 (Reduced Power Level D2)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19957CH	20175CH	20393CH
1.4MHz	QPSK	1	0	18.50	17.46	17.67	17.62
		1	3	18.50	17.54	17.63	17.62
		1	5	18.50	17.61	17.64	17.61
		3	0	18.50	17.51	17.53	17.43
		3	2	18.50	17.47	17.48	17.44
		3	3	18.50	17.47	17.54	17.51
		6	0	18.50	17.38	17.39	17.44
	16QAM	1	0	18.50	17.58	17.82	17.65
		1	3	18.50	17.50	17.67	17.53
		1	5	18.50	17.66	17.50	17.45
		3	0	18.50	17.31	17.46	17.49
		3	2	18.50	17.35	17.41	17.46
		3	3	18.50	17.38	17.59	17.49
		6	0	18.50	17.48	17.39	17.47
	64QAM	1	0	18.50	17.73	17.69	17.49
		1	3	18.50	17.64	17.68	17.58
		1	5	18.50	17.66	17.75	17.44
		3	0	18.50	17.47	17.51	17.53
		3	2	18.50	17.40	17.45	17.45
		3	3	18.50	17.40	17.36	17.47
		6	0	18.50	17.36	17.39	17.36
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
3MHz	QPSK	1	0	18.50	17.47	17.67	17.51
		1	7	18.50	17.49	17.66	17.49
		1	14	18.50	17.49	17.63	17.47
		8	0	18.50	17.49	17.52	17.44
		8	4	18.50	17.47	17.49	17.52
		8	7	18.50	17.50	17.51	17.48
		15	0	18.50	17.46	17.62	17.59
	16QAM	1	0	18.50	17.74	17.73	17.81
		1	7	18.50	17.65	17.82	17.67
		1	14	18.50	17.59	17.73	17.73
		8	0	18.50	17.36	17.44	17.60
		8	4	18.50	17.36	17.44	17.53
		8	7	18.50	17.43	17.48	17.52
		15	0	18.50	17.41	17.55	17.48
	64QAM	1	0	18.50	17.64	17.68	17.63
		1	7	18.50	17.51	17.72	17.55
		1	14	18.50	17.55	17.68	17.65
		8	0	18.50	17.49	17.42	17.56
		8	4	18.50	17.42	17.42	17.56
		8	7	18.50	17.38	17.38	17.49
		15	0	18.50	17.43	17.56	17.52

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19975CH	20175CH	20375CH
5MHz	QPSK	1	0	18.50	17.49	17.56	17.49
		1	13	18.50	17.53	17.67	17.50
		1	24	18.50	17.49	17.54	17.49
		12	0	18.50	17.51	17.65	17.51
		12	6	18.50	17.51	17.66	17.54
		12	13	18.50	17.50	17.65	17.54
		25	0	18.50	17.47	17.63	17.61
	16QAM	1	0	18.50	17.79	17.79	17.76
		1	13	18.50	17.66	17.90	17.75
		1	24	18.50	17.65	17.67	17.73
		12	0	18.50	17.44	17.60	17.46
		12	6	18.50	17.57	17.62	17.53
		12	13	18.50	17.54	17.60	17.45
		25	0	18.50	17.41	17.54	17.45
	64QAM	1	0	18.50	17.49	17.56	17.52
		1	13	18.50	17.49	17.64	17.56
		1	24	18.50	17.57	17.59	17.63
		12	0	18.50	17.48	17.59	17.46
		12	6	18.50	17.46	17.57	17.48
		12	13	18.50	17.52	17.58	17.45
		25	0	18.50	17.49	17.54	17.45
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	18.50	17.57	17.69	17.63
		1	25	18.50	17.54	17.53	17.51
		1	49	18.50	17.58	17.66	17.51
		25	0	18.50	17.60	17.67	17.62
		25	13	18.50	17.61	17.68	17.61
		25	25	18.50	17.60	17.68	17.62
		50	0	18.50	17.60	17.64	17.62
	16QAM	1	0	18.50	17.64	17.69	17.82
		1	25	18.50	17.66	17.71	17.66
		1	49	18.50	17.40	17.73	17.81
		25	0	18.50	17.52	17.61	17.56
		25	13	18.50	17.55	17.56	17.58
		25	25	18.50	17.50	17.58	17.57
		50	0	18.50	17.51	17.59	17.53
	64QAM	1	0	18.50	17.61	17.79	17.71
		1	25	18.50	17.55	17.66	17.63
		1	49	18.50	17.54	17.74	17.81
		25	0	18.50	17.46	17.57	17.56
		25	13	18.50	17.46	17.59	17.55
		25	25	18.50	17.45	17.58	17.55
		50	0	18.50	17.55	17.57	17.55
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20000CH	20175CH	20350CH

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20025CH	20175CH	20325CH
15MHz	QPSK	1	0	18.50	17.46	17.69	17.50
		1	38	18.50	17.62	17.66	17.48
		1	74	18.50	17.61	17.66	17.55
		36	0	18.50	17.55	17.63	17.65
		36	18	18.50	17.54	17.72	17.65
		36	39	18.50	17.57	17.70	17.64
		75	0	18.50	17.62	17.67	17.67
	16QAM	1	0	18.50	17.73	17.77	17.56
		1	38	18.50	17.67	17.84	17.70
		1	74	18.50	17.60	17.74	17.62
		36	0	18.50	17.47	17.54	17.59
		36	18	18.50	17.48	17.53	17.59
		36	39	18.50	17.48	17.53	17.57
		75	0	18.50	17.50	17.62	17.56
	64QAM	1	0	18.50	17.68	17.72	17.49
		1	38	18.50	17.77	17.73	17.49
		1	74	18.50	17.72	17.57	17.47
		36	0	18.50	17.50	17.56	17.55
		36	18	18.50	17.52	17.55	17.55
		36	39	18.50	17.51	17.56	17.49
		75	0	18.50	17.54	17.58	17.60
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	18.50	17.70	17.75	17.76
		1	50	18.50	17.69	17.73	17.75
		1	99	18.50	17.67	17.75	17.73
		50	0	18.50	17.58	17.70	17.62
		50	25	18.50	17.56	17.69	17.57
		50	50	18.50	17.56	17.69	17.61
		100	0	18.50	17.61	17.68	17.68
	16QAM	1	0	18.50	17.86	17.93	17.93
		1	50	18.50	17.91	17.88	17.91
		1	99	18.50	18.00	17.90	17.82
		50	0	18.50	17.49	17.67	17.53
		50	25	18.50	17.55	17.60	17.51
		50	50	18.50	17.46	17.64	17.54
		100	0	18.50	17.54	17.61	17.63
	64QAM	1	0	18.50	17.86	17.80	17.83
		1	50	18.50	17.86	17.85	17.72
		1	99	18.50	17.86	17.73	17.76
		50	0	18.50	17.50	17.63	17.52
		50	25	18.50	17.51	17.65	17.50
		50	50	18.50	17.51	17.61	17.53
		100	0	18.50	17.59	17.62	17.63
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	18.50	17.70	17.75	17.76
		1	50	18.50	17.69	17.73	17.75
		1	99	18.50	17.67	17.75	17.73
		50	0	18.50	17.58	17.70	17.62
		50	25	18.50	17.56	17.69	17.57
		50	50	18.50	17.56	17.69	17.61
		100	0	18.50	17.61	17.68	17.68
	16QAM	1	0	18.50	17.86	17.93	17.93
		1	50	18.50	17.91	17.88	17.91
		1	99	18.50	18.00	17.90	17.82
		50	0	18.50	17.49	17.67	17.53
		50	25	18.50	17.55	17.60	17.51
		50	50	18.50	17.46	17.64	17.54
		100	0	18.50	17.54	17.61	17.63
	64QAM	1	0	18.50	17.86	17.80	17.83
		1	50	18.50	17.86	17.85	17.72
		1	99	18.50	17.86	17.73	17.76
		50	0	18.50	17.50	17.63	17.52
		50	25	18.50	17.51	17.65	17.50
		50	50	18.50	17.51	17.61	17.53
		100	0	18.50	17.59	17.62	17.63

Table 56: Conducted power measurement results of LTE Band 4 (Reduced Power Level D4/D5)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	19957CH	20175CH	20393CH	
1.4MHz	QPSK	1	0	15.00	14.12	14.19	14.20	
		1	3	15.00	14.08	14.23	14.10	
		1	5	15.00	14.08	14.23	14.15	
		3	0	15.00	14.01	14.04	14.08	
		3	2	15.00	13.94	14.06	14.04	
		3	3	15.00	14.04	14.02	14.05	
		6	0	15.00	14.09	14.00	14.09	
	16QAM	1	0	15.00	14.05	14.27	14.27	
		1	3	15.00	14.07	14.31	14.25	
		1	5	15.00	14.02	14.27	14.16	
		3	0	15.00	14.05	14.08	14.09	
		3	2	15.00	14.12	14.03	14.20	
		3	3	15.00	14.09	14.08	14.17	
		6	0	15.00	13.93	13.97	14.09	
	64QAM	1	0	15.00	14.04	14.32	14.13	
		1	3	15.00	14.03	14.17	14.16	
		1	5	15.00	14.10	14.12	14.16	
		3	0	15.00	14.01	13.96	14.09	
		3	2	15.00	14.04	14.12	14.16	
		3	3	15.00	14.01	14.12	14.03	
		6	0	15.00	14.00	13.99	14.04	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
	3MHz	QPSK	1	0	15.00	14.02	14.07	14.14
			1	7	15.00	14.32	14.09	14.06
1			14	15.00	13.95	14.20	14.00	
8			0	15.00	13.84	14.00	14.01	
8			4	15.00	14.24	14.24	14.17	
8			7	15.00	14.15	14.22	14.20	
15			0	15.00	14.11	14.14	13.99	
16QAM		1	0	15.00	13.91	14.05	13.91	
		1	7	15.00	13.93	13.98	13.86	
		1	14	15.00	13.91	13.97	13.95	
		8	0	15.00	14.01	13.95	13.95	
		8	4	15.00	14.13	14.17	14.09	
		8	7	15.00	14.11	14.06	14.16	
		15	0	15.00	14.13	14.20	14.21	
64QAM		1	0	15.00	13.97	14.04	13.89	
		1	7	15.00	13.87	13.93	13.95	
		1	14	15.00	13.94	13.96	13.94	
		8	0	15.00	13.96	13.86	13.96	
		8	4	15.00	14.14	14.11	14.03	
		8	7	15.00	14.12	13.82	13.93	
		15	0	15.00	13.74	14.23	13.88	

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	19975CH	20175CH	20375CH
5MHz	QPSK	1	0	15.00	14.05	14.11	14.06
		1	13	15.00	14.08	14.07	14.07
		1	24	15.00	14.07	14.06	14.07
		12	0	15.00	13.99	14.17	14.14
		12	6	15.00	13.99	14.12	14.12
		12	13	15.00	14.01	14.14	14.14
		25	0	15.00	13.95	14.11	14.02
	16QAM	1	0	15.00	14.25	14.31	14.17
		1	13	15.00	14.33	14.36	14.24
		1	24	15.00	14.27	14.27	14.30
		12	0	15.00	13.98	14.12	14.03
		12	6	15.00	13.94	14.06	14.00
		12	13	15.00	13.98	13.99	14.01
		25	0	15.00	13.90	13.97	14.03
	64QAM	1	0	15.00	14.15	14.28	14.15
		1	13	15.00	14.24	14.29	14.13
		1	24	15.00	14.11	14.18	14.17
		12	0	15.00	13.90	13.97	14.05
		12	6	15.00	13.96	13.95	14.04
		12	13	15.00	13.96	13.96	14.02
		25	0	15.00	13.90	14.05	13.92
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20000CH	20175CH	20350CH
10MHz	QPSK	1	0	15.00	14.09	14.06	14.00
		1	25	15.00	13.95	14.09	14.02
		1	49	15.00	13.93	14.11	14.00
		25	0	15.00	14.08	14.07	14.04
		25	13	15.00	14.08	14.07	14.02
		25	25	15.00	14.12	14.07	14.02
		50	0	15.00	14.08	14.07	14.13
	16QAM	1	0	15.00	14.17	14.17	13.93
		1	25	15.00	14.02	14.16	14.18
		1	49	15.00	13.92	14.15	14.16
		25	0	15.00	14.02	14.05	13.95
		25	13	15.00	14.03	14.06	13.92
		25	25	15.00	13.98	14.08	13.95
		50	0	15.00	13.88	14.04	14.01
	64QAM	1	0	15.00	14.06	14.07	14.10
		1	25	15.00	14.04	14.15	14.09
		1	49	15.00	14.12	13.99	13.98
		25	0	15.00	14.04	14.08	13.96
		25	13	15.00	14.03	14.08	13.93
		25	25	15.00	14.07	14.04	13.93
		50	0	15.00	13.92	14.00	14.01

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20025CH	20175CH	20325CH
15MHz	QPSK	1	0	15.00	14.02	14.11	14.08
		1	38	15.00	14.04	14.13	14.09
		1	74	15.00	14.04	14.14	14.11
		36	0	15.00	14.12	14.14	14.12
		36	18	15.00	14.10	14.15	14.11
		36	39	15.00	14.05	14.15	14.13
		75	0	15.00	14.00	14.14	14.03
	16QAM	1	0	15.00	14.22	14.18	14.14
		1	38	15.00	14.20	14.22	14.22
		1	74	15.00	14.03	14.20	14.17
		36	0	15.00	14.02	14.12	14.08
		36	18	15.00	14.06	14.10	14.08
		36	39	15.00	13.99	14.08	14.11
		75	0	15.00	13.95	13.90	13.98
	64QAM	1	0	15.00	14.24	14.21	14.13
		1	38	15.00	14.12	14.21	14.11
		1	74	15.00	14.16	14.18	14.05
		36	0	15.00	14.06	14.11	14.09
		36	18	15.00	14.08	14.11	14.08
		36	39	15.00	14.06	14.12	14.09
		75	0	15.00	14.00	13.91	13.98
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	15.00	14.19	14.19	14.23
		1	50	15.00	14.19	14.15	14.25
		1	99	15.00	14.20	14.20	14.24
		50	0	15.00	14.10	14.00	14.16
		50	25	15.00	14.11	13.99	14.13
		50	50	15.00	14.12	14.02	14.10
		100	0	15.00	14.06	14.13	14.14
	16QAM	1	0	15.00	14.38	14.36	14.33
		1	50	15.00	14.35	14.41	14.28
		1	99	15.00	14.49	14.28	14.44
		50	0	15.00	14.02	13.96	14.04
		50	25	15.00	14.02	13.96	14.09
		50	50	15.00	14.05	13.92	14.07
		100	0	15.00	14.00	14.06	13.93
	64QAM	1	0	15.00	14.35	14.20	14.29
		1	50	15.00	14.33	14.14	14.31
		1	99	15.00	14.34	14.21	14.18
		50	0	15.00	14.04	13.95	14.06
		50	25	15.00	14.05	13.92	14.09
		50	50	15.00	14.06	13.93	14.08
		100	0	15.00	14.04	14.07	14.06
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20050CH	20175CH	20300CH

Table 57: Conducted power measurement results of LTE Band 4 (Reduced Power Level D6)

### 7.1.15 Conducted power measurements of LTE Band 5 (Second Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20407CH	20525CH	20643CH
1.4MHz	QPSK	1	0	24.50	23.47	23.01	23.22
		1	3	24.50	23.39	22.96	23.22
		1	5	24.50	23.44	22.98	23.20
		3	0	23.50	23.35	22.98	23.16
		3	2	23.50	23.36	23.03	23.12
		3	3	23.50	23.43	23.09	23.19
		6	0	23.50	22.32	21.78	22.18
	16QAM	1	0	23.50	22.41	22.05	22.31
		1	3	23.50	22.41	22.07	22.27
		1	5	23.50	22.43	21.99	22.23
		3	0	22.50	22.46	22.01	22.01
		3	2	22.50	22.41	22.00	22.02
		3	3	22.50	22.35	22.02	22.11
		6	0	22.50	21.30	21.04	21.13
	64QAM	1	0	22.50	21.62	21.16	21.41
		1	3	22.50	21.47	21.25	21.36
		1	5	22.50	21.50	21.19	21.40
		3	0	22.50	21.41	21.18	21.33
		3	2	22.50	21.39	21.15	21.24
		3	3	22.50	21.39	21.25	21.17
		6	0	21.50	20.43	19.98	20.08
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20415CH	20525CH	20635CH
3MHz	QPSK	1	0	24.50	23.42	23.07	23.31
		1	7	24.50	23.48	23.03	23.28
		1	14	24.50	23.42	23.05	23.27
		8	0	23.50	22.42	22.00	22.25
		8	4	23.50	22.36	22.02	22.25
		8	7	23.50	22.37	22.04	22.27
		15	0	23.50	22.42	21.77	22.22
	16QAM	1	0	23.50	22.65	22.12	22.46
		1	7	23.50	22.50	22.08	22.31
		1	14	23.50	22.38	22.12	22.42
		8	0	22.50	21.40	21.23	21.25
		8	4	22.50	21.30	21.28	21.22
		8	7	22.50	21.36	21.23	21.24
		15	0	22.50	21.33	20.92	21.22
	64QAM	1	0	22.50	21.42	21.42	21.44
		1	7	22.50	21.49	21.36	21.52
		1	14	22.50	21.50	21.50	21.40
		8	0	21.50	20.44	20.21	20.30
		8	4	21.50	20.42	20.31	20.34
		8	7	21.50	20.43	20.20	20.34
		15	0	21.50	20.50	20.02	20.29



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20425CH	20525CH	20625CH
5MHz	QPSK	1	0	24.50	23.47	23.26	23.38
		1	13	24.50	23.50	23.26	23.37
		1	24	24.50	23.47	23.26	23.36
		12	0	23.50	22.53	22.19	22.41
		12	6	23.50	22.54	22.16	22.40
		12	13	23.50	22.54	22.16	22.39
		25	0	23.50	22.45	21.94	22.33
	16QAM	1	0	23.50	22.77	22.23	22.61
		1	13	23.50	22.55	22.40	22.58
		1	24	23.50	22.70	22.45	22.50
		12	0	22.50	21.50	21.33	21.50
		12	6	22.50	21.48	21.32	21.47
		12	13	22.50	21.49	21.32	21.48
		25	0	22.50	21.37	21.06	21.30
	64QAM	1	0	22.50	21.60	21.35	21.64
		1	13	22.50	21.57	21.38	21.56
		1	24	22.50	21.65	21.43	21.58
		12	0	21.50	20.60	20.33	20.49
		12	6	21.50	20.62	20.32	20.49
		12	13	21.50	20.61	20.33	20.48
		25	0	21.50	20.48	20.16	20.37
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20450CH	20525CH	20600CH
10MHz	QPSK	1	0	24.50	23.38	23.39	23.03
		1	25	24.50	23.42	23.37	23.02
		1	49	24.50	23.44	23.37	23.01
		25	0	23.50	22.37	22.25	22.26
		25	13	23.50	22.40	22.25	22.22
		25	25	23.50	22.36	22.31	22.23
		50	0	23.50	22.30	21.89	22.25
	16QAM	1	0	23.50	22.34	22.35	22.06
		1	25	23.50	22.39	22.47	22.13
		1	49	23.50	22.52	22.40	22.14
		25	0	22.50	21.44	21.28	21.17
		25	13	22.50	21.41	21.18	21.17
		25	25	22.50	21.42	21.20	21.21
		50	0	22.50	21.29	20.99	21.25
	64QAM	1	0	22.50	21.54	21.43	21.09
		1	25	22.50	21.55	21.53	21.10
		1	49	22.50	21.49	21.44	21.24
		25	0	21.50	20.41	20.27	20.23
		25	13	21.50	20.45	20.26	20.24
		25	25	21.50	20.45	20.28	20.27
		50	0	21.50	20.33	20.20	20.32

Table 58: Conducted power measurement results of LTE Band 5 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20407CH	20525CH	20643CH
1.4MHz	QPSK	1	0	20.00	18.86	18.77	18.75
		1	3	20.00	18.87	18.74	18.73
		1	5	20.00	18.88	18.76	18.73
		3	0	20.00	18.81	18.66	18.66
		3	2	20.00	18.90	18.66	18.66
		3	3	20.00	18.79	18.68	18.61
		6	0	20.00	18.88	18.49	18.65
	16QAM	1	0	20.00	18.90	18.66	18.90
		1	3	20.00	18.94	18.85	18.90
		1	5	20.00	19.01	18.96	18.77
		3	0	20.00	18.88	18.60	18.66
		3	2	20.00	18.87	18.60	18.67
		3	3	20.00	18.89	18.60	18.64
		6	0	20.00	18.78	18.37	18.64
	64QAM	1	0	20.00	18.99	18.95	18.89
		1	3	20.00	18.98	18.76	18.76
		1	5	20.00	18.93	18.78	18.88
		3	0	20.00	18.86	18.64	18.72
		3	2	20.00	18.86	18.66	18.60
		3	3	20.00	18.85	18.56	18.62
		6	0	20.00	18.85	18.37	18.64
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20415CH	20525CH	20635CH
3MHz	QPSK	1	0	20.00	18.87	18.75	18.87
		1	7	20.00	18.92	18.82	18.90
		1	14	20.00	18.91	18.75	18.89
		8	0	20.00	18.90	18.77	18.80
		8	4	20.00	18.87	18.70	18.80
		8	7	20.00	18.86	18.73	18.82
		15	0	20.00	18.86	18.46	18.74
	16QAM	1	0	20.00	19.15	18.81	18.94
		1	7	20.00	19.06	18.85	19.03
		1	14	20.00	19.05	18.84	19.04
		8	0	20.00	18.82	18.65	18.82
		8	4	20.00	18.83	18.73	18.80
		8	7	20.00	18.83	18.80	18.81
		15	0	20.00	18.84	18.41	18.67
	64QAM	1	0	20.00	19.01	18.79	19.12
		1	7	20.00	18.98	18.93	19.00
		1	14	20.00	19.04	18.92	19.12
		8	0	20.00	18.86	18.78	18.80
		8	4	20.00	18.87	18.71	18.80
		8	7	20.00	18.81	18.70	18.78
		15	0	20.00	18.82	18.62	18.74

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20425CH	20525CH	20625CH
5MHz	QPSK	1	0	20.00	18.93	18.84	18.93
		1	13	20.00	18.97	18.83	18.93
		1	24	20.00	18.94	18.83	18.87
		12	0	20.00	19.02	18.85	18.98
		12	6	20.00	19.02	18.81	18.98
		12	13	20.00	19.03	18.82	18.97
		25	0	20.00	18.90	18.51	18.89
	16QAM	1	0	20.00	19.11	19.12	19.09
		1	13	20.00	19.12	18.91	19.13
		1	24	20.00	19.19	18.94	19.01
		12	0	20.00	18.88	18.77	18.89
		12	6	20.00	18.90	18.76	18.89
		12	13	20.00	18.92	18.83	18.92
		25	0	20.00	18.83	18.48	18.81
	64QAM	1	0	20.00	19.09	18.81	18.93
		1	13	20.00	19.00	18.83	18.97
		1	24	20.00	19.08	18.97	18.95
		12	0	20.00	18.88	18.82	18.94
		12	6	20.00	18.87	18.78	18.86
		12	13	20.00	18.90	18.80	18.94
		25	0	20.00	18.83	18.54	18.83
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	20.00	18.87	<b>18.99</b>	<b>18.73</b>
		1	25	20.00	18.85	18.96	18.69
		1	49	20.00	<b>18.89</b>	18.94	18.68
		25	0	20.00	18.98	18.77	18.81
		25	13	20.00	18.98	18.78	18.81
		25	25	20.00	<b>18.99</b>	18.76	18.81
		50	0	20.00	18.79	18.67	18.85
	16QAM	1	0	20.00	18.97	18.84	18.81
		1	25	20.00	19.00	18.99	18.70
		1	49	20.00	18.99	19.05	18.70
		25	0	20.00	18.92	18.71	18.69
		25	13	20.00	18.89	18.76	18.65
		25	25	20.00	18.90	18.69	18.70
		50	0	20.00	18.75	18.53	18.79
	64QAM	1	0	20.00	19.06	19.01	18.65
		1	25	20.00	19.00	19.11	18.65
		1	49	20.00	18.90	19.12	18.64
		25	0	20.00	18.92	18.77	18.70
		25	13	20.00	18.90	18.73	18.74
		25	25	20.00	18.92	18.79	18.68
		50	0	20.00	18.76	18.52	18.84

Table 59: Conducted power measurement results of LTE Band 5 (Receiver ON, Reduced Power)

### 7.1.16 Conducted power measurements of LTE Band 5 (Main Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	20407CH	20525CH	20643CH	
1.4MHz	QPSK	1	0	25.00	23.75	23.67	23.62	
		1	3	25.00	23.74	23.69	23.68	
		1	5	25.00	23.79	23.72	23.77	
		3	0	25.00	23.70	23.67	23.64	
		3	2	25.00	23.75	23.70	23.48	
		3	3	25.00	23.74	23.71	23.55	
		6	0	24.00	22.69	22.61	22.51	
	16QAM	1	0	24.00	22.35	22.63	22.62	
		1	3	24.00	22.29	22.61	22.75	
		1	5	24.00	22.35	22.60	22.65	
		3	0	24.00	22.47	22.60	22.66	
		3	2	24.00	22.42	22.59	22.67	
		3	3	24.00	22.42	22.64	22.61	
		6	0	23.00	21.56	21.58	21.62	
	64QAM	1	0	23.00	21.44	21.70	21.80	
		1	3	23.00	21.53	21.77	21.72	
		1	5	23.00	21.47	21.74	21.71	
		3	0	23.00	21.46	21.59	21.61	
		3	2	23.00	21.48	21.63	21.55	
		3	3	23.00	21.46	21.56	21.58	
		6	0	22.00	20.50	20.50	20.66	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					Max.	20415CH	20525CH	20635CH
	3MHz	QPSK	1	0	25.00	23.37	23.69	23.58
1			7	25.00	23.30	23.65	23.57	
1			14	25.00	23.34	23.65	23.57	
8			0	24.00	22.37	22.63	22.58	
8			4	24.00	22.42	22.63	22.55	
8			7	24.00	22.44	22.65	22.59	
15			0	24.00	22.40	22.62	22.58	
16QAM		1	0	24.00	22.24	22.76	22.74	
		1	7	24.00	22.28	22.65	22.63	
		1	14	24.00	22.27	22.78	22.77	
		8	0	23.00	21.55	21.66	21.64	
		8	4	23.00	21.50	21.65	21.55	
		8	7	23.00	21.54	21.66	21.48	
		15	0	23.00	21.50	21.56	21.58	
64QAM		1	0	23.00	21.51	21.78	21.82	
		1	7	23.00	21.46	21.88	21.87	
		1	14	23.00	21.62	21.84	21.72	
		8	0	22.00	20.70	20.64	20.65	
		8	4	22.00	20.66	20.67	20.58	
		8	7	22.00	20.71	20.64	20.60	
		15	0	22.00	20.65	20.62	20.60	

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20425CH	20525CH	20625CH
5MHz	QPSK	1	0	25.00	23.50	23.64	23.61
		1	13	25.00	23.48	23.64	23.55
		1	24	25.00	23.47	23.68	23.53
		12	0	24.00	22.51	22.75	22.66
		12	6	24.00	22.57	22.69	22.69
		12	13	24.00	22.55	22.71	22.71
		25	0	24.00	22.31	22.59	22.61
	16QAM	1	0	24.00	22.66	22.87	22.72
		1	13	24.00	22.47	22.79	22.63
		1	24	24.00	22.44	22.78	22.67
		12	0	23.00	21.65	21.69	21.73
		12	6	23.00	21.71	21.72	21.65
		12	13	23.00	21.65	21.70	21.61
		25	0	23.00	21.47	21.61	21.61
	64QAM	1	0	23.00	21.71	21.83	21.68
		1	13	23.00	21.79	21.90	21.80
		1	24	23.00	21.86	21.78	21.77
		12	0	22.00	20.83	20.73	20.66
		12	6	22.00	20.91	20.72	20.69
		12	13	22.00	20.74	20.77	20.68
		25	0	22.00	20.62	20.63	20.63
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	25.00	23.86	<b>23.89</b>	23.73
		1	25	25.00	<b>23.97</b>	23.85	23.74
		1	49	25.00	23.92	23.85	<b>23.76</b>
		25	0	24.00	22.81	22.79	22.71
		25	13	24.00	22.80	22.80	22.71
		25	25	24.00	<b>22.90</b>	22.80	22.71
		50	0	24.00	22.80	22.77	22.72
	16QAM	1	0	24.00	22.86	22.95	22.74
		1	25	24.00	22.98	22.92	22.91
		1	49	24.00	22.92	22.85	22.79
		25	0	23.00	21.74	21.68	21.64
		25	13	23.00	21.74	21.66	21.65
		25	25	23.00	21.80	21.68	21.64
		50	0	23.00	21.69	21.67	21.59
	64QAM	1	0	23.00	22.06	21.92	21.73
		1	25	23.00	21.90	21.95	21.77
		1	49	23.00	21.84	22.07	21.80
		25	0	22.00	20.80	20.74	20.73
		25	13	22.00	20.78	20.71	20.72
		25	25	22.00	20.80	20.73	20.72
		50	0	22.00	20.74	20.70	20.67

Table 60: Conducted power measurement results of LTE Band 5

### 7.1.17 Conducted power measurements of LTE Band 7 (Second Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20775CH	21100CH	21425CH
5MHz	QPSK	1	0	19.00	17.21	17.37	17.17
		1	13	19.00	17.27	17.37	17.17
		1	24	19.00	17.24	17.37	17.18
		12	0	19.00	17.26	17.36	17.20
		12	6	19.00	17.26	17.36	17.13
		12	13	19.00	17.27	17.36	17.19
		25	0	19.00	17.22	17.22	17.10
	16QAM	1	0	19.00	17.58	17.49	17.39
		1	13	19.00	17.42	17.61	17.35
		1	24	19.00	17.46	17.65	17.40
		12	0	19.00	17.25	17.31	17.16
		12	6	19.00	17.22	17.26	17.17
		12	13	19.00	17.25	17.28	17.14
		25	0	19.00	17.07	17.12	17.02
	64QAM	1	0	19.00	17.37	17.39	17.18
		1	13	19.00	17.48	17.39	17.20
		1	24	19.00	17.28	17.38	17.37
		12	0	19.00	17.20	17.23	17.17
		12	6	19.00	17.26	17.25	17.10
		12	13	19.00	17.27	17.22	17.15
		25	0	19.00	17.16	17.18	17.10
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	19.00	17.29	17.39	17.24
		1	25	19.00	17.25	17.42	17.25
		1	49	19.00	17.29	17.40	17.24
		25	0	19.00	17.24	17.29	17.18
		25	13	19.00	17.25	17.29	17.18
		25	25	19.00	17.24	17.29	17.19
		50	0	19.00	17.24	17.25	17.14
	16QAM	1	0	19.00	17.33	17.35	17.30
		1	25	19.00	17.35	17.46	17.29
		1	49	19.00	17.38	17.36	17.27
		25	0	19.00	17.15	17.19	17.09
		25	13	19.00	17.16	17.18	17.10
		25	25	19.00	17.17	17.20	17.11
		50	0	19.00	17.13	17.14	17.08
	64QAM	1	0	19.00	17.30	17.46	17.29
		1	25	19.00	17.31	17.52	17.30
		1	49	19.00	17.29	17.53	17.38
		25	0	19.00	17.14	17.23	17.14
		25	13	19.00	17.19	17.24	17.10
		25	25	19.00	17.19	17.23	17.09
		50	0	19.00	17.19	17.17	17.07

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20825CH	21100CH	21375CH
15MHz	QPSK	1	0	19.00	17.26	17.36	17.18
		1	38	19.00	17.22	17.31	17.11
		1	74	19.00	17.26	17.34	17.10
		36	0	19.00	17.27	17.35	17.23
		36	18	19.00	17.27	17.35	17.15
		36	39	19.00	17.26	17.34	17.16
		75	0	19.00	17.22	17.22	17.20
	16QAM	1	0	19.00	17.26	17.49	17.38
		1	38	19.00	17.36	17.44	17.33
		1	74	19.00	17.46	17.48	17.27
		36	0	19.00	17.18	17.25	17.10
		36	18	19.00	17.23	17.26	17.16
		36	39	19.00	17.19	17.27	17.15
		75	0	19.00	17.22	17.14	17.12
	64QAM	1	0	19.00	17.32	17.44	17.28
		1	38	19.00	17.42	17.45	17.33
		1	74	19.00	17.38	17.41	17.23
		36	0	19.00	17.24	17.32	17.17
		36	18	19.00	17.25	17.33	17.19
		36	39	19.00	17.23	17.39	17.16
		75	0	19.00	17.16	17.26	17.13
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	19.00	17.29	<b>17.48</b>	17.29
		1	50	19.00	17.36	17.47	17.35
		1	99	19.00	17.34	17.48	17.24
		50	0	19.00	17.22	<b>17.40</b>	17.23
		50	25	19.00	17.23	17.38	17.24
		50	50	19.00	17.24	17.39	17.25
		100	0	19.00	17.27	17.33	17.10
	16QAM	1	0	19.00	17.51	17.62	17.62
		1	50	19.00	17.56	17.68	17.56
		1	99	19.00	17.53	17.63	17.59
		50	0	19.00	17.18	17.34	17.15
		50	25	19.00	17.17	17.33	17.16
		50	50	19.00	17.17	17.34	17.15
		100	0	19.00	17.18	17.21	17.06
	64QAM	1	0	19.00	17.48	17.57	17.42
		1	50	19.00	17.54	17.48	17.52
		1	99	19.00	17.48	17.63	17.49
		50	0	19.00	17.22	17.35	17.17
		50	25	19.00	17.22	17.37	17.19
		50	50	19.00	17.21	17.31	17.17
		100	0	19.00	17.17	17.26	17.10

Table 61: Conducted power measurement results of LTE Band 7 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20775CH	21100CH	21425CH
5MHz	QPSK	1	0	13.00	11.98	12.17	12.00
		1	13	13.00	12.08	12.17	11.98
		1	24	13.00	12.07	12.17	11.99
		12	0	13.00	12.27	12.42	12.23
		12	6	13.00	12.26	12.46	12.24
		12	13	13.00	12.13	12.46	12.24
		25	0	13.00	12.10	12.35	12.25
	16QAM	1	0	13.00	12.31	12.48	12.27
		1	13	13.00	12.31	12.64	12.33
		1	24	13.00	12.17	12.51	12.23
		12	0	13.00	12.29	12.49	12.26
		12	6	13.00	12.30	12.48	12.26
		12	13	13.00	12.20	12.47	12.20
		25	0	13.00	12.13	12.37	12.23
	64QAM	1	0	13.00	12.39	12.62	12.44
		1	13	13.00	12.37	12.56	12.40
		1	24	13.00	12.37	12.47	12.33
		12	0	13.00	12.32	12.53	12.42
		12	6	13.00	12.31	12.47	12.41
		12	13	13.00	12.30	12.51	12.43
		25	0	13.00	12.07	12.31	12.33
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	13.00	12.09	12.08	12.10
		1	25	13.00	12.11	12.08	12.07
		1	49	13.00	12.08	11.97	12.12
		25	0	13.00	12.14	12.38	12.29
		25	13	13.00	12.16	12.38	12.29
		25	25	13.00	12.03	12.30	12.18
		50	0	13.00	12.04	12.22	12.12
	16QAM	1	0	13.00	12.29	12.40	12.36
		1	25	13.00	12.32	12.23	12.33
		1	49	13.00	12.28	12.50	12.43
		25	0	13.00	12.18	12.39	12.26
		25	13	13.00	12.28	12.36	12.25
		25	25	13.00	12.15	12.35	12.29
		50	0	13.00	12.17	12.21	12.11
	64QAM	1	0	13.00	12.29	12.47	12.47
		1	25	13.00	12.26	12.46	12.37
		1	49	13.00	12.32	12.43	12.54
		25	0	13.00	12.23	12.52	12.37
		25	13	13.00	12.29	12.50	12.45
		25	25	13.00	12.28	12.52	12.47
		50	0	13.00	12.18	12.27	12.24



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20825CH	21100CH	21375CH
15MHz	QPSK	1	0	13.00	12.08	11.98	11.99
		1	38	13.00	11.95	11.93	12.01
		1	74	13.00	12.08	11.97	12.03
		36	0	13.00	12.20	12.35	12.22
		36	18	13.00	12.19	12.36	12.14
		36	39	13.00	12.20	12.31	12.11
		75	0	13.00	12.16	12.24	12.16
	16QAM	1	0	13.00	12.15	12.34	12.36
		1	38	13.00	12.23	12.42	12.33
		1	74	13.00	12.17	12.25	12.28
		36	0	13.00	12.19	12.29	12.21
		36	18	13.00	12.09	12.31	12.21
		36	39	13.00	12.17	12.36	12.21
		75	0	13.00	12.04	12.20	12.13
	64QAM	1	0	13.00	12.28	12.28	12.46
		1	38	13.00	12.30	12.46	12.45
		1	74	13.00	12.28	12.41	12.43
		36	0	13.00	12.33	12.48	12.25
		36	18	13.00	12.28	12.48	12.25
		36	39	13.00	12.33	12.36	12.30
		75	0	13.00	12.28	12.36	12.30
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	13.00	12.24	<b>12.33</b>	12.31
		1	50	13.00	12.25	12.11	12.17
		1	99	13.00	12.18	11.98	12.12
		50	0	13.00	<b>12.23</b>	12.28	12.29
		50	25	13.00	12.20	<b>12.31</b>	<b>12.32</b>
		50	50	13.00	12.14	12.31	12.29
		100	0	13.00	11.94	12.12	12.10
	16QAM	1	0	13.00	12.45	12.42	12.71
		1	50	13.00	12.43	12.56	12.76
		1	99	13.00	12.46	12.40	12.68
		50	0	13.00	12.17	12.27	12.26
		50	25	13.00	12.24	12.34	12.29
		50	50	13.00	12.24	12.22	12.28
		100	0	13.00	11.93	12.24	12.09
	64QAM	1	0	13.00	12.41	12.57	12.66
		1	50	13.00	12.45	12.46	12.74
		1	99	13.00	12.51	12.53	12.81
		50	0	13.00	12.38	12.43	12.31
		50	25	13.00	12.33	12.45	12.39
		50	50	13.00	12.31	12.35	12.39
		100	0	13.00	12.15	12.33	12.21
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	13.00	12.24	<b>12.33</b>	12.31
		1	50	13.00	12.25	12.11	12.17
		1	99	13.00	12.18	11.98	12.12
		50	0	13.00	<b>12.23</b>	12.28	12.29
		50	25	13.00	12.20	<b>12.31</b>	<b>12.32</b>
		50	50	13.00	12.14	12.31	12.29
		100	0	13.00	11.94	12.12	12.10
	16QAM	1	0	13.00	12.45	12.42	12.71
		1	50	13.00	12.43	12.56	12.76
		1	99	13.00	12.46	12.40	12.68
		50	0	13.00	12.17	12.27	12.26
		50	25	13.00	12.24	12.34	12.29
		50	50	13.00	12.24	12.22	12.28
		100	0	13.00	11.93	12.24	12.09
	64QAM	1	0	13.00	12.41	12.57	12.66
		1	50	13.00	12.45	12.46	12.74
		1	99	13.00	12.51	12.53	12.81
		50	0	13.00	12.38	12.43	12.31
		50	25	13.00	12.33	12.45	12.39
		50	50	13.00	12.31	12.35	12.39
		100	0	13.00	12.15	12.33	12.21

Table 62: Conducted power measurement results of LTE Band 7 (Receiver ON)

### 7.1.18 Conducted power measurements of LTE Band 7 (Main Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20775CH	21100CH	21425CH
5MHz	QPSK	1	0	24.50	23.98	24.02	23.85
		1	13	24.50	24.05	24.03	23.95
		1	24	24.50	23.98	24.05	23.87
		12	0	23.50	23.06	23.11	23.06
		12	6	23.50	23.07	23.25	22.96
		12	13	23.50	23.06	23.25	23.06
		25	0	23.50	22.99	23.23	22.90
	16QAM	1	0	23.50	22.96	23.00	22.84
		1	13	23.50	22.90	22.92	22.81
		1	24	23.50	22.97	23.00	22.74
		12	0	22.50	21.94	21.87	21.70
		12	6	22.50	21.91	22.02	21.71
		12	13	22.50	21.99	21.86	21.76
		25	0	22.50	21.83	21.88	21.63
	64QAM	1	0	22.50	22.09	21.95	21.66
		1	13	22.50	22.00	22.00	21.80
		1	24	22.50	21.93	21.98	21.72
		12	0	21.50	20.89	20.88	20.72
		12	6	21.50	20.85	20.84	20.72
		12	13	21.50	20.87	20.82	20.73
		25	0	21.50	20.84	20.78	20.68
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	24.50	24.05	24.09	23.98
		1	25	24.50	24.06	24.12	24.13
		1	49	24.50	23.98	24.26	23.99
		25	0	23.50	22.99	23.09	22.93
		25	13	23.50	23.00	23.06	22.98
		25	25	23.50	23.01	23.05	22.93
		50	0	23.50	23.01	23.05	22.91
	16QAM	1	0	23.50	22.90	22.94	22.83
		1	25	23.50	22.98	22.84	22.78
		1	49	23.50	23.01	22.94	22.82
		25	0	22.50	21.80	21.97	21.75
		25	13	22.50	21.83	21.94	21.68
		25	25	22.50	21.83	21.96	21.72
		50	0	22.50	21.81	21.78	21.69
	64QAM	1	0	22.50	22.04	21.96	21.89
		1	25	22.50	21.86	21.95	21.83
		1	49	22.50	21.97	21.90	21.75
		25	0	21.50	20.80	20.91	20.82
		25	13	21.50	20.78	20.92	20.81
		25	25	21.50	20.80	20.91	20.83
		50	0	21.50	20.78	20.78	20.72

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20825CH	21100CH	21375CH
15MHz	QPSK	1	0	24.50	24.07	24.13	23.98
		1	38	24.50	24.05	24.13	23.98
		1	74	24.50	24.13	24.11	23.97
		36	0	23.50	23.08	23.13	22.96
		36	18	23.50	23.07	23.14	22.98
		36	39	23.50	23.07	23.15	22.97
		75	0	23.50	23.05	23.08	22.94
	16QAM	1	0	23.50	23.02	23.06	22.91
		1	38	23.50	23.07	22.95	22.90
		1	74	23.50	22.97	23.12	22.81
		36	0	22.50	21.89	22.01	21.69
		36	18	22.50	21.86	22.02	21.71
		36	39	22.50	21.87	22.03	21.71
		75	0	22.50	21.84	21.86	21.72
	64QAM	1	0	22.50	22.05	22.01	21.85
		1	38	22.50	22.08	21.98	21.92
		1	74	22.50	22.01	22.08	21.92
		36	0	21.50	20.84	20.96	20.72
		36	18	21.50	20.87	20.92	20.71
		36	39	21.50	20.86	20.90	20.74
		75	0	21.50	20.82	20.86	20.71
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20850CH	21100CH	21350CH
20MHz	QPSK	1	0	24.50	24.03	<b>24.08</b>	<b>24.09</b>
		1	50	24.50	<b>24.10</b>	24.07	24.01
		1	99	24.50	24.05	24.06	24.06
		50	0	23.50	<b>23.26</b>	23.19	23.17
		50	25	23.50	23.25	23.21	23.21
		50	50	23.50	23.25	23.25	23.20
		100	0	23.50	23.17	23.34	23.17
	16QAM	1	0	23.50	23.07	23.02	23.03
		1	50	23.50	23.09	23.06	23.05
		1	99	23.50	23.09	23.04	22.91
		50	0	22.50	22.00	21.97	21.81
		50	25	22.50	21.98	21.95	21.81
		50	50	22.50	21.95	21.99	21.79
		100	0	22.50	21.95	21.94	21.94
	64QAM	1	0	22.50	22.05	22.13	21.96
		1	50	22.50	22.14	22.01	21.96
		1	99	22.50	21.92	22.15	21.96
		50	0	21.50	21.07	20.96	20.90
		50	25	21.50	21.08	20.93	20.79
		50	50	21.50	20.95	20.94	20.81
		100	0	21.50	20.95	20.91	20.92

Table 63: Conducted power measurement results of LTE Band 7 (Full power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20775CH	21100CH	21425CH
5MHz	QPSK	1	0	21.00	20.55	20.55	20.31
		1	13	21.00	20.46	20.46	20.31
		1	24	21.00	20.44	20.47	20.40
		12	0	21.00	20.50	20.50	20.45
		12	6	21.00	20.52	20.51	20.45
		12	13	21.00	20.48	20.51	20.46
		25	0	21.00	20.41	20.48	20.39
	16QAM	1	0	21.00	20.64	20.63	20.58
		1	13	21.00	20.56	20.63	20.44
		1	24	21.00	20.49	20.67	20.48
		12	0	21.00	20.44	20.48	20.48
		12	6	21.00	20.48	20.45	20.43
		12	13	21.00	20.34	20.48	20.45
		25	0	21.00	20.26	20.41	20.35
	64QAM	1	0	21.00	20.63	20.59	20.27
		1	13	21.00	20.40	20.52	20.56
		1	24	21.00	20.49	20.56	20.53
		12	0	21.00	20.47	20.46	20.48
		12	6	21.00	20.47	20.44	20.45
		12	13	21.00	20.48	20.49	20.47
		25	0	21.00	20.38	20.43	20.32
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	21.00	20.41	20.57	20.35
		1	25	21.00	20.43	20.53	20.36
		1	49	21.00	20.36	20.55	20.37
		25	0	21.00	20.47	20.63	20.43
		25	13	21.00	20.48	20.63	20.48
		25	25	21.00	20.46	20.59	20.47
		50	0	21.00	20.43	20.59	20.32
	16QAM	1	0	21.00	20.44	20.58	20.36
		1	25	21.00	20.45	20.75	20.53
		1	49	21.00	20.53	20.75	20.40
		25	0	21.00	20.38	20.52	20.42
		25	13	21.00	20.39	20.54	20.42
		25	25	21.00	20.38	20.54	20.41
		50	0	21.00	20.36	20.50	20.34
	64QAM	1	0	21.00	20.60	20.70	20.59
		1	25	21.00	20.49	20.59	20.62
		1	49	21.00	20.57	20.64	20.44
		25	0	21.00	20.34	20.53	20.43
		25	13	21.00	20.33	20.53	20.45
		25	25	21.00	20.37	20.53	20.40
		50	0	21.00	20.33	20.48	20.38

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20825CH	21100CH	21375CH
15MHz	QPSK	1	0	21.00	20.39	20.55	20.35
		1	38	21.00	20.38	20.56	20.34
		1	74	21.00	20.52	20.54	20.43
		36	0	21.00	20.52	20.64	20.33
		36	18	21.00	20.51	20.62	20.34
		36	39	21.00	20.51	20.61	20.36
		75	0	21.00	20.50	20.61	20.42
	16QAM	1	0	21.00	20.52	20.71	20.47
		1	38	21.00	20.60	20.75	20.59
		1	74	21.00	20.54	20.70	20.47
		36	0	21.00	20.44	20.61	20.44
		36	18	21.00	20.40	20.61	20.43
		36	39	21.00	20.39	20.63	20.32
		75	0	21.00	20.33	20.49	20.39
	64QAM	1	0	21.00	20.53	20.63	20.39
		1	38	21.00	20.45	20.55	20.45
		1	74	21.00	20.53	20.61	20.38
		36	0	21.00	20.47	20.60	20.48
		36	18	21.00	20.48	20.60	20.40
		36	39	21.00	20.46	20.61	20.43
		75	0	21.00	20.35	20.46	20.42
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20850CH	21100CH	21350CH
20MHz	QPSK	1	0	21.00	20.44	20.63	20.48
		1	50	21.00	20.51	20.65	20.48
		1	99	21.00	20.47	20.64	20.46
		50	0	21.00	20.49	20.69	20.47
		50	25	21.00	20.51	20.68	20.47
		50	50	21.00	20.52	20.68	20.48
		100	0	21.00	20.48	20.60	20.42
	16QAM	1	0	21.00	20.66	20.84	20.66
		1	50	21.00	20.55	20.67	20.70
		1	99	21.00	20.70	20.71	20.62
		50	0	21.00	20.45	20.58	20.37
		50	25	21.00	20.42	20.57	20.41
		50	50	21.00	20.44	20.59	20.43
		100	0	21.00	20.40	20.48	20.34
	64QAM	1	0	21.00	20.63	20.86	20.54
		1	50	21.00	20.50	20.88	20.57
		1	99	21.00	20.56	20.61	20.57
		50	0	21.00	20.30	20.55	20.42
		50	25	21.00	20.31	20.55	20.42
		50	50	21.00	20.32	20.55	20.44
		100	0	21.00	20.32	20.47	20.36

Table 64: Conducted power measurement results of LTE Band 7 ( Reduced Power Level D2)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20775CH	21100CH	21425CH
5MHz	QPSK	1	0	22.50	22.00	22.02	21.88
		1	13	22.50	21.99	22.04	21.89
		1	24	22.50	22.00	22.04	21.90
		12	0	22.50	22.16	22.20	22.05
		12	6	22.50	22.18	22.18	21.89
		12	13	22.50	22.20	22.23	22.04
		25	0	22.50	22.07	22.17	22.03
	16QAM	1	0	22.50	22.07	21.99	21.86
		1	13	22.50	22.03	21.87	21.99
		1	24	22.50	22.03	21.99	21.81
		12	0	22.50	21.84	21.87	21.69
		12	6	22.50	21.85	21.86	21.71
		12	13	22.50	21.85	21.87	21.69
		25	0	22.50	21.81	21.85	21.67
	64QAM	1	0	22.50	22.05	21.94	21.92
		1	13	22.50	21.97	22.00	21.95
		1	24	22.50	22.01	22.08	21.85
		12	0	21.50	20.84	20.85	20.69
		12	6	21.50	20.94	20.84	20.67
		12	13	21.50	20.83	20.85	20.73
		25	0	21.50	20.80	20.81	20.64
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	22.50	22.02	22.09	21.97
		1	25	22.50	22.17	22.14	22.03
		1	49	22.50	22.16	22.14	22.06
		25	0	22.50	22.04	22.09	21.96
		25	13	22.50	22.01	22.10	21.93
		25	25	22.50	21.98	22.10	21.93
		50	0	22.50	21.99	22.05	21.86
	16QAM	1	0	22.50	21.91	21.94	21.77
		1	25	22.50	21.86	21.88	21.81
		1	49	22.50	21.92	21.91	21.78
		25	0	22.50	21.79	21.95	21.73
		25	13	22.50	21.81	21.94	21.74
		25	25	22.50	21.82	21.95	21.71
		50	0	22.50	21.78	21.78	21.65
	64QAM	1	0	22.50	21.99	21.95	21.78
		1	25	22.50	21.85	21.93	21.70
		1	49	22.50	21.95	21.90	21.97
		25	0	21.50	20.83	20.92	20.79
		25	13	21.50	20.81	20.90	20.79
		25	25	21.50	20.78	20.90	20.79
		50	0	21.50	20.77	20.80	20.72

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	20825CH	21100CH	21375CH	
15MHz	QPSK	1	0	22.50	22.22	22.15	21.96	
		1	38	22.50	22.08	22.14	21.98	
		1	74	22.50	22.19	22.24	21.97	
		36	0	22.50	22.06	22.09	21.96	
		36	18	22.50	22.05	22.08	22.00	
		36	39	22.50	22.05	22.09	21.96	
		75	0	22.50	22.05	22.09	21.92	
	16QAM	1	0	22.50	21.97	21.97	21.87	
		1	38	22.50	21.98	22.13	21.86	
		1	74	22.50	22.03	22.02	21.91	
		36	0	22.50	21.88	22.01	21.70	
		36	18	22.50	21.87	22.01	21.70	
		36	39	22.50	21.86	22.00	21.70	
		75	0	22.50	21.89	21.84	21.69	
	64QAM	1	0	22.50	22.16	21.94	21.87	
		1	38	22.50	22.03	21.96	21.78	
		1	74	22.50	22.00	21.97	21.86	
		36	0	21.50	20.86	20.91	20.73	
		36	18	21.50	20.86	20.95	20.70	
		36	39	21.50	20.85	20.93	20.71	
		75	0	21.50	20.84	20.85	20.72	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					Max.	20850CH	21100CH	21350CH
	20MHz	QPSK	1	0	22.50	22.03	22.25	22.01
1			50	22.50	22.06	22.13	22.03	
1			99	22.50	22.07	22.11	22.01	
50			0	22.50	22.21	22.24	22.13	
50			25	22.50	22.20	22.19	22.12	
50			50	22.50	22.20	22.20	22.12	
100			0	22.50	22.13	22.14	22.07	
16QAM		1	0	22.50	22.12	21.99	22.07	
		1	50	22.50	22.08	22.01	22.10	
		1	99	22.50	22.08	22.01	21.96	
		50	0	22.50	21.95	21.98	21.80	
		50	25	22.50	21.95	21.95	21.81	
		50	50	22.50	21.96	21.94	21.79	
		100	0	22.50	21.94	21.91	21.72	
64QAM		1	0	22.50	21.97	22.00	22.03	
		1	50	22.50	22.13	22.11	22.02	
		1	99	22.50	21.94	21.92	22.01	
		50	0	21.50	20.94	20.98	20.78	
		50	25	21.50	20.91	20.98	20.79	
		50	50	21.50	20.95	20.99	20.79	
		100	0	21.50	21.00	20.89	20.77	

Table 65: Conducted power measurement results of LTE Band 7 (Reduced Power Level D1)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20775CH	21100CH	21425CH
5MHz	QPSK	1	0	22.00	21.44	21.48	21.35
		1	13	22.00	21.39	21.47	21.35
		1	24	22.00	21.41	21.50	21.38
		12	0	22.00	21.64	21.55	21.41
		12	6	22.00	21.59	21.53	21.41
		12	13	22.00	21.62	21.55	21.43
		25	0	22.00	21.56	21.49	21.50
	16QAM	1	0	22.00	21.51	21.69	21.32
		1	13	22.00	21.67	21.46	21.34
		1	24	22.00	21.45	21.43	21.31
		12	0	22.00	21.33	21.35	21.21
		12	6	22.00	21.34	21.34	21.21
		12	13	22.00	21.39	21.31	21.16
		25	0	22.00	21.34	21.23	21.15
	64QAM	1	0	22.00	21.43	21.51	21.27
		1	13	22.00	21.41	21.45	21.32
		1	24	22.00	21.49	21.45	21.30
		12	0	21.50	20.91	20.81	20.67
		12	6	21.50	20.92	20.81	20.68
		12	13	21.50	20.91	20.86	20.66
		25	0	21.50	20.75	20.77	20.63
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20800CH	21100CH	21400CH
10MHz	QPSK	1	0	22.00	21.50	21.57	21.56
		1	25	22.00	21.49	21.60	21.42
		1	49	22.00	21.48	21.56	21.49
		25	0	22.00	21.47	21.53	21.39
		25	13	22.00	21.48	21.54	21.39
		25	25	22.00	21.48	21.54	21.40
		50	0	22.00	21.51	21.55	21.40
	16QAM	1	0	22.00	21.42	21.38	21.23
		1	25	22.00	21.40	21.52	21.23
		1	49	22.00	21.39	21.32	21.17
		25	0	22.00	21.30	21.39	21.28
		25	13	22.00	21.30	21.42	21.24
		25	25	22.00	21.28	21.42	21.27
		50	0	22.00	21.27	21.27	21.17
	64QAM	1	0	22.00	21.45	21.60	21.23
		1	25	22.00	21.40	21.36	21.29
		1	49	22.00	21.36	21.58	21.28
		25	0	21.50	20.78	20.90	20.75
		25	13	21.50	20.78	20.92	20.76
		25	25	21.50	20.77	20.89	20.73
		50	0	21.50	20.77	20.77	20.64



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20825CH	21100CH	21375CH
15MHz	QPSK	1	0	22.00	21.53	21.72	21.45
		1	38	22.00	21.52	21.58	21.46
		1	74	22.00	21.50	21.58	21.46
		36	0	22.00	21.55	21.58	21.42
		36	18	22.00	21.54	21.55	21.43
		36	39	22.00	21.53	21.57	21.42
		75	0	22.00	21.54	21.55	21.43
	16QAM	1	0	22.00	21.50	21.35	21.33
		1	38	22.00	21.48	21.41	21.38
		1	74	22.00	21.51	21.48	21.19
		36	0	22.00	21.33	21.48	21.18
		36	18	22.00	21.35	21.48	21.19
		36	39	22.00	21.33	21.42	21.21
		75	0	22.00	21.36	21.28	21.20
	64QAM	1	0	22.00	21.57	21.41	21.39
		1	38	22.00	21.47	21.47	21.40
		1	74	22.00	21.46	21.49	21.26
		36	0	21.50	20.84	20.89	20.67
		36	18	21.50	20.85	20.90	20.68
		36	39	21.50	20.82	20.90	20.68
		75	0	21.50	20.82	20.80	20.71
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	22.00	21.52	21.74	21.56
		1	50	22.00	<b>21.76</b>	21.73	21.57
		1	99	22.00	21.59	21.62	21.57
		50	0	22.00	<b>21.75</b>	21.66	21.63
		50	25	22.00	21.70	21.66	21.63
		50	50	22.00	21.72	21.65	21.63
		100	0	22.00	21.66	21.61	21.56
	16QAM	1	0	22.00	21.60	21.56	21.54
		1	50	22.00	21.66	21.53	21.59
		1	99	22.00	21.51	21.52	21.54
		50	0	22.00	21.46	21.43	21.31
		50	25	22.00	21.46	21.45	21.28
		50	50	22.00	21.51	21.44	21.27
		100	0	22.00	21.49	21.37	21.24
	64QAM	1	0	22.00	21.48	21.53	21.39
		1	50	22.00	21.43	21.44	21.49
		1	99	22.00	21.61	21.44	21.48
		50	0	21.50	21.02	20.94	20.76
		50	25	21.50	20.93	20.92	20.74
		50	50	21.50	20.92	20.96	20.75
		100	0	21.50	20.95	20.90	20.76

Table 66: Conducted power measurement results of LTE Band 7 (Reduced Power Level D4)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20775CH	21100CH	21425CH
5MHz	QPSK	1	0	18.50	17.88	18.06	17.86
		1	13	18.50	17.97	17.98	17.81
		1	24	18.50	17.97	17.97	17.82
		12	0	18.50	17.99	18.00	17.85
		12	6	18.50	17.98	18.00	17.86
		12	13	18.50	17.98	17.98	17.85
		25	0	18.50	17.78	17.96	17.71
	16QAM	1	0	18.50	18.13	18.17	17.90
		1	13	18.50	18.17	18.16	17.87
		1	24	18.50	18.16	18.16	17.92
		12	0	18.50	17.92	17.96	17.77
		12	6	18.50	17.92	17.91	17.79
		12	13	18.50	17.93	17.93	17.79
		25	0	18.50	17.76	17.87	17.66
	64QAM	1	0	18.50	18.11	18.19	17.81
		1	13	18.50	18.04	17.99	17.85
		1	24	18.50	18.10	17.85	17.83
		12	0	18.50	17.91	17.94	17.75
		12	6	18.50	17.91	17.95	17.80
		12	13	18.50	17.90	17.94	17.75
		25	0	18.50	17.77	17.87	17.65
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20800CH	21100CH	21400CH
10MHz	QPSK	1	0	18.50	17.92	18.01	17.83
		1	25	18.50	17.91	18.01	17.82
		1	49	18.50	17.90	18.02	17.87
		25	0	18.50	17.93	18.05	17.91
		25	13	18.50	17.96	18.04	17.93
		25	25	18.50	17.94	18.05	17.96
		50	0	18.50	17.89	18.03	17.91
	16QAM	1	0	18.50	18.01	18.11	17.92
		1	25	18.50	17.81	18.10	17.97
		1	49	18.50	18.01	18.18	18.02
		25	0	18.50	17.87	17.94	17.88
		25	13	18.50	17.87	17.96	17.85
		25	25	18.50	17.88	17.94	17.87
		50	0	18.50	17.88	17.93	17.84
	64QAM	1	0	18.50	18.07	17.99	17.88
		1	25	18.50	18.08	18.09	17.78
		1	49	18.50	18.10	18.07	17.80
		25	0	18.50	17.89	17.95	17.88
		25	13	18.50	17.90	17.94	17.86
		25	25	18.50	17.91	17.96	17.84
		50	0	18.50	17.87	17.91	17.81

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20825CH	21100CH	21375CH
15MHz	QPSK	1	0	18.50	17.88	18.11	17.89
		1	38	18.50	17.88	17.94	17.88
		1	74	18.50	17.86	17.98	17.88
		36	0	18.50	18.03	18.11	17.93
		36	18	18.50	17.99	18.11	17.92
		36	39	18.50	18.01	18.10	17.93
		75	0	18.50	17.94	18.01	17.95
	16QAM	1	0	18.50	17.91	18.16	17.97
		1	38	18.50	17.93	18.21	17.91
		1	74	18.50	17.92	17.99	18.01
		36	0	18.50	17.93	18.07	17.79
		36	18	18.50	17.93	18.02	17.92
		36	39	18.50	17.95	18.02	17.90
		75	0	18.50	17.87	17.91	17.82
	64QAM	1	0	18.50	17.91	18.00	17.83
		1	38	18.50	17.97	18.01	17.82
		1	74	18.50	18.00	18.00	17.66
		36	0	18.50	17.95	18.07	17.92
		36	18	18.50	17.94	18.06	17.90
		36	39	18.50	17.89	18.06	17.86
		75	0	18.50	17.88	18.03	17.83
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	18.50	17.95	18.05	17.95
		1	50	18.50	17.94	18.05	17.95
		1	99	18.50	17.94	18.08	17.97
		50	0	18.50	17.93	18.14	17.96
		50	25	18.50	17.98	18.15	17.95
		50	50	18.50	17.97	18.14	17.95
		100	0	18.50	17.94	18.10	17.90
	16QAM	1	0	18.50	18.16	18.33	18.15
		1	50	18.50	18.16	18.33	18.10
		1	99	18.50	18.02	18.18	18.29
		50	0	18.50	17.92	18.07	17.89
		50	25	18.50	17.90	18.08	17.87
		50	50	18.50	17.92	18.08	17.89
		100	0	18.50	17.90	18.02	17.84
	64QAM	1	0	18.50	18.02	18.33	18.04
		1	50	18.50	17.99	18.09	17.99
		1	99	18.50	18.04	18.15	18.00
		50	0	18.50	17.95	18.06	17.84
		50	25	18.50	17.91	18.08	17.88
		50	50	18.50	17.92	18.07	17.85
		100	0	18.50	17.90	18.00	17.84
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20850CH	21100CH	21350CH

Table 67: Conducted power measurement results of LTE Band 7 (Reduced Power Level D6)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20775CH	21100CH	21425CH
5MHz	QPSK	1	0	20.00	19.48	19.49	19.32
		1	13	20.00	19.49	19.46	19.31
		1	24	20.00	19.49	19.47	19.32
		12	0	20.00	19.48	19.49	19.32
		12	6	20.00	19.43	19.50	19.32
		12	13	20.00	19.50	19.48	19.32
		25	0	20.00	19.26	19.43	19.22
	16QAM	1	0	20.00	19.51	19.70	19.54
		1	13	20.00	19.58	19.59	19.42
		1	24	20.00	19.64	19.64	19.44
		12	0	20.00	19.44	19.46	19.29
		12	6	20.00	19.42	19.43	19.23
		12	13	20.00	19.48	19.42	19.41
		25	0	20.00	19.31	19.34	19.12
	64QAM	1	0	20.00	19.34	19.48	19.28
		1	13	20.00	19.41	19.58	19.42
		1	24	20.00	19.41	19.56	19.38
		12	0	20.00	19.46	19.47	19.41
		12	6	20.00	19.43	19.47	19.42
		12	13	20.00	19.40	19.46	19.45
		25	0	20.00	19.34	19.43	19.19
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20800CH	21100CH	21400CH
10MHz	QPSK	1	0	20.00	19.51	19.52	19.37
		1	25	20.00	19.36	19.52	19.36
		1	49	20.00	19.44	19.51	19.36
		25	0	20.00	19.42	19.57	19.44
		25	13	20.00	19.43	19.57	19.43
		25	25	20.00	19.43	19.57	19.48
		50	0	20.00	19.42	19.53	19.41
	16QAM	1	0	20.00	19.53	19.61	19.38
		1	25	20.00	19.47	19.59	19.47
		1	49	20.00	19.61	19.61	19.60
		25	0	20.00	19.37	19.53	19.39
		25	13	20.00	19.39	19.51	19.37
		25	25	20.00	19.38	19.52	19.40
		50	0	20.00	19.31	19.50	19.30
	64QAM	1	0	20.00	19.45	19.56	19.40
		1	25	20.00	19.49	19.56	19.53
		1	49	20.00	19.48	19.49	19.45
		25	0	20.00	19.40	19.56	19.37
		25	13	20.00	19.44	19.55	19.42
		25	25	20.00	19.41	19.55	19.41
		50	0	20.00	19.34	19.51	19.35

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	20825CH	21100CH	21375CH
15MHz	QPSK	1	0	20.00	19.39	19.53	19.42
		1	38	20.00	19.43	19.54	19.42
		1	74	20.00	19.33	19.54	19.41
		36	0	20.00	19.45	19.65	19.41
		36	18	20.00	19.49	19.65	19.47
		36	39	20.00	19.45	19.65	19.48
		75	0	20.00	19.46	19.53	19.43
	16QAM	1	0	20.00	19.46	19.62	19.33
		1	38	20.00	19.50	19.48	19.25
		1	74	20.00	19.40	19.52	19.47
		36	0	20.00	19.40	19.60	19.36
		36	18	20.00	19.44	19.61	19.42
		36	39	20.00	19.46	19.59	19.43
		75	0	20.00	19.37	19.50	19.33
	64QAM	1	0	20.00	19.42	19.69	19.50
		1	38	20.00	19.36	19.67	19.44
		1	74	20.00	19.42	19.60	19.42
		36	0	20.00	19.44	19.63	19.43
		36	18	20.00	19.41	19.65	19.44
		36	39	20.00	19.42	19.63	19.44
		75	0	20.00	19.41	19.52	19.36
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	20.00	19.55	19.68	19.56
		1	50	20.00	19.42	19.67	19.46
		1	99	20.00	19.42	19.67	19.44
		50	0	20.00	19.49	19.60	19.46
		50	25	20.00	19.48	19.62	19.43
		50	50	20.00	19.48	19.61	19.47
		100	0	20.00	19.44	19.54	19.40
	16QAM	1	0	20.00	19.61	19.88	19.62
		1	50	20.00	19.61	19.85	19.63
		1	99	20.00	19.55	19.76	19.57
		50	0	20.00	19.43	19.60	19.39
		50	25	20.00	19.41	19.58	19.41
		50	50	20.00	19.42	19.60	19.39
		100	0	20.00	19.39	19.50	19.32
	64QAM	1	0	20.00	19.62	19.78	19.51
		1	50	20.00	19.64	19.67	19.45
		1	99	20.00	19.50	19.80	19.41
		50	0	20.00	19.42	19.58	19.42
		50	25	20.00	19.43	19.60	19.39
		50	50	20.00	19.43	19.60	19.41
		100	0	20.00	19.39	19.50	19.36
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	20.00	19.55	19.68	19.56
		1	50	20.00	19.42	19.67	19.46
		1	99	20.00	19.42	19.67	19.44
		50	0	20.00	19.49	19.60	19.46
		50	25	20.00	19.48	19.62	19.43
		50	50	20.00	19.48	19.61	19.47
		100	0	20.00	19.44	19.54	19.40
	16QAM	1	0	20.00	19.61	19.88	19.62
		1	50	20.00	19.61	19.85	19.63
		1	99	20.00	19.55	19.76	19.57
		50	0	20.00	19.43	19.60	19.39
		50	25	20.00	19.41	19.58	19.41
		50	50	20.00	19.42	19.60	19.39
		100	0	20.00	19.39	19.50	19.32
	64QAM	1	0	20.00	19.62	19.78	19.51
		1	50	20.00	19.64	19.67	19.45
		1	99	20.00	19.50	19.80	19.41
		50	0	20.00	19.42	19.58	19.42
		50	25	20.00	19.43	19.60	19.39
		50	50	20.00	19.43	19.60	19.41
		100	0	20.00	19.39	19.50	19.36

Table 68: Conducted power measurement results of LTE Band 7 (Reduced Power Level D5)

### 7.1.19 Conducted power measurements of LTE Band 12 (Second Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	23017CH	23095CH	23173CH	
1.4MHz	QPSK	1	0	24.50	23.03	23.49	23.46	
		1	3	24.50	23.07	23.45	23.40	
		1	5	24.50	23.06	23.41	23.39	
		3	0	23.50	23.21	23.45	23.37	
		3	2	23.50	23.16	23.39	23.40	
		3	3	23.50	23.18	23.28	23.37	
		6	0	23.50	22.04	22.24	22.28	
	16QAM	1	0	23.50	21.94	22.45	22.47	
		1	3	23.50	21.90	22.33	22.57	
		1	5	23.50	21.91	22.47	22.46	
		3	0	22.50	21.97	22.26	22.33	
		3	2	22.50	21.98	22.30	22.38	
		3	3	22.50	22.08	22.25	22.32	
		6	0	22.50	21.01	21.18	21.34	
	64QAM	1	0	22.50	21.05	21.45	21.53	
		1	3	22.50	20.89	21.60	21.49	
		1	5	22.50	20.86	21.60	21.52	
		3	0	22.50	20.95	21.28	21.45	
		3	2	22.50	20.90	21.39	21.41	
		3	3	22.50	20.94	21.37	21.40	
		6	0	21.50	20.01	20.41	20.29	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
	3MHz	QPSK	1	0	24.50	23.10	23.49	23.40
			1	7	24.50	23.13	23.40	23.40
1			14	24.50	23.17	23.47	23.41	
8			0	23.50	22.16	22.40	22.39	
8			4	23.50	22.16	22.38	22.35	
8			7	23.50	22.23	22.36	22.35	
15			0	23.50	22.30	22.41	22.35	
16QAM		1	0	23.50	21.88	22.55	22.42	
		1	7	23.50	22.20	22.71	22.45	
		1	14	23.50	22.05	22.48	22.46	
		8	0	22.50	21.09	21.35	21.33	
		8	4	22.50	21.13	21.36	21.28	
		8	7	22.50	21.13	21.35	21.35	
		15	0	22.50	21.37	21.32	21.36	
64QAM		1	0	22.50	20.84	21.51	21.55	
		1	7	22.50	20.99	21.53	21.59	
		1	14	22.50	20.89	21.47	21.58	
		8	0	21.50	20.18	20.47	20.44	
		8	4	21.50	20.09	20.39	20.36	
		8	7	21.50	20.13	20.41	20.37	
		15	0	21.50	20.27	20.36	20.37	

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	23035CH	23095CH	23155CH
5MHz	QPSK	1	0	24.50	23.14	23.60	23.35
		1	13	24.50	23.22	23.58	23.35
		1	24	24.50	23.32	23.58	23.33
		12	0	23.50	22.43	22.48	22.34
		12	6	23.50	22.46	22.47	22.32
		12	13	23.50	22.46	22.48	22.32
		25	0	23.50	22.39	22.37	22.32
	16QAM	1	0	23.50	22.13	22.53	22.48
		1	13	23.50	22.03	22.63	22.43
		1	24	23.50	22.14	22.41	22.32
		12	0	22.50	21.39	21.45	21.34
		12	6	22.50	21.34	21.45	21.44
		12	13	22.50	21.35	21.47	21.35
		25	0	22.50	21.34	21.33	21.26
	64QAM	1	0	22.50	20.88	21.59	21.41
		1	13	22.50	20.93	21.73	21.64
		1	24	22.50	21.10	21.54	21.56
		12	0	21.50	20.35	20.41	20.33
		12	6	21.50	20.36	20.48	20.40
		12	13	21.50	20.33	20.47	20.45
		25	0	21.50	20.32	20.36	20.28
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	24.50	23.38	<b>23.64</b>	23.50
		1	25	24.50	23.43	23.62	23.47
		1	49	24.50	23.33	23.60	23.48
		25	0	23.50	22.46	22.51	22.42
		25	13	23.50	22.48	<b>22.52</b>	22.39
		25	25	23.50	22.47	22.52	22.39
		50	0	23.50	22.43	22.42	22.34
	16QAM	1	0	23.50	22.37	22.64	22.53
		1	25	23.50	22.20	22.69	22.52
		1	49	23.50	22.32	22.67	22.57
		25	0	22.50	21.38	21.49	21.39
		25	13	22.50	21.42	21.48	21.40
		25	25	22.50	21.42	21.51	21.33
		50	0	22.50	21.37	21.35	21.33
	64QAM	1	0	22.50	21.34	21.82	21.61
		1	25	22.50	21.26	21.78	21.58
		1	49	22.50	21.33	21.80	21.72
		25	0	21.50	20.41	20.47	20.37
		25	13	21.50	20.41	20.46	20.36
		25	25	21.50	20.41	20.45	20.37
		50	0	21.50	20.42	20.37	20.33

Table 69: Conducted power measurement results of LTE Band 12 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	23017CH	23095CH	23173CH	
1.4MHz	QPSK	1	0	20.50	19.04	19.44	19.55	
		1	3	20.50	19.08	19.46	19.54	
		1	5	20.50	19.04	19.44	19.58	
		3	0	20.50	19.04	19.39	19.54	
		3	2	20.50	19.02	19.39	19.45	
		3	3	20.50	19.02	19.48	19.50	
		6	0	20.50	19.10	19.34	19.43	
	16QAM	1	0	20.50	19.04	19.59	19.52	
		1	3	20.50	19.02	19.54	19.49	
		1	5	20.50	19.05	19.56	19.45	
		3	0	20.50	19.04	19.22	19.45	
		3	2	20.50	19.13	19.35	19.52	
		3	3	20.50	19.12	19.46	19.42	
		6	0	20.50	18.97	19.23	19.37	
	64QAM	1	0	20.50	18.90	19.55	19.62	
		1	3	20.50	19.02	19.53	19.56	
		1	5	20.50	18.89	19.61	19.53	
		3	0	20.50	18.90	19.40	19.56	
		3	2	20.50	18.96	19.32	19.54	
		3	3	20.50	18.92	19.39	19.48	
		6	0	20.50	19.17	19.31	19.42	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
	3MHz	QPSK	1	0	20.50	19.03	19.45	19.39
			1	7	20.50	19.03	19.44	19.40
1			14	20.50	19.05	19.46	19.45	
8			0	20.50	19.21	19.40	19.39	
8			4	20.50	19.20	19.40	19.41	
8			7	20.50	19.19	19.42	19.38	
15			0	20.50	19.44	19.40	19.38	
16QAM		1	0	20.50	19.08	19.55	19.53	
		1	7	20.50	19.05	19.48	19.54	
		1	14	20.50	19.12	19.56	19.55	
		8	0	20.50	19.09	19.44	19.39	
		8	4	20.50	19.13	19.40	19.37	
		8	7	20.50	19.00	19.33	19.30	
		15	0	20.50	19.17	19.34	19.38	
64QAM		1	0	20.50	19.08	19.41	19.44	
		1	7	20.50	19.06	19.60	19.44	
		1	14	20.50	18.79	19.61	19.45	
		8	0	20.50	19.18	19.42	19.38	
		8	4	20.50	19.14	19.36	19.37	
		8	7	20.50	19.04	19.38	19.37	
		15	0	20.50	19.27	19.37	19.40	
Bandwidth		Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					Max.	23025CH	23095CH	23165CH



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	23035CH	23095CH	23155CH
5MHz	QPSK	1	0	20.50	19.17	19.60	19.46
		1	13	20.50	19.14	19.59	19.41
		1	24	20.50	19.13	19.58	19.49
		12	0	20.50	19.40	19.46	19.41
		12	6	20.50	19.40	19.46	19.39
		12	13	20.50	19.39	19.44	19.41
		25	0	20.50	19.42	19.43	19.40
	16QAM	1	0	20.50	19.34	19.76	19.59
		1	13	20.50	19.31	19.78	19.58
		1	24	20.50	19.31	19.76	19.67
		12	0	20.50	19.32	19.45	19.35
		12	6	20.50	19.32	19.45	19.37
		12	13	20.50	19.32	19.45	19.35
		25	0	20.50	19.31	19.34	19.31
	64QAM	1	0	20.50	18.95	19.65	19.55
		1	13	20.50	18.93	19.64	19.60
		1	24	20.50	18.95	19.62	19.57
		12	0	20.50	19.33	19.44	19.36
		12	6	20.50	19.34	19.46	19.36
		12	13	20.50	19.33	19.44	19.35
		25	0	20.50	19.32	19.38	19.31
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	20.50	19.43	<b>19.68</b>	19.55
		1	25	20.50	19.29	19.66	19.55
		1	49	20.50	19.32	19.62	19.54
		25	0	20.50	19.45	<b>19.61</b>	19.45
		25	13	20.50	19.48	19.61	19.43
		25	25	20.50	19.48	19.59	19.45
		50	0	20.50	19.45	19.48	19.43
	16QAM	1	0	20.50	19.45	19.65	19.79
		1	25	20.50	19.27	19.74	19.51
		1	49	20.50	19.28	19.67	19.56
		25	0	20.50	19.39	19.51	19.36
		25	13	20.50	19.37	19.51	19.40
		25	25	20.50	19.40	19.53	19.34
		50	0	20.50	19.41	19.33	19.32
	64QAM	1	0	20.50	19.31	19.68	19.62
		1	25	20.50	19.20	19.71	19.68
		1	49	20.50	19.23	19.69	19.60
		25	0	20.50	19.43	19.52	19.36
		25	13	20.50	19.40	19.55	19.37
		25	25	20.50	19.44	19.51	19.38
		50	0	20.50	19.39	19.39	19.34
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	23060CH	23095CH	23130CH

Table 70: Conducted power measurement results of LTE Band 12 (Receiver ON)

### 7.1.20 Conducted power measurements of LTE Band 12 (Main Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	23017CH	23095CH	23173CH	
1.4MHz	QPSK	1	0	25.00	23.70	23.79	23.80	
		1	3	25.00	23.73	23.82	23.80	
		1	5	25.00	23.84	23.85	23.79	
		3	0	25.00	23.70	23.77	23.78	
		3	2	25.00	23.64	23.80	23.75	
		3	3	25.00	23.68	23.77	23.78	
	16QAM	6	0	24.00	22.65	22.73	22.84	
		1	0	24.00	22.75	22.91	22.80	
		1	3	24.00	22.72	22.74	22.95	
		1	5	24.00	22.79	22.97	22.87	
		3	0	24.00	22.77	22.76	22.82	
		3	2	24.00	22.68	22.74	22.81	
	64QAM	3	3	24.00	22.76	22.80	22.85	
		6	0	23.00	21.62	21.68	21.71	
		1	0	23.00	22.03	22.05	22.06	
		1	3	23.00	21.85	21.84	22.18	
		1	5	23.00	21.95	22.05	22.00	
		3	0	23.00	21.75	21.92	21.75	
	3MHz	QPSK	3	2	23.00	21.73	21.76	21.71
			3	3	23.00	21.82	21.83	21.83
			6	0	22.00	20.68	20.76	20.65
1			0	25.00	23.76	23.90	23.83	
1			7	25.00	23.74	23.80	23.83	
1			14	25.00	23.75	23.91	23.86	
8			0	24.00	22.76	22.83	22.83	
16QAM	8	4	24.00	22.75	22.81	22.81		
	8	7	24.00	22.72	22.86	22.86		
	15	0	24.00	22.75	22.73	22.72		
	1	0	24.00	22.83	23.00	22.90		
	1	7	24.00	22.87	22.95	22.91		
	1	14	24.00	22.91	22.89	22.83		
	8	0	23.00	21.79	21.83	21.76		
64QAM	8	4	23.00	21.71	21.71	21.75		
	8	7	23.00	21.77	21.71	21.75		
	15	0	23.00	21.75	21.69	21.67		
	1	0	23.00	21.94	21.96	21.99		
	1	7	23.00	21.82	22.01	21.87		
	1	14	23.00	21.94	21.95	22.01		
	8	0	22.00	20.78	20.74	20.75		
64QAM	8	4	22.00	20.75	20.75	20.77		
	8	7	22.00	20.78	20.76	20.77		
	8	7	22.00	20.78	20.76	20.77		
	15	0	22.00	20.73	20.72	20.75		

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	23035CH	23095CH	23155CH
5MHz	QPSK	1	0	25.00	23.76	23.82	23.81
		1	13	25.00	23.77	23.85	23.80
		1	24	25.00	23.78	23.87	23.80
		12	0	24.00	22.83	22.90	22.84
		12	6	24.00	22.84	22.85	22.84
		12	13	24.00	22.83	22.84	22.85
		25	0	24.00	22.78	22.80	22.80
	16QAM	1	0	24.00	23.12	23.17	23.15
		1	13	24.00	23.12	23.12	23.07
		1	24	24.00	23.07	23.00	23.05
		12	0	23.00	21.80	21.85	21.81
		12	6	23.00	21.81	21.83	21.84
		12	13	23.00	21.78	21.82	21.84
		25	0	23.00	21.71	21.70	21.73
	64QAM	1	0	23.00	21.90	21.99	21.86
		1	13	23.00	21.91	21.94	21.80
		1	24	23.00	21.86	22.02	21.88
		12	0	22.00	20.78	20.92	20.78
		12	6	22.00	20.79	20.82	20.78
		12	13	22.00	20.80	20.83	20.80
		25	0	22.00	20.77	20.77	20.74
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	25.00	23.89	23.85	23.89
		1	25	25.00	23.89	23.86	<b>23.91</b>
		1	49	25.00	23.85	23.85	23.89
		25	0	24.00	22.86	22.91	<b>22.92</b>
		25	13	24.00	22.81	22.87	22.82
		25	25	24.00	22.85	22.87	22.82
		50	0	24.00	22.78	22.78	22.80
	16QAM	1	0	24.00	22.87	22.88	22.82
		1	25	24.00	22.79	22.87	22.88
		1	49	24.00	22.92	22.87	22.85
		25	0	23.00	21.79	21.78	21.76
		25	13	23.00	21.78	21.78	21.77
		25	25	23.00	21.77	21.76	21.77
		50	0	23.00	21.75	21.77	21.72
	64QAM	1	0	23.00	22.04	22.09	21.86
		1	25	23.00	21.92	21.96	21.84
		1	49	23.00	21.95	21.97	22.04
		25	0	22.00	20.83	20.83	20.83
		25	13	22.00	20.80	20.84	20.83
		25	25	22.00	20.78	20.84	20.85
		50	0	22.00	20.79	20.79	20.73
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	23060CH	23095CH	23130CH

Table 71: Conducted power measurement results of LTE Band 12

### 7.1.21 Conducted power measurements of LTE Band 17 (Second Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	23755CH	23790CH	23825CH
5MHz	QPSK	1	0	24.50	23.57	23.49	23.40
		1	13	24.50	23.59	23.57	23.38
		1	24	24.50	23.60	23.57	23.41
		12	0	23.50	22.59	22.46	22.46
		12	6	23.50	22.62	22.46	22.40
		12	13	23.50	22.62	22.45	22.40
		25	0	23.50	22.46	22.32	22.37
	16QAM	1	0	23.50	22.69	22.55	22.44
		1	13	23.50	22.63	22.67	22.49
		1	24	23.50	22.67	22.56	22.43
		12	0	22.50	21.45	21.37	21.19
		12	6	22.50	21.43	21.38	21.19
		12	13	22.50	21.43	21.38	21.19
		25	0	22.50	21.37	21.08	21.28
	64QAM	1	0	22.50	21.54	21.51	21.35
		1	13	22.50	21.59	21.58	21.40
		1	24	22.50	21.71	21.52	21.32
		12	0	21.50	20.55	20.45	20.37
		12	6	21.50	20.58	20.50	20.47
		12	13	21.50	20.58	20.41	20.38
		25	0	21.50	20.41	20.32	20.35
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	23780CH	23790CH	23800CH
10MHz	QPSK	1	0	24.50	23.75	23.64	23.60
		1	25	24.50	23.75	23.65	23.60
		1	49	24.50	23.69	23.68	23.65
		25	0	23.50	22.44	22.49	22.45
		25	13	23.50	22.45	22.52	22.48
		25	25	23.50	22.45	22.49	22.44
		50	0	23.50	22.39	22.43	22.41
	16QAM	1	0	23.50	22.69	22.61	22.66
		1	25	23.50	22.70	22.57	22.69
		1	49	23.50	22.67	22.51	22.65
		25	0	22.50	21.39	21.38	21.31
		25	13	22.50	21.39	21.37	21.31
		25	25	22.50	21.37	21.37	21.31
		50	0	22.50	21.23	21.25	21.20
	64QAM	1	0	22.50	21.71	21.64	21.54
		1	25	22.50	21.66	21.58	21.46
		1	49	22.50	21.63	21.57	21.53
		25	0	21.50	20.43	20.46	20.37
		25	13	21.50	20.45	20.44	20.37
		25	25	21.50	20.43	20.44	20.45
		50	0	21.50	20.36	20.38	20.35

Table 72: Conducted power measurement results of LTE Band 17 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	23755CH	23790CH	23825CH
5MHz	QPSK	1	0	20.50	19.64	19.46	19.43
		1	13	20.50	19.63	19.46	19.37
		1	24	20.50	19.50	19.46	19.36
		12	0	20.50	19.56	19.50	19.39
		12	6	20.50	19.57	19.47	19.45
		12	13	20.50	19.56	19.42	19.49
		25	0	20.50	19.51	19.33	19.35
	16QAM	1	0	20.50	19.74	19.63	19.62
		1	13	20.50	19.62	19.72	19.58
		1	24	20.50	19.74	19.60	19.71
		12	0	20.50	19.55	19.41	19.27
		12	6	20.50	19.53	19.36	19.36
		12	13	20.50	19.50	19.44	19.27
		25	0	20.50	19.44	19.33	19.35
	64QAM	1	0	20.50	19.66	19.59	19.46
		1	13	20.50	19.76	19.56	19.46
		1	24	20.50	19.73	19.55	19.54
		12	0	20.50	19.58	19.41	19.34
		12	6	20.50	19.55	19.43	19.49
		12	13	20.50	19.59	19.51	19.37
		25	0	20.50	19.38	19.19	19.37
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	23780CH	23790CH	23800CH
10MHz	QPSK	1	0	20.50	19.64	19.59	19.57
		1	25	20.50	19.60	19.56	19.59
		1	49	20.50	19.64	19.58	19.63
		25	0	20.50	19.43	19.47	19.44
		25	13	20.50	19.45	19.49	19.43
		25	25	20.50	19.43	19.47	19.43
		50	0	20.50	19.38	19.43	19.42
	16QAM	1	0	20.50	19.59	19.61	19.65
		1	25	20.50	19.54	19.69	19.61
		1	49	20.50	19.59	19.56	19.55
		25	0	20.50	19.51	19.48	19.35
		25	13	20.50	19.49	19.44	19.39
		25	25	20.50	19.47	19.44	19.36
		50	0	20.50	19.38	19.32	19.33
	64QAM	1	0	20.50	19.81	19.80	19.79
		1	25	20.50	19.79	19.75	19.79
		1	49	20.50	19.91	19.79	19.75
		25	0	20.50	19.41	19.42	19.39
		25	13	20.50	19.44	19.42	19.44
		25	25	20.50	19.43	19.38	19.41
		50	0	20.50	19.36	19.42	19.43

Table 73: Conducted power measurement results of LTE Band 17 (Receiver ON)

### 7.1.22 Conducted power measurements of LTE Band 17 (Main Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	23755CH	23790CH	23825CH	
5MHz	QPSK	1	0	25.00	23.94	23.80	23.81	
		1	13	25.00	23.85	23.78	23.82	
		1	24	25.00	23.82	23.80	23.88	
		12	0	24.00	22.80	22.83	22.80	
		12	6	24.00	22.79	22.81	22.85	
		12	13	24.00	22.78	22.84	22.80	
		25	0	24.00	22.71	22.88	22.82	
	16QAM	1	0	24.00	22.94	22.97	22.98	
		1	13	24.00	22.96	23.00	23.01	
		1	24	24.00	22.98	23.00	23.02	
		12	0	23.00	21.80	21.87	21.75	
		12	6	23.00	21.85	21.89	21.72	
		12	13	23.00	21.80	21.89	21.78	
		25	0	23.00	21.71	21.73	21.71	
	64QAM	1	0	23.00	22.01	22.02	21.98	
		1	13	23.00	22.08	22.01	22.16	
		1	24	23.00	21.88	21.94	22.05	
		12	0	22.00	20.89	20.80	20.78	
		12	6	22.00	20.80	20.83	20.79	
		12	13	22.00	20.80	20.81	20.78	
		25	0	22.00	20.76	20.76	20.72	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
	10MHz	QPSK	1	0	25.00	23.96	23.90	23.81
			1	25	25.00	23.83	23.96	23.85
1			49	25.00	23.99	23.84	23.85	
25			0	24.00	22.90	22.91	22.84	
25			13	24.00	22.90	22.82	22.93	
25			25	24.00	22.78	22.92	22.79	
50			0	24.00	22.78	22.86	22.80	
16QAM		1	0	24.00	22.95	22.97	22.96	
		1	25	24.00	22.89	22.89	22.79	
		1	49	24.00	22.89	22.92	22.86	
		25	0	23.00	21.73	21.77	21.65	
		25	13	23.00	21.75	21.68	21.78	
		25	25	23.00	21.69	21.67	21.70	
		50	0	23.00	21.73	21.70	21.73	
64QAM		1	0	23.00	21.98	21.95	21.82	
		1	25	23.00	21.87	21.85	21.83	
		1	49	23.00	21.73	21.84	21.97	
		25	0	22.00	20.69	20.77	20.82	
		25	13	22.00	20.77	20.76	20.75	
		25	25	22.00	20.79	20.72	20.81	
		50	0	22.00	20.67	20.70	20.74	

Table 74: Conducted power measurement results of LTE Band 17

### 7.1.23 Conducted power measurements of LTE Band 26 (Second Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	26697CH	26865CH	27033CH	
1.4MHz	QPSK	1	0	24.50	23.47	23.52	23.18	
		1	3	24.50	23.53	23.48	23.16	
		1	5	24.50	23.54	23.45	23.19	
		3	0	23.50	23.41	23.37	23.17	
		3	2	23.50	23.45	23.33	23.20	
		3	3	23.50	23.42	23.35	23.14	
		6	0	23.50	22.48	22.36	22.14	
	16QAM	1	0	23.50	22.63	22.41	22.24	
		1	3	23.50	22.57	22.40	22.15	
		1	5	23.50	22.41	22.52	22.12	
		3	0	22.50	22.45	22.43	22.11	
		3	2	22.50	22.39	22.39	22.16	
		3	3	22.50	22.45	22.41	22.18	
		6	0	22.50	21.39	21.35	21.20	
	64QAM	1	0	22.50	21.70	21.63	21.32	
		1	3	22.50	21.67	21.63	21.38	
		1	5	22.50	21.66	21.53	21.30	
		3	0	22.50	21.54	21.46	21.05	
		3	2	22.50	21.54	21.49	21.34	
		3	3	22.50	21.48	21.54	21.23	
		6	0	21.50	20.48	20.31	20.22	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					Max.	26705CH	26865CH	27025CH
	3MHz	QPSK	1	0	24.50	23.48	23.44	23.23
1			7	24.50	23.42	23.46	23.23	
1			14	24.50	23.53	23.53	23.22	
8			0	23.50	22.45	22.47	22.25	
8			4	23.50	22.43	22.46	22.21	
8			7	23.50	22.46	22.46	22.21	
15			0	23.50	22.42	22.41	22.28	
16QAM		1	0	23.50	22.63	22.59	22.32	
		1	7	23.50	22.60	22.62	22.34	
		1	14	23.50	22.67	22.53	22.36	
		8	0	22.50	21.39	21.45	21.20	
		8	4	22.50	21.39	21.42	21.19	
		8	7	22.50	21.35	21.43	21.20	
		15	0	22.50	21.39	21.34	21.16	
64QAM		1	0	22.50	21.74	21.55	21.35	
		1	7	22.50	21.69	21.56	21.34	
		1	14	22.50	21.80	21.63	21.45	
		8	0	21.50	20.46	20.42	20.19	
		8	4	21.50	20.39	20.44	20.24	
		8	7	21.50	20.46	20.38	20.15	
		15	0	21.50	20.34	20.35	20.19	

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26715CH	26865CH	27015CH
5MHz	QPSK	1	0	24.50	23.48	23.49	23.28
		1	13	24.50	23.48	23.48	23.30
		1	24	24.50	23.57	23.48	23.29
		12	0	23.50	22.52	22.63	22.35
		12	6	23.50	22.51	22.60	22.34
		12	13	23.50	22.51	22.61	22.35
		25	0	23.50	22.41	22.48	22.30
	16QAM	1	0	23.50	22.56	22.57	22.22
		1	13	23.50	22.77	22.56	22.41
		1	24	23.50	22.73	22.72	22.38
		12	0	22.50	21.45	21.59	21.31
		12	6	22.50	21.56	21.56	21.32
		12	13	22.50	21.47	21.55	21.33
		25	0	22.50	21.32	21.39	21.24
	64QAM	1	0	22.50	21.71	21.67	21.46
		1	13	22.50	21.60	21.61	21.37
		1	24	22.50	21.67	21.65	21.44
		12	0	21.50	20.52	20.54	20.28
		12	6	21.50	20.41	20.52	20.31
		12	13	21.50	20.43	20.56	20.26
		25	0	21.50	20.30	20.36	20.27
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26750CH	26865CH	26990CH
10MHz	QPSK	1	0	24.50	23.36	23.43	22.98
		1	25	24.50	23.38	23.56	23.01
		1	49	24.50	23.43	23.54	23.06
		25	0	23.50	22.05	22.60	22.31
		25	13	23.50	22.13	22.60	22.31
		25	25	23.50	22.18	22.62	22.31
		50	0	23.50	22.19	22.44	22.27
	16QAM	1	0	23.50	22.51	22.57	21.97
		1	25	23.50	22.49	22.58	21.93
		1	49	23.50	22.53	22.57	22.05
		25	0	22.50	20.92	21.49	21.24
		25	13	22.50	20.94	21.47	21.27
		25	25	22.50	20.96	21.47	21.27
		50	0	22.50	21.17	21.36	21.22
	64QAM	1	0	22.50	21.58	21.71	21.20
		1	25	22.50	21.61	21.75	21.21
		1	49	22.50	21.52	21.71	21.24
		25	0	21.50	19.87	20.52	20.25
		25	13	21.50	19.92	20.56	20.28
		25	25	21.50	19.88	20.55	20.25
		50	0	21.50	20.14	20.35	20.25



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26775CH	26865CH	26965CH
15MHz	QPSK	1	0	24.50	23.33	<b>23.55</b>	23.38
		1	38	24.50	23.39	23.51	23.36
		1	74	24.50	23.35	23.51	23.36
		36	0	23.50	22.39	<b>22.60</b>	22.24
		36	18	23.50	22.39	22.60	22.24
		36	39	23.50	22.39	22.60	22.23
		75	0	23.50	22.48	22.45	22.33
	16QAM	1	0	23.50	22.51	22.76	22.46
		1	38	23.50	22.45	22.77	22.63
		1	74	23.50	22.53	22.67	22.46
		36	0	22.50	21.30	21.57	21.24
		36	18	22.50	21.33	21.54	21.37
		36	39	22.50	21.33	21.55	21.27
		75	0	22.50	21.43	21.37	21.25
	64QAM	1	0	22.50	21.55	21.62	21.44
		1	38	22.50	21.72	21.63	21.45
		1	74	22.50	21.65	21.56	21.40
		36	0	21.50	20.27	20.55	20.08
		36	18	21.50	20.27	20.57	20.11
		36	39	21.50	20.23	20.56	20.11
		75	0	21.50	20.42	20.43	20.26

Table 75: Conducted power measurement results of LTE Band 26 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26697CH	26865CH	27033CH
1.4MHz	QPSK	1	0	20.00	19.00	19.02	18.77
		1	3	20.00	19.02	19.02	18.78
		1	5	20.00	19.04	18.97	18.76
		3	0	20.00	18.95	18.97	18.66
		3	2	20.00	18.92	18.94	18.70
		3	3	20.00	19.00	18.97	18.72
		6	0	20.00	18.92	18.97	18.64
	16QAM	1	0	20.00	19.06	19.03	18.79
		1	3	20.00	19.06	19.06	18.74
		1	5	20.00	19.04	19.00	18.77
		3	0	20.00	18.97	18.93	18.58
		3	2	20.00	18.94	18.83	18.74
		3	3	20.00	18.87	18.92	18.80
		6	0	20.00	18.86	18.86	18.67
	64QAM	1	0	20.00	19.00	19.04	18.83
		1	3	20.00	19.00	19.16	18.90
		1	5	20.00	18.95	19.11	18.78
		3	0	20.00	19.02	18.92	18.70
		3	2	20.00	19.15	18.92	18.76
		3	3	20.00	18.96	18.89	18.73
		6	0	20.00	18.94	18.97	18.69
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26705CH	26865CH	27025CH
3MHz	QPSK	1	0	20.00	19.06	19.02	18.91
		1	7	20.00	19.04	19.02	18.91
		1	14	20.00	19.03	18.98	18.91
		8	0	20.00	18.97	18.99	18.79
		8	4	20.00	19.01	19.00	18.82
		8	7	20.00	18.95	18.91	18.75
		15	0	20.00	19.03	18.99	18.71
	16QAM	1	0	20.00	19.16	19.22	19.05
		1	7	20.00	19.22	19.15	19.09
		1	14	20.00	19.10	19.22	19.03
		8	0	20.00	18.85	18.93	18.71
		8	4	20.00	18.84	18.91	18.73
		8	7	20.00	18.88	18.87	18.71
		15	0	20.00	18.99	18.94	18.69
	64QAM	1	0	20.00	19.13	19.08	19.08
		1	7	20.00	19.16	19.12	19.07
		1	14	20.00	19.26	19.11	18.97
		8	0	20.00	18.96	18.96	18.83
		8	4	20.00	18.98	18.93	18.80
		8	7	20.00	18.95	19.01	18.84
		15	0	20.00	18.96	18.98	18.70

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26715CH	26865CH	27015CH
5MHz	QPSK	1	0	20.00	19.05	19.04	18.90
		1	13	20.00	19.06	19.05	18.91
		1	24	20.00	19.10	19.02	18.90
		12	0	20.00	19.03	19.09	18.94
		12	6	20.00	19.04	19.08	18.94
		12	13	20.00	19.05	19.05	18.95
		25	0	20.00	18.96	19.06	18.87
	16QAM	1	0	20.00	19.29	19.08	19.12
		1	13	20.00	19.26	19.27	19.10
		1	24	20.00	19.35	19.30	19.03
		12	0	20.00	19.05	19.05	18.97
		12	6	20.00	19.02	19.05	18.90
		12	13	20.00	19.04	19.06	18.92
		25	0	20.00	19.00	18.86	18.85
	64QAM	1	0	20.00	19.13	19.25	19.03
		1	13	20.00	19.12	19.19	19.01
		1	24	20.00	19.16	19.25	19.02
		12	0	20.00	19.00	19.05	18.94
		12	6	20.00	19.04	19.09	18.91
		12	13	20.00	19.02	19.04	18.95
		25	0	20.00	18.91	19.00	18.83
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26750CH	26865CH	26990CH
10MHz	QPSK	1	0	20.00	19.02	19.10	18.57
		1	25	20.00	19.03	19.12	18.60
		1	49	20.00	19.02	19.13	18.66
		25	0	20.00	18.63	19.10	18.80
		25	13	20.00	18.63	19.10	18.80
		25	25	20.00	18.62	19.11	18.80
		50	0	20.00	18.86	19.05	18.88
	16QAM	1	0	20.00	19.08	19.17	18.77
		1	25	20.00	19.00	19.08	18.70
		1	49	20.00	19.13	19.06	18.74
		25	0	20.00	18.58	18.98	18.74
		25	13	20.00	18.61	18.99	18.73
		25	25	20.00	18.64	19.00	18.74
		50	0	20.00	18.93	18.85	18.83
	64QAM	1	0	20.00	19.27	19.22	18.75
		1	25	20.00	19.20	19.14	18.81
		1	49	20.00	19.21	19.21	18.81
		25	0	20.00	18.72	18.95	18.75
		25	13	20.00	18.66	19.01	18.77
		25	25	20.00	18.63	19.04	18.79
		50	0	20.00	18.87	18.99	18.88

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26775CH	26865CH	26965CH
15MHz	QPSK	1	0	20.00	19.02	18.99	18.93
		1	38	20.00	<b>19.09</b>	19.03	18.93
		1	74	20.00	19.03	19.02	18.93
		36	0	20.00	18.98	19.14	18.84
		36	18	20.00	18.93	19.15	18.90
		36	39	20.00	18.92	19.15	18.86
		75	0	20.00	19.01	19.03	18.80
	16QAM	1	0	20.00	19.25	19.16	19.03
		1	38	20.00	19.25	19.16	19.04
		1	74	20.00	19.21	19.08	19.07
		36	0	20.00	19.00	19.03	18.79
		36	18	20.00	18.92	19.10	18.80
		36	39	20.00	18.92	19.09	18.78
		75	0	20.00	18.92	18.95	18.77
	64QAM	1	0	20.00	19.08	19.18	18.96
		1	38	20.00	19.07	19.34	18.94
		1	74	20.00	19.15	19.21	19.09
		36	0	20.00	18.95	19.10	18.75
		36	18	20.00	18.92	19.14	18.74
		36	39	20.00	18.92	19.13	18.75
		75	0	20.00	18.94	18.94	18.80

Table 76: Conducted power measurement results of LTE Band 26 (Receiver ON)

### 7.1.24 Conducted power measurements of LTE Band 26 (Main Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	26697CH	26865CH	27033CH	
1.4MHz	QPSK	1	0	25.00	23.84	23.84	23.64	
		1	3	25.00	23.90	23.84	23.63	
		1	5	25.00	23.88	23.83	23.62	
		3	0	25.00	23.83	23.69	23.54	
		3	2	25.00	23.82	23.72	23.57	
		3	3	25.00	23.93	23.71	23.55	
		6	0	24.00	22.79	22.78	22.53	
	16QAM	1	0	24.00	22.90	22.79	22.53	
		1	3	24.00	22.68	22.84	22.62	
		1	5	24.00	22.72	22.90	22.73	
		3	0	24.00	22.71	22.72	22.62	
		3	2	24.00	22.73	22.65	22.48	
		3	3	24.00	22.74	22.72	22.69	
		6	0	23.00	21.66	21.63	21.58	
	64QAM	1	0	23.00	21.81	21.76	21.74	
		1	3	23.00	21.82	21.75	21.82	
		1	5	23.00	21.92	22.03	21.64	
		3	0	23.00	21.85	21.79	21.59	
		3	2	23.00	21.82	21.82	21.68	
		3	3	23.00	21.79	21.74	21.57	
		6	0	22.00	20.68	20.65	20.54	
	Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
					Max.	26705CH	26865CH	27025CH
	3MHz	QPSK	1	0	25.00	23.79	23.79	23.69
1			7	25.00	23.64	23.79	23.71	
1			14	25.00	23.61	23.92	23.69	
8			0	24.00	22.72	22.78	22.64	
8			4	24.00	22.74	22.79	22.63	
8			7	24.00	22.74	22.76	22.67	
15			0	24.00	22.85	22.83	22.67	
16QAM		1	0	24.00	23.04	22.84	22.80	
		1	7	24.00	22.90	22.85	22.90	
		1	14	24.00	23.12	22.93	22.88	
		8	0	23.00	21.86	21.77	21.59	
		8	4	23.00	21.89	21.84	21.62	
		8	7	23.00	21.87	21.84	21.61	
		15	0	23.00	21.78	21.76	21.64	
64QAM		1	0	23.00	22.07	21.93	21.81	
		1	7	23.00	22.23	21.99	21.63	
		1	14	23.00	21.97	21.90	21.91	
		8	0	22.00	20.96	20.79	20.63	
		8	4	22.00	20.87	20.81	20.62	
		8	7	22.00	20.87	20.81	20.61	
		15	0	22.00	20.89	20.81	20.66	

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26715CH	26865CH	27015CH
5MHz	QPSK	1	0	25.00	24.02	23.83	23.79
		1	13	25.00	23.91	23.83	23.72
		1	24	25.00	24.05	23.83	23.79
		12	0	24.00	22.96	22.91	22.78
		12	6	24.00	22.94	22.92	22.73
		12	13	24.00	22.96	22.92	22.76
		25	0	24.00	22.90	22.83	22.67
	16QAM	1	0	24.00	23.12	22.94	22.92
		1	13	24.00	23.05	22.84	22.94
		1	24	24.00	23.19	22.95	22.95
		12	0	23.00	21.97	21.96	21.71
		12	6	23.00	21.93	21.97	21.65
		12	13	23.00	21.94	21.95	21.75
		25	0	23.00	21.82	21.73	21.63
	64QAM	1	0	23.00	22.01	21.92	21.78
		1	13	23.00	22.01	21.89	21.83
		1	24	23.00	22.06	21.95	21.79
		12	0	22.00	20.88	20.84	20.74
		12	6	22.00	20.88	20.82	20.72
		12	13	22.00	20.94	20.83	20.74
		25	0	22.00	20.84	20.85	20.70
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26750CH	26865CH	26990CH
10MHz	QPSK	1	0	25.00	23.98	23.89	23.70
		1	25	25.00	23.95	23.91	23.79
		1	49	25.00	23.98	23.91	23.78
		25	0	24.00	22.94	22.83	22.77
		25	13	24.00	22.98	22.85	22.75
		25	25	24.00	22.95	22.89	22.76
		50	0	24.00	22.84	22.81	22.73
	16QAM	1	0	24.00	22.94	22.86	22.80
		1	25	24.00	22.96	22.82	22.68
		1	49	24.00	22.95	22.85	22.92
		25	0	23.00	21.89	21.81	21.67
		25	13	23.00	21.87	21.77	21.66
		25	25	23.00	21.84	21.80	21.70
		50	0	23.00	21.79	21.81	21.63
	64QAM	1	0	23.00	22.05	21.99	21.85
		1	25	23.00	22.00	21.99	21.84
		1	49	23.00	22.06	21.91	21.96
		25	0	22.00	20.89	20.82	20.71
		25	13	22.00	20.92	20.82	20.71
		25	25	22.00	20.89	20.83	20.69
		50	0	22.00	20.91	20.77	20.67

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	26775CH	26865CH	26965CH
15MHz	QPSK	1	0	25.00	23.95	23.93	23.89
		1	38	25.00	<b>24.01</b>	23.95	23.85
		1	74	25.00	24.01	23.92	23.87
		36	0	24.00	22.99	22.94	22.89
		36	18	24.00	<b>23.01</b>	22.93	22.79
		36	39	24.00	23.01	22.95	22.79
		75	0	24.00	22.91	22.84	22.80
	16QAM	1	0	24.00	23.08	22.54	22.90
		1	38	24.00	23.00	22.72	22.90
		1	74	24.00	22.98	22.73	23.01
		36	0	23.00	21.86	21.81	21.71
		36	18	23.00	21.82	21.80	21.69
		36	39	23.00	21.82	21.82	21.68
		75	0	23.00	21.76	21.70	21.64
	64QAM	1	0	23.00	21.96	21.73	21.89
		1	38	23.00	21.94	21.63	21.93
		1	74	23.00	22.06	21.75	21.95
		36	0	22.00	20.84	20.79	20.80
		36	18	22.00	20.89	20.77	20.68
		36	39	22.00	20.85	20.81	20.78
		75	0	22.00	20.77	20.73	20.69

Table 77: Conducted power measurement results of LTE Band 26

### 7.1.25 Conducted power measurements of LTE Band 38 (Second Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37775CH	38000CH	38225CH
5MHz	QPSK	1	0	21.00	20.17	20.28	20.27
		1	13	21.00	20.18	20.27	20.28
		1	24	21.00	20.20	20.26	20.28
		12	0	21.00	20.19	20.29	20.30
		12	6	21.00	20.21	20.30	20.29
		12	13	21.00	20.21	20.30	20.29
		25	0	21.00	20.16	20.23	20.24
	16QAM	1	0	21.00	20.24	20.34	20.38
		1	13	21.00	20.24	20.31	20.38
		1	24	21.00	20.25	20.34	20.40
		12	0	21.00	20.12	20.20	20.13
		12	6	21.00	20.12	20.19	20.14
		12	13	21.00	20.11	20.19	20.13
		25	0	21.00	20.09	20.18	20.21
	64QAM	1	0	21.00	20.22	20.31	20.32
		1	13	21.00	20.21	20.30	20.31
		1	24	21.00	20.22	20.29	20.31
		12	0	21.00	20.24	20.31	20.34
		12	6	21.00	20.25	20.31	20.34
		12	13	21.00	20.23	20.30	20.34
		25	0	21.00	20.11	20.17	20.19
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	21.00	20.24	20.36	20.40
		1	25	21.00	20.23	20.35	20.40
		1	49	21.00	20.22	20.34	20.40
		25	0	21.00	20.17	20.23	20.31
		25	13	21.00	20.17	20.23	20.31
		25	25	21.00	20.18	20.23	20.31
		50	0	21.00	20.08	20.21	20.23
	16QAM	1	0	21.00	20.30	20.40	20.42
		1	25	21.00	20.31	20.39	20.41
		1	49	21.00	20.28	20.38	20.41
		25	0	21.00	20.02	20.12	20.14
		25	13	21.00	20.03	20.12	20.14
		25	25	21.00	20.01	20.12	20.14
		50	0	21.00	20.01	20.11	20.17
	64QAM	1	0	21.00	20.22	20.34	20.41
		1	25	21.00	20.23	20.35	20.40
		1	49	21.00	20.27	20.33	20.41
		25	0	21.00	20.14	20.21	20.26
		25	13	21.00	20.13	20.20	20.26
		25	25	21.00	20.13	20.20	20.26
		50	0	21.00	20.03	20.14	20.18



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37825CH	38000CH	38175CH
15MHz	QPSK	1	0	21.00	20.32	20.36	20.43
		1	38	21.00	20.31	20.36	20.42
		1	74	21.00	20.30	20.36	20.43
		36	0	21.00	20.26	20.36	20.39
		36	18	21.00	20.26	20.36	20.39
		36	39	21.00	20.26	20.36	20.40
		75	0	21.00	20.19	20.27	20.27
	16QAM	1	0	21.00	20.39	20.44	20.51
		1	38	21.00	20.39	20.44	20.52
		1	74	21.00	20.39	20.44	20.52
		36	0	21.00	20.19	20.31	20.33
		36	18	21.00	20.19	20.30	20.34
		36	39	21.00	20.19	20.30	20.34
		75	0	21.00	20.07	20.20	20.19
	64QAM	1	0	21.00	20.23	20.35	20.52
		1	38	21.00	20.28	20.34	20.51
		1	74	21.00	20.26	20.33	20.51
		36	0	21.00	20.20	20.31	20.35
		36	18	21.00	20.20	20.31	20.35
		36	39	21.00	20.20	20.31	20.36
		75	0	21.00	20.15	20.25	20.28
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37850CH	38000CH	38150CH
20MHz	QPSK	1	0	21.00	20.28	20.37	<b>20.41</b>
		1	50	21.00	20.27	20.36	20.40
		1	99	21.00	20.27	20.35	20.40
		50	0	21.00	20.27	20.36	<b>20.43</b>
		50	25	21.00	20.29	20.37	20.42
		50	50	21.00	20.27	20.36	20.42
		100	0	21.00	20.24	20.29	20.33
	16QAM	1	0	21.00	20.35	20.41	20.45
		1	50	21.00	20.36	20.39	20.43
		1	99	21.00	20.36	20.39	20.44
		50	0	21.00	20.29	20.38	20.43
		50	25	21.00	20.31	20.38	20.44
		50	50	21.00	20.30	20.38	20.44
		100	0	21.00	20.22	20.21	20.24
	64QAM	1	0	21.00	20.27	20.38	20.38
		1	50	21.00	20.30	20.37	20.39
		1	99	21.00	20.30	20.38	20.39
		50	0	21.00	20.22	20.30	20.30
		50	25	21.00	20.22	20.30	20.30
		50	50	21.00	20.22	20.30	20.30
		100	0	21.00	20.27	20.26	20.27

Table 78: Conducted power measurement results of LTE Band 38 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37775CH	38000CH	38225CH
5MHz	QPSK	1	0	14.50	13.72	13.76	13.79
		1	13	14.50	13.71	13.76	13.80
		1	24	14.50	13.71	13.77	13.80
		12	0	14.50	13.77	13.87	13.82
		12	6	14.50	13.76	13.86	13.82
		12	13	14.50	13.76	13.88	13.81
		25	0	14.50	13.71	13.76	13.74
	16QAM	1	0	14.50	13.82	13.91	13.93
		1	13	14.50	13.82	13.89	13.94
		1	24	14.50	13.83	13.88	13.93
		12	0	14.50	13.71	13.74	13.72
		12	6	14.50	13.71	13.75	13.72
		12	13	14.50	13.71	13.74	13.72
		25	0	14.50	13.69	13.74	13.75
	64QAM	1	0	14.50	13.93	13.83	13.88
		1	13	14.50	13.93	13.82	13.89
		1	24	14.50	13.93	13.83	13.89
		12	0	14.50	13.91	13.85	13.91
		12	6	14.50	13.90	13.84	13.90
		12	13	14.50	13.90	13.85	13.91
		25	0	14.50	13.72	13.70	13.79
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37800CH	38000CH	38200CH
10MHz	QPSK	1	0	14.50	13.90	13.91	13.91
		1	25	14.50	13.90	13.90	13.92
		1	49	14.50	13.90	13.90	13.92
		25	0	14.50	13.79	13.86	13.87
		25	13	14.50	13.79	13.86	13.86
		25	25	14.50	13.79	13.86	13.86
		50	0	14.50	13.68	13.78	13.79
	16QAM	1	0	14.50	13.95	13.97	14.02
		1	25	14.50	13.94	13.96	14.01
		1	49	14.50	13.94	13.96	14.01
		25	0	14.50	13.71	13.74	13.71
		25	13	14.50	13.70	13.73	13.72
		25	25	14.50	13.71	13.74	13.72
		50	0	14.50	13.60	13.70	13.72
	64QAM	1	0	14.50	14.02	13.95	14.10
		1	25	14.50	14.04	13.96	14.12
		1	49	14.50	14.01	13.97	14.10
		25	0	14.50	13.76	13.78	13.90
		25	13	14.50	13.77	13.77	13.91
		25	25	14.50	13.77	13.77	13.91
		50	0	14.50	13.61	13.68	13.75

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37825CH	38000CH	38175CH
15MHz	QPSK	1	0	14.50	13.96	13.95	14.01
		1	38	14.50	13.96	13.94	14.01
		1	74	14.50	13.96	13.96	14.01
		36	0	14.50	13.86	13.94	13.97
		36	18	14.50	13.86	13.94	13.99
		36	39	14.50	13.86	13.94	13.97
		75	0	14.50	13.77	13.40	13.88
	16QAM	1	0	14.50	14.07	14.11	14.13
		1	38	14.50	14.07	14.11	14.13
		1	74	14.50	14.07	14.10	14.13
		36	0	14.50	13.92	13.91	13.97
		36	18	14.50	13.92	13.92	13.96
		36	39	14.50	13.92	13.91	13.96
		75	0	14.50	13.81	13.75	13.79
	64QAM	1	0	14.50	14.11	14.03	14.15
		1	38	14.50	14.09	14.03	14.15
		1	74	14.50	14.09	14.04	14.15
		36	0	14.50	13.78	13.84	13.91
		36	18	14.50	13.79	13.84	13.91
		36	39	14.50	13.79	13.84	13.92
		75	0	14.50	13.70	13.76	13.90
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
20MHz	QPSK	1	0	14.50	13.84	13.85	13.90
		1	50	14.50	<b>13.85</b>	<b>13.88</b>	<b>13.91</b>
		1	99	14.50	13.83	13.86	13.90
		50	0	14.50	14.01	13.95	14.05
		50	25	14.50	14.00	13.96	14.05
		50	50	14.50	13.54	13.96	<b>14.05</b>
		100	0	14.50	13.87	13.87	13.88
	16QAM	1	0	14.50	13.97	13.98	13.98
		1	50	14.50	13.98	13.99	14.00
		1	99	14.50	13.94	13.99	14.00
		50	0	14.50	14.08	14.03	14.12
		50	25	14.50	14.08	14.04	14.13
		50	50	14.50	14.08	14.04	14.12
		100	0	14.50	13.86	13.80	13.81
	64QAM	1	0	14.50	14.06	14.03	13.99
		1	50	14.50	14.06	14.02	13.98
		1	99	14.50	14.03	14.04	13.98
		50	0	14.50	13.80	13.82	13.84
		50	25	14.50	13.80	13.82	13.84
		50	50	14.50	13.80	13.82	13.83
		100	0	14.50	13.71	13.80	13.83

Table 79: Conducted power measurement results of LTE Band 38 (Receiver ON)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37775CH	38000CH	38225CH
5MHz	QPSK	1	0	13.50	12.66	12.65	12.81
		1	13	13.50	12.65	12.65	12.82
		1	24	13.50	12.64	12.65	12.82
		12	0	13.50	12.57	12.69	12.74
		12	6	13.50	12.54	12.69	12.75
		12	13	13.50	12.52	12.69	12.75
		25	0	13.50	12.52	12.66	12.72
	16QAM	1	0	13.50	12.60	12.61	12.87
		1	13	13.50	12.60	12.61	12.87
		1	24	13.50	12.60	12.61	12.87
		12	0	13.50	12.47	12.61	12.69
		12	6	13.50	12.47	12.61	12.70
		12	13	13.50	12.47	12.61	12.70
		25	0	13.50	12.39	12.55	12.61
	64QAM	1	0	13.50	12.63	12.74	12.82
		1	13	13.50	12.63	12.73	12.82
		1	24	13.50	12.62	12.75	12.81
		12	0	13.50	12.48	12.63	12.66
		12	6	13.50	12.45	12.63	12.66
		12	13	13.50	12.47	12.63	12.66
		25	0	13.50	12.51	12.65	12.67
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	13.50	12.70	12.69	13.01
		1	25	13.50	12.70	12.70	13.01
		1	49	13.50	12.70	12.70	13.01
		25	0	13.50	12.57	12.75	12.88
		25	13	13.50	12.56	12.75	12.88
		25	25	13.50	12.56	12.75	12.88
		50	0	13.50	12.54	12.66	12.72
	16QAM	1	0	13.50	12.76	12.84	13.10
		1	25	13.50	12.76	12.85	13.11
		1	49	13.50	12.77	12.84	13.11
		25	0	13.50	12.55	12.73	12.85
		25	13	13.50	12.57	12.73	12.85
		25	25	13.50	12.57	12.73	12.85
		50	0	13.50	12.44	12.60	12.67
	64QAM	1	0	13.50	12.72	12.72	13.02
		1	25	13.50	12.72	12.72	13.02
		1	49	13.50	12.72	12.71	13.02
		25	0	13.50	12.63	12.82	12.93
		25	13	13.50	12.63	12.81	12.93
		25	25	13.50	12.62	12.82	12.93
		50	0	13.50	12.50	12.66	12.73

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	
				Max.	37825CH	38000CH	38175CH	
15MHz	QPSK	1	0	13.50	12.73	12.75	12.93	
		1	38	13.50	12.73	12.76	12.92	
		1	74	13.50	12.72	12.76	12.94	
		36	0	13.50	12.66	12.69	12.96	
		36	18	13.50	12.66	12.69	12.97	
		36	39	13.50	12.66	12.69	12.97	
	16QAM	75	0	13.50	12.59	12.70	12.79	
		1	0	13.50	12.88	12.96	13.20	
		1	38	13.50	12.88	12.96	13.21	
		1	74	13.50	12.88	12.94	13.20	
		36	0	13.50	12.59	12.61	12.84	
		36	18	13.50	12.58	12.62	12.84	
	64QAM	36	39	13.50	12.58	12.62	12.84	
		75	0	13.50	12.44	12.56	12.66	
		1	0	13.50	12.77	12.74	12.96	
		1	38	13.50	12.77	12.74	12.96	
		1	74	13.50	12.77	12.75	12.96	
		36	0	13.50	12.64	12.67	12.96	
	20MHz	QPSK	36	18	13.50	12.64	12.67	12.97
			36	39	13.50	12.65	12.68	12.97
			75	0	13.50	12.53	12.64	12.81
1			0	13.50	12.72	12.68	12.77	
1			50	13.50	12.73	12.69	12.78	
1			99	13.50	12.72	12.68	12.77	
16QAM		50	0	13.50	12.76	12.75	13.02	
		50	25	13.50	12.75	12.74	13.02	
		50	50	13.50	12.75	12.74	13.03	
		100	0	13.50	12.61	12.71	12.81	
	1	0	13.50	12.79	12.73	12.92		
	1	50	13.50	12.79	12.73	12.92		
64QAM	1	99	13.50	12.79	12.73	12.92		
	50	0	13.50	12.65	12.73	12.93		
	50	25	13.50	12.65	12.74	12.93		
	50	50	13.50	12.65	12.73	12.93		
	100	0	13.50	12.55	12.65	12.74		
	1	0	13.50	12.81	12.83	12.91		
20MHz	64QAM	1	50	13.50	12.81	12.82	12.91	
		1	99	13.50	12.81	12.82	12.90	
		50	0	13.50	12.77	12.85	13.15	
		50	25	13.50	12.77	12.85	13.15	
		50	50	13.50	12.77	12.85	13.15	
		100	0	13.50	12.61	12.71	12.80	

Table 80: Conducted power measurement results of LTE Band 38 (Second Antenna+WiFi Antenna, Receiver ON)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37775CH	38000CH	38225CH
5MHz	QPSK	1	0	20.00	19.08	19.15	19.25
		1	13	20.00	19.05	19.16	19.24
		1	24	20.00	19.07	19.19	19.25
		12	0	20.00	19.02	19.15	19.20
		12	6	20.00	19.05	19.15	19.20
		12	13	20.00	19.04	19.18	19.20
		25	0	20.00	19.00	19.12	19.20
	16QAM	1	0	20.00	19.00	19.18	19.20
		1	13	20.00	18.99	19.18	19.21
		1	24	20.00	18.99	19.18	19.21
		12	0	20.00	18.95	19.10	19.22
		12	6	20.00	18.95	19.10	19.22
		12	13	20.00	18.94	19.09	19.22
		25	0	20.00	18.87	19.02	19.09
	64QAM	1	0	20.00	19.04	19.14	19.22
		1	13	20.00	19.04	19.13	19.21
		1	24	20.00	19.03	19.13	19.21
		12	0	20.00	18.91	19.06	19.27
		12	6	20.00	18.91	19.05	19.27
		12	13	20.00	18.90	19.06	19.27
		25	0	20.00	18.96	19.09	19.16
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	20.00	19.11	19.19	19.28
		1	25	20.00	19.10	19.18	19.28
		1	49	20.00	19.11	19.18	19.28
		25	0	20.00	19.04	19.18	19.22
		25	13	20.00	19.05	19.20	19.23
		25	25	20.00	19.04	19.21	19.21
		50	0	20.00	19.00	19.13	19.21
	16QAM	1	0	20.00	19.22	19.30	19.41
		1	25	20.00	19.22	19.30	19.41
		1	49	20.00	19.21	19.29	19.41
		25	0	20.00	19.01	19.17	19.23
		25	13	20.00	19.01	19.17	19.23
		25	25	20.00	19.02	19.18	19.24
		50	0	20.00	18.91	19.05	19.14
	64QAM	1	0	20.00	19.10	19.16	19.45
		1	25	20.00	19.09	19.15	19.45
		1	49	20.00	19.10	19.16	19.45
		25	0	20.00	19.01	19.32	19.21
		25	13	20.00	19.00	19.31	19.21
		25	25	20.00	19.01	19.31	19.22
		50	0	20.00	18.99	19.11	19.20
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37800CH	38000CH	38200CH

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37825CH	38000CH	38175CH
15MHz	QPSK	1	0	20.00	19.18	19.19	19.31
		1	38	20.00	19.18	19.19	19.34
		1	74	20.00	19.17	19.21	19.32
		36	0	20.00	19.04	19.13	19.31
		36	18	20.00	19.06	19.14	19.30
		36	39	20.00	19.06	19.15	19.31
		75	0	20.00	19.06	19.17	19.20
	16QAM	1	0	20.00	19.55	19.63	19.50
		1	38	20.00	19.36	19.12	19.51
		1	74	20.00	19.36	19.30	19.50
		36	0	20.00	19.03	19.16	19.23
		36	18	20.00	19.06	19.11	19.29
		36	39	20.00	19.05	19.18	19.27
		75	0	20.00	18.98	18.96	18.99
	64QAM	1	0	20.00	19.16	19.30	19.49
		1	38	20.00	19.23	18.99	19.48
		1	74	20.00	19.16	19.34	19.47
		36	0	20.00	19.28	19.11	19.42
		36	18	20.00	19.09	19.18	19.42
		36	39	20.00	19.12	19.08	19.42
		75	0	20.00	19.12	19.14	19.13
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37850CH	38000CH	38150CH
20MHz	QPSK	1	0	20.00	19.12	19.12	<b>19.30</b>
		1	50	20.00	19.13	19.18	19.29
		1	99	20.00	19.12	19.12	19.13
		50	0	20.00	19.17	19.18	19.25
		50	25	20.00	19.10	19.19	<b>19.27</b>
		50	50	20.00	19.17	19.18	19.16
		100	0	20.00	19.10	19.18	19.24
	16QAM	1	0	20.00	19.37	19.59	19.64
		1	50	20.00	19.37	19.56	19.63
		1	99	20.00	19.18	19.24	19.31
		50	0	20.00	19.06	19.20	19.25
		50	25	20.00	19.07	19.21	19.15
		50	50	20.00	19.07	19.21	19.26
		100	0	20.00	19.18	19.04	19.14
	64QAM	1	0	20.00	19.15	19.11	19.08
		1	50	20.00	19.23	19.19	19.34
		1	99	20.00	19.25	19.18	19.08
		50	0	20.00	19.13	19.26	19.36
		50	25	20.00	19.12	19.42	19.12
		50	50	20.00	19.12	19.42	19.36
		100	0	20.00	19.05	19.15	19.12

Table 81: Conducted power measurement results of LTE Band 38 (Second Antenna+WiFi Antenna, Receiver OFF)

### 7.1.26 Conducted power measurements of LTE Band 38 (Main Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37775CH	38000CH	38225CH
5MHz	QPSK	1	0	24.50	23.66	23.86	23.80
		1	13	24.50	23.69	23.85	23.80
		1	24	24.50	23.75	23.88	23.80
		12	0	23.50	22.76	22.85	22.83
		12	6	23.50	22.76	22.85	22.83
		12	13	23.50	22.76	22.85	22.84
		25	0	23.50	22.64	22.73	22.83
	16QAM	1	0	23.50	23.06	23.11	23.18
		1	13	23.50	23.02	23.22	23.15
		1	24	23.50	23.02	23.21	23.13
		12	0	22.50	21.69	21.84	21.75
		12	6	22.50	21.66	21.84	21.76
		12	13	22.50	21.67	21.80	21.77
		25	0	22.50	21.52	21.77	21.68
	64QAM	1	0	22.50	21.76	21.96	21.91
		1	13	22.50	21.74	21.88	21.84
		1	24	22.50	21.74	21.87	21.79
		12	0	21.50	20.73	20.92	19.83
		12	6	21.50	20.64	20.92	20.78
		12	13	21.50	20.64	20.92	20.79
		25	0	21.50	20.69	20.85	20.83
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
10MHz	QPSK	1	0	24.50	23.72	23.89	23.89
		1	25	24.50	23.69	23.86	23.89
		1	49	24.50	23.66	23.85	23.89
		25	0	23.50	22.77	22.88	22.88
		25	13	23.50	22.76	22.88	22.87
		25	25	23.50	22.76	22.87	22.87
		50	0	23.50	22.68	22.80	22.88
	16QAM	1	0	23.50	23.00	23.12	23.05
		1	25	23.50	23.04	23.09	23.05
		1	49	23.50	23.07	23.16	23.05
		25	0	22.50	21.76	21.87	21.87
		25	13	22.50	21.77	21.81	21.88
		25	25	22.50	21.77	21.83	21.87
		50	0	22.50	21.72	21.84	21.84
	64QAM	1	0	22.50	21.69	21.88	22.01
		1	25	22.50	21.74	21.95	22.07
		1	49	22.50	21.69	21.88	22.07
		25	0	21.50	20.66	20.86	20.89
		25	13	21.50	20.65	20.86	20.89
		25	25	21.50	20.66	20.85	20.89
		50	0	21.50	20.72	20.73	20.84
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37800CH	38000CH	38200CH



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37825CH	38000CH	38175CH
15MHz	QPSK	1	0	24.50	23.77	23.91	24.02
		1	38	24.50	23.78	23.98	24.01
		1	74	24.50	23.78	24.00	24.00
		36	0	23.50	22.79	22.78	22.95
		36	18	23.50	22.79	22.77	22.96
		36	39	23.50	22.78	22.78	22.97
		75	0	23.50	22.75	22.74	22.90
	16QAM	1	0	23.50	23.10	23.20	23.38
		1	38	23.50	23.05	23.18	23.37
		1	74	23.50	23.05	23.18	23.37
		36	0	22.50	21.80	21.91	21.89
		36	18	22.50	21.82	21.91	21.90
		36	39	22.50	21.80	21.92	21.91
		75	0	22.50	21.62	21.72	21.75
	64QAM	1	0	22.50	21.75	21.97	22.02
		1	38	22.50	21.80	21.97	22.03
		1	74	22.50	21.86	21.90	21.97
		36	0	21.50	20.79	20.85	20.85
		36	18	21.50	20.79	20.86	20.95
		36	39	21.50	20.80	20.86	20.96
		75	0	21.50	20.70	20.81	20.80
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37850CH	38000CH	38150CH
20MHz	QPSK	1	0	24.50	23.78	<b>24.03</b>	<b>24.01</b>
		1	50	24.50	23.84	24.01	23.92
		1	99	24.50	<b>23.87</b>	24.00	23.91
		50	0	23.50	22.83	22.96	23.00
		50	25	23.50	22.83	22.96	<b>23.02</b>
		50	50	23.50	22.84	22.97	23.01
		100	0	23.50	22.82	22.83	22.91
	16QAM	1	0	23.50	23.12	23.21	23.16
		1	50	23.50	23.13	23.17	23.15
		1	99	23.50	23.11	23.19	23.12
		50	0	22.50	21.80	21.89	21.90
		50	25	22.50	21.71	21.89	21.88
		50	50	22.50	21.71	21.89	21.87
		100	0	22.50	21.77	21.80	21.86
	64QAM	1	0	22.50	21.85	22.06	22.14
		1	50	22.50	21.91	21.97	22.10
		1	99	22.50	21.90	21.97	22.11
		50	0	21.50	20.82	20.91	20.94
		50	25	21.50	20.82	20.92	20.94
		50	50	21.50	20.83	20.90	20.95
		100	0	21.50	20.70	20.81	20.83

Table 82: Conducted power measurement results of LTE Band 38 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37775CH	38000CH	38225CH
5MHz	QPSK	1	0	23.50	22.81	22.91	23.00
		1	13	23.50	22.88	23.00	23.00
		1	24	23.50	22.86	22.99	23.00
		12	0	23.50	22.39	22.47	22.33
		12	6	23.50	22.44	22.47	22.33
		12	13	23.50	22.42	22.46	22.34
		25	0	23.50	22.40	22.51	22.40
	16QAM	1	0	23.50	22.94	23.09	23.12
		1	13	23.50	23.01	23.16	23.11
		1	24	23.50	23.01	23.14	23.11
		12	0	22.50	21.90	21.89	21.81
		12	6	22.50	21.91	21.99	21.82
		12	13	22.50	21.91	21.99	21.82
		25	0	22.50	21.78	21.88	21.78
	64QAM	1	0	22.50	21.61	21.80	21.67
		1	13	22.50	21.60	21.86	21.67
		1	24	22.50	21.61	21.85	21.67
		12	0	21.50	20.87	20.92	20.86
		12	6	21.50	20.87	20.93	20.92
		12	13	21.50	20.87	20.92	20.92
		25	0	21.50	20.70	20.84	20.83
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37800CH	38000CH	38200CH
10MHz	QPSK	1	0	23.50	23.06	22.98	22.95
		1	25	23.50	22.99	22.96	23.07
		1	49	23.50	22.97	22.99	23.07
		25	0	23.50	22.40	22.43	22.45
		25	13	23.50	22.39	22.45	22.48
		25	25	23.50	22.40	22.39	22.47
		50	0	23.50	22.32	22.42	22.43
	16QAM	1	0	23.50	23.18	23.20	23.20
		1	25	23.50	23.19	23.14	23.21
		1	49	23.50	23.17	23.15	23.19
		25	0	22.50	21.80	21.87	21.87
		25	13	22.50	21.82	21.86	21.90
		25	25	22.50	21.84	21.86	21.90
		50	0	22.50	21.74	21.80	21.87
	64QAM	1	0	22.50	21.71	21.96	21.84
		1	25	22.50	21.64	21.81	21.91
		1	49	22.50	21.63	21.81	21.91
		25	0	21.50	20.68	20.84	20.86
		25	13	21.50	20.68	20.84	20.87
		25	25	21.50	20.68	20.85	20.87
		50	0	21.50	20.82	20.87	20.84

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37825CH	38000CH	38175CH
15MHz	QPSK	1	0	23.50	22.91	23.02	23.12
		1	38	23.50	22.93	23.08	23.12
		1	74	23.50	22.92	23.07	23.12
		36	0	23.50	22.48	22.50	22.55
		36	18	23.50	22.48	22.50	22.55
		36	39	23.50	22.47	22.50	22.56
		75	0	23.50	22.42	22.47	22.43
	16QAM	1	0	23.50	23.29	23.29	23.31
		1	38	23.50	23.29	23.26	23.32
		1	74	23.50	23.29	23.24	23.41
		36	0	22.50	21.90	21.98	22.01
		36	18	22.50	21.91	21.98	22.02
		36	39	22.50	21.91	21.98	22.02
		75	0	22.50	21.83	21.81	21.78
	64QAM	1	0	22.50	21.67	21.92	21.89
		1	38	22.50	21.66	21.84	21.88
		1	74	22.50	21.66	21.84	21.89
		36	0	21.50	20.88	20.89	20.93
		36	18	21.50	20.93	20.89	21.07
		36	39	21.50	20.88	20.89	21.07
		75	0	21.50	20.94	20.90	20.91
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel
				Max.	37850CH	38000CH	38150CH
20MHz	QPSK	1	0	23.50	23.01	22.98	23.03
		1	50	23.50	22.98	22.97	22.99
		1	99	23.50	22.90	22.96	22.99
		50	0	23.50	22.47	22.50	22.53
		50	25	23.50	22.47	22.49	22.55
		50	50	23.50	22.46	22.50	22.54
		100	0	23.50	22.37	22.50	22.44
	16QAM	1	0	23.50	23.08	23.17	23.25
		1	50	23.50	23.08	23.15	23.26
		1	99	23.50	23.08	23.15	23.25
		50	0	22.50	21.97	21.89	21.93
		50	25	22.50	21.98	21.90	21.94
		50	50	22.50	21.98	21.90	21.94
		100	0	22.50	21.77	21.90	21.83
	64QAM	1	0	22.50	21.79	21.92	21.98
		1	50	22.50	21.80	21.92	21.97
		1	99	22.50	21.80	21.90	21.96
		50	0	21.50	20.91	20.87	20.91
		50	25	21.50	20.91	20.87	20.91
		50	50	21.50	20.86	20.87	20.91
		100	0	21.50	20.82	20.86	20.85

Table 83: Conducted power measurement results of LTE Band 38 (Reduced Power Level D2/D6)

### 7.1.27 Conducted power measurements of LTE Band 41 (Second Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
				Max.	40165CH	40515CH	40865CH	41215CH
5MHz	QPSK	1	0	23.00	22.16	22.01	22.21	22.12
		1	13	23.00	22.07	22.00	22.23	22.11
		1	24	23.00	22.01	21.94	22.18	22.03
		12	0	23.00	22.20	22.06	22.30	22.18
		12	6	23.00	22.21	22.06	22.30	22.18
		12	13	23.00	22.20	22.06	22.30	22.18
		25	0	23.00	22.03	21.97	22.15	22.03
	16QAM	1	0	23.00	22.44	22.42	22.56	22.46
		1	13	23.00	22.44	22.43	22.55	22.44
		1	24	23.00	22.43	22.42	22.55	22.43
		12	0	22.00	21.15	21.10	21.32	21.23
		12	6	22.00	21.16	21.11	21.33	21.23
		12	13	22.00	21.16	21.11	21.31	21.23
		25	0	22.00	21.07	21.00	21.27	21.06
	64QAM	1	0	22.00	20.97	20.84	21.06	20.95
		1	13	22.00	20.96	20.83	21.06	20.95
		1	24	22.00	20.96	20.83	21.05	20.96
		12	0	21.00	20.18	20.11	20.33	20.29
		12	6	21.00	20.16	20.12	20.33	20.30
		12	13	21.00	20.17	20.12	20.33	20.29
		25	0	21.00	20.13	20.07	20.28	20.19
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
				Max.	40190CH	40523CH	40856CH	41190CH
10MHz	QPSK	1	0	23.00	22.20	22.00	22.31	22.11
		1	25	23.00	22.00	21.89	22.06	22.01
		1	49	23.00	21.43	21.88	22.07	22.06
		25	0	23.00	22.15	22.15	22.29	22.21
		25	13	23.00	22.14	22.04	22.29	22.21
		25	25	23.00	22.13	22.04	22.30	22.21
		50	0	23.00	22.03	22.07	22.20	22.11
	16QAM	1	0	23.00	22.38	22.29	22.47	22.32
		1	25	23.00	22.38	22.28	22.47	22.41
		1	49	23.00	22.39	22.30	22.47	22.40
		25	0	22.00	21.05	21.01	21.20	21.09
		25	13	22.00	21.06	21.01	21.20	21.10
		25	25	22.00	21.04	21.02	21.21	21.10
		50	0	22.00	20.94	20.96	21.11	21.08
	64QAM	1	0	22.00	20.96	20.86	21.04	20.96
		1	25	22.00	20.94	20.85	21.07	20.95
		1	49	22.00	20.98	20.85	21.08	20.95
		25	0	21.00	20.18	20.12	20.34	20.25
		25	13	21.00	20.16	20.13	20.33	20.25
		25	25	21.00	20.18	20.13	20.34	20.22
		50	0	21.00	19.99	19.99	20.20	20.08

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
				Max.	40215CH	40523CH	40840CH	41165CH
15MHz	QPSK	1	0	23.00	22.24	22.03	22.27	22.12
		1	38	23.00	21.96	21.98	22.22	22.09
		1	74	23.00	21.24	21.96	22.11	22.04
		36	0	23.00	22.20	22.13	22.30	22.21
		36	18	23.00	22.21	22.13	22.29	22.22
		36	39	23.00	22.21	22.13	22.29	22.22
		75	0	23.00	22.01	22.06	22.23	22.07
	16QAM	1	0	23.00	22.64	22.47	22.70	22.65
		1	38	23.00	22.64	22.45	22.73	22.64
		1	74	23.00	22.65	22.45	22.72	22.63
		36	0	22.00	21.02	20.96	21.15	21.08
		36	18	22.00	21.02	20.97	21.15	21.12
		36	39	22.00	21.03	20.97	21.16	21.09
		75	0	22.00	20.96	21.02	21.20	21.08
	64QAM	1	0	22.00	20.96	20.92	21.04	20.98
		1	38	22.00	20.96	20.91	21.03	20.98
		1	74	22.00	20.96	20.91	21.03	20.99
		36	0	21.00	20.08	20.07	20.29	20.22
		36	18	21.00	20.09	20.07	20.30	20.19
		36	39	21.00	20.10	20.07	20.30	20.18
		75	0	21.00	19.99	20.08	20.24	20.17
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
				Max.	40240CH	40540CH	40840CH	41140CH
20MHz	QPSK	1	0	23.00	22.08	22.96	22.09	22.06
		1	50	23.00	21.68	22.95	21.99	21.75
		1	99	23.00	21.55	22.94	22.22	22.17
		50	0	23.00	22.07	22.17	22.33	22.18
		50	25	23.00	22.08	22.17	22.31	22.19
		50	50	23.00	22.08	22.17	22.32	22.19
		100	0	23.00	22.05	22.11	22.29	22.13
	16QAM	1	0	23.00	22.40	22.26	22.45	22.36
		1	50	23.00	22.36	22.26	22.43	22.36
		1	99	23.00	22.37	22.26	22.43	22.37
		50	0	22.00	21.04	21.13	21.30	21.24
		50	25	22.00	21.04	21.13	21.27	21.24
		50	50	22.00	21.05	21.14	21.26	21.24
		100	0	22.00	20.95	21.02	21.25	21.19
	64QAM	1	0	22.00	20.90	20.79	20.92	20.86
		1	50	22.00	20.90	20.78	20.92	20.86
		1	99	22.00	20.89	20.78	20.91	20.86
		50	0	21.00	20.11	20.09	20.30	20.19
		50	25	21.00	20.17	20.10	20.29	20.19
		50	50	21.00	20.16	20.10	20.28	20.20
		100	0	21.00	20.02	20.11	20.31	20.24

Table 84: Conducted power measurement results of LTE Band 41 (Full Power)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
				Max.	40165CH	40515CH	40865CH	41215CH
5MHz	QPSK	1	0	14.50	13.69	13.54	13.83	13.71
		1	13	14.50	13.67	13.54	13.83	13.70
		1	24	14.50	13.69	13.55	13.83	13.70
		12	0	14.50	13.72	13.60	13.83	13.78
		12	6	14.50	13.73	13.60	13.82	13.78
		12	13	14.50	13.73	13.60	13.82	13.78
		25	0	14.50	13.64	13.52	13.78	13.62
	16QAM	1	0	14.50	13.79	13.62	13.92	13.75
		1	13	14.50	13.79	13.62	13.92	13.75
		1	24	14.50	13.79	13.62	13.93	13.75
		12	0	14.50	13.83	13.67	13.92	13.76
		12	6	14.50	13.84	13.67	13.93	13.77
		12	13	14.50	13.84	13.67	13.93	13.76
		25	0	14.50	13.45	13.36	13.60	13.41
	64QAM	1	0	14.50	13.77	13.64	13.89	13.70
		1	13	14.50	13.76	13.63	13.88	13.70
		1	24	14.50	13.76	13.62	13.88	13.71
		12	0	14.50	13.69	13.52	13.86	13.66
		12	6	14.50	13.69	13.51	13.86	13.66
		12	13	14.50	13.69	13.51	13.86	13.67
		25	0	14.50	13.65	13.50	13.80	13.61
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
10MHz	QPSK	1	0	14.50	13.75	13.61	13.84	13.76
		1	25	14.50	13.74	13.62	13.85	13.76
		1	49	14.50	13.74	13.61	13.84	13.76
		25	0	14.50	13.68	13.59	13.86	13.78
		25	13	14.50	13.69	13.58	13.85	13.77
		25	25	14.50	13.68	13.58	13.86	13.76
		50	0	14.50	13.57	13.55	13.74	13.69
	16QAM	1	0	14.50	14.02	13.95	14.13	14.08
		1	25	14.50	14.02	13.95	14.12	14.07
		1	49	14.50	14.01	13.96	14.12	14.08
		25	0	14.50	13.63	13.52	13.76	13.66
		25	13	14.50	13.63	13.52	13.76	13.67
		25	25	14.50	13.61	13.52	13.76	13.68
		50	0	14.50	13.60	13.51	13.74	13.59
	64QAM	1	0	14.50	13.79	13.68	13.88	13.77
		1	25	14.50	13.80	13.66	13.88	13.78
		1	49	14.50	13.79	13.67	13.88	13.78
		25	0	14.50	13.70	13.54	13.78	13.73
		25	13	14.50	13.70	13.54	13.79	13.73
		25	25	14.50	13.72	13.54	13.78	13.73
		50	0	14.50	13.62	13.58	13.77	13.60
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
10MHz	QPSK	1	0	14.50	13.75	13.61	13.84	13.76
		1	25	14.50	13.74	13.62	13.85	13.76
		1	49	14.50	13.74	13.61	13.84	13.76
		25	0	14.50	13.68	13.59	13.86	13.78
		25	13	14.50	13.69	13.58	13.85	13.77
		25	25	14.50	13.68	13.58	13.86	13.76
		50	0	14.50	13.57	13.55	13.74	13.69
	16QAM	1	0	14.50	14.02	13.95	14.13	14.08
		1	25	14.50	14.02	13.95	14.12	14.07
		1	49	14.50	14.01	13.96	14.12	14.08
		25	0	14.50	13.63	13.52	13.76	13.66
		25	13	14.50	13.63	13.52	13.76	13.67
		25	25	14.50	13.61	13.52	13.76	13.68
		50	0	14.50	13.60	13.51	13.74	13.59
	64QAM	1	0	14.50	13.79	13.68	13.88	13.77
		1	25	14.50	13.80	13.66	13.88	13.78
		1	49	14.50	13.79	13.67	13.88	13.78
		25	0	14.50	13.70	13.54	13.78	13.73
		25	13	14.50	13.70	13.54	13.79	13.73
		25	25	14.50	13.72	13.54	13.78	13.73
		50	0	14.50	13.62	13.58	13.77	13.60

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
				Max.	40215CH	40523CH	40840CH	41165CH
15MHz	QPSK	1	0	14.50	13.78	13.70	13.83	13.73
		1	38	14.50	13.78	13.65	13.83	13.76
		1	74	14.50	13.78	13.70	13.84	13.73
		36	0	14.50	13.70	13.68	13.88	13.79
		36	18	14.50	13.70	13.67	13.86	13.80
		36	39	14.50	13.70	13.68	13.88	13.79
		75	0	14.50	13.64	13.61	13.78	13.68
	16QAM	1	0	14.50	13.96	13.85	14.04	13.95
		1	38	14.50	13.97	13.85	14.04	13.99
		1	74	14.50	13.97	13.82	14.05	13.95
		36	0	14.50	13.57	13.49	13.70	13.65
		36	18	14.50	13.58	13.49	13.69	13.66
		36	39	14.50	13.57	13.49	13.69	13.66
		75	0	14.50	13.57	13.62	13.73	13.65
	64QAM	1	0	14.50	13.81	13.70	13.83	13.79
		1	38	14.50	13.81	13.68	13.89	13.80
		1	74	14.50	13.79	13.71	13.89	13.80
		36	0	14.50	13.75	13.65	13.87	13.78
		36	18	14.50	13.76	13.64	13.87	13.78
		36	39	14.50	13.76	13.66	13.87	13.78
		75	0	14.50	13.57	13.60	13.76	13.67
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
20MHz	QPSK	1	0	14.50	13.59	13.43	13.64	13.51
		1	50	14.50	13.60	13.43	13.64	13.51
		1	99	14.50	13.59	13.43	13.65	13.52
		50	0	14.50	13.74	13.76	13.90	13.82
		50	25	14.50	13.74	13.75	13.90	13.82
		50	50	14.50	13.73	13.76	13.90	13.82
		100	0	14.50	13.61	13.68	13.88	13.73
	16QAM	1	0	14.50	13.76	13.59	13.74	13.62
		1	50	14.50	13.75	13.59	13.87	13.77
		1	99	14.50	13.74	13.56	13.78	13.73
		50	0	14.50	13.72	13.67	13.83	13.76
		50	25	14.50	13.69	13.68	13.79	13.67
		50	50	14.50	13.70	13.68	13.63	13.66
		100	0	14.50	13.59	13.64	13.79	13.64
	64QAM	1	0	14.50	13.67	13.27	13.48	13.34
		1	50	14.50	13.59	13.18	13.52	13.22
		1	99	14.50	13.26	13.27	13.49	13.38
		50	0	14.50	13.72	13.68	13.83	13.81
		50	25	14.50	13.59	13.60	13.77	13.69
		50	50	14.50	13.45	13.45	13.67	13.58
		100	0	14.50	13.62	13.62	13.81	13.64
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
20MHz	QPSK	1	0	14.50	13.59	13.43	13.64	13.51
		1	50	14.50	13.60	13.43	13.64	13.51
		1	99	14.50	13.59	13.43	13.65	13.52
		50	0	14.50	13.74	13.76	13.90	13.82
		50	25	14.50	13.74	13.75	13.90	13.82
		50	50	14.50	13.73	13.76	13.90	13.82
		100	0	14.50	13.61	13.68	13.88	13.73
	16QAM	1	0	14.50	13.76	13.59	13.74	13.62
		1	50	14.50	13.75	13.59	13.87	13.77
		1	99	14.50	13.74	13.56	13.78	13.73
		50	0	14.50	13.72	13.67	13.83	13.76
		50	25	14.50	13.69	13.68	13.79	13.67
		50	50	14.50	13.70	13.68	13.63	13.66
		100	0	14.50	13.59	13.64	13.79	13.64
	64QAM	1	0	14.50	13.67	13.27	13.48	13.34
		1	50	14.50	13.59	13.18	13.52	13.22
		1	99	14.50	13.26	13.27	13.49	13.38
		50	0	14.50	13.72	13.68	13.83	13.81
		50	25	14.50	13.59	13.60	13.77	13.69
		50	50	14.50	13.45	13.45	13.67	13.58
		100	0	14.50	13.62	13.62	13.81	13.64

Table 85: Conducted power measurement results of LTE Band 41 (Receiver ON)

Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
				Max.	40165CH	40515CH	40865CH	41215CH
5MHz	QPSK	1	0	12.00	11.19	11.05	11.33	11.17
		1	13	12.00	11.18	11.05	11.34	11.16
		1	24	12.00	11.19	11.06	11.32	11.15
		12	0	12.00	11.27	11.14	11.40	11.31
		12	6	12.00	11.27	11.15	11.40	11.31
		12	13	12.00	11.28	11.16	11.40	11.32
		25	0	12.00	11.17	11.12	11.34	11.22
	16QAM	1	0	12.00	11.37	11.33	11.51	11.40
		1	13	12.00	11.37	11.31	11.52	11.41
		1	24	12.00	11.39	11.33	11.52	11.40
		12	0	12.00	11.32	11.20	11.42	11.36
		12	6	12.00	11.31	11.20	11.42	11.36
		12	13	12.00	11.32	11.20	11.42	11.36
		25	0	12.00	11.04	10.96	11.16	11.07
	64QAM	1	0	12.00	11.38	11.25	11.55	11.40
		1	13	12.00	11.40	11.26	11.55	11.39
		1	24	12.00	11.38	11.26	11.55	11.41
		12	0	12.00	11.38	11.27	11.49	11.45
		12	6	12.00	11.38	11.26	11.48	11.44
		12	13	12.00	11.39	11.26	11.49	11.44
		25	0	12.00	11.19	11.12	11.32	11.24
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
				Max.	40190CH	40523CH	40856CH	41190CH
10MHz	QPSK	1	0	12.00	11.31	11.24	11.45	11.31
		1	25	12.00	11.32	11.25	11.45	11.32
		1	49	12.00	11.31	11.24	11.45	11.32
		25	0	12.00	11.24	11.15	11.39	11.33
		25	13	12.00	11.24	11.14	11.39	11.33
		25	25	12.00	11.24	11.15	11.38	11.32
		50	0	12.00	11.17	11.11	11.31	11.27
	16QAM	1	0	12.00	11.63	11.53	11.77	11.64
		1	25	12.00	11.63	11.53	11.77	11.64
		1	49	12.00	11.64	11.53	11.77	11.64
		25	0	12.00	11.16	11.08	11.30	11.27
		25	13	12.00	11.16	11.09	11.29	11.22
		25	25	12.00	11.16	11.07	11.30	11.27
		50	0	12.00	11.17	11.16	11.30	11.29
	64QAM	1	0	12.00	11.42	11.24	11.58	11.38
		1	25	12.00	11.42	11.26	11.58	11.38
		1	49	12.00	11.42	11.24	11.58	11.38
		25	0	12.00	11.23	11.15	11.46	11.27
		25	13	12.00	11.23	11.15	11.46	11.27
		25	25	12.00	11.23	11.15	11.46	11.28
		50	0	12.00	11.10	11.09	11.28	11.25



Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
				Max.	40215CH	40523CH	40840CH	41165CH
15MHz	QPSK	1	0	12.00	11.36	11.25	11.42	11.36
		1	38	12.00	11.35	11.25	11.42	11.37
		1	74	12.00	11.35	11.24	11.43	11.36
		36	0	12.00	11.29	11.16	11.40	11.30
		36	18	12.00	11.28	11.15	11.41	11.30
		36	39	12.00	11.29	11.15	11.41	11.30
		75	0	12.00	11.14	11.14	11.30	11.20
	16QAM	1	0	12.00	11.29	11.19	11.39	11.33
		1	38	12.00	11.29	11.18	11.38	11.33
		1	74	12.00	11.29	11.18	11.39	11.33
		36	0	12.00	11.15	11.14	11.34	11.27
		36	18	12.00	11.16	11.14	11.34	11.28
		36	39	12.00	11.15	11.14	11.34	11.28
		75	0	12.00	11.08	11.14	11.24	11.22
	64QAM	1	0	12.00	11.39	11.26	11.48	11.36
		1	38	12.00	11.39	11.26	11.48	11.36
		1	74	12.00	11.38	11.26	11.48	11.37
		36	0	12.00	11.22	11.16	11.36	11.30
		36	18	12.00	11.21	11.16	11.35	11.30
		36	39	12.00	11.22	11.15	11.35	11.30
		75	0	12.00	11.14	11.20	11.31	11.27
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
20MHz	QPSK	1	0	12.00	11.11	11.00	11.16	11.13
		1	50	12.00	11.12	11.00	11.16	11.13
		1	99	12.00	11.10	11.00	11.16	11.14
		50	0	12.00	11.24	11.23	11.37	11.33
		50	25	12.00	11.23	11.22	11.40	11.34
		50	50	12.00	11.25	11.22	11.40	11.33
		100	0	12.00	11.13	11.18	11.36	11.28
	16QAM	1	0	12.00	11.28	11.18	11.31	11.29
		1	50	12.00	11.27	11.18	11.31	11.30
		1	99	12.00	11.28	11.18	11.31	11.30
		50	0	12.00	11.17	11.20	11.33	11.29
		50	25	12.00	11.17	11.21	11.35	11.28
		50	50	12.00	11.16	11.19	11.33	11.29
		100	0	12.00	11.06	11.14	11.31	11.21
	64QAM	1	0	12.00	11.28	11.15	11.30	11.27
		1	50	12.00	11.26	11.14	11.30	11.27
		1	99	12.00	11.27	11.14	11.30	11.27
		50	0	12.00	11.17	11.25	11.34	11.28
		50	25	12.00	11.17	11.24	11.34	11.29
		50	50	12.00	11.17	11.24	11.35	11.28
		100	0	12.00	11.17	11.21	11.45	11.31
Bandwidth	Modulation	RB size	RB offset	Tune-up	Channel	Channel	Channel	Channel
20MHz	QPSK	1	0	12.00	11.11	11.00	11.16	11.13
		1	50	12.00	11.12	11.00	11.16	11.13
		1	99	12.00	11.10	11.00	11.16	11.14
		50	0	12.00	11.24	11.23	11.37	11.33
		50	25	12.00	11.23	11.22	11.40	11.34
		50	50	12.00	11.25	11.22	11.40	11.33
		100	0	12.00	11.13	11.18	11.36	11.28
	16QAM	1	0	12.00	11.28	11.18	11.31	11.29
		1	50	12.00	11.27	11.18	11.31	11.30
		1	99	12.00	11.28	11.18	11.31	11.30
		50	0	12.00	11.17	11.20	11.33	11.29
		50	25	12.00	11.17	11.21	11.35	11.28
		50	50	12.00	11.16	11.19	11.33	11.29
		100	0	12.00	11.06	11.14	11.31	11.21
	64QAM	1	0	12.00	11.28	11.15	11.30	11.27
		1	50	12.00	11.26	11.14	11.30	11.27
		1	99	12.00	11.27	11.14	11.30	11.27
		50	0	12.00	11.17	11.25	11.34	11.28
		50	25	12.00	11.17	11.24	11.34	11.29
		50	50	12.00	11.17	11.24	11.35	11.28
		100	0	12.00	11.17	11.21	11.45	11.31

Table 86: Conducted power measurement results of LTE Band 41 (Second Antenna+WiFi Antenna, Receiver ON)

Bandwidth	Modulation	RB size	RB offset	Tune-up		Channel	Channel	Channel	Channel
				Min.	Max.	40165C H	40515C H	40865C H	41215C H
5MHz	QPSK	1	0	17.50	20.50	19.55	19.47	19.74	19.60
		1	13	17.50	20.50	19.53	19.49	19.76	19.58
		1	24	17.50	20.50	19.57	19.48	19.80	19.69
		12	0	17.50	20.50	19.65	19.55	19.69	19.78
		12	6	17.50	20.50	19.63	19.54	19.69	19.77
		12	13	17.50	20.50	19.61	19.53	19.69	19.76
		25	0	17.50	20.50	19.47	19.49	19.61	19.72
	16QAM	1	0	17.50	20.50	19.90	19.86	20.15	20.13
		1	13	17.50	20.50	19.90	19.85	20.14	20.12
		1	24	17.50	20.50	19.90	19.85	20.14	20.11
		12	0	17.50	20.50	19.68	19.53	19.88	19.83
		12	6	17.50	20.50	19.68	19.53	19.88	19.85
		12	13	17.50	20.50	19.68	19.52	19.88	19.84
		25	0	17.50	20.50	19.53	19.33	19.74	19.58
	64QAM	1	0	17.50	20.50	19.79	19.66	19.95	19.87
		1	13	17.50	20.50	19.78	19.65	19.95	19.87
		1	24	17.50	20.50	19.79	19.64	19.95	19.87
		12	0	17.50	20.50	19.66	19.49	19.81	19.73
		12	6	17.50	20.50	19.65	19.49	19.81	19.73
		12	13	17.50	20.50	19.68	19.61	19.80	19.73
		25	0	17.50	20.50	19.64	19.53	19.75	19.70
Bandwidth	Modulation	RB size	RB offset	Tune-up		Channel	Channel	Channel	Channel
				Min.	Max.	40190C H	40523C H	40856C H	41190C H
10MHz	QPSK	1	0	17.50	20.50	19.77	19.72	19.97	19.85
		1	25	17.50	20.50	19.77	19.71	19.96	19.85
		1	49	17.50	20.50	19.77	19.70	19.97	19.85
		25	0	17.50	20.50	19.70	19.54	19.80	19.83
		25	13	17.50	20.50	19.71	19.53	19.80	19.84
		25	25	17.50	20.50	19.71	19.51	19.80	19.84
		50	0	17.50	20.50	19.52	19.54	19.64	19.61
	16QAM	1	0	17.50	20.50	19.80	19.69	19.94	19.94
		1	25	17.50	20.50	19.68	19.68	19.93	19.93
		1	49	17.50	20.50	19.69	19.67	19.93	19.93
		25	0	17.50	20.50	19.70	19.58	19.82	19.78
		25	13	17.50	20.50	19.70	19.58	19.84	19.78
		25	25	17.50	20.50	19.70	19.58	19.85	19.76
		50	0	17.50	20.50	19.49	19.46	19.70	19.74
	64QAM	1	0	17.50	20.50	19.83	19.82	19.95	19.89
		1	25	17.50	20.50	19.83	19.81	19.94	19.89
		1	49	17.50	20.50	19.84	19.80	19.94	19.89
		25	0	17.50	20.50	19.64	19.57	19.84	19.77
		25	13	17.50	20.50	19.64	19.59	19.84	19.77
		25	25	17.50	20.50	19.64	19.57	19.84	19.76
		50	0	17.50	20.50	19.49	19.59	19.70	19.60

Bandwidth	Modulation	RB size	RB offset	Tune-up		Channel	Channel	Channel	Channel
				Min.	Max.	40215C H	40523C H	40840C H	41165C H
15MHz	QPSK	1	0	17.50	20.50	19.70	19.60	19.85	19.79
		1	38	17.50	20.50	19.70	19.60	19.84	19.79
		1	74	17.50	20.50	19.70	19.61	19.84	19.79
		36	0	17.50	20.50	19.64	19.62	19.86	19.79
		36	18	17.50	20.50	19.64	19.61	19.86	19.78
		36	39	17.50	20.50	19.64	19.61	19.86	19.78
		75	0	17.50	20.50	19.48	19.58	19.77	19.76
	16QAM	1	0	17.50	20.50	19.61	19.47	19.67	19.67
		1	38	17.50	20.50	19.63	19.47	19.69	19.67
		1	74	17.50	20.50	19.63	19.47	19.70	19.67
		36	0	17.50	20.50	19.52	19.53	19.74	19.71
		36	18	17.50	20.50	19.52	19.58	19.74	19.71
		36	39	17.50	20.50	19.53	19.61	19.74	19.71
		75	0	17.50	20.50	19.46	19.54	19.72	19.65
	64QAM	1	0	17.50	20.50	19.83	19.65	19.92	19.93
		1	38	17.50	20.50	19.83	19.64	19.94	19.93
		1	74	17.50	20.50	19.83	19.64	19.93	19.94
		36	0	17.50	20.50	19.67	19.61	19.85	19.79
		36	18	17.50	20.50	19.67	19.64	19.84	19.78
		36	39	17.50	20.50	19.65	19.64	19.84	19.78
		75	0	17.50	20.50	19.52	19.60	19.79	19.69
Bandwidth	Modulation	RB size	RB offset	Tune-up		Channel	Channel	Channel	Channel
				Min.	Max.	40240C H	40540C H	40840C H	41140C H
20MHz	QPSK	1	0	17.50	20.50	19.51	19.43	19.73	19.55
		1	50	17.50	20.50	19.50	19.43	19.74	19.56
		1	99	17.50	20.50	19.50	19.43	<b>19.76</b>	19.53
		50	0	17.50	20.50	19.57	19.73	19.85	19.74
		50	25	17.50	20.50	19.58	19.72	19.85	19.73
		50	50	17.50	20.50	19.58	19.71	<b>19.86</b>	19.73
		100	0	17.50	20.50	19.53	19.54	19.80	19.76
	16QAM	1	0	17.50	20.50	19.97	19.84	20.04	19.96
		1	50	17.50	20.50	19.98	19.83	20.02	19.97
		1	99	17.50	20.50	19.98	19.83	20.03	19.98
		50	0	17.50	20.50	19.49	19.63	19.78	19.66
		50	25	17.50	20.50	19.49	19.65	19.78	19.65
		50	50	17.50	20.50	19.50	19.65	19.78	19.76
		100	0	17.50	20.50	19.47	19.63	19.75	19.67
	64QAM	1	0	17.50	20.50	19.72	19.64	19.81	19.71
		1	50	17.50	20.50	19.73	19.63	19.80	19.72
		1	99	17.50	20.50	19.72	19.63	19.82	19.72
		50	0	17.50	20.50	19.63	19.62	19.79	19.76
		50	25	17.50	20.50	19.63	19.65	19.80	19.76
		50	50	17.50	20.50	19.63	19.65	19.80	19.75
		100	0	17.50	20.50	19.52	19.65	19.85	19.79

Table 87: Conducted power measurement results of LTE Band 41 (Second Antenna+WiFi Antenna, Receiver OFF)

### 7.1.28 Conducted power measurements of LTE Band 41 (Main Antenna)

Bandwidth	Modulation	RB size	RB offset	Tune-up		Channel	Channel	Channel	Channel
				Min.	Max.	40165C H	40515C H	40865C H	41215C H
5MHz	QPSK	1	0	21.00	24.00	23.37	23.27	23.39	23.32
		1	13	21.00	24.00	23.29	23.29	23.42	23.29
		1	24	21.00	24.00	23.49	23.41	23.41	23.28
		12	0	20.00	23.00	22.36	22.08	22.42	22.27
		12	6	20.00	23.00	22.48	22.35	22.42	22.27
		12	13	20.00	23.00	22.59	22.08	22.41	22.27
		25	0	20.00	23.00	22.41	22.15	22.39	22.19
	16QAM	1	0	20.00	23.00	22.42	22.35	22.54	22.34
		1	13	20.00	23.00	22.35	22.35	22.53	22.32
		1	24	20.00	23.00	22.35	22.34	22.53	22.32
		12	0	19.00	22.00	21.20	21.21	21.39	21.24
		12	6	19.00	22.00	21.21	21.21	21.40	21.25
		12	13	19.00	22.00	21.21	21.22	21.39	21.25
		25	0	19.00	22.00	21.09	21.05	21.20	21.03
	64QAM	1	0	19.00	22.00	21.36	21.26	21.44	21.31
		1	13	19.00	22.00	21.32	21.26	21.44	21.30
		1	24	19.00	22.00	21.29	21.25	21.44	21.29
		12	0	18.00	21.00	20.32	20.16	20.45	20.29
		12	6	18.00	21.00	20.32	20.19	20.44	20.30
		12	13	18.00	21.00	20.32	20.15	20.45	20.26
		25	0	18.00	21.00	20.12	20.18	20.43	20.18
Bandwidth	Modulation	RB size	RB offset	Tune-up		Channel	Channel	Channel	Channel
				Min.	Max.	40190C H	40523C H	40856C H	41190C H
10MHz	QPSK	1	0	21.00	24.00	23.39	23.33	23.48	23.27
		1	25	21.00	24.00	23.37	23.32	23.47	23.30
		1	49	21.00	24.00	23.37	23.43	23.49	23.31
		25	0	20.00	23.00	22.32	22.21	22.43	22.22
		25	13	20.00	23.00	22.32	22.22	22.43	22.22
		25	25	20.00	23.00	22.32	22.22	22.43	22.22
		50	0	20.00	23.00	22.18	22.15	22.27	22.16
	16QAM	1	0	20.00	23.00	22.60	22.60	22.68	22.50
		1	25	20.00	23.00	22.60	22.59	22.68	22.54
		1	49	20.00	23.00	22.61	22.59	22.67	22.54
		25	0	19.00	22.00	21.20	21.12	21.31	21.13
		25	13	19.00	22.00	21.20	21.13	21.32	21.15
		25	25	19.00	22.00	21.21	21.13	21.32	21.15
		50	0	19.00	22.00	21.15	21.18	21.29	21.16
	64QAM	1	0	19.00	22.00	21.33	21.26	21.40	21.22
		1	25	19.00	22.00	21.33	21.29	21.40	21.21
		1	49	19.00	22.00	21.32	21.29	21.44	21.20
		25	0	18.00	21.00	20.23	20.27	20.35	20.31
		25	13	18.00	21.00	20.28	20.28	20.44	20.31
		25	25	18.00	21.00	20.29	20.27	20.45	20.31
		50	0	18.00	21.00	20.13	20.15	20.30	20.14

Bandwidth	Modulation	RB size	RB offset	Tune-up		Channel	Channel	Channel	Channel
				Min.	Max.	40215C H	40523C H	40840C H	41165C H
15MHz	QPSK	1	0	21.00	24.00	23.23	23.38	23.46	23.29
		1	38	21.00	24.00	23.33	23.37	23.37	23.29
		1	74	21.00	24.00	23.31	23.36	23.45	23.29
		36	0	20.00	23.00	22.23	22.14	22.48	22.26
		36	18	20.00	23.00	22.24	22.15	22.49	22.26
		36	39	20.00	23.00	22.24	22.15	22.49	22.26
		75	0	20.00	23.00	22.18	22.25	22.44	22.19
	16QAM	1	0	20.00	23.00	22.79	22.70	22.81	22.73
		1	38	20.00	23.00	22.79	22.68	22.88	22.72
		1	74	20.00	23.00	22.79	22.68	22.88	22.72
		36	0	19.00	22.00	21.16	21.15	21.40	21.30
		36	18	19.00	22.00	21.17	21.15	21.40	21.31
		36	39	19.00	22.00	21.17	21.15	21.41	21.31
		75	0	19.00	22.00	21.14	21.14	21.30	21.14
	64QAM	1	0	19.00	22.00	21.40	21.28	21.37	21.30
		1	38	19.00	22.00	21.39	21.28	21.49	21.30
		1	74	19.00	22.00	21.38	21.27	21.49	21.30
		36	0	18.00	21.00	20.34	20.39	20.34	20.32
		36	18	18.00	21.00	20.34	20.39	20.35	20.32
		36	39	18.00	21.00	20.35	20.39	20.36	20.30
		75	0	18.00	21.00	20.18	20.28	20.29	20.25
Bandwidth	Modulation	RB size	RB offset	Tune-up		Channel	Channel	Channel	Channel
				Min.	Max.	40240C H	40540C H	40840C H	41140C H
20MHz	QPSK	1	0	21.00	24.00	23.19	23.14	<b>23.24</b>	23.18
		1	50	21.00	24.00	23.17	23.14	23.23	23.20
		1	99	21.00	24.00	23.15	23.13	23.22	23.19
		50	0	20.00	23.00	22.26	22.37	22.52	22.32
		50	25	20.00	23.00	22.21	22.36	22.52	22.32
		50	50	20.00	23.00	22.22	22.36	<b>22.53</b>	22.32
		100	0	20.00	23.00	22.16	22.21	22.33	22.21
	16QAM	1	0	20.00	23.00	22.27	22.33	22.43	22.23
		1	50	20.00	23.00	22.27	22.22	22.42	22.23
		1	99	20.00	23.00	22.26	22.22	22.41	22.23
		50	0	19.00	22.00	21.20	21.27	21.40	21.28
		50	25	19.00	22.00	21.14	21.27	21.41	21.27
		50	50	19.00	22.00	21.13	21.27	21.41	21.27
		100	0	19.00	22.00	21.13	21.22	21.27	21.21
	64QAM	1	0	19.00	22.00	21.21	21.25	21.33	21.16
		1	50	19.00	22.00	21.20	21.11	21.37	21.17
		1	99	19.00	22.00	21.19	21.16	21.36	21.16
		50	0	18.00	21.00	20.20	20.30	20.37	20.30
		50	25	18.00	21.00	20.20	20.30	20.37	20.29
		50	50	18.00	21.00	20.21	20.29	20.37	20.29
		100	0	18.00	21.00	20.16	20.34	20.23	20.31

Table 88: Conducted power measurement results of LTE Band 41

### 7.1.29 Conducted power measurements of Downlink LTE CA

The following conducted power measurement results of downlink LTE carrier aggregation are provided to quantify downlink only carrier aggregation SAR test exclusion per KDB 941225 D05A.

Uplink maximum output power is measured with downlink carrier aggregation active, using the channel with highest measured maximum output power when downlink carrier aggregation is inactive, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼dB higher than the maximum output power measured when downlink carrier aggregation inactive.

Power test equipment: R&S Radio Communication Tester CMW500 and/or Anritsu Radio Communication Analyzer MTT8821C were used

The power measurements result are in the table as below:

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	16QAM	1	99	100	0	19100	1100	2	20	902	/	/	/	18.75	18.64	19.50
CA_5B	5	10	QPSK	1	49	50	0	20450	2450	5	10	2549	/	/	/	23.44	22.64	24.50
CA_7C	7	20	16QAM	1	50	100	0	21100	3100	7	20	3298	/	/	/	17.68	17.61	19.00
CA_12B	12	10	QPSK	1	0	50	0	23130	5130	12	5	5058	/	/	/	23.91	22.49	24.50
CA_38C	38	20	16QAM	1	0	100	0	38150	38150	38	20	37952	/	/	/	20.45	19.97	21.00
CA_41C	41	20	QPSK	1	0	100	0	40540	40540	41	20	40738	/	/	/	22.96	21.80	23.00
CA_41D	41	20	QPSK	1	0	100	0	40540	40540	41	20	40738	41	20	70936	22.96	21.58	23.00
CA_7A-7A	7	20	16QAM	1	50	100	0	21100	3100	7	20	3350	/	/	/	17.68	17.56	19.00
CA_5A-7A	5	10	QPSK	1	49	50	0	20450	2450	7	20	3100	/	/	/	23.44	23.32	24.50
	7	20	16QAM	1	50	100	0	21100	3100	5	10	2525	/	/	/	17.68	17.38	19.00

Table 89: Conducted power measurement results of DL CA(Second Antenna, Full Power)

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	16QAM	1	50	100	0	19100	1100	2	20	902	/	/	/	12.13	11.98	12.50
CA_5B	5	10	64QAM	1	49	50	0	20450	2450	5	10	2549	/	/	/	19.00	19.09	20.00
CA_7C	7	20	64QAM	1	99	100	0	21350	3350	7	20	3152	/	/	/	12.81	11.34	13.00
CA_12B	12	10	16QAM	1	0	50	0	23130	5130	12	5	5058	/	/	/	19.79	19.51	20.50
CA_38C	38	20	16QAM	50	25	100	0	38150	38150	38	20	37952	/	/	/	14.13	13.61	14.50
CA_41C	41	10	16QAM	1	0	50	0	40856	40856	41	20	40974	/	/	/	14.13	13.23	14.50
CA_41D	41	10	16QAM	1	0	50	0	40856	40856	41	20	40974	41	20	41172	14.13	13.19	14.50
CA_7A-7A	7	20	64QAM	1	99	100	0	21350	3350	7	20	2850	/	/	/	12.81	11.28	13.00
CA_5A-7A	5	10	64QAM	1	49	50	0	20525	2525	7	20	3100	/	/	/	19.12	19.17	20.00
	7	20	64QAM	1	99	100	0	21350	3350	5	10	2525	/	/	/	12.81	11.34	13.00

Table 90: Conducted power measurement results of DL CA(Second Antenna,Receiver ON)

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	16QAM	1	50	100	0	19100	1100	2	20	902	/	/	/	11.61	11.53	12.00
CA_38C	38	20	64QAM	50	0	100	0	38150	38150	38	20	37952	/	/	/	13.15	12.70	13.50
CA_41C	41	20	64QAM	100	0	100	0	40840	40840	41	20	41038	/	/	/	11.45	10.80	12.00
CA_41D	41	20	64QAM	100	0	100	0	40840	40840	41	20	41038	41	20	40642	11.45	10.71	12.00

Table 91: Conducted power measurement results of DL CA (Second Antenna+WiFi Antenna, Receiver ON)

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	64QAM	50	25	100	0	18700	700	2	20	898	/	/	/	17.69	17.56	18.50
CA_38C	38	20	16QAM	1	0	100	0	38150	38150	38	20	37952	/	/	/	19.64	18.99	20.00
CA_41C	41	20	16QAM	1	0	100	0	40840	40840	41	20	41038	/	/	/	20.04	19.27	20.50
CA_41D	41	20	16QAM	1	0	100	0	40840	40840	41	20	41038	41	20	40642	20.04	19.21	20.50

Table 92: Conducted power measurement results of DL CA(Second Antenna+WiFi Antenna, Receiver OFF)

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	QPSK	1	50	100	0	19100	1100	2	20	902	/	/	/	23.40	23.30	24.50
CA_5B	5	10	QPSK	1	25	50	0	20450	2450	5	10	2549	/	/	/	23.97	23.71	25.00
CA_7C	7	20	QPSK	1	50	100	0	20850	2850	7	20	3048	/	/	/	24.10	23.42	24.50
CA_12B	12	10	QPSK	1	25	50	0	23130	5130	12	5	5058	/	/	/	23.91	23.58	25.00
CA_38C	38	20	QPSK	1	0	100	0	38150	38150	38	20	37952	/	/	/	24.04	23.70	24.50
CA_41C	41	20	QPSK	1	0	100	0	40840	40840	41	20	41038	/	/	/	23.24	22.98	24.00
CA_41D	41	20	QPSK	1	0	100	0	40840	40840	41	20	41038	41	20	40642	23.24	22.92	24.00
CA_7A-7A	7	20	QPSK	1	50	100	0	20850	2850	7	20	3350	/	/	/	24.10	23.93	24.50
CA_5A-7A	5	10	QPSK	1	25	50	0	20450	2450	7	20	3100	/	/	/	23.97	23.73	25.00
	7	20	QPSK	1	50	100	0	20850	2850	5	10	2525	/	/	/	24.10	23.39	24.50

Table 93: Conducted power measurement results of DL CA(Main Antenna,Full Power)

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	16QAM	1	99	100	0	18900	900	2	20	1098	/	/	/	20.42	20.26	21.00
CA_7C	7	20	64QAM	1	50	100	0	21100	3100	7	20	3298	/	/	/	20.88	20.11	21.00
CA_38C	38	20	16QAM	1	50	100	0	38150	38150	38	20	37952	/	/	/	23.26	22.62	23.50
CA_7A-7A	7	20	64QAM	1	50	100	0	21100	3100	7	20	3350	/	/	/	20.88	20.23	21.00
CA_5A-7A	5	10	QPSK	1	25	50	0	20450	2450	7	20	3100	/	/	/	23.97	23.59	25.00
	7	20	64QAM	1	50	100	0	21100	3100	5	10	2525	/	/	/	20.88	20.03	21.00

Table 94: Conducted power measurement results of DL CA(Main Antenna, Reduced Power Level D2)

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	QPSK	1	50	100	0	19100	1100	2	20	902	/	/	/	23.40	23.31	24.50
CA_7C	7	20	QPSK	1	0	100	0	21100	3100	7	20	3298	/	/	/	22.25	21.69	22.50
CA_7A-7A	7	20	QPSK	1	0	100	0	21100	3100	7	20	3350	/	/	/	22.25	22.16	22.50
CA_5A-7A	7	20	QPSK	1	0	100	0	21100	3100	5	10	2525	/	/	/	22.25	22.09	22.50
	5	10	QPSK	1	25	50	0	20450	2450	7	20	3100	/	/	/	23.97	23.56	25.00

Table 95: Conducted power measurement results of DL CA(Main Antenna, Reduced Power Level D1)

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	16QAM	1	0	100	0	19100	1100	2	20	902	/	/	/	17.05	17.01	17.50
CA_7C	7	20	QPSK	1	50	100	0	20850	2850	7	20	3298	/	/	/	21.76	20.87	22.00
CA_7A-7A	7	20	QPSK	1	50	100	0	20850	2850	7	20	3350	/	/	/	21.76	21.56	22.00
CA_5A-7A	7	20	QPSK	1	50	100	0	20850	2850	5	10	2525	/	/	/	21.76	21.57	22.00
	5	10	QPSK	1	25	50	0	20450	2450	7	20	3100	/	/	/	23.97	23.54	25.00

Table 96: Conducted power measurement results of DL CA(Main Antenna, Reduced Power Level D4)

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	64QAM	1	99	100	0	18700	700	2	20	898	/	/	/	13.48	13.35	14.00
CA_7C	7	20	64QAM	1	0	100	0	21100	3100	7	20	3298	/	/	/	18.33	17.70	18.50
CA_38C	38	20	16QAM	1	50	100	0	38150	38150	38	20	37952	/	/	/	23.26	22.62	23.50
CA_7A-7A	7	20	64QAM	1	0	100	0	21100	3100	7	20	3350	/	/	/	18.33	17.84	18.50
CA_5A-7A	7	20	64QAM	1	0	100	0	21100	3100	5	10	2525	/	/	/	18.33	17.89	18.50
	5	10	QPSK	1	25	50	0	20450	2450	7	20	3100	/	/	/	23.97	23.54	25.00

Table 97: Conducted power measurement results of DL CA(Main Antenna, Reduced Power Level D6)

DL LTE CA Class	PCC									SCC1			SCC 2			Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	Rel 8 LTE Tx Power (dBm)	DL LTE CA Tx Power (dBm)	Tune-up
CA_2C	2	20	16QAM	1	0	100	0	19100	1100	2	20	902	/	/	/	17.05	17.03	17.50
CA_7C	7	20	16QAM	1	0	100	0	21100	3100	7	20	3298	/	/	/	19.88	19.15	20.00
CA_7A-7A	7	20	16QAM	1	0	100	0	21100	3100	7	20	3350	/	/	/	19.88	19.54	20.00
CA_5A-7A	7	20	16QAM	1	0	100	0	21100	3100	5	10	2525	/	/	/	19.88	19.49	20.00
	5	10	QPSK	1	25	50	0	20450	2450	7	20	3100	/	/	/	23.97	23.57	25.00

Table 98: Conducted power measurement results of DL CA(Main Antenna, Reduced Power Level D5)



### 7.1.30 Conducted power measurements of LTE Downlink 4x4 MIMO

LTE Band	Bandwidth/MHz	Channel	Modulation	RB Size	RB Offset	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
LTE Band 7	20	21100CH	16QAM	1	50	17.68	17.53	19.00

Table 99: Conducted power measurement results of LTE Band 7 DL 4x4 MIMO for Second Antenna(Full Power).

DL LTE CA Class	PCC										SCC1				Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	DL Antenna Configuration	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	DL Antenna Configuration	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
CA_7C	7	20	16QAM	1	50	100	0	21100	3100	4*4 MIMO	7	20	3298	4*4 MIMO	17.68	17.16	19.00
CA_5A-7A	5	10	QPSK	1	49	50	0	20450	2450	2*2 MIMO	7	20	3100	4*4 MIMO	23.44	23.01	24.50
	7	20	16QAM	1	50	100	0	21100	3100	4*4 MIMO	5	10	2525	2*2 MIMO	17.68	17.03	19.00

Table 100: Conducted power measurement results of LTE DL 4x4 MIMO with CA for Second Antenna(Full Power).

LTE Band	Bandwidth/MHz	Channel	Modulation	RB Size	RB Offset	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
LTE Band 7	20	21350CH	64QAM	1	99	12.81	12.30	13.00

Table 101: Conducted power measurement results of LTE Band 7 DL 4x4 MIMO for Second Antenna(Receiver ON).

DL LTE CA Class	PCC										SCC1				Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	DL Antenna Configuration	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	DL Antenna Configuration	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
CA_7C	7	20	64QAM	1	99	100	0	21350	2135	4*4 MIMO	7	20	3152	4*4 MIMO	12.81	12.22	13.00
CA_5A-7A	5	10	64QAM	1	49	50	0	20525	2525	2*2 MIMO	7	20	3100	4*4 MIMO	19.12	18.86	20.00
	7	20	64QAM	1	99	100	0	21350	2135	4*4 MIMO	5	10	2525	2*2 MIMO	12.81	12.31	13.00

Table 102: Conducted power measurement results of LTE DL 4x4 MIMO with CA for Second Antenna(Receiver ON).

LTE Band	Bandwidth/MHz	Channel	Modulation	RB Size	RB Offset	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
LTE Band 7	20	20850CH	QPSK	1	50	24.10	23.50	24.50

Table 103: Conducted power measurement results of LTE Band 7 DL 4x4 MIMO for Main Antenna(Full Power).

DL LTE CA Class	PCC										SCC1				Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	DL Antenna Configuration	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	DL Antenna Configuration	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
CA_7C	7	20	QPSK	1	50	100	0	20850	2850	4*4 MIMO	7	20	3048	4*4 MIMO	24.10	23.42	24.50
CA_5A-7A	5	10	QPSK	1	25	50	0	20450	2450	2*2 MIMO	7	20	3100	4*4 MIMO	23.97	23.73	25.00
	7	20	QPSK	1	50	100	0	20850	2850	4*4 MIMO	5	10	2525	2*2 MIMO	24.10	23.26	24.50

Table 104: Conducted power measurement results of LTE DL 4x4 MIMO with CA for Main Antenna(Full Power).

LTE Band	Bandwidth/MHz	Channel	Modulation	RB Size	RB Offset	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
LTE Band 7	20	21100CH	64QAM	1	50	20.88	20.33	21.00

Table 105: Conducted power measurement results of LTE Band 7 DL 4x4 MIMO for Main Antenna(Reduced Power Level D2).

DL LTE CA Class	PCC										SCC1				Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	DL Antenna Configuration	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	DL Antenna Configuration	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
CA_7C	7	20	64QAM	1	50	100	0	21100	3100	4*4 MIMO	7	20	3298	4*4 MIMO	20.88	20.33	21.00
CA_5A-7A	5	10	QPSK	1	25	50	0	20450	2450	2*2 MIMO	7	20	3100	4*4 MIMO	23.59	23.11	25.00
	7	20	64QAM	1	50	100	0	21100	3100	4*4 MIMO	5	10	2525	2*2 MIMO	20.88	20.11	21.00

Table 106: Conducted power measurement results of LTE DL 4x4 MIMO with CA for Main Antenna(Reduced Power Level D2).

LTE Band	Bandwidth/MHz	Channel	Modulation	RB Size	RB Offset	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
LTE Band 7	20	21100CH	QPSK	1	0	22.25	22.03	22.50

Table 107: Conducted power measurement results of LTE Band 7 DL 4x4 MIMO for Main Antenna(Reduced Power Level D1).

DL LTE CA Class	PCC										SCC1				Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	DL Antenna Configuration	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	DL Antenna Configuration	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
CA_7C	7	20	QPSK	1	0	100	0	21100	3100	4*4 MIMO	7	20	3298	4*4 MIMO	22.25	21.95	22.50
CA_5A-7A	5	10	QPSK	1	25	50	0	20450	2450	2*2 MIMO	7	20	3100	4*4 MIMO	23.97	23.32	25.00
	7	20	QPSK	1	0	100	0	21100	3100	4*4 MIMO	5	10	2525	2*2 MIMO	22.25	21.87	22.50

Table 108: Conducted power measurement results of LTE DL 4x4 MIMO with CA for Main Antenna(Reduced Power Level D1).

LTE Band	Bandwidth/MHz	Channel	Modulation	RB Size	RB Offset	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
LTE Band 7	20	20850CH	QPSK	1	50	21.76	21.23	22.00

Table 109: Conducted power measurement results of LTE Band 7 DL 4x4 MIMO for Main Antenna(Reduced Power Level D4).

DL LTE CA Class	PCC										SCC1				Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	DL Antenna Configuration	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	DL Antenna Configuration	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
CA_7C	7	20	QPSK	1	50	100	0	20850	2850	4*4 MIMO	7	20	3048	4*4 MIMO	21.76	21.36	22.00
CA_5A-7A	5	10	QPSK	1	25	50	0	20450	2450	2*2 MIMO	7	20	3100	4*4 MIMO	23.97	23.32	25.00
	7	20	QPSK	1	50	100	0	20850	2850	4*4 MIMO	5	10	2525	2*2 MIMO	21.76	21.41	22.00

Table 110: Conducted power measurement results of LTE DL 4x4 MIMO with CA for Main Antenna(Reduced Power Level D4).

LTE Band	Bandwidth/MHz	Channel	Modulation	RB Size	RB Offset	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
LTE Band 7	20	21100CH	64QAM	1	0	18.33	18.00	18.50

Table 111: Conducted power measurement results of LTE Band 7 DL 4x4 MIMO for Main Antenna(Reduced Power Level D6).

DL LTE CA Class	PCC										SCC1				Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	DL Antenna Configuration	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	DL Antenna Configuration	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
CA_7C	7	20	64QAM	1	0	100	0	21100	3100	4*4 MIMO	7	20	3298	4*4 MIMO	18.33	18.06	18.50
CA_5A-7A	5	10	QPSK	1	25	50	0	20450	2450	2*2 MIMO	7	20	3100	4*4 MIMO	23.97	23.35	25.00
	7	20	64QAM	1	0	100	0	21100	3100	4*4 MIMO	5	10	2525	2*2 MIMO	18.33	18.16	18.50

Table 112: Conducted power measurement results of LTE DL 4x4 MIMO with CA for Main Antenna(Reduced Power Level D6).

LTE Band	Bandwidth/MHz	Channel	Modulation	RB Size	RB Offset	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
LTE Band 7	20	21100CH	16QAM	1	0	19.88	19.24	20.00

Table 113: Conducted power measurement results of LTE Band 7 DL 4x4 MIMO for Main Antenna(Reduced Power Level D5).

DL LTE CA Class	PCC										SCC1				Power		
	PCC Band	PCC Bandwidth (MHz)	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	PCC UL Channel	PCC DL Channel	DL Antenna Configuration	SCC Band	SCC Bandwidth (MHz)	SCC DL Channel	DL Antenna Configuration	without DL 4x4MIMO Tx Power (dBm)	with DL 4x4MIMO Tx Power (dBm)	Tune-up
CA_7C	7	20	16QAM	1	0	100	0	21100	3100	4*4 MIMO	7	20	3298	4*4 MIMO	19.88	19.30	20.00
CA_5A-7A	5	10	QPSK	1	25	50	0	20450	2450	2*2 MIMO	7	20	3100	4*4 MIMO	23.97	23.30	25.00
	7	20	16QAM	1	0	100	0	21100	3100	4*4 MIMO	5	10	2525	2*2 MIMO	19.88	19.41	20.00

Table 114: Conducted power measurement results of LTE DL 4x4 MIMO with CA for Main Antenna(Reduced Power Level D5).

### 7.1.31 Conducted Power measurements of Uplink LTE CA

For Intra-band uplink LTE CA measurement (Uplink CA\_7C, CA\_38C, CA\_41C), the following procedure is applied:

Maximum output power is measured for each UL CA configuration for the required test channels :

- UL PCC configuration is determined by the required test channel
- SCC and subsequent CCs are added alternatively to either side of the PCC or within the transmission band for channels at the ends of a frequency band.

The MPR information for Intra-band uplink LTE CA is as below:

For intra-band contiguous carrier aggregation the allowed Maximum Power Reduction (MPR) for the maximum output power in Table 6.2.2A.0-2 due to higher order modulation and contiguously allocated transmissions (resource blocks) is specified in Table 6.2.3A.1.3-1. In case the modulation format is different on different component carriers then the MPR is determined by the rules applied to higher order of those modulations.

**Table 6.2.3A.1.3-1: Maximum Power Reduction (MPR) for Power Class 3**

Modulation	CA bandwidth Class B and C							MPR (dB)
	25 RB + 50 RB	50 RB + 50 RB	25 RB + 100 RB	50 RB + 100 RB	75 RB + 75 RB	75 RB + 100 RB	100 RB + 100 RB	
QPSK	> 8 and ≤ 25	> 12 and ≤ 50	> 8 and ≤ 25	> 12 and ≤ 50	> 16 and ≤ 75	> 16 and ≤ 75	> 18 and ≤ 100	≤ 1
QPSK	> 25	> 50	> 25	> 50	> 75	> 75	> 100	≤ 2
16 QAM	≤ 8	≤ 12	≤ 8	≤ 12	≤ 16	≤ 16	≤ 18	≤ 1
16 QAM	> 8 and ≤ 25	> 12 and ≤ 50	> 8 and ≤ 25	> 12 and ≤ 50	> 16 and ≤ 75	> 16 and ≤ 75	> 18 and ≤ 100	≤ 2
16 QAM	> 25	> 50	> 25	> 50	> 75	> 75	> 100	≤ 3

Table 115: MPR information for Uplink intra-band contiguous CA(QPSK and 16QAM)

For intra-band contiguous carrier aggregation the allowed Maximum Power Reduction (MPR) for the maximum output power in Table 6.2.2A.0-2 due to higher order modulation and contiguously aggregated transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3A.1\_1.3-1. In case the modulation format is different on different component carriers then the MPR is determined by the rules applied to higher order of those modulations.

**Table 6.2.3A.1\_1.3-1: Maximum Power Reduction (MPR) for Power Class 3**

Modulation	CA bandwidth Class B and C							MPR (dB)
	25 RB + 50 RB	50 RB + 50 RB	25 RB + 100 RB	50 RB + 100 RB	75 RB + 75 RB	75 RB + 100 RB	100 RB + 100 RB	
64 QAM	≤ 8 and allocation wholly contained within a single CC	≤ 12 and allocation wholly contained within a single CC	≤ 8 and allocation wholly contained within a single CC	≤ 12 and allocation wholly contained within a single CC	≤ 16 and allocation wholly contained within a single CC	≤ 16 and allocation wholly contained within a single CC	≤ 18 and allocation wholly contained within a single CC	≤ 2
64 QAM	> 8 or allocation extends across two CC's	> 12 or allocation extends across two CC's	> 8 or allocation extends across two CC's	> 12 or allocation extends across two CC's	> 16 or allocation extends across two CC's	> 16 or allocation extends across two CC's	> 18 or allocation extends across two CC's	≤ 3

Table 116: MPR information for Uplink intra-band contiguous CA(64QAM)

The UL CA conducted power measurements results are as below:

Antenna	CA Combination	Test Scenario	Modulation	PCC						SCC					conducted power (dbm)	Tune up (dbm)
				PCC Band	PCC Bandwidth (MHz)	PCC UL RB size	PCC UL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC UL Channel	SCC UL RB size	SCC UL RB offset		
SEC ANT	CA_7C	Receiver on	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	11.68	13.00
SEC ANT	CA_7C	Receiver on	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	11.69	13.00
SEC ANT	CA_7C	Receiver on	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	11.72	13.00
SEC ANT	CA_7C	Receiver on	QPSK	7	20	1	0	21350	2560	7	20	21152	1	99	<b>11.74</b>	13.00
SEC ANT	CA_7C	Full power	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	17.65	19.00
SEC ANT	CA_7C	Full power	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	<b>17.70</b>	19.00
SEC ANT	CA_7C	Full power	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	17.66	19.00
SEC ANT	CA_7C	Full power	QPSK	7	20	1	0	21350	2560	7	20	21152	1	99	17.57	19.00
MAIN ANT	CA_7C	Full power	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	23.48	24.50
MAIN ANT	CA_7C	Full power	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	23.10	24.50
MAIN ANT	CA_7C	Full power	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	<b>23.56</b>	24.50
MAIN ANT	CA_7C	Full power	QPSK	7	20	1	0	21350	2560	7	20	21152	1	99	23.40	24.50
MAIN ANT	CA_7C	Power Level D2	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	19.96	21.00
MAIN ANT	CA_7C	Power Level D2	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	19.88	21.00
MAIN ANT	CA_7C	Power Level D2	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	20.02	21.00
MAIN ANT	CA_7C	Power Level D2	QPSK	7	20	1	0	21350	2560	7	20	21152	1	99	20.00	21.00
MAIN ANT	CA_7C	Power Level D1	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	21.55	22.50
MAIN ANT	CA_7C	Power Level D1	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	21.46	22.50
MAIN ANT	CA_7C	Power Level D1	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	21.40	22.50
MAIN ANT	CA_7C	Power Level D1	QPSK	7	20	1	0	21350	2560	7	20	21152	1	99	21.58	22.50
MAIN ANT	CA_7C	Power Level D6	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	17.42	18.50
MAIN ANT	CA_7C	Power Level D6	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	17.46	18.50
MAIN ANT	CA_7C	Power Level D6	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	17.38	18.50
MAIN ANT	CA_7C	Power Level D6	QPSK	7	20	1	0	21350	2560	7	20	21152	1	99	17.41	18.50
MAIN ANT	CA_7C	Power Level D5	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	18.88	20.00
MAIN ANT	CA_7C	Power Level D5	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	18.93	20.00
MAIN ANT	CA_7C	Power Level D5	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	18.91	20.00
MAIN ANT	CA_7C	Power Level D5	QPSK	7	20	1	0	21350	2560	7	20	21152	1	99	18.84	20.00
MAIN ANT	CA_7C	Power Level D4	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	20.99	22.00
MAIN ANT	CA_7C	Power Level D4	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	20.73	22.00
MAIN ANT	CA_7C	Power Level D4	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	<b>21.03</b>	22.00
MAIN ANT	CA_7C	Power Level D4	QPSK	7	20	1	0	21350	2560	7	20	21152	1	99	20.96	22.00
SEC ANT	CA_38C	Receiver on	QPSK	38	20	1	99	37850	2580	38	20	38048	1	0	12.92	14.50
SEC ANT	CA_38C	Receiver on	QPSK	38	20	1	99	37901	2595	38	20	38099	1	0	<b>13.37</b>	14.50
SEC ANT	CA_38C	Receiver on	QPSK	38	20	1	0	38099	2595	38	20	37901	1	99	13.18	14.50
SEC ANT	CA_38C	Receiver on	QPSK	38	20	1	0	38150	2610	38	20	37952	1	99	13.25	14.50
SEC ANT	CA_38C	Full power	QPSK	38	20	1	99	37850	2580	38	20	38048	1	0	19.35	21.00
SEC ANT	CA_38C	Full power	QPSK	38	20	1	99	37901	2595	38	20	38099	1	0	<b>19.41</b>	21.00
SEC ANT	CA_38C	Full power	QPSK	38	20	1	0	38099	2595	38	20	37901	1	99	19.38	21.00
SEC ANT	CA_38C	Full power	QPSK	38	20	1	0	38150	2610	38	20	37952	1	99	19.34	21.00
SEC ANT	CA_38C	Receiver on+WIFI Antenna	QPSK	38	20	1	99	37850	2580	38	20	38048	1	0	12.96	13.50
SEC ANT	CA_38C	Receiver on+WIFI Antenna	QPSK	38	20	1	99	37901	2595	38	20	38099	1	0	13.09	13.50
SEC ANT	CA_38C	Receiver on+WIFI Antenna	QPSK	38	20	1	0	38099	2595	38	20	37901	1	99	<b>13.13</b>	13.50

SEC ANT	CA_38C	Receiver on+WIFI Antenna	QPSK	38	20	1	0	38150	2610	38	20	37952	1	99	13.06	13.50
SEC ANT	CA_38C	Receiver off+WIFI Antenna	QPSK	38	20	1	99	37850	2580	38	20	38048	1	0	19.51	20.00
SEC ANT	CA_38C	Receiver off+WIFI Antenna	QPSK	38	20	1	99	37901	2595	38	20	38099	1	0	19.48	20.00
SEC ANT	CA_38C	Receiver off+WIFI Antenna	QPSK	38	20	1	0	38099	2595	38	20	37901	1	99	<b>19.54</b>	20.00
SEC ANT	CA_38C	Receiver off+WIFI Antenna	QPSK	38	20	1	0	38150	2610	38	20	37952	1	99	19.39	20.00
MAIN ANT	CA_38C	Full power	QPSK	38	20	1	99	37850	2580	38	20	38048	1	0	23.21	24.50
MAIN ANT	CA_38C	Full power	QPSK	38	20	1	99	37901	2595	38	20	38099	1	0	23.31	24.50
MAIN ANT	CA_38C	Full power	QPSK	38	20	1	0	38099	2595	38	20	37901	1	99	<b>23.55</b>	24.50
MAIN ANT	CA_38C	Full power	QPSK	38	20	1	0	38150	2610	38	20	37952	1	99	23.47	24.50
MAIN ANT	CA_38C	Power Level D2/D6	QPSK	38	20	1	99	37850	2580	38	20	38048	1	0	22.39	23.50
MAIN ANT	CA_38C	Power Level D2/D6	QPSK	38	20	1	99	37901	2595	38	20	38099	1	0	22.45	23.50
MAIN ANT	CA_38C	Power Level D2/D6	QPSK	38	20	1	0	38099	2595	38	20	37901	1	99	22.66	23.50
MAIN ANT	CA_38C	Power Level D2/D6	QPSK	38	20	1	0	38150	2610	38	20	37952	1	99	22.53	23.50
SEC ANT	CA_41C	Receiver on	QPSK	41	20	1	99	40240	2555	41	20	40438	1	0	13.09	14.50
SEC ANT	CA_41C	Receiver on	QPSK	41	20	1	99	40540	2585	41	20	40738	1	0	<b>13.26</b>	14.50
SEC ANT	CA_41C	Receiver on	QPSK	41	20	1	0	40540	2585	41	20	40342	1	99	13.01	14.50
SEC ANT	CA_41C	Receiver on	QPSK	41	20	1	99	40840	2615	41	20	41038	1	0	13.24	14.50
SEC ANT	CA_41C	Receiver on	QPSK	41	20	1	0	40840	2615	41	20	40642	1	99	13.11	14.50
SEC ANT	CA_41C	Receiver on	QPSK	41	20	1	0	41140	2645	41	20	40942	1	99	13.22	14.50
SEC ANT	CA_41C	Full power	QPSK	41	20	1	99	40240	2555	41	20	40438	1	0	21.55	23.00
SEC ANT	CA_41C	Full power	QPSK	41	20	1	99	40540	2585	41	20	40738	1	0	<b>21.69</b>	23.00
SEC ANT	CA_41C	Full power	QPSK	41	20	1	0	40540	2585	41	20	40342	1	99	21.47	23.00
SEC ANT	CA_41C	Full power	QPSK	41	20	1	99	40840	2615	41	20	41038	1	0	21.67	23.00
SEC ANT	CA_41C	Full power	QPSK	41	20	1	0	40840	2615	41	20	40642	1	99	21.60	23.00
SEC ANT	CA_41C	Full power	QPSK	41	20	1	0	41140	2645	41	20	40942	1	99	21.67	23.00
SEC ANT	CA_41C	Receiver on+WIFI Antenna	QPSK	41	20	1	99	40240	2555	41	20	40438	1	0	10.61	12.00
SEC ANT	CA_41C	Receiver on+WIFI Antenna	QPSK	41	20	1	99	40540	2585	41	20	40738	1	0	10.77	12.00
SEC ANT	CA_41C	Receiver on+WIFI Antenna	QPSK	41	20	1	0	40540	2585	41	20	40342	1	99	10.48	12.00
SEC ANT	CA_41C	Receiver on+WIFI Antenna	QPSK	41	20	1	99	40840	2615	41	20	41038	1	0	10.69	12.00
SEC ANT	CA_41C	Receiver on+WIFI Antenna	QPSK	41	20	1	0	40840	2615	41	20	40642	1	99	10.59	12.00
SEC ANT	CA_41C	Receiver on+WIFI Antenna	QPSK	41	20	1	0	41140	2645	41	20	40942	1	99	10.53	12.00
SEC ANT	CA_41C	Receiver off+WIFI Antenna	QPSK	41	20	1	99	40240	2555	41	20	40438	1	0	19.05	20.50
SEC ANT	CA_41C	Receiver off+WIFI Antenna	QPSK	41	20	1	99	40540	2585	41	20	40738	1	0	<b>19.21</b>	20.50
SEC ANT	CA_41C	Receiver off+WIFI Antenna	QPSK	41	20	1	0	40540	2585	41	20	40342	1	99	19.12	20.50
SEC ANT	CA_41C	Receiver off+WIFI Antenna	QPSK	41	20	1	99	40840	2615	41	20	41038	1	0	19.21	20.50
SEC ANT	CA_41C	Receiver off+WIFI Antenna	QPSK	41	20	1	0	40840	2615	41	20	40642	1	99	19.11	20.50
SEC ANT	CA_41C	Receiver off+WIFI Antenna	QPSK	41	20	1	0	41140	2645	41	20	40942	1	99	19.00	20.50
MAIN ANT	CA_41C	Full power	QPSK	41	20	1	99	40240	2555	41	20	40438	1	0	23.18	24.00
MAIN ANT	CA_41C	Full power	QPSK	41	20	1	99	40540	2585	41	20	40738	1	0	23.22	24.00
MAIN ANT	CA_41C	Full power	QPSK	41	20	1	0	40540	2585	41	20	40342	1	99	23.15	24.00
MAIN ANT	CA_41C	Full power	QPSK	41	20	1	99	40840	2615	41	20	41038	1	0	23.10	24.00
MAIN ANT	CA_41C	Full power	QPSK	41	20	1	0	40840	2615	41	20	40642	1	99	<b>23.53</b>	24.00
MAIN ANT	CA_41C	Full power	QPSK	41	20	1	0	41140	2645	41	20	40942	1	99	23.33	24.00

Table 117: Additional Conducted Power test results of UL inter-band CA



### 7.1.32 Conducted power measurements of WiFi 2.4G

Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11b	Ant1	1	2412	1Mbps	12.50	<b>11.38</b>	Yes
		6	2437		12.50	<b>11.55</b>	Yes
		11	2462		12.50	<b>11.37</b>	Yes
	Ant2	1	2412		12.50	<b>10.95</b>	Yes
		6	2437		12.50	<b>11.17</b>	Yes
		11	2462		12.50	<b>10.61</b>	Yes
802.11g	Ant1	1	2412	6Mbps	12.50	11.67	No
		6	2437		12.50	11.70	No
		11	2462		12.50	11.58	No
	Ant2	1	2412		12.50	11.09	No
		6	2437		12.50	11.11	No
		11	2462		12.50	10.77	No
802.11n SISO 20M	Ant1	1	2412	MCS0	12.50	11.26	No
		6	2437		12.50	11.37	No
		11	2462		12.50	11.20	No
	Ant2	1	2412		12.50	10.53	No
		6	2437		12.50	10.55	No
		11	2462		12.50	10.35	No
802.11n SISO 40M	Ant1	3	2422	MCS0	11.50	10.35	No
		4	2427		12.50	11.03	No
		6	2437		12.50	11.17	No
		8	2447		12.50	11.10	No
		9	2452		11.50	10.18	No
	Ant2	3	2422		11.50	9.98	No
		4	2427		12.50	10.81	No
		6	2437		12.50	10.88	No
		8	2447		12.50	10.85	No
		9	2452		11.50	9.91	No

Table 118: Conducted power measurement results of WiFi 2.4G SISO(MCC of FCC countries,Receiver ON).

Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11g CDD	Ant1	1	2412	6Mbps	12.50	<b>11.67</b>	Yes
		6	2437		12.50	<b>11.70</b>	Yes
		11	2462		12.50	<b>11.58</b>	Yes
	Ant2	1	2412		12.50	<b>11.09</b>	Yes
		6	2437		12.50	<b>11.11</b>	Yes
		11	2462		12.50	<b>10.77</b>	Yes
	Sum	1	2412	6Mbps	15.50	14.40	No

802.11n MIMO 20M		6	2437	MCS0	15.50	14.43	No
		11	2462		15.50	14.20	No
	Ant1	1	2412		12.50	11.26	No
		6	2437		12.50	11.37	No
		11	2462		12.50	11.20	No
	Ant2	1	2412		12.50	10.53	No
		6	2437		12.50	10.55	No
		11	2462		12.50	10.35	No
	Sum	1	2412		15.50	13.92	No
6		2437	15.50	13.99	No		
11		2462	15.50	13.81	No		
802.11n MIMO 40M	Ant1	3	2422	MCS0	11.50	10.35	No
		4	2427		12.50	11.03	No
		6	2437		12.50	11.17	No
		8	2447		12.50	11.10	No
		9	2452		11.50	10.18	No
	Ant2	3	2422		11.50	9.98	No
		4	2427		12.50	10.81	No
		6	2437		12.50	10.88	No
		8	2447		12.50	10.85	No
		9	2452		11.50	9.91	No
	Sum	3	2422		14.50	13.18	No
		4	2427		15.50	13.93	No
		6	2437		15.50	14.04	No
		8	2447		15.50	13.99	No
		9	2452		14.50	13.06	No

Table 119: Conducted power measurement results of WiFi 2.4G CDD/MIMO(MCC of FCC countries,Receiver ON).

Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)			
802.11b	Ant1	1	2412	1Mbps	17.50	16.17	No			
		6	2437		17.50	16.39	No			
		11	2462		17.50	<b>16.41</b>	Yes			
	Ant2	1	2412		17.50	15.94	No			
		6	2437		17.50	<b>16.09</b>	Yes			
		11	2462		17.50	15.88	No			
802.11g	Ant1	1	2412	6Mbps	13.00	12.05	No			
		2	2417		17.50	16.01	No			
		6	2437		17.50	15.94	No			
		10	2457		17.50	15.91	No			
		11	2462		13.00	11.99	No			
	Ant2	1	2412		13.00	11.85	No			
		2	2417		17.50	16.02	No			
		6	2437		17.50	15.97	No			
		10	2457		17.50	15.77	No			
		11	2462		13.00	11.50	No			
		802.11n SISO 20M	Ant1		1	2412	MCS0	13.00	11.63	No
					2	2417		16.50	14.61	No
6	2437			16.50	14.81	No				
10	2457			16.50	14.86	No				
11	2462			13.00	11.50	No				
Ant2	1		2412	13.00	11.12	No				
	2		2417	16.50	15.05	No				
	6		2437	16.50	15.08	No				
	10		2457	16.50	14.88	No				
	11		2462	13.00	11.15	No				
802.11n SISO 40M	Ant1	3	2422	MCS0	11.50	10.24	No			
		4	2427		15.00	13.14	No			
		6	2437		15.00	13.24	No			
		8	2447		15.00	13.17	No			
		9	2452		11.50	10.15	No			
	Ant2	3	2422		11.50	10.24	No			
		4	2427		15.00	13.65	No			
		6	2437		15.00	13.54	No			
		8	2447		15.00	13.58	No			
		9	2452		11.50	10.08	No			

Table 120: Conducted power measurement results of WiFi 2.4G SISO (Full Power).

Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)	
802.11g CDD	Ant1	1	2412	6Mbps	13.00	12.05	No	
		2	2417		17.50	<b>16.01</b>	Yes	
		6	2437		17.50	15.94	No	
		10	2457		17.50	15.91	No	
		11	2462		13.00	11.99	No	
	Ant2	1	2412		13.00	11.85	No	
		2	2417		17.50	<b>16.02</b>	Yes	
		6	2437		17.50	15.97	No	
		10	2457		17.50	15.77	No	
		11	2462		13.00	11.50	No	
	Sum	1	2412		6Mbps	16.00	14.96	No
		2	2417			20.50	19.00	No
		6	2437			20.50	18.97	No
		10	2457			20.50	18.95	No
		11	2462			16.00	14.76	No
Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)	
802.11n MIMO 20M	Ant1	1	2412	MCS0	13.00	11.63	No	
		2	2417		16.50	14.61	No	
		6	2437		16.50	14.81	No	
		10	2457		16.50	14.86	No	
		11	2462		13.00	11.50	No	
	Ant2	1	2412		13.00	11.12	No	
		2	2417		16.50	15.05	No	
		6	2437		16.50	15.08	No	
		10	2457		16.50	14.88	No	
		11	2462		13.00	11.15	No	
	Sum	1	2412		MCS8	16.00	14.39	No
		2	2417			19.50	17.85	No
		6	2437			19.50	17.96	No
		10	2457			19.50	17.88	No
		11	2462			16.00	14.34	No
Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)	
802.11n MIMO 40M	Ant1	3	2422	MCS0	11.50	10.24	No	
		4	2427		15.00	13.14	No	
		6	2437		15.00	13.24	No	
		8	2447		15.00	13.17	No	
		9	2452		11.50	10.15	No	
	Ant2	3	2422		11.50	10.24	No	
		4	2427		15.00	13.65	No	
		6	2437		15.00	13.54	No	

		8	2447		15.00	13.58	No
		9	2452		11.50	10.08	No
	Sum	3	2422	MCS0	14.50	13.25	No
		4	2427		18.00	16.41	No
		6	2437		18.00	16.40	No
		8	2447		18.00	16.39	No
		9	2452		14.50	13.13	No

Table 121: Conducted power measurement results of WiFi 2.4G CDD/MIMO (Full Power).

Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
802.11b	Ant 1	1	2412	1Mbps	13.50	11.98
		7	2442		13.50	12.08
		13	2472		13.50	12.18
	Ant 2	1	2412		13.50	12.07
		7	2442		13.50	12.23
		13	2472		13.50	12.53
Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
802.11g	Ant 1	1	2412	6Mbps	13.00	11.90
		2	2417		13.50	12.39
		7	2442		13.50	12.26
		10	2457		13.50	12.67
		11	2462		13.00	12.31
		12	2467		13.50	12.45
		13	2472		13.50	12.70
	Ant 2	1	2412		13.00	11.74
		2	2417		13.50	12.08
		7	2442		13.50	12.20
		10	2457		13.50	12.51
		11	2462		13.00	12.07
		12	2467		13.50	12.29
		13	2472		13.50	12.26
Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
802.11n SISO 20M	Ant 1	1	2412	MCS0	13.50	11.49
		2	2417		13.50	11.83
		7	2442		13.50	11.83
		10	2457		13.50	12.38
		11	2462		13.50	11.94
		12	2467		13.50	11.96
		13	2472		13.50	12.28
	Ant 2	1	2412		13.50	11.13
		2	2417		13.50	11.79
		7	2442		13.50	11.63
		10	2457		13.50	12.16
		11	2462		13.50	11.71
		12	2467		13.50	12.01
		13	2472		13.50	11.82
Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
802.11n SISO 40M	Ant 1	3	2422	MCS0	11.50	10.39
		4	2427		13.50	11.54
		7	2442		13.50	12.28

		8	2447		13.50	11.96
		9	2452		11.50	10.23
		10	2457		11.50	9.93
		11	2462		11.50	9.95
	Ant 2	3	2422		11.50	9.43
		4	2427		13.50	11.49
		7	2442		13.50	10.56
		8	2447		13.50	11.01
		9	2452		11.50	9.38
		10	2457		11.50	9.36
		11	2462		11.50	8.98

Table 122: Conducted power measurement results of WiFi 2.4G SISO (MCC of CE countries,Receiver ON).

Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)		
					Max.			
802.11g CCD	Ant1	1	2412	6Mbps	13.00	11.90		
		2	2417		13.50	12.39		
		7	2442		13.50	12.26		
		10	2457		13.50	12.67		
		11	2462		13.00	12.31		
		12	2467		13.50	12.45		
		13	2472		13.50	12.70		
	Ant2	1	2412		13.00	11.74		
		2	2417		13.50	12.08		
		7	2442		13.50	12.20		
		10	2457		13.50	12.51		
		11	2462		13.00	12.07		
		12	2467		13.50	12.29		
		13	2472		13.50	12.26		
	Sum	1	2412		16.00	14.83		
		2	2417		16.50	15.25		
		7	2442		16.50	15.24		
		10	2457		16.50	15.70		
		11	2462		16.00	15.20		
		12	2467		16.50	15.38		
		13	2472		16.50	15.50		
	Mode	Ant	Channel		Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
	802.11n MIMO 20M	Ant1	1		2412	MCS0	13.50	11.49
			2		2417		13.50	11.83
7			2442	13.50	11.83			
10			2457	13.50	12.38			
11			2462	13.50	11.94			
12			2467	13.50	11.96			
13			2472	13.50	12.28			
Ant2		1	2412	13.50	11.13			
		2	2417	13.50	11.79			
		7	2442	13.50	11.63			
		10	2457	13.50	12.16			
		11	2462	13.50	11.71			
		12	2467	13.50	12.01			
		13	2472	13.50	11.82			
Sum		1	2412	16.50	14.32			
		2	2442	16.50	14.82			
		7	2442	16.50	14.74			
		10	2442	16.50	15.28			
		11	2442	16.50	14.84			



Mode	Ant	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
802.11n MIMO 40M		12	2442	MCS0	16.50	15.00
		13	2472		16.50	15.07
	Ant1	3	2422		11.50	10.39
		4	2427		13.50	11.54
		7	2442		13.50	12.28
		8	2447		13.50	11.96
		9	2452		11.50	10.23
		10	2457		11.50	9.93
		11	2462		11.50	9.95
	Ant2	3	2422		11.50	9.43
		4	2427		13.50	11.49
		7	2442		13.50	10.56
		8	2447		13.50	11.01
		9	2452		11.50	9.38
		10	2457		11.50	9.36
		11	2462		11.50	8.98
	Sum	3	2422		14.50	12.95
		4	2427		16.50	14.53
		7	2442		16.50	14.51
		8	2447		16.50	14.52
		9	2452		14.50	12.84
		10	2457		14.50	12.66
		11	2462		14.50	12.50

Table 123: Conducted power measurement results of WiFi 2.4G CDD/MIMO(MCC of CE countries,Receiver ON).

Note:

- 1) The Average conducted power of WiFi is measured with RMS detector.
- 2) As different maximum tune-up output power is specified across the different channels range. So the additional conducted power measurement for the adjacent channel of each power level stage is also performed in this report to ensure compliance.

### 7.1.33 Conducted power measurements of WiFi 5G

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11a SISO	Ant1	CH 36	5180	6Mbps	11.00	9.79	No
		CH 40	5200		11.00	10.15	No
		CH 44	5220		11.00	10.41	No
		CH 48	5240		11.00	10.45	No
		CH 52	5260		11.00	10.32	No
		CH 56	5280		11.00	10.21	No
		CH 60	5300		11.00	10.27	No
		CH 64	5320		11.00	9.98	No
		CH 100	5500		11.00	10.00	No
		CH 104	5520		11.00	10.09	No
		CH 108	5540		11.00	10.36	No
		CH 112	5560		11.00	10.35	No
		CH 116	5580		11.00	10.22	No
		CH 120	5600		11.00	10.31	No
		CH 124	5620		11.00	10.05	No
		CH 128	5640		11.00	10.24	No
		CH 132	5660		11.00	10.63	No
		CH 136	5680		11.00	10.72	No
		CH 140	5700		11.00	9.61	No
		CH 149	5745		11.00	10.09	No
	CH 153	5765	11.00		10.14	No	
	CH 157	5785	11.00		10.17	No	
	CH 161	5805	11.00		9.66	No	
	CH 165	5825	11.00		<b>10.18</b>	Yes	
	Ant2	CH 36	5180		11.00	9.91	No
		CH 40	5200		11.00	9.92	No
		CH 44	5220		11.00	9.95	No
		CH 48	5240		11.00	9.98	No
		CH 52	5260		11.00	9.99	No
		CH 56	5280		11.00	10.07	No
		CH 60	5300		11.00	10.10	No
		CH 64	5320		11.00	9.89	No
		CH 100	5500		11.00	10.24	No
		CH 104	5520		11.00	10.55	No
CH 108		5540	11.00	10.48	No		
CH 112		5560	11.00	10.33	No		
CH 116		5580	11.00	8.89	No		
CH 120		5600	11.00	8.78	No		
CH 124	5620	11.00	8.51	No			
CH 128	5640	11.00	8.43	No			
CH 132	5660	11.00	8.75	No			
CH 136	5680	11.00	8.96	No			
CH 140	5700	11.00	8.21	No			
CH 149	5745	10.00	9.03	No			
CH 153	5765	10.00	9.10	No			

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)	
802.11n SISO 20M (5GHz)		CH 157	5785		10.00	9.21	No	
		CH 161	5805		10.00	9.24	No	
		CH 165	5825		10.00	<b>9.35</b>	Yes	
		Ant1	CH 36	5180	MCS0	11.00	9.21	No
			CH 40	5200		11.00	9.40	No
			CH 44	5220		11.00	9.38	No
			CH 48	5240		11.00	9.60	No
			CH 52	5260		11.00	9.53	No
			CH 56	5280		11.00	9.48	No
			CH 60	5300		11.00	9.16	No
			CH 64	5320		11.00	9.45	No
			CH 100	5500		11.00	9.49	No
			CH 104	5520		11.00	9.53	No
			CH 108	5540		11.00	9.20	No
			CH 112	5560		11.00	9.47	No
			CH 116	5580		11.00	9.46	No
			CH 120	5600		11.00	9.54	No
			CH 124	5620		11.00	9.45	No
		CH 128	5640	11.00		9.66	No	
		CH 132	5660	11.00		9.77	No	
		CH 136	5680	11.00		9.84	No	
		CH 140	5700	11.00		9.89	No	
		CH 149	5745	10.00		8.21	No	
		CH 153	5765	10.00		8.14	No	
		CH 157	5785	10.00		7.57	No	
		CH 161	5805	10.00		8.02	No	
		CH 165	5825	10.00		7.92	No	
		Ant2	CH 36	5180		11.00	9.68	No
			CH 40	5200		11.00	9.67	No
			CH 44	5220		11.00	9.65	No
CH 48			5240	11.00		9.66	No	
CH 52			5260	11.00		9.66	No	
CH 56			5280	11.00		9.73	No	
CH 60	5300		11.00	9.78	No			
CH 64	5320		11.00	9.72	No			
CH 100	5500		11.00	9.91	No			
CH 104	5520		11.00	9.90	No			
CH 108	5540		11.00	9.86	No			
CH 112	5560		11.00	9.87	No			
CH 116	5580		11.00	9.73	No			
CH 120	5600		11.00	9.76	No			
CH 124	5620		11.00	9.54	No			
CH 128	5640	11.00	9.38	No				
CH 132	5660	11.00	9.38	No				
CH 136	5680	11.00	9.15	No				

		CH 140	5700		11.00	8.85	No
		CH 149	5745		9.00	7.04	No
		CH 153	5765		9.00	7.06	No
		CH 157	5785		9.00	7.16	No
		CH 161	5805		9.00	7.21	No
		CH 165	5825		9.00	7.38	No
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11n SISO 40M (5GHz)	Ant1	CH 38	5190	MCS0	9.50	7.72	No
		CH 46	5230		11.00	9.38	No
		CH 54	5270		11.00	<b>9.75</b>	Yes
		CH 62	5310		9.50	8.00	No
		CH 102	5510		9.50	7.82	No
		CH 110	5550		11.00	<b>9.46</b>	Yes
		CH 118	5590		11.00	9.45	No
		CH 126	5630		11.00	9.32	No
		CH 134	5670		9.50	8.68	No
		CH 151	5755		10.50	8.92	No
	CH 159	5795	10.50		8.79	No	
	Ant2	CH 38	5190		9.50	8.36	No
		CH 46	5230		11.00	9.91	No
		CH 54	5270		11.00	<b>9.91</b>	Yes
		CH 62	5310		9.50	8.40	No
		CH 102	5510		9.50	8.64	No
		CH 110	5550		11.00	<b>10.21</b>	Yes
		CH 118	5590		11.00	10.04	No
		CH 126	5630		11.00	9.81	No
		CH 134	5670		9.50	7.82	No
CH 151		5755	9.50	7.62	No		
CH 159	5795	9.50	7.73	No			
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11ac SISO 20M (5GHz)	Ant1	CH 36	5180	MCS0	11.00	9.18	No
		CH 40	5200		11.00	9.36	No
		CH 44	5220		11.00	9.34	No
		CH 48	5240		11.00	9.63	No
		CH 52	5260		11.00	9.67	No
		CH 56	5280		11.00	9.64	No
		CH 60	5300		11.00	9.37	No
		CH 64	5320		11.00	9.42	No
		CH 100	5500		11.00	9.47	No
		CH 104	5520		11.00	9.55	No
		CH 108	5540		11.00	9.38	No
		CH 112	5560		11.00	9.44	No
		CH 116	5580		11.00	9.30	No
		CH 120	5600		11.00	9.41	No

		CH 124	5620		11.00	9.32	No
		CH 128	5640		11.00	9.44	No
		CH 132	5660		11.00	9.43	No
		CH 136	5680		11.00	9.43	No
		CH 140	5700		11.00	9.84	No
		CH 149	5745		10.00	8.23	No
		CH 153	5765		10.00	7.77	No
		CH 157	5785		10.00	7.76	No
		CH 161	5805		10.00	7.73	No
		CH 165	5825		10.00	7.82	No
	Ant2	CH 36	5180		11.00	9.67	No
		CH 40	5200		11.00	9.63	No
		CH 44	5220		11.00	9.64	No
		CH 48	5240		11.00	9.64	No
		CH 52	5260		11.00	9.68	No
		CH 56	5280		11.00	9.76	No
		CH 60	5300		11.00	9.81	No
		CH 64	5320		11.00	9.76	No
		CH 100	5500		11.00	9.67	No
		CH 104	5520		11.00	6.57	No
		CH 108	5540		11.00	9.56	No
		CH 112	5560		11.00	9.58	No
		CH 116	5580		11.00	9.58	No
		CH 120	5600		11.00	9.54	No
		CH 124	5620		11.00	9.64	No
		CH 128	5640		11.00	9.46	No
		CH 132	5660		11.00	9.58	No
		CH 136	5680		11.00	9.33	No
		CH 140	5700		11.00	9.07	No
		CH 149	5745		9.00	6.87	No
CH 153	5765	9.00	6.90	No			
CH 157	5785	9.00	6.99	No			
CH 161	5805	9.00	7.09	No			
CH 165	5825	9.00	7.20	No			
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11ac SISO 40M (5GHz)	Ant1	CH 38	5190	MCS0	9.50	7.84	No
		CH 46	5230		11.00	9.46	No
		CH 54	5270		11.00	9.56	No
		CH 62	5310		9.50	7.97	No
		CH 102	5510		9.50	7.92	No
		CH 110	5550		11.00	9.46	No
		CH 118	5590		11.00	9.02	No
		CH 126	5630		11.00	9.35	No
		CH 134	5670		9.50	8.36	No
		CH 151	5755		10.50	9.02	No

	Ant2	CH 159	5795		10.50	8.97	No
		CH 38	5190		9.50	7.77	No
		CH 46	5230		11.00	9.63	No
		CH 54	5270		11.00	9.89	No
		CH 62	5310		9.50	8.37	No
		CH 102	5510		9.50	8.56	No
		CH 110	5550		11.00	10.08	No
		CH 118	5590		11.00	10.04	No
		CH 126	5630		11.00	9.94	No
		CH 134	5670		9.50	8.19	No
		CH 151	5755		9.50	7.66	6.9
		CH 159	5795		9.50	7.73	6.88
		Mode	Antenna		Channel	Frequency (MHz)	Data Rate (Mbps)
802.11ac SISO 80M (5GHz)	Ant1	CH 42	5210	MCS0	9.50	8.33	No
		CH 58	5290		9.50	8.22	No
		CH 106	5530		9.50	7.40	No
		CH 122	5610		9.50	7.88	No
		CH 155	5775		9.00	5.74	No
	Ant2	CH 42	5210		9.50	7.91	No
		CH 58	5290		9.50	8.00	No
		CH 106	5530		9.50	8.48	No
		CH 122	5610		9.50	8.50	No
		CH 155	5775		8.00	5.31	No
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11ac SISO 160M (5GHz)	Ant1	CH 50	5250	MCS0	9.00	6.01	No
		CH 114	5570		9.00	6.06	No
	Ant2	CH 50	5250		8.00	5.42	No
		CH 114	5570		8	5.11	No

Table 124: Conducted power measurement results of WiFi 5G SISO (MCC of FCC countries,Receiver ON)

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11a CDD (5GHz)	Ant1	CH 36	5180	6Mbps	11.00	9.79	No
		CH 40	5200		11.00	10.15	No
		CH 44	5220		11.00	10.41	No
		CH 48	5240		11.00	10.45	No
		CH 52	5260		11.00	10.32	No
		CH 56	5280		11.00	10.21	No
		CH 60	5300		11.00	10.27	No
		CH 64	5320		11.00	9.98	No
		CH 100	5500		11.00	10.00	No
		CH 104	5520		11.00	10.09	No
		CH 108	5540		11.00	10.36	No
		CH 112	5560		11.00	10.35	No
		CH 116	5580		11.00	10.22	No
		CH 120	5600		11.00	10.31	No
		CH 124	5620		11.00	10.05	No
		CH 128	5640		11.00	10.24	No
		CH 132	5660		11.00	10.63	No
		CH 136	5680		11.00	10.72	No
		CH 140	5700		11.00	9.61	No
		CH 149	5745		11.00	10.09	No
	CH 153	5765	11.00		10.14	No	
	CH 157	5785	11.00		10.17	No	
	CH 161	5805	11.00		9.66	No	
	CH 165	5825	11.00		<b>10.18</b>	Yes	
	Ant2	CH 36	5180		11.00	9.91	No
		CH 40	5200		11.00	9.92	No
		CH 44	5220		11.00	9.95	No
		CH 48	5240		11.00	9.98	No
		CH 52	5260		11.00	9.99	No
		CH 56	5280		11.00	10.07	No
		CH 60	5300		11.00	10.10	No
		CH 64	5320		11.00	9.89	No
		CH 100	5500		11.00	10.24	No
		CH 104	5520		11.00	10.55	No
CH 108		5540	11.00	10.48	No		
CH 112		5560	11.00	10.33	No		
CH 116		5580	11.00	8.89	No		
CH 120		5600	11.00	8.78	No		
CH 124	5620	11.00	8.51	No			
CH 128	5640	11.00	8.43	No			
CH 132	5660	11.00	8.75	No			
CH 136	5680	11.00	8.96	No			
CH 140	5700	11.00	8.21	No			
CH 149	5745	10.00	9.03	No			
CH 153	5765	10.00	9.10	No			

		CH 157	5785	6Mbps	10.00	9.21	No
		CH 161	5805		10.00	9.24	No
		CH 165	5825		10.00	<b>9.35</b>	Yes
	Sum	CH 36	5180		14.00	12.86	No
		CH 40	5200		14.00	13.05	No
		CH 44	5220		14.00	13.20	No
		CH 48	5240		14.00	13.23	No
		CH 52	5260		14.00	13.17	No
		CH 56	5280		14.00	13.15	No
		CH 60	5300		14.00	13.20	No
		CH 64	5320		14.00	12.95	No
		CH 100	5500		14.00	13.13	No
		CH 104	5520		14.00	13.34	No
		CH 108	5540		14.00	13.43	No
		CH 112	5560		14.00	13.35	No
		CH 116	5580		14.00	12.62	No
		CH 120	5600		14.00	12.62	No
		CH 124	5620		14.00	12.36	No
		CH 128	5640		14.00	12.44	No
		CH 132	5660		14.00	12.80	No
		CH 136	5680		14.00	12.94	No
		CH 140	5700		14.00	11.98	No
		CH 149	5745		13.50	12.60	No
		CH 153	5765		13.50	12.66	No
		CH 157	5785		13.50	12.73	No
		CH 161	5805		13.50	12.47	No
		CH 165	5825		13.50	12.80	No
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11n MIMO 20M (5GHz)	Ant1	CH 36	5180	MCS0	11.00	9.21	No
		CH 40	5200		11.00	9.40	No
		CH 44	5220		11.00	9.38	No
		CH 48	5240		11.00	9.60	No
		CH 52	5260		11.00	9.53	No
		CH 56	5280		11.00	9.48	No
		CH 60	5300		11.00	9.16	No
		CH 64	5320		11.00	9.45	No
		CH 100	5500		11.00	9.49	No
		CH 104	5520		11.00	9.53	No
		CH 108	5540		11.00	9.20	No
		CH 112	5560		11.00	9.47	No
		CH 116	5580		11.00	9.46	No
		CH 120	5600		11.00	9.54	No
		CH 124	5620		11.00	9.45	No
		CH 128	5640		11.00	9.66	No
CH 132	5660	11.00	9.77	No			



		CH 136	5680		11.00	9.84	No		
		CH 140	5700		11.00	9.89	No		
		CH 149	5745		10.00	8.21	No		
		CH 153	5765		10.00	8.14	No		
		CH 157	5785		10.00	7.57	No		
		CH 161	5805		10.00	8.02	No		
		CH 165	5825		10.00	7.92	No		
	Ant2	CH 36	5180		11.00	9.68	No		
		CH 40	5200		11.00	9.67	No		
		CH 44	5220		11.00	9.65	No		
		CH 48	5240		11.00	9.66	No		
		CH 52	5260		11.00	9.66	No		
		CH 56	5280		11.00	9.73	No		
		CH 60	5300		11.00	9.78	No		
		CH 64	5320		11.00	9.72	No		
		CH 100	5500		11.00	9.91	No		
		CH 104	5520		11.00	9.90	No		
		CH 108	5540		11.00	9.86	No		
		CH 112	5560		11.00	9.87	No		
		CH 116	5580		11.00	9.73	No		
		CH 120	5600		11.00	9.76	No		
		CH 124	5620		11.00	9.54	No		
		CH 128	5640		11.00	9.38	No		
		CH 132	5660		11.00	9.38	No		
		CH 136	5680		11.00	9.15	No		
		CH 140	5700		11.00	8.85	No		
		CH 149	5745		9.00	7.04	No		
		CH 153	5765		9.00	7.06	No		
		CH 157	5785		9.00	7.16	No		
		CH 161	5805		9.00	7.21	No		
		CH 165	5825		9.00	7.38	No		
		Sum	CH 36		5180	MCS0	14.00	12.46	No
			CH 40		5200		14.00	12.55	No
CH 44	5220		14.00	12.53	No				
CH 48	5240		14.00	12.64	No				
CH 52	5260		14.00	12.61	No				
CH 56	5280		14.00	12.62	No				
CH 60	5300		14.00	12.49	No				
CH 64	5320		14.00	12.60	No				
CH 100	5500		14.00	12.72	No				
CH 104	5520		14.00	12.73	No				
CH 108	5540		14.00	12.55	No				
CH 112	5560		14.00	12.68	No				
CH 116	5580		14.00	12.61	No				
CH 120	5600		14.00	12.66	No				
CH 124	5620		14.00	12.51	No				

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)	
		CH 128	5640		14.00	12.53	No	
		CH 132	5660		14.00	12.59	No	
		CH 136	5680		14.00	12.52	No	
		CH 140	5700		14.00	12.41	No	
		CH 149	5745		12.50	10.67	No	
		CH 153	5765		12.50	10.64	No	
		CH 157	5785		12.50	10.38	No	
		CH 161	5805		12.50	10.64	No	
		CH 165	5825		12.50	10.67	No	
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)	
802.11n MIMO 40M (5GHz)	Ant1	CH 38	5190	MCS0	9.50	7.72	No	
		CH 46	5230		11.00	9.38	No	
		CH 54	5270		11.00	<b>9.75</b>	Yes	
		CH 62	5310		9.50	8.00	No	
		CH 102	5510		9.50	7.82	No	
		CH 110	5550		11.00	<b>9.46</b>	Yes	
		CH 118	5590		11.00	9.45	No	
		CH 126	5630		11.00	9.32	No	
		CH 134	5670		9.50	8.68	No	
		CH 151	5755		10.50	8.92	No	
	CH 159	5795	10.50		8.79	No		
	Ant2	CH 38	5190		9.50	8.36	No	
		CH 46	5230		11.00	9.91	No	
		CH 54	5270		11.00	<b>9.91</b>	Yes	
		CH 62	5310		9.50	8.40	No	
		CH 102	5510		9.50	8.64	No	
		CH 110	5550		11.00	<b>10.21</b>	Yes	
		CH 118	5590		11.00	10.04	No	
		CH 126	5630		11.00	9.81	No	
		CH 134	5670		9.50	7.82	No	
		CH 151	5755		9.50	7.62	No	
	CH 159	5795	9.50		7.73	No		
	Sum	CH 38	5190		MCS0	12.50	11.06	No
		CH 46	5230			14.00	12.66	No
		CH 54	5270			14.00	12.84	No
		CH 62	5310			12.50	11.21	No
		CH 102	5510			12.50	11.26	No
		CH 110	5550			14.00	12.86	No
		CH 118	5590			14.00	12.77	No
		CH 126	5630			14.00	12.58	No
CH 134		5670	12.50	11.28		No		
CH 151		5755	13.00	11.33		No		
CH 159	5795	13.00	11.30	No				
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)	

802.11ac MIMO 20M (5GHz)	Ant1	CH 36	5180	MCS0	11.00	9.18	No
		CH 40	5200		11.00	9.36	No
		CH 44	5220		11.00	9.34	No
		CH 48	5240		11.00	9.63	No
		CH 52	5260		11.00	9.67	No
		CH 56	5280		11.00	9.64	No
		CH 60	5300		11.00	9.37	No
		CH 64	5320		11.00	9.42	No
		CH 100	5500		11.00	9.47	No
		CH 104	5520		11.00	9.55	No
		CH 108	5540		11.00	9.38	No
		CH 112	5560		11.00	9.44	No
		CH 116	5580		11.00	9.30	No
		CH 120	5600		11.00	9.41	No
		CH 124	5620		11.00	9.32	No
		CH 128	5640		11.00	9.44	No
		CH 132	5660		11.00	9.43	No
		CH 136	5680		11.00	9.43	No
		CH 140	5700		11.00	9.84	No
		CH 149	5745		10.00	8.23	No
		CH 153	5765		10.00	7.77	No
		CH 157	5785		10.00	7.76	No
		CH 161	5805		10.00	7.73	No
		CH 165	5825		10.00	7.82	No
	Ant2	CH 36	5180		11.00	9.67	No
		CH 40	5200		11.00	9.63	No
		CH 44	5220		11.00	9.64	No
		CH 48	5240		11.00	9.64	No
		CH 52	5260		11.00	9.68	No
		CH 56	5280		11.00	9.76	No
		CH 60	5300		11.00	9.81	No
		CH 64	5320		11.00	9.76	No
		CH 100	5500		11.00	9.67	No
		CH 104	5520		11.00	6.57	No
CH 108	5540	11.00	9.56	No			
CH 112	5560	11.00	9.58	No			
CH 116	5580	11.00	9.58	No			
CH 120	5600	11.00	9.54	No			
CH 124	5620	11.00	9.64	No			
CH 128	5640	11.00	9.46	No			
CH 132	5660	11.00	9.58	No			
CH 136	5680	11.00	9.33	No			
CH 140	5700	11.00	9.07	No			
CH 149	5745	9.00	6.87	No			
CH 153	5765	9.00	6.90	No			
CH 157	5785	9.00	6.99	No			

		CH 161	5805	MCS0	9.00	7.09	No
		CH 165	5825		9.00	7.20	No
	Sum	CH 36	5180		14.00	12.44	No
		CH 40	5200		14.00	12.51	No
		CH 44	5220		14.00	12.50	No
		CH 48	5240		14.00	12.65	No
		CH 52	5260		14.00	12.69	No
		CH 56	5280		14.00	12.71	No
		CH 60	5300		14.00	12.61	No
		CH 64	5320		14.00	12.60	No
		CH 100	5500		14.00	12.58	No
		CH 104	5520		14.00	11.32	No
		CH 108	5540		14.00	12.48	No
		CH 112	5560		14.00	12.52	No
		CH 116	5580		14.00	12.45	No
		CH 120	5600		14.00	12.49	No
		CH 124	5620		14.00	12.49	No
		CH 128	5640		14.00	12.46	No
		CH 132	5660		14.00	12.52	No
		CH 136	5680		14.00	12.39	No
		CH 140	5700		14.00	12.48	No
		CH 149	5745		12.50	10.61	No
		CH 153	5765		12.50	10.37	No
		CH 157	5785		12.50	10.40	No
		CH 161	5805		12.50	10.43	No
CH 165	5825	12.50	10.53	No			
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11ac MIMO 40M (5GHz)	Ant1	CH 38	5190	MCS0	9.50	7.84	No
		CH 46	5230		11.00	9.46	No
		CH 54	5270		11.00	9.56	No
		CH 62	5310		9.50	7.97	No
		CH 102	5510		9.50	7.92	No
		CH 110	5550		11.00	9.46	No
		CH 118	5590		11.00	9.02	No
		CH 126	5630		11.00	9.35	No
		CH 134	5670		9.50	8.36	No
		CH 151	5755		10.50	9.02	No
		CH 159	5795		10.50	8.97	No
	Ant2	CH 38	5190		9.50	7.77	No
		CH 46	5230		11.00	9.63	No
		CH 54	5270		11.00	9.89	No
		CH 62	5310		9.50	8.37	No
		CH 102	5510		9.50	8.56	No
		CH 110	5550		11.00	10.08	No
		CH 118	5590		11.00	10.04	No

		CH 126	5630	MCS0	11.00	9.94	No	
		CH 134	5670		9.50	8.19	No	
		CH 151	5755		9.50	7.66	6.9	
		CH 159	5795		9.50	7.73	6.88	
	Sum	CH 38	5190		12.50	10.82	No	
		CH 46	5230		14.00	12.56	No	
		CH 54	5270		14.00	12.74	No	
		CH 62	5310		12.50	11.18	No	
		CH 102	5510		12.50	11.26	No	
		CH 110	5550		14.00	12.79	No	
		CH 118	5590		14.00	12.57	No	
		CH 126	5630		14.00	12.67	No	
		CH 134	5670		12.50	11.29	No	
		CH 151	5755		13.00	11.40	No	
		CH 159	5795		13.00	11.40	No	
		Mode	Antenna		Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up
802.11ac MIMO 80M (5GHz)	Ant1	CH 42	5210	MCS0	9.50	8.33	No	
		CH 58	5290		9.50	8.22	No	
		CH 106	5530		9.50	7.40	No	
		CH 122	5610		9.50	7.88	No	
		CH 155	5775		9.00	5.74	No	
	Ant2	CH 42	5210		9.50	7.91	No	
		CH 58	5290		9.50	8.00	No	
		CH 106	5530		9.50	8.48	No	
		CH 122	5610		9.50	8.50	No	
		CH 155	5775		8.00	5.31	No	
	Sum	CH 42	5210		MCS0	12.50	11.14	No
		CH 58	5290			12.50	11.12	No
		CH 106	5530			12.50	10.98	No
		CH 122	5610			12.50	11.21	No
		CH 155	5775			11.50	8.54	No
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)	
802.11ac MIMO 160M (5GHz)	Ant1	CH 50	5250	MCS0	9.00	6.01	No	
		CH 114	5570		9.00	6.06	No	
	Ant2	CH 50	5250		8.00	5.42	No	
		CH 114	5570		8.00	5.11	No	
	Sum	CH 50	5250		MCS0	11.50	8.74	No
		CH 114	5570			11.50	8.62	No

Table 125: Conducted power measurement results of WiFi 5G CDD/MIMO (MCC of FCC countries, Receiver ON)

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11a SISO	Ant1	CH 36	5180	6Mbps	11.50	9.61	No
		CH 40	5200		16.00	14.75	No
		CH 44	5220		16.00	14.73	No
		CH 48	5240		16.00	<b>15.02</b>	Yes(Hotspot)
		CH 52	5260		16.00	15.12	No
		CH 56	5280		16.00	15.13	No
		CH 60	5300		16.00	<b>15.16</b>	Yes
		CH 64	5320		11.50	9.67	No
		CH 100	5500		11.50	9.28	No
		CH 104	5520		16.00	<b>15.19</b>	Yes
		CH 108	5540		16.00	14.86	No
		CH 112	5560		16.00	14.87	No
		CH 116	5580		16.00	14.90	No
		CH 120	5600		16.00	14.96	No
		CH 124	5620		16.00	15.03	No
		CH 128	5640		16.00	15.11	No
		CH 132	5660		16.00	15.12	No
		CH 136	5680		16.00	15.17	No
		CH 140	5700		11.00	9.78	No
		CH 149	5745		11.00	10.29	No
		CH 153	5765		11.00	10.38	No
		CH 157	5785		11.00	10.34	No
		CH 161	5805		11.00	10.23	No
		CH 165	5825		11.00	<b>10.39</b>	Yes(Hotspot)
	Ant2	CH 36	5180		11.50	9.94	No
		CH 40	5200		15.00	14.78	No
		CH 44	5220		15.00	14.95	No
		CH 48	5240		15.00	14.98	Yes
		CH 52	5260		15.00	14.81	No
		CH 56	5280		15.00	14.91	No
		CH 60	5300		15.00	<b>14.93</b>	Yes
		CH 64	5320		11.50	10.74	No
		CH 100	5500		11.50	11.02	No
		CH 104	5520		15.00	<b>14.95</b>	Yes
		CH 108	5540		15.00	14.91	No
		CH 112	5560		15.00	14.89	No
CH 116	5580	15.00	14.94	No			
CH 120	5600	15.00	14.87	No			
CH 124	5620	15.00	14.85	No			
CH 128	5640	15.00	14.88	No			
CH 132	5660	15.00	14.49	No			
CH 136	5680	15.00	14.43	No			
CH 140	5700	11.00	8.97	No			
CH 149	5745	10.00	9.14	No			
CH 153	5765	10.00	9.20	No			

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11n SISO 20M (5GHz)	Ant1	CH 157	5785	MCS0	10.00	9.27	No
		CH 161	5805		10.00	9.32	No
		CH 165	5825		10.00	9.35	Yes
	CH 36	5180	11.50		9.75	No	
	CH 40	5200	15.00		13.27	No	
	CH 44	5220	15.00		13.36	No	
	CH 48	5240	15.00		13.04	No	
	CH 52	5260	15.00		13.19	No	
	CH 56	5280	15.00		13.29	No	
	CH 60	5300	15.00		13.34	No	
	CH 64	5320	11.50		9.87	No	
	CH 100	5500	11.50		9.97	No	
	CH 104	5520	15.00		13.27	No	
	CH 108	5540	15.00		13.36	No	
	CH 112	5560	15.00		13.35	No	
	CH 116	5580	15.00		13.35	No	
	CH 120	5600	15.00		13.25	No	
	CH 124	5620	15.00		13.32	No	
	CH 128	5640	15.00		13.41	No	
	CH 132	5660	15.00		13.56	No	
	CH 136	5680	15.00		13.54	No	
	CH 140	5700	11.00		9.99	No	
	CH 149	5745	10.00		8.19	No	
	CH 153	5765	10.00		7.56	No	
	CH 157	5785	10.00		8.18	No	
	CH 161	5805	10.00		8.03	No	
	CH 165	5825	10.00		7.80	No	
	Ant2	CH 36	5180		11.50	9.89	No
		CH 40	5200		14.00	12.70	No
		CH 44	5220		14.00	12.91	No
CH 48		5240	14.00	12.92	No		
CH 52		5260	14.00	12.98	No		
CH 56		5280	14.00	12.99	No		
CH 60		5300	14.00	13.03	No		
CH 64		5320	11.50	10.20	No		
CH 100		5500	11.50	10.45	No		
CH 104		5520	14.00	13.34	No		
CH 108		5540	14.00	13.31	No		
CH 112		5560	14.00	13.34	No		
CH 116		5580	14.00	13.27	No		
CH 120		5600	14.00	13.19	No		
CH 124		5620	14.00	13.08	No		
CH 128	5640	14.00	12.91	No			
CH 132	5660	14.00	12.77	No			

		CH 136	5680		14.00	12.62	No
		CH 140	5700		11.00	8.93	No
		CH 149	5745		9.00	6.99	No
		CH 153	5765		9.00	7.03	No
		CH 157	5785		9.00	7.04	No
		CH 161	5805		9.00	7.20	No
		CH 165	5825		9.00	7.26	No
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11n SISO 40M (5GHz)	Ant1	CH 38	5190	MCS0	9.50	7.67	No
		CH 46	5230		15.50	14.18	No
		CH 54	5270		15.50	14.13	No
		CH 62	5310		9.50	7.99	No
		CH 102	5510		9.50	8.05	No
		CH 110	5550		15.50	14.29	No
		CH 118	5590		15.50	14.17	No
		CH 126	5630		15.50	14.38	No
		CH 134	5670		9.50	8.58	No
		CH 151	5755		10.50	8.84	No
	CH 159	5795	10.50		8.62	No	
	Ant2	CH 38	5190		9.50	7.69	No
		CH 46	5230		14.50	14.19	No
		CH 54	5270		14.50	14.19	No
		CH 62	5310		9.50	8.88	No
		CH 102	5510		9.50	8.65	No
		CH 110	5550		14.50	13.57	No
		CH 118	5590		14.50	13.54	No
		CH 126	5630		14.50	13.29	No
		CH 134	5670		9.50	7.85	No
CH 151		5755	9.50	7.71	No		
CH 159	5795	9.50	7.76	No			
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11ac SISO 20M (5GHz)	Ant1	CH 36	5180	MCS0	11.50	9.55	No
		CH 40	5200		15.00	13.30	No
		CH 44	5220		15.00	13.46	No
		CH 48	5240		15.00	13.63	No
		CH 52	5260		15.00	13.63	No
		CH 56	5280		15.00	13.54	No
		CH 60	5300		15.00	13.50	No
		CH 64	5320		11.50	9.88	No
		CH 100	5500		11.50	10.00	No
		CH 104	5520		15.00	13.32	No
		CH 108	5540		15.00	13.34	No
		CH 112	5560		15.00	13.32	No
		CH 116	5580		15.00	13.24	No



		CH 120	5600		15.00	13.07	No
		CH 124	5620		15.00	13.23	No
		CH 128	5640		15.00	13.26	No
		CH 132	5660		15.00	13.30	No
		CH 136	5680		15.00	13.30	No
		CH 140	5700		11.00	9.86	No
		CH 149	5745		10.00	8.23	No
		CH 153	5765		10.00	8.26	No
		CH 157	5785		10.00	7.71	No
		CH 161	5805		10.00	8.03	No
		CH 165	5825		10.00	7.81	No
		Ant2	CH 36		5180	11.50	9.76
	CH 40		5200		14.00	12.74	No
	CH 44		5220		14.00	12.82	No
	CH 48		5240		14.00	12.88	No
	CH 52		5260		14.00	12.85	No
	CH 56		5280		14.00	12.88	No
	CH 60		5300		14.00	12.92	No
	CH 64		5320		11.50	10.02	No
	CH 100		5500		11.50	10.23	No
	CH 104		5520		14.00	13.40	No
	CH 108		5540		14.00	13.40	No
	CH 112		5560		14.00	13.45	No
	CH 116		5580		14.00	13.48	No
	CH 120		5600		14.00	13.51	No
	CH 124		5620		14.00	13.44	No
	CH 128		5640		14.00	13.39	No
	CH 132		5660		14.00	13.36	No
	CH 136		5680		14.00	13.13	No
	CH 140		5700		11.00	9.07	No
	CH 149		5745		9.00	7.01	No
	CH 153	5765	9.00		7.06	No	
CH 157	5785	9.00	7.10	No			
CH 161	5805	9.00	7.22	No			
CH 165	5825	9.00	7.27	No			
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11ac SISO 40M (5GHz)	Ant1	CH 38	5190	MCS0	9.50	7.75	No
		CH 46	5230		15.50	14.23	No
		CH 54	5270		15.50	14.82	No
		CH 62	5310		9.50	7.51	No
		CH 102	5510		9.50	8.14	No
		CH 110	5550		15.50	14.24	No
		CH 118	5590		15.50	14.03	No
		CH 126	5630		15.50	14.14	No
CH 134	5670	9.50	8.36	No			

		CH 151	5755		10.50	8.61	No
		CH 159	5795		10.50	8.88	No
	Ant2	CH 38	5190		9.50	7.84	No
		CH 46	5230		14.50	13.64	No
		CH 54	5270		14.50	13.52	No
		CH 62	5310		9.50	7.81	No
		CH 102	5510		9.50	8.61	No
		CH 110	5550		14.50	14.07	No
		CH 118	5590		14.50	14.10	No
		CH 126	5630		14.50	14.00	No
		CH 134	5670		9.50	8.22	No
		CH 151	5755		9.50	7.61	No
		CH 159	5795		9.50	7.82	No
		Mode	Antenna		Channel	Frequency (MHz)	Data Rate (Mbps)
802.11ac SISO 80M (5GHz)	Ant1	CH 42	5210	MCS0	9.50	8.01	No
		CH 58	5290		9.50	8.05	No
		CH 106	5530		9.50	8.08	No
		CH 122	5610		9.50	7.85	No
		CH 155	5775		9.00	7.66	No
	Ant2	CH 42	5210		9.50	7.99	No
		CH 58	5290		9.50	7.89	No
		CH 106	5530		9.50	8.47	No
		CH 122	5610		9.50	8.41	No
		CH 155	5775		8.00	5.34	No
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11ac SISO 160M (5GHz)	Ant1	CH 50	5250	MCS0	9.00	5.05	No
		CH 114	5570		9.00	6.04	No
	Ant2	CH 50	5250		8.00	5.41	No
		CH 114	5570		8.00	6.06	No

Table 126: Conducted power measurement results of WiFi 5G SISO(Full Power)

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11a CDD (5GHz)	Ant1	CH 36	5180	6Mbps	11.50	9.61	No
		CH 40	5200		16.00	14.75	No
		CH 44	5220		16.00	14.73	No
		CH 48	5240		16.00	<b>15.02</b>	Yes
		CH 52	5260		16.00	15.12	No
		CH 56	5280		16.00	15.13	No
		CH 60	5300		16.00	<b>15.16</b>	Yes
		CH 64	5320		11.50	9.67	No
		CH 100	5500		11.50	9.28	No
		CH 104	5520		16.00	<b>15.19</b>	Yes
		CH 108	5540		16.00	14.86	No
		CH 112	5560		16.00	14.87	No
		CH 116	5580		16.00	14.90	No
		CH 120	5600		16.00	14.96	No
		CH 124	5620		16.00	15.03	No
		CH 128	5640		16.00	15.11	No
		CH 132	5660		16.00	15.12	No
		CH 136	5680		16.00	15.17	No
		CH 140	5700		11.00	9.78	No
		CH 149	5745		11.00	10.29	No
		CH 153	5765		11.00	10.38	No
		CH 157	5785		11.00	10.34	No
		CH 161	5805		11.00	10.23	No
		CH 165	5825		11.00	<b>10.39</b>	Yes
	Ant2	CH 36	5180		11.50	9.94	No
		CH 40	5200		15.00	14.78	No
		CH 44	5220		15.00	14.95	No
		CH 48	5240		15.00	<b>14.98</b>	Yes
		CH 52	5260		15.00	14.81	No
		CH 56	5280		15.00	14.91	No
		CH 60	5300		15.00	<b>14.93</b>	Yes
		CH 64	5320		11.50	10.74	No
		CH 100	5500		11.50	11.02	No
		CH 104	5520		15.00	<b>14.95</b>	Yes
		CH 108	5540		15.00	14.91	No
		CH 112	5560		15.00	14.89	No
CH 116	5580	15.00	14.94	No			
CH 120	5600	15.00	14.87	No			
CH 124	5620	15.00	14.85	No			
CH 128	5640	15.00	14.88	No			
CH 132	5660	15.00	14.49	No			
CH 136	5680	15.00	14.43	No			
CH 140	5700	11.00	8.97	No			
CH 149	5745	10.00	9.14	No			
CH 153	5765	10.00	9.20	No			

		CH 157	5785	MCS0	10.00	9.27	No
		CH 161	5805		10.00	9.32	No
		CH 165	5825		10.00	<b>9.35</b>	Yes
	Sum	CH 36	5180		14.50	12.79	No
		CH 40	5200		18.50	17.78	No
		CH 44	5220		18.50	17.85	No
		CH 48	5240		18.50	18.01	No
		CH 52	5260		18.50	17.98	No
		CH 56	5280		18.50	18.03	No
		CH 60	5300		18.50	18.06	No
		CH 64	5320		14.50	13.25	No
		CH 100	5500		14.50	13.25	No
		CH 104	5520		18.50	18.08	No
		CH 108	5540		18.50	17.90	No
		CH 112	5560		18.50	17.89	No
		CH 116	5580		18.50	17.93	No
		CH 120	5600		18.50	17.93	No
		CH 124	5620		18.50	17.95	No
		CH 128	5640		18.50	18.01	No
		CH 132	5660		18.50	17.83	No
		CH 136	5680		18.50	17.83	No
		CH 140	5700		14.00	12.40	No
		CH 149	5745		14.50	12.76	No
		CH 153	5765		13.50	12.84	No
		CH 157	5785		13.50	12.85	No
		CH 161	5805		13.50	12.81	No
		CH 165	5825		13.50	12.91	No
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11n MIMO 20M (5GHz)	Ant1	CH 36	5180	MCS0	11.50	9.75	No
		CH 40	5200		15.00	13.27	No
		CH 44	5220		15.00	13.36	No
		CH 48	5240		15.00	13.04	No
		CH 52	5260		15.00	13.19	No
		CH 56	5280		15.00	13.29	No
		CH 60	5300		15.00	13.34	No
		CH 64	5320		11.50	9.87	No
		CH 100	5500		11.50	9.97	No
		CH 104	5520		15.00	13.27	No
		CH 108	5540		15.00	13.36	No
		CH 112	5560		15.00	13.35	No
		CH 116	5580		15.00	13.35	No
		CH 120	5600		15.00	13.25	No
		CH 124	5620		15.00	13.32	No
CH 128	5640	15.00	13.41	No			
CH 132	5660	15.00	13.56	No			

		CH 136	5680		15.00	13.54	No		
		CH 140	5700		11.00	9.99	No		
		CH 149	5745		10.00	8.19	No		
		CH 153	5765		10.00	7.56	No		
		CH 157	5785		10.00	8.18	No		
		CH 161	5805		10.00	8.03	No		
		CH 165	5825		10.00	7.80	No		
	Ant2	CH 36	5180		11.50	9.89	No		
		CH 40	5200		14.00	12.70	No		
		CH 44	5220		14.00	12.91	No		
		CH 48	5240		14.00	12.92	No		
		CH 52	5260		14.00	12.98	No		
		CH 56	5280		14.00	12.99	No		
		CH 60	5300		14.00	13.03	No		
		CH 64	5320		11.50	10.20	No		
		CH 100	5500		11.50	10.45	No		
		CH 104	5520		14.00	13.34	No		
		CH 108	5540		14.00	13.31	No		
		CH 112	5560		14.00	13.34	No		
		CH 116	5580		14.00	13.27	No		
		CH 120	5600		14.00	13.19	No		
		CH 124	5620		14.00	13.08	No		
		CH 128	5640		14.00	12.91	No		
		CH 132	5660		14.00	12.77	No		
		CH 136	5680		14.00	12.62	No		
		CH 140	5700		11.00	8.93	No		
		CH 149	5745		9.00	6.99	No		
		CH 153	5765		9.00	7.03	No		
		CH 157	5785		9.00	7.04	No		
		CH 161	5805		9.00	7.20	No		
		CH 165	5825		9.00	7.26	No		
		Sum	CH 36		5180	MCS0	14.50	12.83	No
			CH 40		5200		17.50	16.00	No
CH 44	5220		17.50	16.15	No				
CH 48	5240		17.50	15.99	No				
CH 52	5260		17.50	16.10	No				
CH 56	5280		17.50	16.15	No				
CH 60	5300		17.50	16.20	No				
CH 64	5320		14.50	13.05	No				
CH 100	5500		14.50	13.23	No				
CH 104	5520		17.50	16.32	No				
CH 108	5540		17.50	16.35	No				
CH 112	5560		17.50	16.36	No				
CH 116	5580		17.50	16.32	No				
CH 120	5600		17.50	16.23	No				
CH 124	5620		17.50	16.21	No				

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)	
		CH 128	5640		17.50	16.18	No	
		CH 132	5660		17.50	16.19	No	
		CH 136	5680		17.50	16.11	No	
		CH 140	5700		14.00	12.50	No	
		CH 149	5745		12.50	10.64	No	
		CH 153	5765		12.50	10.31	No	
		CH 157	5785		12.50	10.66	No	
		CH 161	5805		12.50	10.65	No	
		CH 165	5825		12.50	10.55	No	
802.11n MIMO 40M (5GHz)	Ant1	CH 38	5190	MCS0	9.50	7.67	No	
		CH 46	5230		15.50	14.18	No	
		CH 54	5270		15.50	<b>14.13</b>	No	
		CH 62	5310		9.50	7.99	No	
		CH 102	5510		9.50	8.05	No	
		CH 110	5550		15.50	<b>14.29</b>	No	
		CH 118	5590		15.50	14.17	No	
		CH 126	5630		15.50	14.38	No	
		CH 134	5670		9.50	8.58	No	
		CH 151	5755		10.50	8.84	No	
		CH 159	5795		10.50	8.62	No	
		Ant2	CH 38		5190	9.50	7.69	No
	CH 46		5230	14.50	14.19	No		
	CH 54		5270	14.50	14.19	No		
	CH 62		5310	9.50	8.88	No		
	CH 102		5510	9.50	8.65	No		
	CH 110		5550	14.50	13.57	No		
	CH 118		5590	14.50	13.54	No		
	CH 126		5630	14.50	13.29	No		
	CH 134		5670	9.50	7.85	No		
	CH 151		5755	9.50	7.71	No		
	CH 159		5795	9.50	7.76	No		
	Sum		CH 38	5190	MCS0	12.50	10.69	No
		CH 46	5230	18.00		<b>17.20</b>	No	
		CH 54	5270	18.00		<b>17.17</b>	No	
		CH 62	5310	12.50		11.47	No	
		CH 102	5510	12.50		11.37	No	
		CH 110	5550	18.00		16.96	No	
		CH 118	5590	18.00		16.88	No	
		CH 126	5630	18.00		<b>16.88</b>	No	
		CH 134	5670	12.50		11.24	No	
		CH 151	5755	13.00		11.32	No	
		CH 159	5795	13.00		11.22	No	
		Mode	Antenna	Channel		Frequency (MHz)	Data Rate (Mbps)	Tune-up

802.11ac MIMO 20M (5GHz)	Ant1	CH 36	5180	MCS0	11.50	9.55	No
		CH 40	5200		15.00	13.30	No
		CH 44	5220		15.00	13.46	No
		CH 48	5240		15.00	13.63	No
		CH 52	5260		15.00	13.63	No
		CH 56	5280		15.00	13.54	No
		CH 60	5300		15.00	13.50	No
		CH 64	5320		11.50	9.88	No
		CH 100	5500		11.50	10.00	No
		CH 104	5520		15.00	13.32	No
		CH 108	5540		15.00	13.34	No
		CH 112	5560		15.00	13.32	No
		CH 116	5580		15.00	13.24	No
		CH 120	5600		15.00	13.07	No
		CH 124	5620		15.00	13.23	No
		CH 128	5640		15.00	13.26	No
		CH 132	5660		15.00	13.30	No
		CH 136	5680		15.00	13.30	No
		CH 140	5700		11.00	9.86	No
		CH 149	5745		10.00	8.23	No
	CH 153	5765	10.00		8.26	No	
	CH 157	5785	10.00		7.71	No	
	CH 161	5805	10.00		8.03	No	
	CH 165	5825	10.00		7.81	No	
	Ant2	CH 36	5180		11.50	9.76	No
	CH 40	5200	14.00		12.74	No	
	CH 44	5220	14.00		12.82	No	
	CH 48	5240	14.00		12.88	No	
	CH 52	5260	14.00		12.85	No	
	CH 56	5280	14.00		12.88	No	
	CH 60	5300	14.00		12.92	No	
	CH 64	5320	11.50		10.02	No	
	CH 100	5500	11.50		10.23	No	
	CH 104	5520	14.00		13.40	No	
CH 108	5540	14.00	13.40	No			
CH 112	5560	14.00	13.45	No			
CH 116	5580	14.00	13.48	No			
CH 120	5600	14.00	13.51	No			
CH 124	5620	14.00	13.44	No			
CH 128	5640	14.00	13.39	No			
CH 132	5660	14.00	13.36	No			
CH 136	5680	14.00	13.13	No			
CH 140	5700	11.00	9.07	No			
CH 149	5745	9.00	7.01	No			
CH 153	5765	9.00	7.06	No			
CH 157	5785	9.00	7.10	No			

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)		
802.11ac MIMO 40M (5GHz)	Sum	CH 161	5805	MCS0	9.00	7.22	No		
		CH 165	5825		9.00	7.27	No		
	CH 36	5180	14.50		12.67	No			
	CH 40	5200	17.50		16.04	No			
	CH 44	5220	17.50		16.16	No			
	CH 48	5240	17.50		16.28	No			
	CH 52	5260	17.50		16.27	No			
	CH 56	5280	17.50		16.23	No			
	CH 60	5300	17.50		16.23	No			
	CH 64	5320	14.50		12.96	No			
	CH 100	5500	14.50		13.13	No			
	CH 104	5520	17.50		16.37	No			
	CH 108	5540	17.50		16.38	No			
	CH 112	5560	17.50		16.40	No			
	CH 116	5580	17.50		16.37	No			
	CH 120	5600	17.50		16.31	No			
	CH 124	5620	17.50		16.35	No			
	CH 128	5640	17.50		16.34	No			
	CH 132	5660	17.50		16.34	No			
	CH 136	5680	17.50		16.23	No			
	CH 140	5700	14.00		12.49	No			
	CH 149	5745	12.50		10.67	No			
	CH 153	5765	12.50		10.71	No			
	CH 157	5785	12.50		10.43	No			
	CH 161	5805	12.50		10.65	No			
	CH 165	5825	12.50		10.56	No			
	802.11ac MIMO 40M (5GHz)	Ant1	CH 38		5190	MCS0	9.50	7.75	No
			CH 46		5230		15.50	14.23	No
			CH 54		5270		15.50	14.82	No
			CH 62		5310		9.50	7.51	No
			CH 102		5510		9.50	8.14	No
			CH 110		5550		15.50	14.24	No
CH 118			5590	15.50	14.03		No		
CH 126			5630	15.50	14.14		No		
CH 134			5670	9.50	8.36		No		
CH 151			5755	10.50	8.61		No		
CH 159		5795	10.50	8.88	No				
Ant2		CH 38	5190	9.50	7.84		No		
		CH 46	5230	14.50	13.64		No		
		CH 54	5270	14.50	13.52		No		
		CH 62	5310	9.50	7.81		No		
		CH 102	5510	9.50	8.61		No		
	CH 110	5550	14.50	14.07	No				
	CH 118	5590	14.50	14.10	No				



		CH 126	5630	MCS0	14.50	14.00	No
		CH 134	5670		9.50	8.22	No
		CH 151	5755		9.50	7.61	No
		CH 159	5795		9.50	7.82	No
	Sum	CH 38	5190		12.50	10.81	No
		CH 46	5230		18.00	16.96	No
		CH 54	5270		18.00	17.23	No
		CH 62	5310		12.50	10.67	No
		CH 102	5510		12.50	11.39	No
		CH 110	5550		18.00	17.17	No
		CH 118	5590		18.00	17.08	No
		CH 126	5630		18.00	17.08	No
		CH 134	5670		12.50	11.30	No
		CH 151	5755		13.00	11.15	No
CH 159	5795	13.00	11.39	No			
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11ac MIMO 80M (5GHz)	Ant1	CH 42	5210	MCS0	9.50	8.01	No
		CH 58	5290		9.50	8.05	No
		CH 106	5530		9.50	8.08	No
		CH 122	5610		9.50	7.85	No
		CH 155	5775		9.00	7.66	No
	Ant2	CH 42	5210		9.50	7.99	No
		CH 58	5290		9.50	7.89	No
		CH 106	5530		9.50	8.47	No
		CH 122	5610		9.50	8.41	No
		CH 155	5775		8.00	5.34	No
	Sum	CH 42	5210		12.50	11.01	No
		CH 58	5290		12.50	10.98	No
		CH 106	5530		12.50	11.29	No
		CH 122	5610		12.50	11.15	No
CH 155		5775	11.50	9.66	No		
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)	SAR Test (Yes/No)
802.11ac MIMO 160M (5GHz)	Ant1	CH 50	5250	MCS0	9.00	5.05	No
		CH 114	5570		9.00	6.04	No
	Ant2	CH 50	5250		8.00	5.41	No
		CH 114	5570		8.00	6.06	No
	Sum	CH 50	5250		11.50	8.24	No
		CH 114	5570		11.50	9.06	No

Table 127: Conducted power measurement results of WiFi 5G CDD/MIMO(Full Power)

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
802.11a SISO	Ant1	CH 36	5180	6.5Mbps	11.50	9.92
		CH 40	5200		14.50	<b>13.77</b>
		CH 52	5260		14.50	<b>13.45</b>
		CH 60	5300		14.50	<b>13.27</b>
		CH 64	5320		11.50	10.36
		CH 100	5500		11.50	9.75
		CH 104	5520		14.50	<b>13.19</b>
		CH 120	5600		14.50	<b>13.48</b>
		CH 124	5620		14.50	<b>13.47</b>
		CH 128	5640		14.50	<b>13.42</b>
		CH 132	5660		14.50	<b>13.41</b>
		CH 136	5680		14.50	<b>13.68</b>
		CH 140	5700		11.00	10.22
		CH 149	5745		11.00	<b>9.68</b>
		CH 157	5785		11.00	<b>9.91</b>
		CH 165	5825		11.00	<b>10.05</b>
	Ant2	CH 36	5180		11.50	10.06
		CH 40	5200		14.50	<b>13.40</b>
		CH 52	5260		14.50	<b>13.41</b>
		CH 60	5300		14.50	<b>13.47</b>
		CH 64	5320		11.50	9.83
		CH 100	5500		11.50	10.08
		CH 104	5520		14.50	<b>13.79</b>
		CH 120	5600		14.50	<b>13.74</b>
		CH 124	5620		14.50	<b>13.65</b>
		CH 128	5640		14.50	<b>13.62</b>
		CH 132	5660		14.50	<b>13.51</b>
		CH 136	5680		14.50	<b>13.58</b>
		CH 140	5700		11.00	9.53
		CH 149	5745		10.00	<b>8.94</b>
		CH 157	5785		10.00	<b>9.18</b>
		CH 165	5825		10.00	<b>9.26</b>
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
802.11n SISO 20M	Ant1	CH 36	5180	MCS0	11.50	9.90
		CH 40	5200		14.50	13.07
		CH 52	5260		14.50	13.12
		CH 60	5300		14.50	13.15
		CH 64	5320		11.50	9.94
		CH 100	5500		11.50	9.81

		CH 104	5520		14.50	13.20
		CH 120	5600		14.50	13.40
		CH 124	5620		14.50	13.44
		CH 128	5640		14.50	13.41
		CH 132	5660		14.50	13.41
		CH 136	5680		14.50	13.15
		CH 140	5700		11.00	9.94
		CH 149	5745		10.00	8.41
		CH 157	5785		10.00	8.56
		CH 165	5825		10.00	8.75
	Ant2	CH 36	5180		11.50	10.13
		CH 40	5200		14.00	12.53
		CH 52	5260		14.00	12.73
		CH 60	5300		14.00	12.85
		CH 64	5320		11.50	9.91
		CH 100	5500		11.50	9.85
		CH 104	5520		14.00	12.82
		CH 120	5600		14.00	13.01
		CH 124	5620		14.00	13.45
		CH 128	5640		14.00	13.43
		CH 132	5660		14.00	13.41
		CH 136	5680		14.00	13.10
		CH 140	5700		11.00	9.27
		CH 149	5745		9.00	7.34
		CH 157	5785		9.00	7.78
		CH 165	5825		9.00	7.82
		Mode	Antenna		Channel	Frequency (MHz)
802.11n SISO 40M	Ant1	CH 38	5190	MCS0	9.50	6.62
		CH 46	5230		15.50	12.52
		CH 54	5270		15.50	12.52
		CH 62	5310		9.50	7.85
		CH 102	5510		9.50	7.49
		CH 110	5550		15.50	13.41
		CH 118	5590		15.50	13.64
		CH 126	5630		15.50	13.34
		CH 134	5670		9.50	7.46
		CH 151	5755		10.50	8.49
		CH 159	5795		10.50	9.74
		Ant2	CH 38		5190	9.50
	CH 46		5230		14.50	12.91
	CH 54		5270		14.50	12.99

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
		CH 62	5310		9.50	7.02
		CH 102	5510		9.50	7.69
		CH 110	5550		14.50	12.28
		CH 118	5590		14.50	11.52
		CH 126	5630		14.50	11.52
		CH 134	5670		9.50	6.84
		CH 151	5755		9.50	7.85
		CH 159	5795		9.50	7.05
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up Max.	Average Power (dBm)
802.11ac SISO 20M	Ant1	CH 36	5180	MCS0	11.50	9.20
		CH 40	5200		14.50	13.02
		CH 52	5260		14.50	12.97
		CH 60	5300		14.50	13.04
		CH 64	5320		11.50	9.82
		CH 100	5500		11.50	9.36
		CH 104	5520		14.50	13.42
		CH 120	5600		14.50	13.00
		CH 124	5620		14.50	13.20
		CH 128	5640		14.50	13.11
		CH 132	5660		14.50	13.02
		CH 136	5680		14.50	12.85
		CH 140	5700		11.00	9.25
		CH 149	5745		10.00	8.15
	CH 157	5785	10.00		8.28	
	CH 165	5825	10.00		8.58	
	Ant2	CH 36	5180		11.50	9.58
		CH 40	5200		14.00	12.67
		CH 52	5260		14.00	12.57
		CH 60	5300		14.00	12.67
		CH 64	5320		11.50	9.86
		CH 100	5500		11.50	9.80
		CH 104	5520		14.00	12.96
		CH 120	5600		14.00	12.72
		CH 124	5620		14.00	12.57
		CH 128	5640		14.00	12.62
		CH 132	5660		14.00	12.71
		CH 136	5680		14.00	12.86
CH 140		5700	11.00	9.54		
CH 149		5745	9.00	7.36		
CH 157	5785	9.00	7.65			
CH 165	5825	9.00	7.56			
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up Max.	Average Power (dBm)
	Ant1	CH 38	5190	MCS0	9.50	6.76
		CH 46	5230		14.50	11.56

802.11ac SISO 40M		CH 54	5270	MCS0	14.50	11.52
		CH 62	5310		9.50	7.35
		CH 102	5510		9.50	7.64
		CH 110	5550		14.50	13.40
		CH 118	5590		14.50	13.61
		CH 126	5630		14.50	13.36
		CH 134	5670		9.50	7.48
		CH 151	5755		10.50	8.57
		CH 159	5795		10.50	9.83
		Ant2	CH 38		5190	9.50
	CH 46		5230		14.50	12.74
	CH 54		5270		14.50	12.95
	CH 62		5310		9.50	6.89
	CH 102		5510		9.50	8.06
	CH 110		5550		14.50	12.09
	CH 118		5590		14.50	11.52
	CH 126		5630		14.50	11.69
	CH 134		5670		9.50	7.16
	CH 151		5755		9.50	7.89
	CH 159	5795	9.50		6.97	
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up Max.	Average Power (dBm)
802.11ac SISO 80M	Ant1	CH 42	5210	MCS0	9.50	6.66
		CH 58	5290		9.50	6.95
		CH 106	5530		9.50	8.06
		CH 122	5610		9.50	8.57
		CH 155	5775		9.00	7.46
	Ant2	CH 42	5210		9.50	6.53
		CH 58	5290		9.50	6.79
		CH 106	5530		9.50	7.09
		CH 122	5610		9.50	6.71
		CH 155	5775		8.00	5.45
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up Max.	Average Power (dBm)
802.11ac SISO 160M	Ant1	CH 50	5250	MCS0	9.00	7.22
		CH 114	5570		9.00	7.31
	Ant2	CH 50	5250		8.00	6.75
		CH 114	5570		8.00	6.68

Table 128: Conducted power measurement results of WiFi 5G SISO (MCC of CE countries,Receiver ON)

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
802.11a CDD	Ant1	CH 36	5180	6.5Mbps	11.50	9.92
		CH 40	5200		14.50	<b>13.77</b>
		CH 52	5260		14.50	<b>13.45</b>
		CH 60	5300		14.50	<b>13.27</b>
		CH 64	5320		11.50	10.36
		CH 100	5500		11.50	9.75
		CH 104	5520		14.50	<b>13.19</b>
		CH 120	5600		14.50	<b>13.48</b>
		CH 124	5620		14.50	<b>13.47</b>
		CH 128	5640		14.50	<b>13.45</b>
		CH 132	5660		14.50	<b>13.42</b>
		CH 136	5680		14.50	<b>13.68</b>
		CH 140	5700		11.00	10.22
		CH 149	5745		11.00	<b>9.68</b>
		CH 157	5785		11.00	<b>9.91</b>
		CH 165	5825		11.00	<b>10.05</b>
	Ant2	CH 36	5180		11.50	10.06
		CH 40	5200		14.50	<b>13.40</b>
		CH 52	5260		14.50	<b>13.41</b>
		CH 60	5300		14.50	<b>13.47</b>
		CH 64	5320		11.50	9.83
		CH 100	5500		11.50	10.08
		CH 104	5520		14.50	<b>13.79</b>
		CH 120	5600		14.50	<b>13.74</b>
		CH 124	5620		14.50	<b>13.67</b>
		CH 128	5640		14.50	<b>13.52</b>
		CH 132	5660		14.50	<b>13.41</b>
		CH 136	5680		14.50	<b>13.58</b>
		CH 140	5700		11.00	9.53
		CH 149	5745		10.00	<b>8.94</b>
	CH 157	5785	10.00		<b>9.18</b>	
	CH 165	5825	10.00		<b>9.26</b>	
	Sum	CH 36	5180		14.50	12.01
		CH 40	5200		17.50	16.84
		CH 52	5260		17.50	16.71
		CH 60	5300		17.50	16.83
CH 64		5320	14.50	12.47		
CH 100		5500	14.50	12.87		
CH 104		5520	17.50	16.72		
CH 120		5600	17.50	16.93		

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
802.11n MIMO 20M	Ant1	CH 124	5620	MCS0	17.50	16.58
		CH 128	5640		17.50	16.50
		CH 132	5660		17.50	16.43
		CH 136	5680		17.50	16.53
		CH 140	5700		14.00	12.07
		CH 149	5745		13.50	12.02
		CH 157	5785		13.50	12.19
		CH 165	5825		13.50	12.33
	Ant2	CH 36	5180	11.50	9.25	
		CH 40	5200	14.50	12.96	
		CH 52	5260	14.50	13.11	
		CH 60	5300	14.50	12.84	
		CH 64	5320	11.50	9.34	
		CH 100	5500	11.50	9.28	
		CH 104	5520	14.50	12.80	
		CH 120	5600	14.50	12.73	
		CH 124	5620	14.50	12.76	
		CH 128	5640	14.50	12.58	
		CH 132	5660	14.50	12.87	
		CH 136	5680	14.50	12.60	
		CH 140	5700	11.00	9.30	
		CH 149	5745	10.00	8.67	
		CH 157	5785	10.00	8.73	
		CH 165	5825	10.00	8.84	
		CH 36	5180	11.50	9.36	
		CH 40	5200	14.00	12.88	
		CH 52	5260	14.00	12.99	
		CH 60	5300	14.00	13.06	
CH 64	5320	11.50	9.23			
CH 100	5500	11.50	9.67			
CH 104	5520	14.00	13.25			
CH 120	5600	14.00	13.29			
CH 124	5620	14.00	13.32			
CH 128	5640	14.00	13.35			
CH 132	5660	14.00	13.27			
CH 136	5680	14.00	12.64			
CH 140	5700	11.00	9.31			
CH 149	5745	9.00	7.66			
CH 157	5785	9.00	7.80			
CH 165	5825	9.00	7.92			

	Sum	CH 36	5180		14.50	12.32
		CH 40	5200		17.30	15.93
		CH 52	5260		17.30	16.06
		CH 60	5300		17.30	15.96
		CH 64	5320		14.50	12.30
		CH 100	5500		14.50	12.49
		CH 104	5520		17.30	16.04
		CH 120	5600		17.30	16.03
		CH 124	5620		17.30	16.06
		CH 128	5640		17.30	15.99
		CH 132	5660		17.30	16.08
		CH 136	5680		17.30	15.63
		CH 140	5700		14.00	12.32
		CH 149	5745		12.50	11.20
		CH 157	5785		12.50	11.30
		CH 165	5825		12.50	11.41
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up Max.	Average Power (dBm)
802.11n MIMO 40M	Ant1	CH 38	5190	MCS0	9.50	6.62
		CH 46	5230		15.50	12.52
		CH 54	5270		15.50	12.52
		CH 62	5310		9.50	7.85
		CH 102	5510		9.50	7.49
		CH 110	5550		15.50	13.41
		CH 118	5590		15.50	13.64
		CH 126	5630		15.50	13.34
		CH 134	5670		9.50	7.46
		CH 151	5755		10.50	8.49
	CH 159	5795	10.50		9.74	
	Ant2	CH 38	5190		9.50	6.52
		CH 46	5230		14.50	12.91
		CH 54	5270		14.50	12.99
		CH 62	5310		9.50	7.02
		CH 102	5510		9.50	7.69
		CH 110	5550		14.50	12.28
		CH 118	5590		14.50	11.52
		CH 126	5630		14.50	11.52
		CH 134	5670		9.50	6.84
		CH 151	5755		9.50	7.85
	CH 159	5795	9.50		7.05	
	Sum	CH 38	5190		12.50	9.58
		CH 46	5230		17.50	15.73
		CH 54	5270		17.50	15.77
		CH 62	5310		12.50	10.47
		CH 102	5510		12.50	10.60



Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
802.11ac MIMO 20M		CH 110	5550		17.50	15.89
		CH 118	5590		17.50	15.72
		CH 126	5630		17.50	15.53
		CH 134	5670		12.50	10.17
		CH 151	5755		13.00	11.19
		CH 159	5795		13.00	11.61
	Ant1	CH 36	5180	MCS0	11.50	9.20
		CH 40	5200		14.50	13.02
		CH 52	5260		14.50	12.97
		CH 60	5300		14.50	13.04
		CH 64	5320		11.50	9.82
		CH 100	5500		11.50	9.36
		CH 104	5520		14.50	13.42
		CH 120	5600		14.50	13.00
		CH 124	5620		14.50	13.21
		CH 128	5640		14.50	12.87
		CH 132	5660		14.50	12.87
		CH 136	5680		14.50	12.85
		CH 140	5700		11.00	9.25
		CH 149	5745		10.00	8.15
		CH 157	5785		10.00	8.28
Ant2	CH 165	5825	10.00	8.58		
	CH 36	5180	11.50	9.58		
	CH 40	5200	14.00	12.67		
	CH 52	5260	14.00	12.57		
	CH 60	5300	14.00	12.67		
	CH 64	5320	11.50	9.86		
	CH 100	5500	11.50	9.80		
	CH 104	5520	14.00	12.96		
	CH 120	5600	14.00	12.72		
	CH 124	5620	14.00	12.78		
	CH 128	5640	14.00	12.84		
	CH 132	5660	14.00	12.98		
	CH 136	5680	14.00	12.86		
	CH 140	5700	11.00	9.54		
Sum	CH 149	5745	9.00	7.36		
	CH 157	5785	9.00	7.65		
	CH 165	5825	9.00	7.56		
	CH 36	5180	14.50	12.40		
	CH 40	5200	17.50	15.86		
	CH 52	5260	17.50	15.78		
	CH 60	5300	17.50	15.87		
	CH 64	5320	14.50	12.85		
CH 100	5500	14.50	12.60			
CH 104	5520	17.50	16.21			
CH 120	5600	17.50	15.87			
CH 124	5620	17.50	16.01			

Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up	Average Power (dBm)
					Max.	
		CH 128	5640		17.50	15.87
		CH 132	5660		17.50	15.94
		CH 136	5680		17.50	15.87
		CH 140	5700		14.00	12.41
		CH 149	5745		12.50	10.78
		CH 157	5785		12.50	10.99
		CH 165	5825		12.50	11.11
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up Max.	Average Power (dBm)
802.11ac MIMO 40M	Ant1	CH 38	5190	MCS0	9.50	6.76
		CH 46	5230		14.50	11.56
		CH 54	5270		14.50	11.52
		CH 62	5310		9.50	7.35
		CH 102	5510		9.50	7.64
		CH 110	5550		14.50	13.40
		CH 118	5590		14.50	13.61
		CH 126	5530		14.50	13.36
		CH 134	5670		9.50	7.48
		CH 151	5755		10.50	8.57
		CH 159	5795		10.50	9.83
	Ant2	CH 38	5190		9.50	6.52
		CH 46	5230		14.50	12.74
		CH 54	5270		14.50	12.95
		CH 62	5310		9.50	6.89
		CH 102	5510		9.50	8.06
		CH 110	5550		14.50	12.09
		CH 118	5590		14.50	11.52
		CH 126	5530		14.50	11.69
		CH 134	5670		9.50	7.16
		CH 151	5755		9.50	7.89
		CH 159	5795		9.50	6.97
	Sum	CH 38	5190		12.51	9.65
		CH 46	5230		17.51	15.20
		CH 54	5270		17.51	15.30
		CH 62	5310		12.51	10.14
		CH 102	5510		12.51	10.87
		CH 110	5550		17.51	15.80
		CH 118	5590		17.51	15.70
		CH 126	5530		17.51	15.62
		CH 134	5670		12.51	10.33
		CH 151	5755		13.04	11.25
		CH 159	5795		13.04	11.64
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up Max.	Average Power (dBm)
802.11ac MIMO 80M	Ant1	CH 42	5210	MCS0	9.50	6.94
		CH 58	5290		9.50	7.61
		CH 106	5530		9.50	8.52
		CH 122	5610		9.50	9.04

	Ant2	CH 155	5775		8.00	7.95
		CH 42	5210		9.50	8.05
		CH 58	5290		9.50	8.43
		CH 106	5530		9.50	8.74
		CH 122	5610		9.50	7.65
	Sum	CH 155	5775		7.00	6.55
		CH 42	5210		12.51	10.54
		CH 58	5290		12.51	11.05
		CH 106	5530		12.51	11.64
		CH 122	5610		12.51	11.41
		CH 155	5775		11.54	10.32
Mode	Antenna	Channel	Frequency (MHz)	Data Rate (Mbps)	Tune-up Max.	Average Power (dBm)
802.11ac MIMO 160M	Ant1	CH 50	5250	MCS0	9.00	7.22
		CH 114	5570		9.00	7.31
	Ant2	CH 50	5250		8.00	6.75
		CH 114	5570		8.00	6.68
	Sum	CH 50	5250		11.54	10.00
		CH 114	5570		11.54	10.02

Table 129: Conducted power measurement results of WiFi 5G CDD/MIMO (MCC of CE countries,Receiver ON)

Note:

- 1) The Average conducted power of WiFi is measured with RMS detector.
- 2) As different maximum tune-up output power is specified across the different channels range. So the additional conducted power measurement for the adjacent channel of each power level stage is also performed in this report to ensure compliance.

### 7.1.34 Conducted power measurements of BT

The output power of BT antenna is as the following:

BT	Tune-up	Average Conducted Power (dBm)		
	Max.	0CH	5CH	10CH
DH5	9.00	7.27	7.45	7.86
2DH5	8.00	4.84	5.11	5.30
3DH5	8.00	4.89	5.02	5.13
BT	Tune-up	Average Conducted Power (dBm)		
	Max.	11CH	41CH	70CH
DH5	10.00	<b>8.02</b>	8.40	<b>8.78</b>
2DH5	9.00	5.10	5.36	5.14
3DH5	9.00	5.22	5.37	5.08
BT	Tune-up	Average Conducted Power (dBm)		
	Max.	71CH	75CH	78CH
DH5	10.00	8.77	8.61	<b>8.30</b>
2DH5	8.00	5.25	5.16	4.66
3DH5	8.00	5.42	5.27	4.62

BT	Tune-up	Average Conducted Power (dBm)		
	Max.	0CH	3CH	5CH
BLE	7.50	4.50	4.56	4.49
BT	Tune-up	Average Conducted Power (dBm)		
	Max.	6CH	19CH	31CH
BLE	8.50	4.69	5.81	5.75
BT	Tune-up	Average Conducted Power (dBm)		
	Max.	32CH	33CH	34CH
BLE	8.00	5.81	5.71	5.58
BT	Tune-up	Average Conducted Power (dBm)		
	Max.	35CH	37CH	39CH
BLE	7.50	5.29	5.11	4.66

Table 130: Conducted power measurement results of BT.

BT	Tune-up	Average Conducted Power (dBm)		
	Max.	0CH	2CH	3CH
UHD GFSK 1Mbps HP	7.10	5.33	5.19	5.11
UHD GFSK 2Mbps HP	7.40	5.15	5.38	5.31
UHD 2M HP	7.40	5.86	6.09	5.99
UHD 2M 8DPSK HP	7.40	5.97	6.20	6.11
BT	Tune-up	Average Conducted Power (dBm)		
	Max.	4CH	10CH	16CH
UHD GFSK 1Mbps HP	7.40	5.40	6.09	6.01
UHD GFSK 2Mbps HP	7.70	5.55	6.25	6.19
UHD 2M HP	7.80	6.27	6.93	6.85
UHD 2M 8DPSK HP	7.80	6.38	7.04	6.96
BT	Tune-up	Average Conducted Power (dBm)		
	Max.	17CH	25CH	32CH
UHD GFSK 1Mbps HP	7.50	6.01	6.15	6.37
UHD GFSK 2Mbps HP	7.80	6.15	6.28	6.50
UHD 2M HP	8.20	6.84	6.96	7.18
UHD 2M 8DPSK HP	8.20	6.93	7.06	7.27
BT	Tune-up	Average Conducted Power (dBm)		
	Max.	33CH	35CH	37CH
UHD GFSK 1Mbps HP	7.30	6.09	5.72	5.47
UHD GFSK 2Mbps HP	7.60	6.22	5.83	5.58
UHD 2M HP	7.70	6.89	6.51	6.24
UHD 2M 8DPSK HP	7.70	6.98	6.59	6.33
BT	Tune-up	Average Conducted Power (dBm)		
	Max.	0CH	2CH	4CH
UHD 4M	5.80	5.23	5.46	5.63
	Max.	6CH	12CH	16CH
	6.50	6.13	6.16	6.23
	Max.	18CH	26CH	32CH
	6.40	6.17	6.03	6.21
	Max.	34CH	/	36CH
	6.10	5.90		5.69

Table 131: Conducted power measurement results of BT.

Note:

- 1) The conducted power of BT is measured with RMS detector.
- 2) The bolded mode was selected for SAR testing.
- 3) As different maximum tune-up output power is specified across the different channels range. So the additional conducted power measurement for the adjacent channel of each power level stage is also performed in this report to ensure compliance.

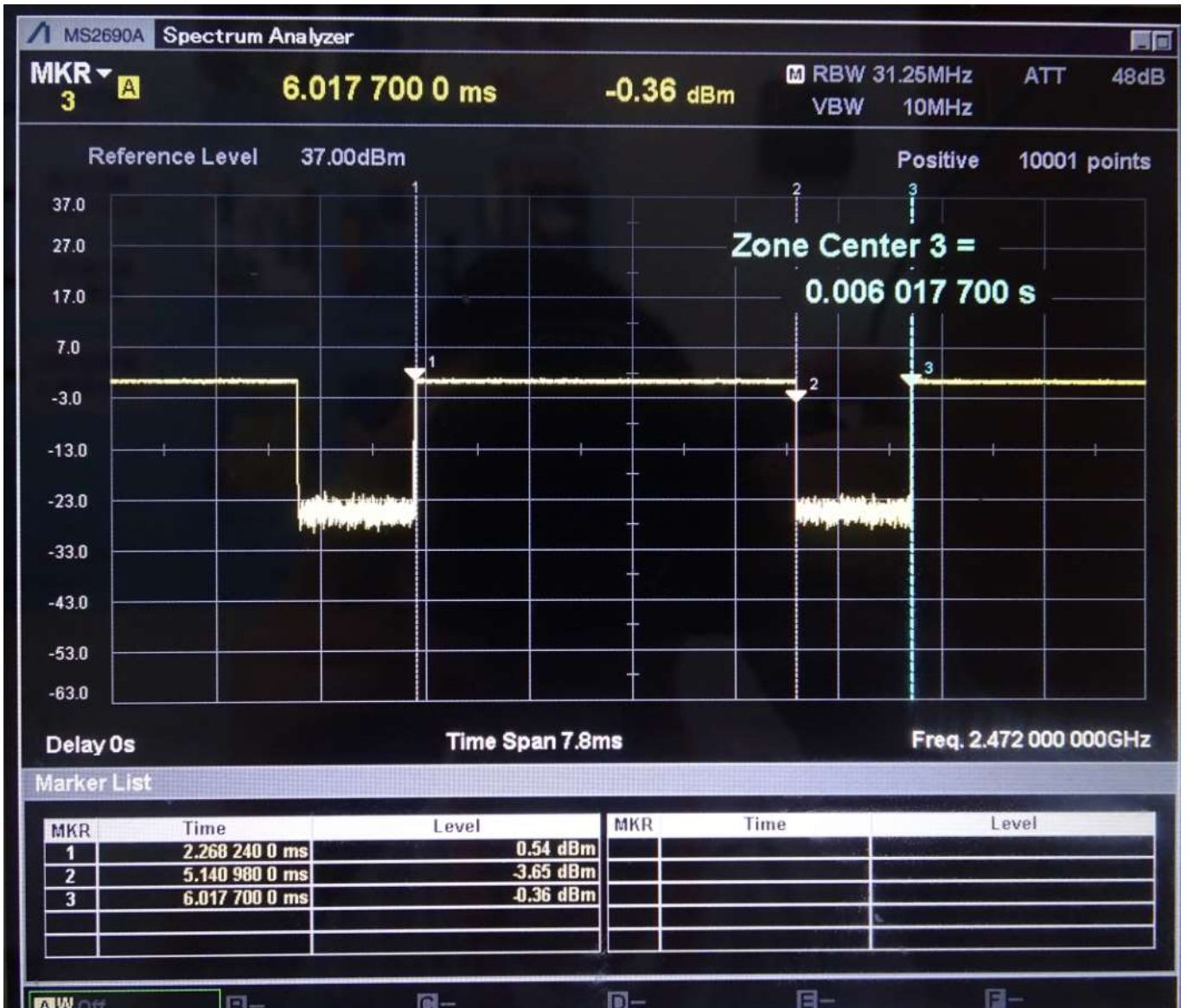


Figure: Bluetooth Transmission Plot

So the actual bluetooth duty cycle is calculated as below:

$$\text{Dutycycle} = \text{pulse} \frac{\text{width}}{\text{period}} * 100\% = \frac{2.87274\text{ms}}{3.74946\text{ms}} * 100\% = 76.6\%$$

## 7.2 SAR measurement Results

### General Notes:

- 1) Per KDB447498 D01, all SAR measurement results are scaled to the maximum tune-up tolerance limit to demonstrate SAR compliance.
- 2) Per KDB447498 D01, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
  - $\leq 0.8\text{W/kg}$  for 1-g or  $2.0\text{W/kg}$  for 10-g respectively, when the transmission band is  $\leq 100\text{MHz}$ .
  - $\leq 0.6\text{ W/kg}$  or  $1.5\text{ W/kg}$ , for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.
  - $\leq 0.4\text{ W/kg}$  or  $1.0\text{ W/kg}$ , for 1-g or 10-g respectively, when the transmission band is  $\geq 200\text{ MHz}$ .When the maximum output power variation across the required test channels is  $> \frac{1}{2}\text{ dB}$ , instead of the middle channel, the highest output power channel must be used.
- 3) Per KDB865664 D01, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8\text{W/kg}$ ; if the deviation among the repeated measurement is  $\leq 20\%$ , and the measured SAR  $< 1.45\text{W/kg}$ , only one repeated measurement is required.
- 4) Per KDB941225 D06, the DUT Dimension is bigger than 9 cm x 5 cm, so 10mm is chosen as the test separation distance for Hotspot mode. When the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.
- 5) Per KDB648474 D04, SAR is evaluated without a headset connected to the device. When the standalone reported body-worn SAR is  $\leq 1.2\text{ W/kg}$ , no additional SAR evaluations using a headset are required.
- 6) Per KDB865664 D02, SAR plot is only required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination; Plots are also required when the measured SAR is  $> 1.5\text{ W/kg}$ , or  $> 7.0\text{ W/kg}$  for occupational exposure. The published RF exposure KDB procedures may require additional plots; for example, to support SAR to peak location separation ratio test exclusion and/or volume scan post-processing (Refer to appendix B for details).
- 7) All SAR measurement results are scaled to the maximum tune-up tolerance limit to demonstrate SAR compliance.
- 8) Per KDB648474 D04, Body-worn accessories that do not contain metallic or conductive components is tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.
- 9) Per KDB648474 D04, Phones with built-in NFC functions do not require separate SAR testing and can generally be tested according to the SAR measurement procedures normally required for the phone. Influences of the hardware introduced by the built-in NFC functions are inherently considered through testing of the other transmitters that require SAR evaluation.

### GSM Notes:

- 1) Per KDB941225 D01, 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.
- 2) Per KDB648474 D04, the device does not support DTM function. Body-worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR.

### UMTS Notes:

1) Per KDB941225 D01, When the maximum output power and tune-up tolerance specified for production units in a Second mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of Second to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the Second mode.

### LTE Notes:

1) The LTE test configurations are determined according to KDB941225 D05 SAR for LTE Devices. The general test procedures used for SAR testing can be found in Section 6.5.

2) A-MPR was disabled for all SAR test by setting NS\_01 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI)

3) According to KDB 941225 D05 SAR for LTE Devices, for Time-Division Duplex (TDD) systems, SAR is tested using a fixed periodic duty factor according to the highest transmission duty factor (63.33%) implemented for the device and supported by the defined 3GPP LTE TDD configurations.

### WiFi Notes:

Per KDB248227D01:

1) When reported SAR for the initial test position is  $\leq 0.4$  W/kg, no additional testing for the remaining test position is required. Otherwise, SAR is evaluated at the subsequent highest peak SAR position until the reported SAR result is  $\leq 0.8$  W/kg or all test position are measured. For all positions/configurations tested using the initial test position and subsequent test positions, when the *reported* SAR is  $> 0.8$  W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the *reported* SAR is  $\leq 1.2$  W/kg or all required channels are tested..

2) When the DSSS *reported* SAR of the highest measured maximum output power channel for the exposure configuration is  $\leq 0.8$  W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.

3) When the highest *reported* SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations

4) The highest SAR measured for the initial test position or initial test configuration should be used to determine SAR test exclusion according to the sum of 1-g SAR and SAR peak to location ratio provisions in KDB 447498. In addition, a test lab may also choose to perform standalone SAR measurements for test positions and 802.11 configurations that are not required by the initial test position or initial test configuration procedures and apply the results to determine simultaneous transmission SAR test exclusion, according to sum of 1-g and SAR peak to location ratio requirements to reduce the number of simultaneous transmission SAR measurements.



## 7.2.1 SAR measurement Result of GSM850

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	190/836.6	GSM	0.311	0.167	-0.04	27.54	28.80	0.416	Battery 1#	/
Left tilt	190/836.6	GSM	0.232	0.145	0.05	27.54	28.80	0.310	Battery 1#	/
Right cheek	190/836.6	GSM	0.301	0.177	-0.05	27.54	28.80	0.402	Battery 1#	/
Right tilt	190/836.6	GSM	0.239	0.142	-0.01	27.54	28.80	0.319	Battery 1#	/
Left cheek	190/836.6	GSM	0.316	0.172	-0.10	27.54	28.80	0.422	Battery 2#	Yes
Left cheek	190/836.6	GSM	0.300	0.160	-0.04	27.54	28.80	0.401	With SIM2	/
Left cheek	128/824.2	GSM	0.282	0.186	-0.06	27.42	28.80	0.387	Battery 2#	/
Left cheek	251/848.8	GSM	0.306	0.164	-0.01	27.57	28.80	0.406	Battery 2#	/
Main Antenna										
Left cheek	190/836.6	GSM	0.108	0.075	-0.01	33.17	33.80	0.125	Battery 1#	/
Left tilt	190/836.6	GSM	0.052	0.037	-0.13	33.17	33.80	0.060	Battery 1#	/
Right cheek	190/836.6	GSM	0.162	0.127	-0.07	33.17	33.80	0.187	Battery 1#	/
Right tilt	190/836.6	GSM	0.065	0.045	-0.15	33.17	33.80	0.075	Battery 1#	/
Right cheek	190/836.6	GSM	0.174	0.137	-0.17	33.17	33.80	0.201	Battery 2#	/
Right cheek	190/836.6	GSM	0.158	0.124	-0.17	33.17	33.80	0.183	With SIM2	/
Right cheek	128/824.2	GSM	0.132	0.091	-0.08	32.97	33.80	0.160	Battery 2#	/
Right cheek	251/848.8	GSM	0.197	0.155	-0.11	33.23	33.80	0.225	Battery 2#	Yes

Table 132: Head SAR test results of GSM850

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	190/836.6	GSM	0.037	0.025	-0.10	27.54	28.80	0.049	Battery 1#	/
Back Side	15mm	190/836.6	GSM	0.045	0.032	-0.14	27.54	28.80	0.060	Battery 1#	Yes
Back Side	15mm	190/836.6	GSM	0.038	0.028	-0.10	27.54	28.80	0.051	Battery 2#	/
Back Side	15mm	190/836.6	GSM	0.038	0.028	-0.19	27.54	28.80	0.051	With SIM2	/
Main Antenna											
Front Side	15mm	190/836.6	GSM	0.162	0.111	-0.16	33.17	33.80	0.187	Battery 1#	/
Back Side	15mm	190/836.6	GSM	0.209	0.155	-0.15	33.17	33.80	0.242	Battery 1#	Yes
Back Side	15mm	190/836.6	GSM	0.207	0.153	-0.07	33.17	33.80	0.239	Battery 2#	/
Back Side	15mm	190/836.6	GSM	0.208	0.154	-0.17	33.17	33.80	0.240	With SIM2	/

Table 133: Body-Worn SAR test results of GSM850

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	190/836.6	GPRS 2TS	0.087	0.051	-0.18	25.45	26.80	0.119	Battery 1#	/
Back Side	10mm	190/836.6	GPRS 2TS	0.083	0.048	-0.11	25.45	26.80	0.113	Battery 1#	/
Left Side	10mm	190/836.6	GPRS 2TS	0.066	0.044	-0.18	25.45	26.80	0.089	Battery 1#	/
Right Side	10mm	190/836.6	GPRS 2TS	0.014	0.009	-0.19	25.45	26.80	0.019	Battery 1#	/
Top Side	10mm	190/836.6	GPRS 2TS	0.055	0.028	0.11	25.45	26.80	0.075	Battery 1#	/
Front Side	10mm	190/836.6	GPRS 2TS	0.084	0.048	-0.17	25.45	26.80	0.115	Battery 2#	/
Front Side	10mm	190/836.6	GPRS 2TS	0.075	0.046	-0.17	25.45	26.80	0.103	With SIM2	/
Main Antenna											
Front Side	10mm	190/836.6	GPRS 2TS	0.305	0.204	-0.18	30.70	31.80	0.393	Battery 1#	/
Back Side	10mm	190/836.6	GPRS 2TS	0.389	0.236	-0.17	30.70	31.80	0.501	Battery 1#	/
Left Side	10mm	190/836.6	GPRS 2TS	0.118	0.079	-0.16	30.70	31.80	0.152	Battery 1#	/
Right Side	10mm	190/836.6	GPRS 2TS	0.281	0.189	-0.14	30.70	31.80	0.362	Battery 1#	/
Bottom Side	10mm	190/836.6	GPRS 2TS	0.154	0.093	-0.05	30.70	31.80	0.198	Battery 1#	/
Back Side	10mm	190/836.6	GPRS 2TS	0.403	0.245	0.06	30.70	31.80	0.519	Battery 2#	/
Back Side	10mm	190/836.6	GPRS 2TS	0.389	0.234	-0.10	30.70	31.80	0.501	With SIM2	/

Table 134: Hotspot SAR test results of GSM850

## 7.2.2 SAR measurement Result of GSM1900

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	661/1880	GSM	0.147	0.070	-0.17	24.26	25.50	0.196	Battery 1#	/
Left tilt	661/1880	GSM	0.154	0.073	0.19	24.26	25.50	0.205	Battery 1#	/
Right cheek	661/1880	GSM	0.213	0.096	-0.12	24.26	25.50	0.283	Battery 1#	/
Right tilt	661/1880	GSM	0.261	0.114	0.06	24.26	25.50	0.347	Battery 1#	/
Right tilt	661/1880	GSM	0.265	0.117	-0.07	24.26	25.50	0.353	Battery 2#	Yes
Right tilt	661/1880	GSM	0.183	0.084	0.00	24.26	25.50	0.243	With SIM2	/
Right tilt	512/1850.2	GSM	0.205	0.094	-0.19	24.41	25.50	0.263	Battery 2#	/
Right tilt	810/1909.8	GSM	0.223	0.104	0.11	24.19	25.50	0.302	Battery 2#	/
Main Antenna										
Left cheek	661/1880	GSM	0.066	0.042	0.16	29.51	30.50	0.083	Battery 1#	/
Left tilt	661/1880	GSM	0.020	0.011	0.14	29.51	30.50	0.025	Battery 1#	/
Right cheek	661/1880	GSM	0.040	0.026	0.12	29.51	30.50	0.050	Battery 1#	/
Right tilt	661/1880	GSM	0.029	0.018	0.11	29.51	30.50	0.037	Battery 1#	/
Left cheek	661/1880	GSM	0.069	0.044	0.17	29.51	30.50	0.087	Battery 2#	Yes
Left cheek	661/1880	GSM	0.064	0.040	0.13	29.51	30.50	0.080	With SIM2	/
Left cheek	512/1850.2	GSM	0.060	0.038	0.14	29.43	30.50	0.077	Battery 2#	/
Left cheek	810/1909.8	GSM	0.065	0.040	0.14	29.56	30.50	0.080	Battery 2#	/

Table 135: Head SAR test results of GSM1900

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	661/1880	GSM	0.026	0.014	-0.11	25.30	26.50	0.035	Battery 1#	/
Back Side	15mm	661/1880	GSM	0.030	0.017	-0.17	25.30	26.50	0.040	Battery 1#	/
Back Side	15mm	661/1880	GSM	0.031	0.017	0.19	25.30	26.50	0.041	Battery 2#	Yes
Back Side	15mm	661/1880	GSM	0.028	0.015	0.07	25.30	26.50	0.036	With SIM2	/
Main Antenna											
Front Side	15mm	661/1880	GSM	0.240	0.135	0.02	29.51	30.50	0.301	Battery 1#	/
Back Side	15mm	661/1880	GSM	0.293	0.165	0.00	29.51	30.50	0.368	Battery 1#	Yes
Back Side	15mm	661/1880	GSM	0.190	0.107	-0.08	29.51	30.50	0.239	Battery 2#	/
Back Side	15mm	661/1880	GSM	0.205	0.088	0.11	29.51	30.50	0.257	With SIM2	/

Table 136: Body-Worn SAR test results of GSM1900

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	661/1880	GPRS 2TS	0.058	0.027	0.06	23.32	24.50	0.076	Battery 1#	/
Back Side	10mm	661/1880	GPRS 2TS	0.081	0.041	0.12	23.32	24.50	0.106	Battery 1#	/
Left Side	10mm	661/1880	GPRS 2TS	0.012	0.007	-0.05	23.32	24.50	0.015	Battery 1#	/
Right Side	10mm	661/1880	GPRS 2TS	0.005	0.003	-0.03	23.32	24.50	0.006	Battery 1#	/
Top Side	10mm	661/1880	GPRS 2TS	0.130	0.064	-0.13	23.32	24.50	0.171	Battery 1#	/
Top Side	10mm	661/1880	GPRS 2TS	0.145	0.071	-0.09	23.32	24.50	0.190	Battery 2#	Yes
Top Side	10mm	661/1880	GPRS 2TS	0.125	0.062	-0.18	23.32	24.50	0.164	With SIM2	/
Main Antenna											
Front Side	10mm	661/1880	GPRS 2TS	0.155	0.082	-0.02	22.34	23.50	0.202	Battery 1#	/
Back Side	10mm	661/1880	GPRS 2TS	0.196	0.103	-0.05	22.34	23.50	0.256	Battery 1#	/
Left Side	10mm	661/1880	GPRS 2TS	0.014	0.008	-0.08	22.34	23.50	0.018	Battery 1#	/
Right Side	10mm	661/1880	GPRS 2TS	0.026	0.014	-0.14	22.34	23.50	0.034	Battery 1#	/
Bottom Side	10mm	661/1880	GPRS 2TS	0.352	0.181	-0.07	22.34	23.50	0.460	Battery 1#	/
Bottom Side	10mm	661/1880	GPRS 2TS	0.385	0.196	-0.01	22.34	23.50	0.503	Battery 2#	/
Bottom Side	10mm	661/1880	GPRS 2TS	0.371	0.189	-0.11	22.34	23.50	0.485	With SIM2	/

Table 137: Hotspot SAR test results of GSM1900

Per KDB648474D04, when hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled-up 1-g SAR (W/kg)	Product Specific 10-g SAR Exclusion
				1-g	10-g					
Main Antenna										
Front Side	10mm	661/1880	GPRS 2TS	0.155	0.082	-0.02	22.34	28.50	0.640	Yes
Back Side	10mm	661/1880	GPRS 2TS	0.196	0.103	-0.05	22.34	28.50	0.810	Yes
Left Side	10mm	661/1880	GPRS 2TS	0.014	0.008	-0.08	22.34	28.50	0.057	Yes
Right Side	10mm	661/1880	GPRS 2TS	0.026	0.014	-0.14	22.34	28.50	0.107	Yes
Bottom Side	10mm	661/1880	GPRS 2TS	0.352	0.181	-0.07	22.34	28.50	1.454	No
Bottom Side	10mm	661/1880	GPRS 2TS	0.385	0.196	-0.01	22.34	28.50	1.590	No
Bottom Side	10mm	661/1880	GPRS 2TS	0.371	0.189	-0.11	22.34	28.50	1.532	No

Table 138: Product Specific 10-g SAR test reduction evaluation of GSM1900

Note : According to the table above , Product Specific 10-g SAR test is required for this frequency band for Bottom Side (Main Antenna)

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Main Antenna											
Bottom Side	0mm	661/1880	GPRS 2TS	4.030	1.720	-0.16	25.74	27.00	2.299	Battery 1#	Yes
Bottom Side	0mm	512/1850.2	GPRS 2TS	3.770	1.660	-0.12	25.56	27.00	2.313	Battery 1#	/
Bottom Side	0mm	810/1909.8	GPRS 2TS	3.360	1.510	-0.18	25.90	27.00	1.945	Battery 1#	/
Bottom Side	0mm	512/1850.2	GPRS 2TS	3.850	1.700	-0.19	25.56	27.00	2.368	Battery 2#	/
Bottom Side	0mm	512/1850.2	GPRS 2TS	3.100	1.370	-0.14	25.56	27.00	1.909	With SIM2	/
Additional SAR test at a conservative distance(triggering distance minus 1mm)											
Bottom Side	8mm	661/1880	GPRS 2TS	2.570	1.160	-0.12	27.32	28.50	1.522	Battery 1#	/

Table 139: Product Specific 10-g SAR SAR test results of GSM1900

### 7.2.3 SAR measurement Result of UMTS Band II

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	9400/1880	RMC	0.161	0.082	-0.10	13.70	15.00	0.217	Battery 1#	/
Left tilt	9400/1880	RMC	0.183	0.085	0.19	13.70	15.00	0.247	Battery 1#	/
Right cheek	9400/1880	RMC	0.245	0.104	0.07	13.70	15.00	0.330	Battery 1#	/
Right tilt	9400/1880	RMC	0.293	0.124	0.12	13.70	15.00	0.395	Battery 1#	/
Right tilt	9400/1880	RMC	0.243	0.104	-0.06	13.70	15.00	0.328	Battery 2#	/
Right tilt	9400/1880	RMC	0.264	0.111	-0.05	13.70	15.00	0.356	With SIM2	/
Right tilt	9262/1852.4	RMC	0.254	0.126	-0.08	13.72	15.00	0.341	Battery 1#	/
Right tilt	9538/1907.6	RMC	0.293	0.125	0.09	13.82	15.00	0.384	Battery 1#	Yes
Main Antenna										
Left cheek	9400/1880	RMC	0.134	0.087	0.04	23.77	25.00	0.178	Battery 1#	Yes
Left tilt	9400/1880	RMC	0.130	0.075	0.01	23.77	25.00	0.173	Battery 1#	/
Right cheek	9400/1880	RMC	0.082	0.055	0.01	23.77	25.00	0.109	Battery 1#	/
Right tilt	9400/1880	RMC	0.062	0.039	0.08	23.77	25.00	0.082	Battery 1#	/
Left cheek	9400/1880	RMC	0.120	0.078	0.00	23.77	25.00	0.159	Battery 2#	/
Left cheek	9400/1880	RMC	0.107	0.062	0.12	23.77	25.00	0.142	With SIM2	/
Left cheek	9262/1852.4	RMC	0.107	0.062	0.01	24.15	25.00	0.130	Battery 1#	/
Left cheek	9538/1907.6	RMC	0.128	0.081	0.07	24.25	25.00	0.152	Battery 1#	/

Table 140: Head SAR test results of UMTS Band II

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	9400/1880	RMC	0.094	0.051	-0.13	20.71	22.00	0.127	Battery 1#	/
Back Side	15mm	9400/1880	RMC	0.110	0.060	-0.19	20.71	22.00	0.148	Battery 1#	Yes
Back Side	15mm	9400/1880	RMC	0.108	0.059	-0.08	20.71	22.00	0.145	Battery 2#	/
Back Side	15mm	9400/1880	RMC	0.107	0.058	0.01	20.71	22.00	0.144	With SIM2	/
Main Antenna											
Front Side	15mm	9400/1880	RMC	0.507	0.272	-0.05	23.77	25.00	0.673	Battery 1#	/
Back Side	15mm	9400/1880	RMC	0.608	0.344	-0.03	23.77	25.00	0.807	Battery 1#	/
Back Side	15mm	9538/1907.6	RMC	0.629	0.356	0.05	23.77	25.00	0.835	Battery 1#	/
Back Side	15mm	9262/1852.4	RMC	0.622	0.349	0.00	24.15	25.00	0.756	Battery 1#	/
Back Side	15mm	9538/1907.6	RMC	0.648	0.364	0.06	24.25	25.00	0.770	Battery 2#	Yes
Back Side	15mm	9538/1907.6	RMC	0.617	0.348	-0.08	24.25	25.00	0.733	With SIM2	/

Table 141: Body-Worn SAR test results of UMTS Band II

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	9400/1880	RMC	0.243	0.117	0.10	18.73	20.00	0.326	Battery 1#	/
Back Side	10mm	9400/1880	RMC	0.240	0.120	0.02	18.73	20.00	0.322	Battery 1#	/
Left Side	10mm	9400/1880	RMC	0.024	0.014	0.02	18.73	20.00	0.033	Battery 1#	/
Right Side	10mm	9400/1880	RMC	0.006	0.004	-0.01	18.73	20.00	0.008	Battery 1#	/
Top Side	10mm	9400/1880	RMC	0.288	0.138	-0.04	18.73	20.00	0.386	Battery 1#	/
Top Side	10mm	9400/1880	RMC	0.316	0.155	-0.11	18.73	20.00	0.423	Battery 2#	Yes
Top Side	10mm	9400/1880	RMC	0.286	0.137	-0.15	18.73	20.00	0.383	With SIM2	/
Main Antenna											
Front Side	10mm	9400/1880	RMC	0.200	0.101	0.13	16.79	18.00	0.264	Battery 1#	/
Back Side	10mm	9400/1880	RMC	0.277	0.145	0.09	16.79	18.00	0.366	Battery 1#	/
Left Side	10mm	9400/1880	RMC	0.022	0.012	0.10	16.79	18.00	0.029	Battery 1#	/
Right Side	10mm	9400/1880	RMC	0.037	0.019	-0.02	16.79	18.00	0.049	Battery 1#	/
Bottom Side	10mm	9400/1880	RMC	0.579	0.292	-0.08	16.79	18.00	0.765	Battery 1#	Yes
Bottom Side	10mm	9400/1880	RMC	0.561	0.284	-0.08	16.79	18.00	0.741	Battery 2#	/
Bottom Side	10mm	9400/1880	RMC	0.572	0.289	-0.08	16.79	18.00	0.756	With SIM2	/

Table 142: Hotspot SAR test results of UMTS Band II

Per KDB648474D04, when hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled-up 1-g SAR (W/kg)	Product Specific 10-g SAR Exclusion
				1-g	10-g					
Second Antenna										
Front Side	10mm	9400/1880	RMC	0.243	0.117	0.10	18.73	22.00	0.516	Yes
Back Side	10mm	9400/1880	RMC	0.240	0.120	0.02	18.73	22.00	0.510	Yes
Left Side	10mm	9400/1880	RMC	0.024	0.014	0.02	18.73	22.00	0.052	Yes
Right Side	10mm	9400/1880	RMC	0.006	0.004	-0.01	18.73	22.00	0.013	Yes
Top Side	10mm	9400/1880	RMC	0.288	0.138	-0.04	18.73	22.00	0.611	Yes
Top Side	10mm	9400/1880	RMC	0.316	0.155	-0.11	18.73	22.00	0.671	Yes
Top Side	10mm	9400/1880	RMC	0.286	0.137	-0.15	18.73	22.00	0.607	Yes
Main Antenna										
Front Side	10mm	9400/1880	RMC	0.200	0.101	0.13	16.79	25.00	1.324	No
Back Side	10mm	9400/1880	RMC	0.277	0.145	0.09	16.79	25.00	1.834	No
Left Side	10mm	9400/1880	RMC	0.022	0.012	0.10	16.79	25.00	0.146	Yes
Right Side	10mm	9400/1880	RMC	0.037	0.019	-0.02	16.79	25.00	0.246	Yes
Bottom Side	10mm	9400/1880	RMC	0.579	0.292	-0.08	16.79	25.00	3.834	No
Bottom Side	10mm	9400/1880	RMC	0.561	0.284	-0.08	16.79	25.00	3.715	No
Bottom Side	10mm	9400/1880	RMC	0.572	0.289	-0.08	16.79	25.00	3.788	No

Table 143: Product Specific 10-g SAR test reduction evaluation of UMTS Band II

Note : According to the table above , Product Specific 10-g SAR test is required for this frequency band for Front Side, Back Side, Bottom Side(Main antenna)

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Main Antenna											
Front Side	0mm	9400/1880	RMC	3.660	1.600	-0.02	20.29	21.50	2.114	Battery 1#	/
Front Side	0mm	9262/1852.4	RMC	3.590	1.570	-0.01	20.34	21.50	2.051	Battery 1#	/
Front Side	0mm	9538/1907.6	RMC	3.720	1.620	-0.02	20.38	21.50	2.097	Battery 1#	/
Back Side	0mm	9400/1880	RMC	3.000	1.270	-0.01	20.29	21.50	1.678	Battery 1#	/
Bottom Side	0mm	9400/1880	RMC	5.750	2.400	-0.18	20.29	21.50	3.171	Battery 1#	Yes
Bottom Side-holder perturbation verification	0mm	9400/1880	RMC	4.670	2.070	-0.08	20.29	21.50	2.735	Battery 1#	/
Bottom Side Repeated	0mm	9400/1880	RMC	4.720	2.080	0.12	20.29	21.50	2.748	Battery 1#	/
Bottom Side	0mm	9262/1852.4	RMC	4.800	2.130	-0.14	20.34	21.50	2.782	Battery 1#	/
Bottom Side	0mm	9538/1907.6	RMC	4.820	2.180	-0.13	20.38	21.50	2.821	Battery 1#	/
Bottom Side	0mm	9400/1880	RMC	4.710	2.110	-0.13	20.29	21.50	2.788	Battery 2#	/
Bottom Side	0mm	9400/1880	RMC	5.470	2.340	0.11	20.29	21.50	3.092	With SIM2	/
Additional SAR test at a conservative distance(triggering distance minus 1mm)											
Front Side	3mm	9400/1880	RMC	4.570	1.940	-0.01	23.77	25.00	2.575	Battery 1#	/
Front Side	3mm	9262/1852.4	RMC	4.690	2.070	0.10	24.15	25.00	2.518	Battery 1#	/
Front Side	3mm	9538/1907.6	RMC	4.950	2.170	0.02	24.25	25.00	2.579	Battery 1#	/
Back Side	4mm	9400/1880	RMC	3.960	1.810	-0.08	23.77	25.00	2.403	Battery 1#	/
Back Side	4mm	9262/1852.4	RMC	4.310	1.980	-0.02	24.15	25.00	2.408	Battery 1#	/
Back Side	4mm	9538/1907.6	RMC	4.580	2.080	-0.07	24.25	25.00	2.472	Battery 1#	/
Bottom Side	8mm	9400/1880	RMC	5.100	2.370	0.05	23.77	25.00	3.146	Battery 1#	/
Bottom Side	8mm	9262/1852.4	RMC	4.650	2.100	-0.13	24.15	25.00	2.554	Battery 1#	/
Bottom Side	8mm	9538/1907.6	RMC	5.100	2.360	-0.12	24.25	25.00	2.805	Battery 1#	/

Table 144: Product Specific 10-g SAR test results of UMTS Band II



## 7.2.4 SAR measurement Result of UMTS Band IV

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	1413/1732.6	RMC	0.104	0.055	-0.06	12.80	14.00	0.137	Battery 1#	/
Left tilt	1413/1732.6	RMC	0.099	0.054	0.15	12.80	14.00	0.130	Battery 1#	/
Right cheek	1413/1732.6	RMC	0.163	0.075	-0.04	12.80	14.00	0.215	Battery 1#	/
Right tilt	1413/1732.6	RMC	0.157	0.071	-0.01	12.80	14.00	0.207	Battery 1#	/
Right cheek	1413/1732.6	RMC	0.175	0.085	-0.11	12.80	14.00	0.231	Battery 2#	Yes
Right cheek	1413/1732.6	RMC	0.151	0.069	-0.14	12.80	14.00	0.199	With SIM2	/
Right cheek	1312/1712.4	RMC	0.133	0.062	-0.13	12.74	14.00	0.178	Battery 2#	/
Right cheek	1513/1752.6	RMC	0.162	0.073	0.00	12.66	14.00	0.221	Battery 2#	/
Main Antenna										
Left cheek	1413/1732.6	RMC	0.123	0.081	-0.13	24.04	25.00	0.153	Battery 1#	/
Left tilt	1413/1732.6	RMC	0.044	0.025	-0.06	24.04	25.00	0.055	Battery 1#	/
Right cheek	1413/1732.6	RMC	0.073	0.045	-0.18	24.04	25.00	0.092	Battery 1#	/
Right tilt	1413/1732.6	RMC	0.047	0.027	0.00	24.04	25.00	0.058	Battery 1#	/
Left cheek	1413/1732.6	RMC	0.121	0.080	-0.14	24.04	25.00	0.151	Battery 2#	/
Left cheek	1413/1732.6	RMC	0.111	0.064	0.10	24.04	25.00	0.138	With SIM2	/
Left cheek	1312/1712.4	RMC	0.113	0.066	-0.19	23.90	25.00	0.146	Battery 1#	/
Left cheek	1513/1752.6	RMC	0.133	0.087	-0.08	23.87	25.00	0.173	Battery 1#	Yes

Table 145: Head SAR test results of UMTS Band IV

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	1413/1732.6	RMC	0.090	0.049	-0.13	21.35	22.50	0.118	Battery 1#	/
Back Side	15mm	1413/1732.6	RMC	0.122	0.066	-0.18	21.35	22.50	0.159	Battery 1#	Yes
Back Side	15mm	1413/1732.6	RMC	0.107	0.060	-0.19	21.35	22.50	0.139	Battery 2#	/
Back Side	15mm	1413/1732.6	RMC	0.105	0.058	-0.15	21.35	22.50	0.137	With SIM2	/
Main Antenna											
Front Side	15mm	1413/1732.6	RMC	0.591	0.342	-0.08	24.04	25.00	0.737	Battery 1#	/
Back Side	15mm	1413/1732.6	RMC	0.627	0.369	-0.15	24.04	25.00	0.782	Battery 1#	Yes
Back Side	15mm	1413/1732.6	RMC	0.572	0.335	-0.18	24.04	25.00	0.714	Battery 2#	/
Back Side	15mm	1413/1732.6	RMC	0.577	0.338	-0.17	24.04	25.00	0.720	With SIM2	/

Table 146: Body-Worn SAR test results of UMTS Band IV

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	1413/1732.6	RMC	0.206	0.105	-0.18	20.38	21.50	0.267	Battery 1#	/
Back Side	10mm	1413/1732.6	RMC	0.211	0.111	-0.14	20.38	21.50	0.273	Battery 1#	/
Left Side	10mm	1413/1732.6	RMC	0.017	0.009	-0.10	20.38	21.50	0.022	Battery 1#	/
Right Side	10mm	1413/1732.6	RMC	0.012	0.007	-0.17	20.38	21.50	0.016	Battery 1#	/
Top Side	10mm	1413/1732.6	RMC	0.264	0.124	0.17	20.38	21.50	0.342	Battery 1#	/
Top Side	10mm	1413/1732.6	RMC	0.267	0.125	0.09	20.38	21.50	0.346	Battery 2#	Yes
Top Side	10mm	1413/1732.6	RMC	0.244	0.114	0.18	20.38	21.50	0.316	With SIM2	/
Main Antenna											
Front Side	10mm	1413/1732.6	RMC	0.309	0.163	-0.04	17.48	18.50	0.391	Battery 1#	/
Back Side	10mm	1413/1732.6	RMC	0.332	0.180	-0.13	17.48	18.50	0.420	Battery 1#	/
Left Side	10mm	1413/1732.6	RMC	0.019	0.011	-0.16	17.48	18.50	0.024	Battery 1#	/
Right Side	10mm	1413/1732.6	RMC	0.044	0.024	-0.16	17.48	18.50	0.055	Battery 1#	/
Bottom Side	10mm	1413/1732.6	RMC	0.529	0.277	-0.17	17.48	18.50	0.669	Battery 1#	/
Bottom Side	10mm	1413/1732.6	RMC	0.533	0.279	-0.19	17.48	18.50	0.674	Battery 2#	Yes
Bottom Side	10mm	1413/1732.6	RMC	0.495	0.249	-0.19	17.48	18.50	0.626	With SIM2	/

Table 147: Hotspot SAR test results of UMTS Band IV

Per KDB648474D04, when hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled-up 1-g SAR (W/kg)	Product Specific 10-g SAR Exclusion
				1-g	10-g					
Second Antenna										
Front Side	10mm	1413/1732.6	RMC	0.206	0.105	-0.18	20.38	22.50	0.336	Yes
Back Side	10mm	1413/1732.6	RMC	0.211	0.111	-0.14	20.38	22.50	0.344	Yes
Left Side	10mm	1413/1732.6	RMC	0.017	0.009	-0.10	20.38	22.50	0.028	Yes
Right Side	10mm	1413/1732.6	RMC	0.012	0.007	-0.17	20.38	22.50	0.020	Yes
Top Side	10mm	1413/1732.6	RMC	0.264	0.124	0.17	20.38	22.50	0.430	Yes
Top Side	10mm	1413/1732.6	RMC	0.267	0.125	0.09	20.38	22.50	0.435	Yes
Top Side	10mm	1413/1732.6	RMC	0.244	0.114	0.18	20.38	22.50	0.398	Yes
Main Antenna										
Front Side	10mm	1413/1732.6	RMC	0.309	0.163	-0.04	17.48	25.00	1.746	No
Back Side	10mm	1413/1732.6	RMC	0.332	0.180	-0.13	17.48	25.00	1.876	No
Left Side	10mm	1413/1732.6	RMC	0.019	0.011	-0.16	17.48	25.00	0.105	Yes
Right Side	10mm	1413/1732.6	RMC	0.044	0.024	-0.16	17.48	25.00	0.247	Yes
Bottom Side	10mm	1413/1732.6	RMC	0.529	0.277	-0.17	17.48	25.00	2.989	No
Bottom Side	10mm	1413/1732.6	RMC	0.533	0.279	-0.19	17.48	25.00	3.011	No
Bottom Side	10mm	1413/1732.6	RMC	0.495	0.249	-0.19	17.48	25.00	2.796	No

Table 148: Product Specific 10-g SAR test reduction evaluation of UMTS Band IV

Note : According to the table above , Product Specific 10-g SAR test is required for this frequency band for Front Side, Back Side, Bottom Side

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Main Antenna											
Front Side	0mm	1413/1732.6	RMC	3.890	1.580	0.09	19.80	20.50	1.856	Battery 1#	/
Back Side	0mm	1413/1732.6	RMC	3.550	1.540	-0.15	19.80	20.50	1.809	Battery 1#	/
Bottom Side	0mm	1413/1732.6	RMC	4.180	1.790	0.14	19.80	20.50	2.103	Battery 1#	/
Bottom Side	0mm	1312/1712.4	RMC	3.290	1.460	-0.12	19.45	20.50	1.859	Battery 1#	/
Bottom Side	0mm	1513/1752.6	RMC	3.210	1.410	-0.10	19.45	20.50	1.796	Battery 1#	/
Bottom Side	0mm	1413/1732.6	RMC	4.110	1.760	-0.11	19.80	20.50	2.068	Battery 2#	/
Bottom Side	0mm	1413/1732.6	RMC	4.150	1.710	-0.10	19.80	20.50	2.009	With SIM2	/
Additional SAR test at a conservative distance(triggering distance minus 1mm)											
Front Side	3mm	1413/1732.6	RMC	3.890	1.770	-0.10	24.04	25.00	2.208	Battery 1#	/
Front Side	3mm	1312/1712.4	RMC	2.570	1.360	-0.16	23.90	25.00	1.752	Battery 1#	/
Front Side	3mm	1513/1752.6	RMC	3.100	1.620	-0.16	23.87	25.00	2.101	Battery 1#	/
Back Side	4mm	1413/1732.6	RMC	3.990	1.870	-0.18	24.04	25.00	2.333	Battery 1#	/
Back Side	4mm	1312/1712.4	RMC	3.340	1.460	-0.12	23.90	25.00	1.881	Battery 1#	/
Back Side	4mm	1513/1752.6	RMC	4.270	2.000	-0.18	23.87	25.00	2.594	Battery 1#	/
Bottom Side	8mm	1413/1732.6	RMC	4.780	2.230	-0.10	24.04	25.00	2.782	Battery 1#	/
Bottom Side	8mm	1312/1712.4	RMC	3.230	1.500	-0.11	23.90	25.00	1.932	Battery 1#	/
Bottom Side	8mm	1513/1752.6	RMC	4.870	2.270	-0.15	23.87	25.00	2.945	Battery 1#	Yes
Bottom Side Repeated	8mm	1513/1752.6	RMC	3.850	1.890	0.09	23.87	25.00	2.452	Battery 1#	/

Table 149: Product Specific 10-g SAR test results of UMTS Band IV

## 7.2.5 SAR measurement Result of UMTS Band V

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	4182/836.4	RMC	0.358	0.198	-0.18	18.99	20.50	0.507	Battery 1#	/
Left tilt	4182/836.4	RMC	0.278	0.181	-0.17	18.99	20.50	0.394	Battery 1#	/
Right cheek	4182/836.4	RMC	0.350	0.206	-0.08	18.99	20.50	0.496	Battery 1#	/
Right tilt	4182/836.4	RMC	0.290	0.172	-0.06	18.99	20.50	0.411	Battery 1#	/
Left cheek	4182/836.4	RMC	0.394	0.212	-0.05	18.99	20.50	0.558	Battery 2#	Yes
Left cheek	4182/836.4	RMC	0.360	0.197	-0.04	18.99	20.50	0.510	With SIM2	/
Left cheek	4132/826.4	RMC	0.341	0.223	-0.05	19.02	20.50	0.479	Battery 2#	/
Left cheek	4233/846.6	RMC	0.379	0.207	-0.04	18.98	20.50	0.538	Battery 2#	/
Main Antenna										
Left cheek	4182/836.4	RMC	0.130	0.091	-0.15	24.55	25.00	0.144	Battery 1#	/
Left tilt	4182/836.4	RMC	0.062	0.044	-0.17	24.55	25.00	0.069	Battery 1#	/
Right cheek	4182/836.4	RMC	0.190	0.149	-0.18	24.55	25.00	0.211	Battery 1#	/
Right tilt	4182/836.4	RMC	0.078	0.055	-0.16	24.55	25.00	0.087	Battery 1#	/
Right cheek	4182/836.4	RMC	0.211	0.165	-0.13	24.55	25.00	0.234	Battery 2#	/
Right cheek	4182/836.4	RMC	0.190	0.150	0.04	24.55	25.00	0.211	With SIM2	/
Right cheek	4132/826.4	RMC	0.156	0.107	-0.15	24.47	25.00	0.176	Battery 2#	/
Right cheek	4233/846.6	RMC	0.224	0.176	-0.16	24.42	25.00	0.256	Battery 2#	Yes

Table 150: Head SAR test results of UMTS Band V

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	4182/836.4	RMC	0.132	0.089	-0.13	23.55	25.00	0.184	Battery 1#	/
Back Side	15mm	4182/836.4	RMC	0.133	0.098	-0.12	23.55	25.00	0.186	Battery 1#	/
Back Side	15mm	4182/836.4	RMC	0.139	0.102	-0.15	23.55	25.00	0.194	Battery 2#	Yes
Back Side	15mm	4182/836.4	RMC	0.138	0.102	-0.12	23.55	25.00	0.193	With SIM2	/
Main Antenna											
Front Side	15mm	4182/836.4	RMC	0.167	0.115	-0.17	24.55	25.00	0.185	Battery 1#	/
Back Side	15mm	4182/836.4	RMC	0.212	0.157	-0.05	24.55	25.00	0.235	Battery 1#	/
Back Side	15mm	4182/836.4	RMC	0.246	0.182	-0.04	24.55	25.00	0.273	Battery 2#	Yes
Back Side	15mm	4182/836.4	RMC	0.232	0.173	-0.06	24.55	25.00	0.257	With SIM2	/

Table 151: Body-Worn SAR test results of UMTS Band V

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	4182/836.4	RMC	0.233	0.135	-0.10	23.55	25.00	0.325	Battery 1#	/
Back Side	10mm	4182/836.4	RMC	0.243	0.140	-0.12	23.55	25.00	0.339	Battery 1#	/
Left Side	10mm	4182/836.4	RMC	0.148	0.100	-0.04	23.55	25.00	0.207	Battery 1#	/
Right Side	10mm	4182/836.4	RMC	0.036	0.024	-0.17	23.55	25.00	0.050	Battery 1#	/
Top Side	10mm	4182/836.4	RMC	0.145	0.077	0.09	23.55	25.00	0.202	Battery 1#	/
Back Side	10mm	4182/836.4	RMC	0.260	0.149	-0.10	23.55	25.00	0.363	Battery 2#	Yes
Back Side	10mm	4182/836.4	RMC	0.216	0.126	-0.14	23.55	25.00	0.302	With SIM2	/
Main Antenna											
Front Side	10mm	4182/836.4	RMC	0.237	0.163	-0.17	24.55	25.00	0.263	Battery 1#	/
Back Side	10mm	4182/836.4	RMC	0.346	0.209	-0.04	24.55	25.00	0.384	Battery 1#	/
Left Side	10mm	4182/836.4	RMC	0.077	0.052	-0.11	24.55	25.00	0.086	Battery 1#	/
Right Side	10mm	4182/836.4	RMC	0.292	0.195	-0.03	24.55	25.00	0.324	Battery 1#	/
Bottom Side	10mm	4182/836.4	RMC	0.147	0.084	0.14	24.55	25.00	0.163	Battery 1#	/
Back Side	10mm	4182/836.4	RMC	0.355	0.217	-0.05	24.55	25.00	0.394	Battery 2#	Yes
Back Side	10mm	4182/836.4	RMC	0.328	0.201	-0.05	24.55	25.00	0.364	With SIM2	/

Table 152: Hotspot SAR test results of UMTS Band V

## 7.2.6 SAR measurement Result of LTE Band 2

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	19100/1900	20M QPSK 1RB#0	0.139	0.072	0.04	11.90	12.50	0.160	Battery 1#	/
Left tilt	19100/1900	20M QPSK 1RB#0	0.165	0.082	0.04	11.90	12.50	0.189	Battery 1#	/
Right cheek	19100/1900	20M QPSK 1RB#0	0.200	0.087	0.02	11.90	12.50	0.230	Battery 1#	/
Right tilt	19100/1900	20M QPSK 1RB#0	0.229	0.098	-0.01	11.90	12.50	0.263	Battery 1#	/
Left cheek	19100/1900	20M QPSK 50%RB#0	0.081	0.041	0.01	11.79	12.50	0.095	Battery 1#	/
Left tilt	19100/1900	20M QPSK 50%RB#0	0.113	0.058	0.03	11.79	12.50	0.133	Battery 1#	/
Right cheek	19100/1900	20M QPSK 50%RB#0	0.120	0.061	-0.05	11.79	12.50	0.141	Battery 1#	/
Right tilt	19100/1900	20M QPSK 50%RB#0	0.164	0.069	0.00	11.79	12.50	0.193	Battery 1#	/
Right tilt	19100/1900	20M QPSK 1RB#0	0.234	0.097	-0.06	11.90	12.50	0.269	Battery 2#	Yes
Right tilt	19100/1900	20M QPSK 1RB#0	0.166	0.084	0.00	11.90	12.50	0.191	With SIM2	/
Right tilt	18700/1860	20M QPSK 1RB#50	0.206	0.089	0.13	10.97	12.50	0.293	Battery 2#	/
Right tilt	18900/1880	20M QPSK 1RB#0	0.113	0.049	-0.01	10.77	12.50	0.168	Battery 2#	/
Main Antenna										
Left cheek	19100/1900	20M QPSK 1RB#50	0.047	0.029	0.08	23.40	24.50	0.060	Battery 1#	/
Left tilt	19100/1900	20M QPSK 1RB#50	0.014	0.008	-0.07	23.40	24.50	0.018	Battery 1#	/
Right cheek	19100/1900	20M QPSK 1RB#50	0.058	0.036	0.02	23.40	24.50	0.075	Battery 1#	/
Right tilt	19100/1900	20M QPSK 1RB#50	0.047	0.029	-0.14	23.40	24.50	0.061	Battery 1#	/
Left cheek	18700/1860	20M QPSK 50%RB#25	0.050	0.040	-0.10	22.36	23.50	0.066	Battery 1#	/
Left tilt	18700/1860	20M QPSK 50%RB#25	0.029	0.016	0.10	22.36	23.50	0.038	Battery 1#	/
Right cheek	18700/1860	20M QPSK 50%RB#25	0.033	0.019	-0.09	22.36	23.50	0.042	Battery 1#	/
Right tilt	18700/1860	20M QPSK 50%RB#25	0.051	0.031	-0.16	22.36	23.50	0.066	Battery 1#	/
Right cheek	19100/1900	20M QPSK 1RB#50	0.066	0.042	0.04	23.40	24.50	0.085	With SIM2	/
Right cheek	19100/1900	20M QPSK 1RB#50	0.071	0.046	-0.14	23.40	24.50	0.092	Battery 2#	Yes
Right cheek	18700/1860	20M QPSK 1RB#99	0.066	0.040	0.08	23.37	24.50	0.086	Battery 2#	/
Right cheek	18900/1880	20M QPSK 1RB#50	0.060	0.035	0.16	23.35	24.50	0.078	Battery 2#	/

Table 153: Head SAR test results of LTE Band 2

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	19100/1900	20M QPSK 1RB#0	0.141	0.076	0.02	18.60	19.50	0.173	Battery 1#	/
Back Side	15mm	19100/1900	20M QPSK 1RB#0	0.156	0.086	-0.01	18.60	19.50	0.192	Battery 1#	Yes
Front Side	15mm	19100/1900	20M QPSK 50%RB#0	0.093	0.050	0.07	18.57	19.50	0.115	Battery 1#	/
Back Side	15mm	19100/1900	20M QPSK 50%RB#0	0.098	0.051	0.16	18.57	19.50	0.121	Battery 1#	/
Back Side	15mm	19100/1900	20M QPSK 1RB#0	0.090	0.050	0.02	18.60	19.50	0.111	Battery 2#	/
Back Side	15mm	19100/1900	20M QPSK 1RB#0	0.088	0.048	0.12	18.60	19.50	0.108	With SIM2	/
Main Antenna											
Front Side	15mm	19100/1900	20M QPSK 1RB#50	0.484	0.271	-0.18	23.40	24.50	0.624	Battery 1#	/
Back Side	15mm	19100/1900	20M QPSK 1RB#50	0.470	0.262	0.01	23.40	24.50	0.605	Battery 1#	/
Front Side	15mm	18700/1860	20M QPSK 50%RB#25	0.359	0.201	-0.12	22.36	23.50	0.467	Battery 1#	/
Back Side	15mm	18700/1860	20M QPSK 50%RB#25	0.399	0.224	-0.14	22.36	23.50	0.519	Battery 1#	/
Front Side	15mm	19100/1900	20M QPSK 1RB#50	0.620	0.347	-0.10	23.40	24.50	0.799	Battery 2#	Yes
Front Side	15mm	19100/1900	20M QPSK 1RB#50	0.514	0.288	-0.06	23.40	24.50	0.662	With SIM2	/

Table 154: Body-Worn SAR test results of LTE Band 2

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	19100/1900	20M QPSK 1RB#0	0.285	0.139	-0.02	17.47	18.50	0.361	Battery 1#	/
Back Side	10mm	19100/1900	20M QPSK 1RB#0	0.320	0.162	-0.06	17.47	18.50	0.406	Battery 1#	/
Left Side	10mm	19100/1900	20M QPSK 1RB#0	0.057	0.030	-0.05	17.47	18.50	0.072	Battery 1#	/
Right Side	10mm	19100/1900	20M QPSK 1RB#0	0.013	0.007	0.08	17.47	18.50	0.016	Battery 1#	/
Top Side	10mm	19100/1900	20M QPSK 1RB#0	0.570	0.278	0.08	17.47	18.50	0.723	Battery 1#	Yes
Front Side	10mm	19100/1900	20M QPSK 50%RB#0	0.201	0.101	-0.11	17.40	18.50	0.259	Battery 1#	/
Back Side	10mm	19100/1900	20M QPSK 50%RB#0	0.205	0.104	-0.02	17.40	18.50	0.264	Battery 1#	/
Left Side	10mm	19100/1900	20M QPSK 50%RB#0	0.036	0.019	-0.13	17.40	18.50	0.047	Battery 1#	/
Right Side	10mm	19100/1900	20M QPSK 50%RB#0	0.010	0.005	0.18	17.40	18.50	0.013	Battery 1#	/
Top Side	10mm	19100/1900	20M QPSK 50%RB#0	0.375	0.183	0.08	17.40	18.50	0.483	Battery 1#	/
Top Side	10mm	19100/1900	20M QPSK 1RB#0	0.475	0.232	-0.09	17.47	18.50	0.602	Battery 2#	/
Top Side	10mm	19100/1900	20M QPSK 1RB#0	0.455	0.223	-0.11	17.47	18.50	0.577	With SIM2	/
Main Antenna											
Front Side	10mm	18700/1860	20M QPSK 1RB#99	0.221	0.115	0.03	16.74	17.50	0.263	Battery 2#	/
Back Side	10mm	18700/1860	20M QPSK 1RB#99	0.263	0.140	-0.18	16.74	17.50	0.313	Battery 1#	/
Left Side	10mm	18700/1860	20M QPSK 1RB#99	0.019	0.011	-0.18	16.74	17.50	0.022	Battery 1#	/
Right Side	10mm	18700/1860	20M QPSK 1RB#99	0.184	0.093	-0.18	16.74	17.50	0.219	Battery 1#	/
Bottom Side	10mm	18700/1860	20M QPSK 1RB#99	0.514	0.263	0.17	16.74	17.50	0.612	Battery 1#	Yes
Front Side	10mm	18700/1860	20M QPSK 50%RB#0	0.197	0.095	0.19	16.76	17.50	0.234	Battery 1#	/
Back Side	10mm	18700/1860	20M QPSK 50%RB#0	0.258	0.137	-0.06	16.76	17.50	0.306	Battery 1#	/
Left Side	10mm	18700/1860	20M QPSK 50%RB#0	0.018	0.011	-0.02	16.76	17.50	0.022	Battery 1#	/
Right Side	10mm	18700/1860	20M QPSK 50%RB#0	0.040	0.020	0.12	16.76	17.50	0.047	Battery 1#	/
Bottom Side	10mm	18700/1860	20M QPSK 50%RB#0	0.492	0.253	0.18	16.76	17.50	0.583	Battery 1#	/
Bottom Side	10mm	18700/1860	20M QPSK 1RB#99	0.429	0.220	0.16	16.74	17.50	0.511	Battery 2#	/
Bottom Side	10mm	18700/1860	20M QPSK 1RB#99	0.436	0.203	0.14	16.74	17.50	0.519	With SIM2	/

Table 155: Hotspot SAR test results of LTE Band 2



Per KDB648474D04, when hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled-up 1-g SAR (W/kg)	Product Specific 10-g SAR Exclusion
				1-g	10-g					
Second Antenna										
Front Side	10mm	19100/1900	20M QPSK 1RB#0	0.285	0.139	-0.02	17.47	19.50	0.455	Yes
Back Side	10mm	19100/1900	20M QPSK 1RB#0	0.320	0.162	-0.06	17.47	19.50	0.511	Yes
Left Side	10mm	19100/1900	20M QPSK 1RB#0	0.057	0.030	-0.05	17.47	19.50	0.091	Yes
Right Side	10mm	19100/1900	20M QPSK 1RB#0	0.013	0.007	0.08	17.47	19.50	0.021	Yes
Top Side	10mm	19100/1900	20M QPSK 1RB#0	0.570	0.278	0.08	17.47	19.50	0.910	Yes
Front Side	10mm	19100/1900	20M QPSK 50%RB#0	0.201	0.101	-0.11	17.40	19.50	0.326	Yes
Back Side	10mm	19100/1900	20M QPSK 50%RB#0	0.205	0.104	-0.02	17.40	19.50	0.332	Yes
Left Side	10mm	19100/1900	20M QPSK 50%RB#0	0.036	0.019	-0.13	17.40	19.50	0.059	Yes
Right Side	10mm	19100/1900	20M QPSK 50%RB#0	0.010	0.005	0.18	17.40	19.50	0.016	Yes
Top Side	10mm	19100/1900	20M QPSK 50%RB#0	0.375	0.183	0.08	17.40	19.50	0.608	Yes
Top Side	10mm	19100/1900	20M QPSK 1RB#0	0.475	0.232	-0.09	17.47	19.50	0.758	Yes
Top Side	10mm	19100/1900	20M QPSK 1RB#0	0.455	0.223	-0.11	17.47	19.50	0.726	Yes
Main Antenna										
Front Side	10mm	18700/1860	20M QPSK 1RB#99	0.221	0.115	0.03	16.74	24.50	1.319	No
Back Side	10mm	18700/1860	20M QPSK 1RB#99	0.263	0.140	-0.18	16.74	24.50	1.570	No
Left Side	10mm	18700/1860	20M QPSK 1RB#99	0.019	0.011	-0.18	16.74	24.50	0.112	Yes
Right Side	10mm	18700/1860	20M QPSK 1RB#99	0.184	0.093	-0.18	16.74	24.50	1.099	Yes
Bottom Side	10mm	18700/1860	20M QPSK 1RB#99	0.514	0.263	0.17	16.74	24.50	3.069	No
Front Side	10mm	18700/1860	20M QPSK 50%RB#0	0.197	0.095	0.19	16.76	23.50	0.930	Yes
Back Side	10mm	18700/1860	20M QPSK 50%RB#0	0.258	0.137	-0.06	16.76	23.50	1.218	No
Left Side	10mm	18700/1860	20M QPSK 50%RB#0	0.018	0.011	-0.02	16.76	23.50	0.086	Yes
Right Side	10mm	18700/1860	20M QPSK 50%RB#0	0.040	0.020	0.12	16.76	23.50	0.187	Yes
Bottom Side	10mm	18700/1860	20M QPSK 50%RB#0	0.492	0.253	0.18	16.76	23.50	2.323	No
Bottom Side	10mm	18700/1860	20M QPSK 1RB#99	0.429	0.220	0.16	16.74	24.50	2.561	No
Bottom Side	10mm	18700/1860	20M QPSK 1RB#99	0.436	0.203	0.14	16.74	24.50	2.603	No

Table 156: Product Specific 10-g SAR test reduction evaluation of LTE Band 2

Note : According to the table above , Product Specific 10-g SAR test is required for this frequency band for Front Side, Back Side, Bottom Side

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot
				1-g	10-g						
Main Antenna											
Front Side	0mm	18700/1860	20M QPSK 1RB#50	3.910	1.620	0.00	20.11	21.00	1.988	Battery 1#	/
Back Side	0mm	18700/1860	20M QPSK 1RB#50	3.560	1.460	-0.15	20.11	21.00	1.792	Battery 1#	/
Bottom Side	0mm	18900/1880	20M QPSK 1RB#50	3.750	1.520	-0.19	20.11	21.00	1.866	Battery 1#	/
Front Side	0mm	19100/1900	20M QPSK 50%RB#0	4.030	1.670	0.00	20.35	21.00	1.940	Battery 1#	/
Back Side	0mm	19100/1900	20M QPSK 50%RB#0	4.200	1.700	-0.11	20.35	21.00	1.974	Battery 1#	/
Bottom Side	0mm	19100/1900	20M QPSK 50%RB#0	3.470	1.410	-0.14	20.35	21.00	1.638	Battery 1#	/
Back Side	0mm	19100/1900	20M QPSK 50%RB#0	4.270	1.710	0.18	20.35	21.00	1.986	Battery 2#	/
Back Side	0mm	19100/1900	20M QPSK 50%RB#0	4.080	1.660	-0.15	20.35	21.00	1.928	With SIM2	/
Additional SAR test at a conservative distance(triggering distance minus 1mm)											
Front Side	3mm	19100/1900	20M QPSK 1RB#50	3.960	1.710	-0.01	23.40	24.50	2.203	Battery 1#	/
Front Side	3mm	18700/1860	20M QPSK 1RB#99	4.570	1.990	0.18	23.37	24.50	2.581	Battery 1#	/
Front Side	3mm	18900/1880	20M QPSK 1RB#50	3.920	1.580	-0.01	23.35	24.50	2.059	Battery 1#	/
Back Side	4mm	19100/1900	20M QPSK 1RB#50	3.160	1.390	-0.03	23.40	24.50	1.791	Battery 1#	/
Bottom Side	8mm	19100/1900	20M QPSK 1RB#50	4.820	2.220	-0.12	23.40	24.50	2.860	Battery 1#	Yes
Bottom Side repeated	8mm	18700/1860	20M QPSK 1RB#50	4.490	2.080	0.15	20.11	21.00	2.553	Battery 1#	/
Bottom Side	8mm	18700/1860	20M QPSK 1RB#99	4.730	2.100	0.11	23.37	24.50	2.724	Battery 1#	/
Bottom Side	8mm	18900/1880	20M QPSK 1RB#50	4.330	1.920	0.19	23.35	24.50	2.502	Battery 1#	/
Front Side	3mm	18700/1860	20M QPSK 50%RB#25	2.340	1.060	-0.11	22.36	23.50	1.378	Battery 1#	/
Back Side	4mm	18700/1860	20M QPSK 50%RB#25	2.570	1.140	0.01	22.36	23.50	1.482	Battery 1#	/
Bottom Side	8mm	18700/1860	20M QPSK 50%RB#25	3.690	1.580	-0.13	22.36	23.50	2.054	Battery 1#	/
Bottom Side	8mm	18900/1880	20M QPSK 50%RB#25	3.700	1.650	0.16	22.22	23.50	2.216	Battery 1#	/
Bottom Side	8mm	19100/1900	20M QPSK 50%RB#25	3.780	1.680	0.16	22.22	23.50	2.256	Battery 1#	/
Front Side	3mm	18700/1860	20M QPSK 100%RB#0	3.750	1.520	-0.19	22.22	23.50	2.041	Battery 1#	/
Bottom Side	8mm	18700/1860	20M QPSK 100%RB#0	3.410	1.570	0.07	22.22	23.50	2.108	Battery 1#	/

Table 157: Product Specific 10-g SAR test results of LTE Band 2

## 7.2.7 SAR measurement Result of LTE Band 4

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	20050/1720	20M QPSK 1RB#99	0.172	0.089	-0.19	13.12	14.00	0.211	Battery 1#	/
Left tilt	20050/1720	20M QPSK 1RB#99	0.131	0.067	-0.04	13.12	14.00	0.160	Battery 1#	/
Right cheek	20050/1720	20M QPSK 1RB#99	0.223	0.107	-0.06	13.12	14.00	0.273	Battery 1#	/
Right tilt	20050/1720	20M QPSK 1RB#99	0.196	0.092	-0.03	13.12	14.00	0.240	Battery 1#	/
Left cheek	20050/1720	20M QPSK 50%RB#0	0.178	0.093	-0.08	12.87	14.00	0.231	Battery 1#	/
Left tilt	20050/1720	20M QPSK 50%RB#0	0.136	0.069	-0.06	12.87	14.00	0.176	Battery 1#	/
Right cheek	20050/1720	20M QPSK 50%RB#0	0.202	0.099	-0.04	12.87	14.00	0.262	Battery 1#	/
Right tilt	20050/1720	20M QPSK 50%RB#0	0.198	0.093	-0.03	12.87	14.00	0.257	Battery 1#	/
Right cheek	20050/1720	20M QPSK 1RB#99	0.233	0.113	0.17	13.12	14.00	0.285	Battery 2#	/
Right cheek	20050/1720	20M QPSK 1RB#99	0.230	0.112	0.18	13.12	14.00	0.282	With SIM2	/
Right cheek	20175/1732.5	20M QPSK 1RB#99	0.261	0.125	-0.05	12.68	14.00	0.354	Battery 2#	/
Right cheek	20300/1745	20M QPSK 1RB#50	0.283	0.133	-0.13	12.87	14.00	0.367	Battery 2#	Yes
Main Antenna										
Left cheek	20300/1745	20M QPSK 1RB#0	0.121	0.080	-0.08	23.45	24.50	0.154	Battery 1#	Yes
Left tilt	20300/1745	20M QPSK 1RB#0	0.035	0.019	-0.08	23.45	24.50	0.044	Battery 1#	/
Right cheek	20300/1745	20M QPSK 1RB#0	0.065	0.039	-0.04	23.45	24.50	0.083	Battery 1#	/
Right tilt	20300/1745	20M QPSK 1RB#0	0.040	0.023	-0.17	23.45	24.50	0.051	Battery 1#	/
Left cheek	20175/1732.5	20M QPSK 50%RB#50	0.084	0.049	-0.09	22.47	23.50	0.106	Battery 1#	/
Left tilt	20175/1732.5	20M QPSK 50%RB#50	0.029	0.016	-0.11	22.47	23.50	0.037	Battery 1#	/
Right cheek	20175/1732.5	20M QPSK 50%RB#50	0.046	0.028	0.14	22.47	23.50	0.058	Battery 1#	/
Right tilt	20175/1732.5	20M QPSK 50%RB#50	0.029	0.017	-0.13	22.47	23.50	0.037	Battery 1#	/
Left cheek	20300/1745	20M QPSK 1RB#0	0.113	0.075	-0.13	23.45	24.50	0.144	With SIM2	/
Left cheek	20300/1745	20M QPSK 1RB#0	0.098	0.065	-0.18	23.45	24.50	0.125	Battery 2#	/
Left cheek	20050/1720	20M QPSK 1RB#0	0.081	0.047	-0.09	23.41	24.50	0.104	Battery 1#	/
Left cheek	20175/1732.5	20M QPSK 1RB#50	0.083	0.048	-0.07	23.38	24.50	0.107	Battery 1#	/

Table 158: Head SAR test results of LTE Band 4

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	20050/1720	20M QPSK 1RB#50	0.051	0.027	-0.11	20.25	21.00	0.060	Battery 1#	/
Back Side	15mm	20050/1720	20M QPSK 1RB#50	0.079	0.043	-0.02	20.25	21.00	0.093	Battery 1#	/
Front Side	15mm	20050/1720	20M QPSK 50%RB#25	0.049	0.027	-0.16	19.78	21.00	0.065	Battery 1#	/
Back Side	15mm	20050/1720	20M QPSK 50%RB#25	0.082	0.045	-0.16	19.78	21.00	0.109	Battery 1#	Yes
Back Side	15mm	20050/1720	20M QPSK 50%RB#25	0.061	0.033	0.02	19.78	21.00	0.081	Battery 2#	/
Back Side	15mm	20050/1720	20M QPSK 50%RB#25	0.063	0.035	-0.19	19.78	21.00	0.084	With SIM2	/
Main Antenna											
Front Side	15mm	20300/1745	20M QPSK 1RB#0	0.498	0.288	-0.09	23.45	24.50	0.634	Battery 1#	/
Back Side	15mm	20300/1745	20M QPSK 1RB#0	0.563	0.330	-0.01	23.45	24.50	0.717	Battery 1#	/
Front Side	15mm	20175/1732.5	20M QPSK 50%RB#0	0.324	0.186	-0.12	22.47	23.50	0.411	Battery 1#	/
Back Side	15mm	20175/1732.5	20M QPSK 50%RB#0	0.418	0.245	0.01	22.47	23.50	0.530	Battery 1#	/
Back Side	15mm	20300/1745	20M QPSK 1RB#0	0.625	0.364	0.03	23.45	24.50	0.796	Battery 2#	Yes
Back Side	15mm	20300/1745	20M QPSK 1RB#0	0.606	0.354	-0.04	23.45	24.50	0.772	With SIM2	/

Table 159: Body-Worn SAR test results of LTE Band 4

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	20050/1720	20M QPSK 1RB#50	0.085	0.046	-0.16	18.60	19.50	0.104	Battery 1#	/
Back Side	10mm	20050/1720	20M QPSK 1RB#50	0.134	0.070	-0.14	18.60	19.50	0.165	Battery 1#	/
Left Side	10mm	20050/1720	20M QPSK 1RB#50	0.010	0.006	-0.12	18.60	19.50	0.012	Battery 1#	/
Right Side	10mm	20050/1720	20M QPSK 1RB#50	0.018	0.008	-0.17	18.60	19.50	0.023	Battery 1#	/
Top Side	10mm	20050/1720	20M QPSK 1RB#50	0.128	0.060	-0.19	18.60	19.50	0.157	Battery 1#	/
Front Side	10mm	20050/1720	20M QPSK 50%RB#50	0.092	0.050	-0.14	18.35	19.50	0.120	Battery 1#	/
Back Side	10mm	20050/1720	20M QPSK 50%RB#50	0.143	0.075	-0.13	18.35	19.50	0.186	Battery 1#	Yes
Left Side	10mm	20050/1720	20M QPSK 50%RB#50	0.011	0.006	0.06	18.35	19.50	0.014	Battery 1#	/
Right Side	10mm	20050/1720	20M QPSK 50%RB#50	0.009	0.004	0.16	18.35	19.50	0.011	Battery 1#	/
Top Side	10mm	20050/1720	20M QPSK 50%RB#50	0.084	0.039	-0.14	18.35	19.50	0.109	Battery 1#	/
Back Side	10mm	20050/1720	20M QPSK 50%RB#50	0.096	0.051	-0.08	18.35	19.50	0.125	Battery 2#	/
Back Side	10mm	20050/1720	20M QPSK 50%RB#50	0.129	0.068	0.03	18.35	19.50	0.168	With SIM2	/
Main Antenna											
Front Side	10mm	20300/1745	20M QPSK 1RB#0	0.217	0.120	-0.09	17.76	18.50	0.257	Battery 1#	/
Back Side	10mm	20300/1745	20M QPSK 1RB#0	0.303	0.165	-0.12	17.76	18.50	0.359	Battery 1#	/
Left Side	10mm	20300/1745	20M QPSK 1RB#0	0.017	0.010	-0.16	17.76	18.50	0.020	Battery 1#	/
Right Side	10mm	20300/1745	20M QPSK 1RB#0	0.036	0.019	-0.19	17.76	18.50	0.042	Battery 1#	/
Bottom Side	10mm	20300/1745	20M QPSK 1RB#0	0.491	0.257	0.04	17.76	18.50	0.582	Battery 1#	Yes
Front Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.231	0.128	-0.11	17.70	18.50	0.278	Battery 1#	/
Back Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.245	0.129	-0.18	17.70	18.50	0.295	Battery 1#	/
Left Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.015	0.009	-0.10	17.70	18.50	0.017	Battery 1#	/
Right Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.034	0.017	-0.11	17.70	18.50	0.041	Battery 1#	/
Bottom Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.464	0.242	0.03	17.70	18.50	0.558	Battery 1#	/
Bottom Side	10mm	20300/1745	20M QPSK 1RB#0	0.482	0.253	0.10	17.76	18.50	0.572	Battery 2#	/

Bottom Side	10mm	20300/1745	20M QPSK 1RB#0	0.436	0.220	-0.06	17.76	18.50	0.517	With SIM2	/
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Table 160: Hotspot SAR test results of LTE Band 4

Per KDB648474D04, when hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled-up 1-g SAR (W/kg)	Product Specific 10-g SAR Exclusion
				1-g	10-g					
Second Antenna										
Front Side	10mm	20050/1720	20M QPSK 1RB#50	0.085	0.046	-0.16	18.60	21.00	0.147	Yes
Back Side	10mm	20050/1720	20M QPSK 1RB#50	0.134	0.070	-0.14	18.60	21.00	0.233	Yes
Left Side	10mm	20050/1720	20M QPSK 1RB#50	0.010	0.006	-0.12	18.60	21.00	0.018	Yes
Right Side	10mm	20050/1720	20M QPSK 1RB#50	0.018	0.008	-0.17	18.60	21.00	0.032	Yes
Top Side	10mm	20050/1720	20M QPSK 1RB#50	0.128	0.060	-0.19	18.60	21.00	0.222	Yes
Front Side	10mm	20050/1720	20M QPSK 50%RB#50	0.092	0.050	-0.14	18.35	21.00	0.169	Yes
Back Side	10mm	20050/1720	20M QPSK 50%RB#50	0.143	0.075	-0.13	18.35	21.00	0.263	Yes
Left Side	10mm	20050/1720	20M QPSK 50%RB#50	0.011	0.006	0.06	18.35	21.00	0.020	Yes
Right Side	10mm	20050/1720	20M QPSK 50%RB#50	0.009	0.004	0.16	18.35	21.00	0.016	Yes
Top Side	10mm	20050/1720	20M QPSK 50%RB#50	0.084	0.039	-0.14	18.35	21.00	0.154	Yes
Back Side	10mm	20050/1720	20M QPSK 50%RB#50	0.096	0.051	-0.08	18.35	21.00	0.177	Yes
Back Side	10mm	20050/1720	20M QPSK 50%RB#50	0.129	0.068	0.03	18.35	21.00	0.237	Yes
Main Antenna										
Front Side	10mm	20300/1745	20M QPSK 1RB#0	0.217	0.120	-0.09	17.76	24.50	1.024	Yes
Back Side	10mm	20300/1745	20M QPSK 1RB#0	0.303	0.165	-0.12	17.76	24.50	1.430	No
Left Side	10mm	20300/1745	20M QPSK 1RB#0	0.017	0.010	-0.16	17.76	24.50	0.080	Yes
Right Side	10mm	20300/1745	20M QPSK 1RB#0	0.036	0.019	-0.19	17.76	24.50	0.169	Yes
Bottom Side	10mm	20300/1745	20M QPSK 1RB#0	0.491	0.257	0.04	17.76	24.50	2.318	No
Front Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.231	0.128	-0.11	17.70	23.50	0.878	Yes
Back Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.245	0.129	-0.18	17.70	23.50	0.931	Yes
Left Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.015	0.009	-0.10	17.70	23.50	0.055	Yes
Right Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.034	0.017	-0.11	17.70	23.50	0.129	Yes
Bottom Side	10mm	20175/1732.5	20M QPSK 50%RB#0	0.464	0.242	0.03	17.70	23.50	1.764	No
Bottom Side	10mm	20300/1745	20M QPSK 1RB#0	0.482	0.253	0.10	17.76	23.50	1.807	No
Bottom Side	10mm	20300/1745	20M QPSK 1RB#0	0.436	0.220	-0.06	17.76	23.50	1.635	No

Table 161: Product Specific 10-g SAR test reduction evaluation of LTE Band 4

Note : According to the table above , Product Specific 10-g SAR test is required for this frequency band for Back Side, Bottom Side(Main antenna)

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Main Antenna											
Back Side	0mm	20300/1745	20M QPSK 1RB#0	2.740	1.300	0.17	20.18	21.00	1.570	Battery 1#	/
Bottom Side	0mm	20300/1745	20M QPSK 1RB#0	4.730	2.060	0.10	20.18	21.00	2.488	Battery 1#	/
Bottom Side	0mm	20050/1720	20M QPSK 1RB#99	4.700	1.930	-0.19	19.97	21.00	2.447	Battery 1#	/
Bottom Side	0mm	20175/1732.5	20M QPSK 1RB#50	4.380	1.800	-0.14	20.08	21.00	2.225	Battery 1#	/
Back Side	0mm	20175/1732.5	20M QPSK 50%RB#50	2.630	1.260	0.18	20.01	21.00	1.583	Battery 1#	/
Bottom Side	0mm	20175/1732.5	20M QPSK 50%RB#50	4.750	1.940	-0.10	20.01	21.00	2.437	Battery 1#	/
Bottom Side	0mm	20050/1720	20M QPSK 50%RB#25	4.650	1.990	-0.15	19.83	21.00	2.605	Battery 1#	/
Bottom Side	0mm	20300/1745	20M QPSK 50%RB#50	4.770	1.950	-0.11	19.91	21.00	2.506	Battery 1#	/
Bottom Side	0mm	20300/1745	20M QPSK 100%RB#0	4.860	1.980	-0.12	19.99	21.00	2.498	Battery 1#	/
Bottom Side	0mm	20050/1720	20M QPSK 50%RB#25	5.080	2.160	-0.11	19.83	21.00	2.828	With SIM2	/
Bottom Side	0mm	20050/1720	20M QPSK 50%RB#25	5.510	2.330	-0.18	19.83	21.00	3.050	Battery 2#	Yes
Bottom Side Repeated	0mm	20050/1720	20M QPSK 50%RB#25	4.980	2.110	-0.11	19.83	21.00	2.762	Battery 2#	/
Additional SAR test at a conservative distance(triggering distance minus 1mm)											
Back Side	4mm	20300/1745	20M QPSK 1RB#0	4.020	1.900	-0.15	23.45	24.50	2.420	Battery 1#	/
Back Side	4mm	20050/1720	20M QPSK 1RB#0	3.170	1.370	-0.16	23.41	24.50	1.761	Battery 1#	/
Back Side	4mm	20175/1732.5	20M QPSK 1RB#50	2.830	1.200	-0.08	23.38	24.50	1.553	Battery 1#	/
Bottom Side	8mm	20300/1745	20M QPSK 1RB#0	4.260	2.010	-0.11	23.45	24.50	2.560	Battery 1#	/
Bottom Side	8mm	20050/1720	20M QPSK 1RB#0	3.250	1.480	-0.09	23.41	24.50	1.902	Battery 1#	/
Bottom Side	8mm	20175/1732.5	20M QPSK 1RB#50	3.220	1.470	-0.09	23.38	24.50	1.902	Battery 1#	/
Back Side	4mm	20175/1732.5	20M QPSK 50%RB#0	2.070	0.974	-0.07	22.47	23.50	1.235	Battery 1#	/
Bottom Side	8mm	20175/1732.5	20M QPSK 50%RB#0	2.420	1.130	0.06	22.47	23.50	1.432	Battery 1#	/
Back Side	4mm	20175/1732.5	20M QPSK 100%RB#0	3.650	1.750	-0.18	22.41	23.50	2.249	Battery 1#	/
Bottom Side	8mm	20175/1732.5	20M QPSK 100%RB#0	2.450	1.150	0.07	22.41	23.50	1.478	Battery 1#	/

Table 162: Product Specific 10-g SAR SAR test results of LTE Band 4

## 7.2.8 SAR measurement Result of LTE Band 5

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	20525/836.5	10M QPSK 1RB#0	0.318	0.171	0.18	18.99	20.00	0.401	Battery 1#	/
Left tilt	20525/836.5	10M QPSK 1RB#0	0.236	0.147	-0.16	18.99	20.00	0.298	Battery 1#	/
Right cheek	20525/836.5	10M QPSK 1RB#0	0.283	0.170	-0.03	18.99	20.00	0.357	Battery 1#	/
Right tilt	20525/836.5	10M QPSK 1RB#0	0.197	0.127	0.03	18.99	20.00	0.249	Battery 1#	/
Left cheek	20450/829	10M QPSK 50%RB#25	0.305	0.191	-0.15	18.99	20.00	0.385	Battery 1#	/
Left tilt	20450/829	10M QPSK 50%RB#25	0.222	0.138	-0.04	18.99	20.00	0.280	Battery 1#	/
Right cheek	20450/829	10M QPSK 50%RB#25	0.234	0.158	0.09	18.99	20.00	0.295	Battery 1#	/
Right tilt	20450/829	10M QPSK 50%RB#25	0.184	0.119	0.06	18.99	20.00	0.232	Battery 1#	/
Left cheek	20525/836.5	10M QPSK 1RB#0	0.324	0.177	0.14	18.99	20.00	0.409	Battery 2#	/
Left cheek	20525/836.5	10M QPSK 1RB#0	0.320	0.171	-0.05	18.99	20.00	0.404	With SIM2	/
Left cheek	20450/829	10M QPSK 1RB#49	0.300	0.186	-0.12	18.89	20.00	0.387	Battery 2#	/
Left cheek	20600/844	10M QPSK 1RB#0	0.385	0.206	0.14	18.73	20.00	0.516	Battery 2#	Yes
Main Antenna										
Left cheek	20450/829	10M QPSK 1RB#25	0.128	0.089	-0.16	23.97	25.00	0.162	Battery 1#	/
Left tilt	20450/829	10M QPSK 1RB#25	0.076	0.056	-0.18	23.97	25.00	0.097	Battery 1#	/
Right cheek	20450/829	10M QPSK 1RB#25	0.185	0.145	-0.03	23.97	25.00	0.235	Battery 1#	/
Right tilt	20450/829	10M QPSK 1RB#25	0.072	0.051	-0.15	23.97	25.00	0.092	Battery 1#	/
Left cheek	20450/829	10M QPSK 50%RB#25	0.108	0.075	-0.11	22.90	24.00	0.139	Battery 1#	/
Left tilt	20450/829	10M QPSK 50%RB#25	0.060	0.047	-0.17	22.90	24.00	0.078	Battery 1#	/
Right cheek	20450/829	10M QPSK 50%RB#25	0.171	0.117	-0.17	22.90	24.00	0.220	Battery 1#	/
Right tilt	20450/829	10M QPSK 50%RB#25	0.062	0.044	-0.15	22.90	24.00	0.080	Battery 1#	/
Right cheek	20450/829	10M QPSK 1RB#25	0.178	0.137	-0.14	23.97	25.00	0.226	Battery 2#	/
Right cheek	20450/829	10M QPSK 1RB#25	0.142	0.097	-0.19	23.97	25.00	0.180	With SIM2	/
Right cheek	20525/836.5	10M QPSK 1RB#0	0.164	0.113	-0.14	23.89	25.00	0.212	Battery 1#	/
Right cheek	20600/844	10M QPSK 1RB#49	0.222	0.174	0.03	23.76	25.00	0.295	Battery 1#	Yes

Table 163: Head SAR test results of LTE Band 5

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	20450/829	10M QPSK 1RB#49	0.102	0.074	-0.15	23.44	24.50	0.130	Battery 1#	/
Back Side	15mm	20450/829	10M QPSK 1RB#49	0.096	0.065	-0.14	23.44	24.50	0.122	Battery 1#	/
Front Side	15mm	20450/829	10M QPSK 50%RB#13	0.114	0.083	-0.09	22.40	23.50	0.147	Battery 1#	/
Back Side	15mm	20450/829	10M QPSK 50%RB#13	0.107	0.073	-0.17	22.40	23.50	0.138	Battery 1#	/
Front Side	15mm	20450/829	10M QPSK 50%RB#13	0.133	0.095	-0.04	22.40	23.50	0.171	Battery 2#	Yes
Front Side	15mm	20450/829	10M QPSK 50%RB#13	0.107	0.073	-0.07	22.40	23.50	0.138	With SIM2	/
Main Antenna											
Front Side	15mm	20450/829	10M QPSK 1RB#25	0.167	0.117	-0.18	23.97	25.00	0.212	Battery 1#	/
Back Side	15mm	20450/829	10M QPSK 1RB#25	0.219	0.161	-0.08	23.97	25.00	0.278	Battery 1#	/
Front Side	15mm	20450/829	10M QPSK 50%RB#25	0.146	0.101	-0.16	22.90	24.00	0.188	Battery 1#	/
Back Side	15mm	20450/829	10M QPSK 50%RB#25	0.184	0.125	-0.10	22.90	24.00	0.237	Battery 1#	/
Back Side	15mm	20450/829	10M QPSK 1RB#25	0.223	0.164	-0.07	23.97	25.00	0.283	Battery 2#	Yes
Back Side	15mm	20450/829	10M QPSK 1RB#25	0.200	0.137	-0.10	23.97	25.00	0.254	With SIM2	/

Table 164: Body-Worn SAR test results of LTE Band 5



Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	20450/829	10M QPSK 1RB#49	0.195	0.127	-0.12	23.44	24.50	0.249	Battery 1#	/
Back Side	10mm	20450/829	10M QPSK 1RB#49	0.183	0.109	-0.12	23.44	24.50	0.234	Battery 1#	/
Left Side	10mm	20450/829	10M QPSK 1RB#49	0.141	0.094	-0.04	23.44	24.50	0.180	Battery 1#	/
Right Side	10mm	20450/829	10M QPSK 1RB#49	0.025	0.017	-0.15	23.44	24.50	0.032	Battery 1#	/
Top Side	10mm	20450/829	10M QPSK 1RB#49	0.103	0.102	0.08	23.44	24.50	0.131	Battery 1#	/
Front Side	10mm	20450/829	10M QPSK 50%RB#13	0.214	0.124	-0.09	22.40	23.50	0.276	Battery 1#	Yes
Back Side	10mm	20450/829	10M QPSK 50%RB#13	0.200	0.120	-0.12	22.40	23.50	0.258	Battery 1#	/
Left Side	10mm	20450/829	10M QPSK 50%RB#13	0.136	0.091	-0.04	22.40	23.50	0.175	Battery 1#	/
Right Side	10mm	20450/829	10M QPSK 50%RB#13	0.030	0.020	-0.18	22.40	23.50	0.038	Battery 1#	/
Top Side	10mm	20450/829	10M QPSK 50%RB#13	0.119	0.062	0.03	22.40	23.50	0.153	Battery 1#	/
Front Side	10mm	20450/829	10M QPSK 50%RB#13	0.192	0.111	-0.07	22.40	23.50	0.247	Battery 2#	/
Front Side	10mm	20450/829	10M QPSK 50%RB#13	0.174	0.102	-0.11	22.40	23.50	0.224	With SIM2	/
Main Antenna											
Front Side	10mm	20450/829	10M QPSK 1RB#25	0.265	0.182	-0.18	23.97	25.00	0.336	Battery 1#	/
Back Side	10mm	20450/829	10M QPSK 1RB#25	0.361	0.218	0.00	23.97	25.00	0.458	Battery 1#	Yes
Left Side	10mm	20450/829	10M QPSK 1RB#25	0.085	0.057	-0.17	23.97	25.00	0.107	Battery 1#	/
Right Side	10mm	20450/829	10M QPSK 1RB#25	0.273	0.183	-0.08	23.97	25.00	0.346	Battery 1#	/
Bottom Side	10mm	20450/829	10M QPSK 1RB#25	0.166	0.083	0.18	23.97	25.00	0.210	Battery 1#	/
Front Side	10mm	20450/829	10M QPSK 50%RB#25	0.227	0.155	-0.16	22.90	24.00	0.292	Battery 1#	/
Back Side	10mm	20450/829	10M QPSK 50%RB#25	0.338	0.209	-0.03	22.90	24.00	0.435	Battery 1#	/
Left Side	10mm	20450/829	10M QPSK 50%RB#25	0.073	0.049	-0.15	22.90	24.00	0.094	Battery 1#	/
Right Side	10mm	20450/829	10M QPSK 50%RB#25	0.235	0.158	-0.09	22.90	24.00	0.303	Battery 1#	/
Bottom Side	10mm	20450/829	10M QPSK 50%RB#25	0.147	0.074	0.14	22.90	24.00	0.189	Battery 1#	/
Back Side	10mm	20450/829	10M QPSK 1RB#25	0.335	0.203	-0.03	23.97	25.00	0.425	Battery 2#	/
Back Side	10mm	20450/829	10M QPSK 1RB#25	0.331	0.201	-0.07	23.97	25.00	0.420	With SIM2	/

Table 165: Hotspot SAR test results of LTE Band 5

### 7.2.9 SAR measurement Result of LTE Band 7

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	21100/2535	20M QPSK 1RB#0	0.201	0.096	-0.07	12.33	13.00	0.235	Battery 1#	/
Left tilt	21100/2535	20M QPSK 1RB#0	0.265	0.122	0.06	12.33	13.00	0.309	Battery 1#	/
Right cheek	21100/2535	20M QPSK 1RB#0	0.282	0.118	0.17	12.33	13.00	0.329	Battery 1#	/
Right tilt	21100/2535	20M QPSK 1RB#0	0.344	0.147	0.03	12.33	13.00	0.401	Battery 1#	/
Left cheek	21350/2560	20M QPSK 50%RB#25	0.200	0.094	0.06	12.32	13.00	0.234	Battery 1#	/
Left tilt	21350/2560	20M QPSK 50%RB#25	0.215	0.102	-0.01	12.32	13.00	0.251	Battery 1#	/
Right cheek	21350/2560	20M QPSK 50%RB#25	0.241	0.119	0.02	12.32	13.00	0.282	Battery 1#	/
Right tilt	21350/2560	20M QPSK 50%RB#25	0.355	0.145	-0.14	12.32	13.00	0.415	Battery 1#	/
Right tilt	21350/2560	20M QPSK 50%RB#25	0.336	0.136	0.04	12.32	13.00	0.393	Battery 2#	/
Right tilt	21350/2560	20M QPSK 50%RB#25	0.334	0.138	-0.09	12.32	13.00	0.391	With SIM2	/
Right tilt	20850/2510	20M QPSK 50%RB#0	0.349	0.153	0.16	12.23	13.00	0.417	Battery 1#	/
Right tilt	21100/2535	20M QPSK 50%RB#25	0.329	0.151	-0.15	12.31	13.00	0.386	Battery 1#	/
Right tilt	21350/2560(PCC)	20M QPSK 1RB#0	0.425	0.174	-0.09	11.74	13.00	0.568	Battery 1#	Yes
	21152/2540.2(SCC)	20M QPSK 1RB#99								
Main Antenna										
Left cheek	20850/2510	20M QPSK 1RB#50	0.037	0.019	0.11	24.10	24.50	0.041	Battery 1#	/
Left tilt	20850/2510	20M QPSK 1RB#50	0.036	0.019	0.02	24.10	24.50	0.040	Battery 1#	/
Right cheek	20850/2510	20M QPSK 1RB#50	0.063	0.037	0.07	24.10	24.50	0.069	Battery 1#	Yes
Right tilt	20850/2510	20M QPSK 1RB#50	0.026	0.015	0.01	24.10	24.50	0.029	Battery 1#	/
Left cheek	20850/2510	20M QPSK 50%RB#0	0.049	0.025	0.15	23.26	23.50	0.052	Battery 1#	/
Left tilt	20850/2510	20M QPSK 50%RB#0	0.040	0.021	-0.13	23.26	23.50	0.042	Battery 1#	/
Right cheek	20850/2510	20M QPSK 50%RB#0	0.058	0.032	0.09	23.26	23.50	0.061	Battery 1#	/
Right tilt	20850/2510	20M QPSK 50%RB#0	0.026	0.015	0.00	23.26	23.50	0.027	Battery 1#	/
Right cheek	20850/2510	20M QPSK 1RB#50	0.040	0.023	-0.04	24.10	24.50	0.043	Battery 2#	/
Right cheek	20850/2510	20M QPSK 1RB#50	0.060	0.035	-0.14	24.10	24.50	0.066	With SIM2	/
Right cheek	21100/2535	20M QPSK 1RB#0	0.051	0.028	0.08	24.08	24.50	0.056	Battery 1#	/
Right cheek	21350/2560	20M QPSK 1RB#0	0.049	0.027	-0.14	24.09	24.50	0.054	Battery 1#	/
Right cheek	21100/2535(PCC)	20M QPSK 1RB#0	0.059	0.035	-0.15	23.56	24.50	0.073	Battery 1#	/
	20902/2515.2(SCC)	20M QPSK 1RB#99								

Table 166: Head SAR test results of LTE Band 7

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	21100/2535	20M QPSK 1RB#0	0.089	0.047	-0.09	17.48	19.00	0.126	Battery 1#	/
Back Side	15mm	21100/2535	20M QPSK 1RB#0	0.115	0.063	0.00	17.48	19.00	0.163	Battery 1#	/
Front Side	15mm	21100/2535	20M QPSK 50%RB#0	0.086	0.046	-0.15	17.40	19.00	0.124	Battery 1#	/
Back Side	15mm	21100/2535	20M QPSK 50%RB#0	0.109	0.059	-0.02	17.40	19.00	0.158	Battery 1#	/
Back Side	15mm	21100/2535	20M QPSK 1RB#0	0.113	0.062	-0.02	17.48	19.00	0.160	Battery 2#	/
Back Side	15mm	21100/2535	20M QPSK 1RB#0	0.100	0.050	0.00	17.48	19.00	0.142	With SIM2	/
Back Side	15mm	21100/2535(PCC)	20M QPSK 1RB#99	0.125	0.068	0.16	17.70	19.00	0.169	Battery 1#	Yes
		21298/2554.8(SCC)	20M QPSK 1RB#0								
Main Antenna											
Front Side	15mm	20850/2510	20M QPSK 1RB#50	0.170	0.097	-0.16	24.10	24.50	0.186	Battery 1#	/
Back Side	15mm	20850/2510	20M QPSK 1RB#50	0.169	0.096	-0.16	24.10	24.50	0.185	Battery 1#	/
Front Side	15mm	20850/2510	20M QPSK 50%RB#0	0.194	0.111	-0.08	23.26	23.50	0.205	Battery 1#	/
Back Side	15mm	20850/2510	20M QPSK 50%RB#0	0.185	0.104	-0.15	23.26	23.50	0.196	Battery 1#	/
Front Side	15mm	20850/2510	20M QPSK 50%RB#0	0.243	0.139	-0.12	23.26	23.50	0.257	Battery 2#	Yes
Front Side	15mm	20850/2510	20M QPSK 50%RB#0	0.226	0.130	-0.04	23.26	23.50	0.239	With SIM2	/
Front Side	15mm	21100/2535(PCC)	20M QPSK 1RB#0	0.225	0.126	-0.10	23.56	24.50	0.279	Battery 2#	/
		20902/2515.2(SCC)	20M QPSK 1RB#99								

Table 167: Body-Worn SAR test results of LTE Band 7

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	21100/2535	20M QPSK 1RB#0	0.178	0.091	-0.08	17.48	19.00	0.253	Battery 1#	/
Back Side	10mm	21100/2535	20M QPSK 1RB#0	0.254	0.127	-0.13	17.48	19.00	0.360	Battery 1#	/
Left Side	10mm	21100/2535	20M QPSK 1RB#0	0.115	0.055	0.07	17.48	19.00	0.163	Battery 1#	/
Right Side	10mm	21100/2535	20M QPSK 1RB#0	0.037	0.018	0.15	17.48	19.00	0.052	Battery 1#	/
Top Side	10mm	21100/2535	20M QPSK 1RB#0	0.487	0.237	0.05	17.48	19.00	0.691	Battery 1#	/
Front Side	10mm	21100/2535	20M QPSK 50%RB#0	0.150	0.077	-0.14	17.40	19.00	0.217	Battery 1#	/
Back Side	10mm	21100/2535	20M QPSK 50%RB#0	0.226	0.115	0.05	17.40	19.00	0.327	Battery 1#	/
Left Side	10mm	21100/2535	20M QPSK 50%RB#0	0.112	0.054	0.10	17.40	19.00	0.162	Battery 1#	/
Right Side	10mm	21100/2535	20M QPSK 50%RB#0	0.036	0.018	0.16	17.40	19.00	0.053	Battery 1#	/
Top Side	10mm	21100/2535	20M QPSK 50%RB#0	0.463	0.225	0.05	17.40	19.00	0.669	Battery 1#	/
Top Side	10mm	21100/2535	20M QPSK 1RB#0	0.537	0.267	-0.16	17.48	19.00	0.762	Battery 2#	Yes
Top Side	10mm	21100/2535	20M QPSK 1RB#0	0.472	0.228	-0.14	17.48	19.00	0.670	With SIM2	/
Top Side	10mm	21100/2535(PCC)	20M QPSK 1RB#99	0.491	0.240	0.07	17.70	19.00	0.662	Battery 2#	/
		21298/2554.8(SCC)	20M QPSK 1RB#0								
Main Antenna											
Front Side	10mm	20850/2510	20M QPSK 1RB#50	0.288	0.160	-0.08	21.76	22.00	0.304	Battery 1#	/
Back Side	10mm	20850/2510	20M QPSK 1RB#50	0.250	0.137	-0.12	21.76	22.00	0.264	Battery 1#	/
Left Side	10mm	20850/2510	20M QPSK 1RB#50	0.178	0.082	0.06	21.76	22.00	0.188	Battery 1#	/
Right Side	10mm	20850/2510	20M QPSK 1RB#50	0.024	0.013	-0.06	21.76	22.00	0.026	Battery 1#	/
Bottom Side	10mm	20850/2510	20M QPSK 1RB#50	0.448	0.235	-0.02	21.76	22.00	0.473	Battery 1#	/
Front Side	10mm	20850/2510	20M QPSK 50%RB#0	0.310	0.170	0.03	21.75	22.00	0.328	Battery 1#	/
Back Side	10mm	20850/2510	20M QPSK 50%RB#0	0.260	0.141	0.06	21.75	22.00	0.275	Battery 1#	/
Left Side	10mm	20850/2510	20M QPSK 50%RB#0	0.191	0.093	0.08	21.75	22.00	0.202	Battery 1#	/
Right Side	10mm	20850/2510	20M QPSK 50%RB#0	0.025	0.013	-0.18	21.75	22.00	0.026	Battery 1#	/
Bottom Side	10mm	20850/2510	20M QPSK 50%RB#0	0.452	0.236	0.04	21.75	22.00	0.479	Battery 1#	/
Bottom Side	10mm	20850/2510	20M QPSK 1RB#50	0.458	0.240	0.06	21.76	22.00	0.484	Battery 2#	Yes
Bottom Side	10mm	20850/2510	20M QPSK 1RB#50	0.431	0.227	0.00	21.76	22.00	0.455	With SIM2	/
Bottom Side	10mm	21100/2535(PCC)	20M QPSK 1RB#0	0.419	0.209	-0.01	21.03	22.00	0.524	Battery 2#	/
		20902/2515.2(SCC)	20M QPSK 1RB#99								

Table 168: Hotspot SAR test results of LTE Band 7

Per KDB648474D04, when hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled-up 1-g SAR (W/kg)	Product Specific 10-g SAR Exclusion
				1-g	10-g					
Main Antenna										
Front Side	10mm	18700/1860	20M QPSK 1RB#99	0.221	0.115	0.03	16.74	24.50	1.319	No
Back Side	10mm	20850/2510	20M QPSK 1RB#50	0.288	0.160	-0.08	21.76	24.50	0.541	Yes
Left Side	10mm	20850/2510	20M QPSK 1RB#50	0.250	0.137	-0.12	21.76	24.50	0.470	Yes
Right Side	10mm	20850/2510	20M QPSK 1RB#50	0.178	0.082	0.06	21.76	24.50	0.335	Yes
Bottom Side	10mm	20850/2510	20M QPSK 1RB#50	0.024	0.013	-0.06	21.76	24.50	0.046	Yes
Front Side	10mm	20850/2510	20M QPSK 1RB#50	0.448	0.235	-0.02	21.76	24.50	0.842	Yes
Back Side	10mm	20850/2510	20M QPSK 50%RB#0	0.310	0.170	0.03	21.75	24.50	0.584	Yes
Left Side	10mm	20850/2510	20M QPSK 50%RB#0	0.260	0.141	0.06	21.75	24.50	0.490	Yes
Right Side	10mm	20850/2510	20M QPSK 50%RB#0	0.191	0.093	0.08	21.75	24.50	0.360	Yes
Bottom Side	10mm	20850/2510	20M QPSK 50%RB#0	0.025	0.013	-0.18	21.75	24.50	0.046	Yes
Bottom Side	10mm	20850/2510	20M QPSK 50%RB#0	0.452	0.236	0.04	21.75	24.50	0.851	Yes
Bottom Side	10mm	20850/2510	20M QPSK 1RB#50	0.458	0.240	0.06	21.76	24.50	0.861	Yes
Bottom Side	10mm	20850/2510	20M QPSK 1RB#50	0.431	0.227	0.00	21.76	24.50	0.810	Yes
Bottom Side	10mm	21100/2535(PCC)	20M QPSK 1RB#0	0.419	0.209	-0.01	21.03	24.50	0.932	Yes
Bottom Side	10mm	20902/2515.2 (SCC)								

Table 169: Product Specific 10-g SAR test reduction evaluation of LTE Band 7

Note : According to the table above , Product Specific 10-g SAR test is not required for this frequency band.

### 7.2.10 SAR measurement Result of LTE Band 12

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	23095/707.5	10M QPSK 1RB#0	<b>0.428</b>	0.223	-0.07	19.68	20.50	<b>0.517</b>	Battery 1#	Yes
Left tilt	23095/707.5	10M QPSK 1RB#0	<b>0.317</b>	0.204	-0.08	19.68	20.50	<b>0.383</b>	Battery 1#	/
Right cheek	23095/707.5	10M QPSK 1RB#0	<b>0.330</b>	0.176	0.03	19.68	20.50	<b>0.399</b>	Battery 1#	/
Right tilt	23095/707.5	10M QPSK 1RB#0	<b>0.289</b>	0.187	0.11	19.68	20.50	<b>0.349</b>	Battery 1#	/
Left cheek	23095/707.5	10M QPSK 50%RB#0	<b>0.350</b>	0.222	-0.04	19.61	20.50	<b>0.430</b>	Battery 1#	/
Left tilt	23095/707.5	10M QPSK 50%RB#0	<b>0.259</b>	0.166	-0.02	19.61	20.50	<b>0.318</b>	Battery 1#	/
Right cheek	23095/707.5	10M QPSK 50%RB#0	<b>0.342</b>	0.182	0.05	19.61	20.50	<b>0.420</b>	Battery 1#	/
Right tilt	23095/707.5	10M QPSK 50%RB#0	<b>0.274</b>	0.178	-0.09	19.61	20.50	<b>0.336</b>	Battery 1#	/
Left cheek	23095/707.5	10M QPSK 1RB#0	<b>0.355</b>	0.185	-0.05	19.68	20.50	<b>0.429</b>	Battery 2#	/
Left cheek	23095/707.5	10M QPSK 1RB#0	<b>0.340</b>	0.182	-0.04	19.68	20.50	<b>0.411</b>	With SIM2	/
Left cheek	23060/704	10M QPSK 1RB#0	<b>0.427</b>	0.222	-0.07	19.43	20.50	<b>0.546</b>	Battery 1#	/
Left cheek	23130/711	10M QPSK 1RB#0	<b>0.350</b>	0.223	-0.04	19.55	20.50	<b>0.436</b>	Battery 1#	/
Main Antenna										
Left cheek	23130/711	10M QPSK 1RB#25	<b>0.099</b>	0.079	-0.04	23.91	25.00	<b>0.128</b>	Battery 1#	/
Left tilt	23130/711	10M QPSK 1RB#25	<b>0.068</b>	0.043	-0.15	23.91	25.00	<b>0.087</b>	Battery 1#	/
Right cheek	23130/711	10M QPSK 1RB#25	<b>0.126</b>	0.099	-0.06	23.91	25.00	<b>0.162</b>	Battery 1#	Yes
Right tilt	23130/711	10M QPSK 1RB#25	<b>0.056</b>	0.035	-0.12	23.91	25.00	<b>0.072</b>	Battery 1#	/
Left cheek	23130/711	10M QPSK 50%RB#0	<b>0.074</b>	0.052	0.09	22.92	24.00	<b>0.095</b>	Battery 1#	/
Left tilt	23130/711	10M QPSK 50%RB#0	<b>0.054</b>	0.034	-0.13	22.92	24.00	<b>0.069</b>	Battery 1#	/
Right cheek	23130/711	10M QPSK 50%RB#0	<b>0.102</b>	0.080	-0.05	22.92	24.00	<b>0.131</b>	Battery 1#	/
Right tilt	23130/711	10M QPSK 50%RB#0	<b>0.046</b>	0.029	-0.06	22.92	24.00	<b>0.059</b>	Battery 1#	/
Right cheek	23130/711	10M QPSK 1RB#25	<b>0.111</b>	0.088	0.03	23.91	25.00	<b>0.143</b>	Battery 2#	/
Right cheek	23130/711	10M QPSK 1RB#25	<b>0.111</b>	0.088	-0.19	23.91	25.00	<b>0.143</b>	With SIM2	/
Right cheek	23060/704	10M QPSK 1RB#0	<b>0.105</b>	0.073	-0.12	23.89	25.00	<b>0.136</b>	Battery 1#	/
Right cheek	23095/707.5	10M QPSK 1RB#25	<b>0.111</b>	0.087	-0.18	23.86	25.00	<b>0.144</b>	Battery 1#	/

Table 170: Head SAR test results of LTE Band 12

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	23095/707.5	10M QPSK 1RB#0	0.154	0.111	-0.12	23.64	24.50	0.188	Battery 1#	Yes
Back Side	15mm	23095/707.5	10M QPSK 1RB#0	0.139	0.100	-0.13	23.64	24.50	0.169	Battery 1#	/
Front Side	15mm	23095/707.5	10M QPSK 50%RB#13	0.114	0.080	-0.10	22.52	23.50	0.143	Battery 1#	/
Back Side	15mm	23095/707.5	10M QPSK 50%RB#13	0.110	0.079	-0.15	22.52	23.50	0.138	Battery 1#	/
Front Side	15mm	23095/707.5	10M QPSK 1RB#0	0.135	0.109	-0.11	23.64	24.50	0.165	Battery 2#	/
Front Side	15mm	23095/707.5	10M QPSK 1RB#0	0.137	0.099	-0.05	23.64	24.50	0.167	With SIM2	/
Main Antenna											
Front Side	15mm	23130/711	10M QPSK 1RB#25	0.154	0.111	-0.12	23.91	25.00	0.198	Battery 1#	/
Back Side	15mm	23130/711	10M QPSK 1RB#25	0.172	0.132	-0.13	23.91	25.00	0.221	Battery 1#	/
Front Side	15mm	23130/711	10M QPSK 50%RB#0	0.121	0.087	-0.08	22.92	24.00	0.155	Battery 1#	/
Back Side	15mm	23130/711	10M QPSK 50%RB#0	0.138	0.098	-0.09	22.92	24.00	0.177	Battery 1#	/
Back Side	15mm	23130/711	10M QPSK 1RB#25	0.196	0.150	-0.10	23.91	25.00	0.252	Battery 2#	Yes
Back Side	15mm	23130/711	10M QPSK 1RB#25	0.168	0.130	-0.16	23.91	25.00	0.216	With SIM2	/

Table 171: Body-Worn SAR test results of LTE Band 12

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	23095/707.5	10M QPSK 1RB#0	0.332	0.211	-0.15	23.64	24.50	0.405	Battery 1#	/
Back Side	10mm	23095/707.5	10M QPSK 1RB#0	0.355	0.207	-0.14	23.64	24.50	0.433	Battery 1#	Yes
Left Side	10mm	23095/707.5	10M QPSK 1RB#0	0.165	0.112	-0.10	23.64	24.50	0.201	Battery 1#	/
Right Side	10mm	23095/707.5	10M QPSK 1RB#0	0.042	0.027	-0.16	23.64	24.50	0.051	Battery 1#	/
Top Side	10mm	23095/707.5	10M QPSK 1RB#0	0.210	0.105	-0.01	23.64	24.50	0.256	Battery 1#	/
Front Side	10mm	23095/707.5	10M QPSK 50%RB#13	0.228	0.146	-0.13	22.52	23.50	0.286	Battery 1#	/
Back Side	10mm	23095/707.5	10M QPSK 50%RB#13	0.218	0.142	-0.17	22.52	23.50	0.273	Battery 1#	/
Left Side	10mm	23095/707.5	10M QPSK 50%RB#13	0.108	0.073	-0.12	22.52	23.50	0.135	Battery 1#	/
Right Side	10mm	23095/707.5	10M QPSK 50%RB#13	0.030	0.019	-0.14	22.52	23.50	0.037	Battery 1#	/
Top Side	10mm	23095/707.5	10M QPSK 50%RB#13	0.147	0.074	-0.04	22.52	23.50	0.184	Battery 1#	/
Back Side	10mm	23095/707.5	10M QPSK 1RB#0	0.238	0.140	-0.13	23.64	24.50	0.290	Battery 2#	/
Back Side	10mm	23095/707.5	10M QPSK 1RB#0	0.253	0.150	-0.14	23.64	24.50	0.308	With SIM2	/
Main Antenna											
Front Side	10mm	23130/711	10M QPSK 1RB#25	0.225	0.167	-0.16	23.91	25.00	0.289	Battery 1#	/
Back Side	10mm	23130/711	10M QPSK 1RB#25	0.237	0.143	-0.09	23.91	25.00	0.305	Battery 1#	/
Left Side	10mm	23130/711	10M QPSK 1RB#25	0.105	0.072	-0.16	23.91	25.00	0.135	Battery 1#	/
Right Side	10mm	23130/711	10M QPSK 1RB#25	0.234	0.161	-0.11	23.91	25.00	0.301	Battery 1#	/
Bottom Side	10mm	23130/711	10M QPSK 1RB#25	0.111	0.064	-0.10	23.91	25.00	0.143	Battery 1#	/
Front Side	10mm	23130/711	10M QPSK 50%RB#0	0.177	0.122	-0.09	22.92	24.00	0.227	Battery 1#	/
Back Side	10mm	23130/711	10M QPSK 50%RB#0	0.212	0.148	-0.07	22.92	24.00	0.272	Battery 1#	/
Left Side	10mm	23130/711	10M QPSK 50%RB#0	0.090	0.061	-0.19	22.92	24.00	0.115	Battery 1#	/
Right Side	10mm	23130/711	10M QPSK 50%RB#0	0.195	0.134	-0.13	22.92	24.00	0.250	Battery 1#	/
Bottom Side	10mm	23130/711	10M QPSK 50%RB#0	0.092	0.053	-0.13	22.92	24.00	0.118	Battery 1#	/
Back Side	10mm	23130/711	10M QPSK 1RB#25	0.254	0.184	-0.18	23.91	25.00	0.326	Battery 2#	Yes
Back Side	10mm	23130/711	10M QPSK 1RB#25	0.201	0.120	-0.10	23.91	25.00	0.258	With SIM2	/

Table 172: Hotspot SAR test results of LTE Band 12



### **7.2.11 SAR measurement Result of LTE Band 17**

SAR for LTE Band 17 (Frequency range:704-716 MHz) is covered by LTE Band 12 (Frequency range:699-716 MHz) due to similar frequency range,same maximum tune up limit and same channel bandwidth.

### 7.2.12 SAR measurement Result of LTE Band 26

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	26775/822.5	15M QPSK 1RB#38	0.369	0.207	0.02	19.09	20.00	0.455	Battery 1#	/
Left tilt	26775/822.5	15M QPSK 1RB#38	0.320	0.165	0.06	19.09	20.00	0.395	Battery 1#	/
Right cheek	26775/822.5	15M QPSK 1RB#38	0.417	0.235	-0.01	19.09	20.00	0.514	Battery 1#	/
Right tilt	26775/822.5	15M QPSK 1RB#38	0.303	0.186	0.18	19.09	20.00	0.374	Battery 1#	/
Left cheek	26865/831.5	15M QPSK 50%RB#18	0.385	0.241	0.07	19.15	20.00	0.468	Battery 1#	/
Left tilt	26865/831.5	15M QPSK 50%RB#18	0.401	0.247	0.06	19.15	20.00	0.488	Battery 1#	/
Right cheek	26865/831.5	15M QPSK 50%RB#18	0.479	0.262	0.01	19.15	20.00	0.583	Battery 1#	Yes
Right tilt	26865/831.5	15M QPSK 50%RB#18	0.338	0.165	0.01	19.15	20.00	0.411	Battery 1#	/
Right cheek	26865/831.5	15M QPSK 50%RB#18	0.414	0.236	0.02	19.15	20.00	0.504	Battery 2#	/
Right cheek	26865/831.5	15M QPSK 50%RB#18	0.404	0.228	0.01	19.15	20.00	0.491	With SIM2	/
Right cheek	26775/822.5	15M QPSK 50%RB#0	0.381	0.242	-0.02	18.98	20.00	0.482	Battery 1#	/
Right cheek	26965/841.5	15M QPSK 50%RB#18	0.374	0.240	-0.03	18.90	20.00	0.482	Battery 1#	/
Main Antenna										
Left cheek	26775/822.5	15M QPSK 1RB#38	0.105	0.073	0.11	24.01	25.00	0.132	Battery 1#	/
Left tilt	26775/822.5	15M QPSK 1RB#38	0.080	0.051	0.08	24.01	25.00	0.100	Battery 1#	/
Right cheek	26775/822.5	15M QPSK 1RB#38	0.149	0.115	0.19	24.01	25.00	0.187	Battery 1#	/
Right tilt	26775/822.5	15M QPSK 1RB#38	0.055	0.038	0.02	24.01	25.00	0.069	Battery 1#	/
Left cheek	26775/822.5	15M QPSK 50%RB#18	0.082	0.057	-0.10	23.01	24.00	0.103	Battery 1#	/
Left tilt	26775/822.5	15M QPSK 50%RB#18	0.018	0.011	0.13	23.01	24.00	0.023	Battery 1#	/
Right cheek	26775/822.5	15M QPSK 50%RB#18	0.108	0.075	0.13	23.01	24.00	0.136	Battery 1#	/
Right tilt	26775/822.5	15M QPSK 50%RB#18	0.045	0.032	0.12	23.01	24.00	0.057	Battery 1#	/
Right cheek	26775/822.5	15M QPSK 1RB#38	0.183	0.140	0.06	24.01	25.00	0.230	Battery 2#	/
Right cheek	26775/822.5	15M QPSK 1RB#38	0.165	0.114	0.03	24.01	25.00	0.207	With SIM2	/
Right cheek	26865/831.5	15M QPSK 1RB#38	0.106	0.127	0.06	23.95	25.00	0.135	Battery 2#	/
Right cheek	26965/841.5	15M QPSK 1RB#0	0.234	0.179	-0.18	23.89	25.00	0.302	Battery 2#	Yes

Table 173: Head SAR test results of LTE Band 26

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	26865/831.5	15M QPSK 1RB#0	0.111	0.080	0.09	23.55	24.50	0.138	Battery 1#	/
Back Side	15mm	26865/831.5	15M QPSK 1RB#0	0.103	0.076	-0.08	23.55	24.50	0.128	Battery 1#	/
Front Side	15mm	26865/831.5	15M QPSK 50%RB#0	0.137	0.093	0.02	22.60	23.50	0.169	Battery 1#	Yes
Back Side	15mm	26865/831.5	15M QPSK 50%RB#0	0.115	0.079	-0.07	22.60	23.50	0.141	Battery 1#	/
Front Side	15mm	26865/831.5	15M QPSK 50%RB#0	0.123	0.088	0.03	22.60	23.50	0.151	Battery 2#	/
Front Side	15mm	26865/831.5	15M QPSK 50%RB#0	0.118	0.085	-0.02	22.60	23.50	0.145	With SIM2	/
Main Antenna											
Front Side	15mm	26775/822.5	15M QPSK 1RB#38	0.169	0.126	-0.06	24.01	25.00	0.212	Battery 1#	/
Back Side	15mm	26775/822.5	15M QPSK 1RB#38	0.214	0.156	-0.01	24.01	25.00	0.269	Battery 1#	/
Front Side	15mm	26775/822.5	15M QPSK 50%RB#18	0.127	0.090	-0.19	23.01	24.00	0.160	Battery 1#	/
Back Side	15mm	26775/822.5	15M QPSK 50%RB#18	0.163	0.114	0.01	23.01	24.00	0.205	Battery 1#	/
Back Side	15mm	26775/822.5	15M QPSK 1RB#38	0.251	0.181	-0.02	24.01	25.00	0.315	Battery 2#	Yes
Back Side	15mm	26775/822.5	15M QPSK 1RB#38	0.208	0.152	-0.01	24.01	25.00	0.261	With SIM2	/

Table 174: Body-Worn SAR test results of LTE Band 26

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	26865/831.5	15M QPSK 1RB#0	0.302	0.169	-0.02	23.55	24.50	0.376	Battery 1#	Yes
Back Side	10mm	26865/831.5	15M QPSK 1RB#0	0.283	0.173	-0.06	23.55	24.50	0.352	Battery 1#	/
Left Side	10mm	26865/831.5	15M QPSK 1RB#0	0.175	0.117	-0.04	23.55	24.50	0.218	Battery 1#	/
Right Side	10mm	26865/831.5	15M QPSK 1RB#0	0.042	0.028	-0.04	23.55	24.50	0.052	Battery 1#	/
Top Side	10mm	26865/831.5	15M QPSK 1RB#0	0.229	0.109	0.15	23.55	24.50	0.285	Battery 1#	/
Front Side	10mm	26865/831.5	15M QPSK 50%RB#0	0.262	0.163	0.01	22.60	23.50	0.322	Battery 1#	/
Back Side	10mm	26865/831.5	15M QPSK 50%RB#0	0.226	0.205	-0.04	22.60	23.50	0.278	Battery 1#	/
Left Side	10mm	26865/831.5	15M QPSK 50%RB#0	0.140	0.093	-0.03	22.60	23.50	0.172	Battery 1#	/
Right Side	10mm	26865/831.5	15M QPSK 50%RB#0	0.033	0.022	-0.14	22.60	23.50	0.040	Battery 1#	/
Top Side	10mm	26865/831.5	15M QPSK 50%RB#0	0.184	0.085	-0.03	22.60	23.50	0.226	Battery 1#	/
Front Side	10mm	26865/831.5	15M QPSK 1RB#0	0.257	0.146	-0.01	23.55	24.50	0.320	Battery 2#	/
Front Side	10mm	26865/831.5	15M QPSK 1RB#0	0.271	0.153	0.01	23.55	24.50	0.337	With SIM2	/
Main Antenna											
Front Side	10mm	26775/822.5	15M QPSK 1RB#38	0.220	0.143	-0.06	24.01	25.00	0.276	Battery 1#	/
Back Side	10mm	26775/822.5	15M QPSK 1RB#38	0.322	0.190	-0.01	24.01	25.00	0.404	Battery 1#	Yes
Left Side	10mm	26775/822.5	15M QPSK 1RB#38	0.074	0.049	-0.10	24.01	25.00	0.093	Battery 1#	/
Right Side	10mm	26775/822.5	15M QPSK 1RB#38	0.241	0.160	-0.02	24.01	25.00	0.303	Battery 1#	/
Bottom Side	10mm	26775/822.5	15M QPSK 1RB#38	0.178	0.089	0.18	24.01	25.00	0.224	Battery 1#	/
Front Side	10mm	26775/822.5	15M QPSK 50%RB#18	0.171	0.111	-0.07	23.01	24.00	0.215	Battery 1#	/
Back Side	10mm	26775/822.5	15M QPSK 50%RB#18	0.221	0.138	0.05	23.01	24.00	0.278	Battery 1#	/
Left Side	10mm	26775/822.5	15M QPSK 50%RB#18	0.060	0.039	-0.10	23.01	24.00	0.075	Battery 1#	/
Right Side	10mm	26775/822.5	15M QPSK 50%RB#18	0.199	0.133	-0.06	23.01	24.00	0.250	Battery 1#	/
Bottom Side	10mm	26775/822.5	15M QPSK 50%RB#18	0.115	0.064	0.19	23.01	24.00	0.144	Battery 1#	/
Back Side	10mm	26775/822.5	15M QPSK 1RB#38	0.291	0.173	0.00	24.01	25.00	0.366	Battery 2#	/
Back Side	10mm	26775/822.5	15M QPSK 1RB#38	0.274	0.164	0.00	24.01	25.00	0.344	With SIM2	/

Table 175: Hotspot SAR test results of LTE Band 26

### 7.2.13 SAR measurement Result of LTE Band 38

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	38150/2610	20M QPSK 1RB#50	0.158	0.076	0.05	13.91	14.50	0.181	Battery 1#	/
Left tilt	38150/2610	20M QPSK 1RB#50	0.199	0.095	-0.04	13.91	14.50	0.228	Battery 1#	/
Right cheek	38150/2610	20M QPSK 1RB#50	0.299	0.121	-0.07	13.91	14.50	0.343	Battery 1#	/
Right tilt	38150/2610	20M QPSK 1RB#50	0.362	0.145	0.04	13.91	14.50	0.415	Battery 1#	Yes
Left cheek	38150/2610	20M QPSK 50%RB#50	0.176	0.079	0.01	14.05	14.50	0.195	Battery 1#	/
Left tilt	38150/2610	20M QPSK 50%RB#50	0.220	0.098	-0.01	14.05	14.50	0.244	Battery 1#	/
Right cheek	38150/2610	20M QPSK 50%RB#50	0.305	0.122	0.18	14.05	14.50	0.338	Battery 1#	/
Right tilt	38150/2610	20M QPSK 50%RB#50	0.358	0.144	0.13	14.05	14.50	0.397	Battery 1#	/
Right tilt	38150/2610	20M QPSK 1RB#50	0.346	0.140	-0.02	13.91	14.50	0.396	Battery 2#	/
Right tilt	38150/2610	20M QPSK 1RB#50	0.349	0.141	0.00	13.91	14.50	0.400	With SIM2	/
Right tilt	37850/2580	20M QPSK 1RB#50	0.326	0.130	0.03	13.85	14.50	0.379	Battery 1#	/
Right tilt	38000/2595	20M QPSK 1RB#50	0.340	0.136	-0.04	13.88	14.50	0.392	Battery 1#	/
Left cheek	37901/2585.1(PCC)	20M QPSK 1RB#99	0.128	0.059	0.03	13.37	14.50	0.166	Battery 1#	/
	38099/2604.9(SCC)	20M QPSK 1RB#0								/
Main Antenna										
Left cheek	38000/2595	20M QPSK 1RB#0	0.031	0.017	0.02	24.03	24.50	0.035	Battery 1#	/
Left tilt	38000/2595	20M QPSK 1RB#0	0.019	0.010	-0.17	24.03	24.50	0.021	Battery 1#	/
Right cheek	38000/2595	20M QPSK 1RB#0	0.044	0.025	-0.14	24.03	24.50	0.049	Battery 1#	Yes
Right tilt	38000/2595	20M QPSK 1RB#0	0.013	0.007	0.11	24.03	24.50	0.015	Battery 1#	/
Left cheek	38150/2610	20M QPSK 50%RB#25	0.020	0.011	0.02	23.02	23.50	0.023	Battery 1#	/
Left tilt	38150/2610	20M QPSK 50%RB#25	0.020	0.010	0.11	23.02	23.50	0.022	Battery 1#	/
Right cheek	38150/2610	20M QPSK 50%RB#25	0.027	0.015	0.02	23.02	23.50	0.030	Battery 1#	/
Right tilt	38150/2610	20M QPSK 50%RB#25	0.010	0.005	-0.03	23.02	23.50	0.011	Battery 1#	/
Right cheek	38000/2595	20M QPSK 1RB#0	0.028	0.016	0.14	24.03	24.50	0.031	Battery 2#	/
Right cheek	38000/2595	20M QPSK 1RB#0	0.040	0.022	0.16	24.03	24.50	0.045	With SIM2	/
Right cheek	37850/2580	20M QPSK 1RB#99	0.035	0.019	0.10	23.87	24.50	0.040	Battery 1#	/
Right cheek	38150/2610	20M QPSK 1RB#0	0.040	0.022	-0.15	24.01	24.50	0.044	Battery 1#	/
Right cheek	38099/2604.9(PCC)	20M QPSK 1RB#99	0.035	0.011	-0.15	23.55	24.50	0.043	Battery 1#	/
	37901/2585.1(SCC)	20M QPSK 1RB#0								/

Table 176: Head SAR test results of LTE Band 38

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	38150/2610	20M QPSK 1RB#0	0.123	0.063	0.17	20.41	21.00	0.141	Battery 1#	/
Back Side	15mm	38150/2610	20M QPSK 1RB#0	0.114	0.060	-0.18	20.41	21.00	0.131	Battery 1#	/
Front Side	15mm	38150/2610	20M QPSK 50%RB#0	0.123	0.065	0.16	20.43	21.00	0.140	Battery 1#	Yes
Back Side	15mm	38150/2610	20M QPSK 50%RB#0	0.109	0.057	0.14	20.43	21.00	0.124	Battery 1#	/
Front Side	15mm	38150/2610	20M QPSK 1RB#0	0.104	0.054	-0.06	20.41	21.00	0.119	Battery 2#	/
Front Side	15mm	38150/2610	20M QPSK 1RB#0	0.107	0.055	-0.02	20.41	21.00	0.123	With SIM2	/
Front Side	15mm	37901/2585.1(PCC)	20M QPSK 1RB#99	0.094	0.050	0.17	19.41	21.00	0.136	Battery 1#	/
		38099/2604.9(SCC)	20M QPSK 1RB#0								
Main Antenna											
Front Side	15mm	38000/2595	20M QPSK 1RB#0	0.128	0.071	-0.13	24.03	24.50	0.143	Battery 1#	/
Back Side	15mm	38000/2595	20M QPSK 1RB#0	0.146	0.079	-0.15	24.03	24.50	0.163	Battery 1#	Yes
Front Side	15mm	38150/2610	20M QPSK 50%RB#25	0.119	0.060	-0.11	23.02	23.50	0.133	Battery 1#	/
Back Side	15mm	38150/2610	20M QPSK 50%RB#25	0.107	0.058	-0.13	23.02	23.50	0.120	Battery 1#	/
Back Side	15mm	38000/2595	20M QPSK 1RB#0	0.121	0.066	-0.18	24.03	24.50	0.135	Battery 2#	/
Back Side	15mm	38000/2595	20M QPSK 1RB#0	0.116	0.065	0.14	24.03	24.50	0.129	With SIM2	/
Back Side	15mm	38099/2604.9(PCC)	20M QPSK 1RB#99	0.128	0.071	0.17	23.55	24.50	0.159	Battery 1#	/
		37901/2585.1(SCC)	20M QPSK 1RB#0								

Table 177: Body-Worn SAR test results of LTE Band 38

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	38150/2610	20M QPSK 1RB#0	0.122	0.061	-0.17	19.30	20.00	0.143	Battery 1#	/
Back Side	10mm	38150/2610	20M QPSK 1RB#0	0.175	0.087	0.08	19.30	20.00	0.206	Battery 1#	/
Left Side	10mm	38150/2610	20M QPSK 1RB#0	0.056	0.028	-0.12	19.30	20.00	0.065	Battery 1#	/
Right Side	10mm	38150/2610	20M QPSK 1RB#0	0.031	0.015	-0.12	19.30	20.00	0.037	Battery 1#	/
Top Side	10mm	38150/2610	20M QPSK 1RB#0	0.444	0.219	-0.14	19.30	20.00	0.522	Battery 1#	Yes
Front Side	10mm	38150/2610	20M QPSK 50%RB#25	0.171	0.086	0.11	19.27	20.00	0.202	Battery 1#	/
Back Side	10mm	38150/2610	20M QPSK 50%RB#25	0.247	0.121	0.04	19.27	20.00	0.292	Battery 1#	/
Left Side	10mm	38150/2610	20M QPSK 50%RB#25	0.105	0.049	-0.12	19.27	20.00	0.124	Battery 1#	/
Right Side	10mm	38150/2610	20M QPSK 50%RB#25	0.038	0.019	0.03	19.27	20.00	0.045	Battery 1#	/
Top Side	10mm	38150/2610	20M QPSK 50%RB#25	0.439	0.218	-0.02	19.27	20.00	0.519	Battery 1#	/
Top Side	10mm	38150/2610	20M QPSK 1RB#0	0.358	0.174	-0.05	19.30	20.00	0.421	Battery 2#	/
Top Side	10mm	38150/2610	20M QPSK 1RB#0	0.370	0.186	-0.05	19.30	20.00	0.435	With SIM2	/
Top Side	10mm	38099/2604.9(PCC)	20M QPSK 1RB#0	0.364	0.141	0.12	19.54	20.00	0.405	Battery 1#	/
		37901/2585.1(SCC)	20M QPSK 1RB#99								
Main Antenna											
Front Side	10mm	38000/2595	20M QPSK 1RB#0	0.268	0.142	0.00	24.03	24.50	0.299	Battery 1#	/
Back Side	10mm	38000/2595	20M QPSK 1RB#0	0.310	0.164	0.14	24.03	24.50	0.345	Battery 1#	Yes
Left Side	10mm	38000/2595	20M QPSK 1RB#0	0.130	0.065	-0.07	24.03	24.50	0.145	Battery 1#	/
Right Side	10mm	38000/2595	20M QPSK 1RB#0	0.038	0.016	0.04	24.03	24.50	0.042	Battery 1#	/
Bottom Side	10mm	38000/2595	20M QPSK 1RB#0	0.292	0.159	-0.03	24.03	24.50	0.325	Battery 1#	/
Front Side	10mm	38150/2610	20M QPSK 50%RB#25	0.159	0.083	0.01	23.02	23.50	0.178	Battery 1#	/
Back Side	10mm	38150/2610	20M QPSK 50%RB#25	0.219	0.118	-0.07	23.02	23.50	0.245	Battery 1#	/
Left Side	10mm	38150/2610	20M QPSK 50%RB#25	0.085	0.042	-0.04	23.02	23.50	0.095	Battery 1#	/
Right Side	10mm	38150/2610	20M QPSK 50%RB#25	0.038	0.016	-0.04	23.02	23.50	0.042	Battery 1#	/
Bottom Side	10mm	38150/2610	20M QPSK 50%RB#25	0.202	0.102	0.19	23.02	23.50	0.226	Battery 1#	/
Back Side	10mm	38000/2595	20M QPSK 1RB#0	0.262	0.142	0.15	24.03	24.50	0.292	Battery 2#	/
Back Side	10mm	38000/2595	20M QPSK 1RB#0	0.274	0.144	0.16	24.03	24.50	0.305	With SIM2	/
Back Side	10mm	38099/2604.9(PCC)	20M QPSK 1RB#99	0.259	0.139	-0.16	23.55	24.50	0.322	Battery 1#	/
		37901/2585.1(SCC)	20M QPSK 1RB#0								

Table 178: Hotspot SAR test results of LTE Band 38

Per KDB648474D04, when hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled-up 1-g SAR (W/kg)	Product Specific 10-g SAR Exclusion
				1-g	10-g					
Second Antenna										
Front Side	10mm	38150/2610	20M QPSK 1RB#0	0.122	0.061	-0.17	19.30	21.00	0.180	Yes
Back Side	10mm	38150/2610	20M QPSK 1RB#0	0.175	0.087	0.08	19.30	21.00	0.259	Yes
Left Side	10mm	38150/2610	20M QPSK 1RB#0	0.056	0.028	-0.12	19.30	21.00	0.082	Yes
Right Side	10mm	38150/2610	20M QPSK 1RB#0	0.031	0.015	-0.12	19.30	21.00	0.046	Yes
Top Side	10mm	38150/2610	20M QPSK 1RB#0	0.444	0.219	-0.14	19.30	21.00	0.657	Yes
Front Side	10mm	38150/2610	20M QPSK 50%RB#25	0.171	0.086	0.11	19.27	21.00	0.255	Yes
Back Side	10mm	38150/2610	20M QPSK 50%RB#25	0.247	0.121	0.04	19.27	21.00	0.368	Yes
Left Side	10mm	38150/2610	20M QPSK 50%RB#25	0.105	0.049	-0.12	19.27	21.00	0.156	Yes
Right Side	10mm	38150/2610	20M QPSK 50%RB#25	0.038	0.019	0.03	19.27	21.00	0.057	Yes
Top Side	10mm	38150/2610	20M QPSK 50%RB#25	0.439	0.218	-0.02	19.27	21.00	0.654	Yes
Top Side	10mm	38150/2610	20M QPSK 1RB#0	0.358	0.174	-0.05	19.30	21.00	0.530	Yes
Top Side	10mm	38150/2610	20M QPSK 1RB#0	0.370	0.186	-0.05	19.30	21.00	0.547	Yes
Top Side	10mm	38000/2595(PCC)	20M QPSK 1RB#0	0.364	0.141	0.12	19.54	21.00	0.509	Yes
		37802/2575.2(SCC)	20M QPSK 1RB#99							

Table 179: Product Specific 10-g SAR test reduction evaluation of LTE Band 38

Note : According to the table above , Product Specific 10-g SAR test is not required for this frequency band.



### 7.2.14 SAR measurement Result of LTE Band 41

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g						
Second Antenna										
Left cheek	40840/2615	20M QPSK 1RB#99	0.153	0.077	-0.05	13.65	14.50	0.186	Battery 1#	/
Left tilt	40840/2615	20M QPSK 1RB#99	0.191	0.094	-0.16	13.65	14.50	0.232	Battery 1#	/
Right cheek	40840/2615	20M QPSK 1RB#99	0.273	0.119	-0.02	13.65	14.50	0.332	Battery 1#	/
Right tilt	40840/2615	20M QPSK 1RB#99	0.292	0.128	-0.08	13.65	14.50	0.355	Battery 1#	/
Left cheek	40840/2615	20M QPSK 50%RB#0	0.157	0.079	-0.07	13.90	14.50	0.180	Battery 1#	/
Left tilt	40840/2615	20M QPSK 50%RB#0	0.186	0.092	0.08	13.90	14.50	0.214	Battery 1#	/
Right cheek	40840/2615	20M QPSK 50%RB#0	0.225	0.113	-0.06	13.90	14.50	0.258	Battery 1#	/
Right tilt	40840/2615	20M QPSK 50%RB#0	0.249	0.121	-0.04	13.90	14.50	0.286	Battery 1#	/
Right tilt	40840/2615	20M QPSK 1RB#99	0.281	0.134	-0.05	13.65	14.50	0.342	Battery 2#	/
Right tilt	40840/2615	20M QPSK 1RB#99	0.284	0.134	0.12	13.65	14.50	0.345	With SIM2	/
Right tilt	40240/2555	20M QPSK 1RB#50	0.262	0.127	-0.06	13.60	14.50	0.322	Battery 1#	/
Right tilt	40540/2585	20M QPSK 1RB#0	0.274	0.131	-0.17	13.43	14.50	0.351	Battery 1#	/
Right tilt	41140/2645	20M QPSK 1RB#99	0.273	0.126	0.04	13.52	14.50	0.342	Battery 1#	/
Right cheek	40540/2585(PCC)	20M QPSK 1RB#99	0.349	0.154	-0.04	13.26	14.50	0.464	Battery 1#	Yes
	40738/2604.8(SCC)	20M QPSK 1RB#0								
Main Antenna										
Left cheek	40840/2615	20M QPSK 1RB#0	0.017	0.009	0.11	23.24	24.00	0.020	Battery 1#	/
Left tilt	40840/2615	20M QPSK 1RB#0	0.017	0.009	-0.02	23.24	24.00	0.020	Battery 1#	/
Right cheek	40840/2615	20M QPSK 1RB#0	0.040	0.024	0.17	23.24	24.00	0.048	Battery 1#	/
Right tilt	40840/2615	20M QPSK 1RB#0	0.012	0.007	0.10	23.24	24.00	0.014	Battery 1#	/
Left cheek	40840/2615	20M QPSK 50%RB#50	0.012	0.006	0.18	22.53	23.00	0.014	Battery 1#	/
Left tilt	40840/2615	20M QPSK 50%RB#50	0.013	0.007	0.06	22.53	23.00	0.015	Battery 1#	/
Right cheek	40840/2615	20M QPSK 50%RB#50	0.019	0.010	0.15	22.53	23.00	0.021	Battery 1#	/
Right tilt	40840/2615	20M QPSK 50%RB#50	0.009	0.005	0.18	22.53	23.00	0.010	Battery 1#	/
Right cheek	40840/2615	20M QPSK 1RB#0	0.040	0.023	0.05	23.24	24.00	0.048	Battery 2#	/
Right cheek	40840/2615	20M QPSK 1RB#0	0.038	0.020	0.13	23.24	24.00	0.045	With SIM2	/
Right cheek	40240/2555	20M QPSK 1RB#0	0.028	0.015	-0.07	23.19	24.00	0.034	Battery 1#	/
Right cheek	40540/2585	20M QPSK 1RB#0	0.036	0.019	-0.12	23.14	24.00	0.044	Battery 1#	/
Right cheek	41140/2645	20M QPSK 1RB#50	0.047	0.027	-0.13	23.20	24.00	0.056	Battery 1#	Yes
Right cheek	40840/26159(PCC)	20M QPSK 1RB#99	0.038	0.022	0.140	23.53	24.00	0.042	Battery 1#	/
	40642/2595.2(SCC)	20M QPSK 1RB#0								

Table 180: Head SAR test results of LTE Band 41

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	15mm	40540/2585	20M QPSK 1RB#0	0.142	0.076	0.18	22.96	23.00	0.143	Battery 1#	/
Back Side	15mm	40540/2585	20M QPSK 1RB#0	0.127	0.075	0.13	22.96	23.00	0.128	Battery 1#	/
Front Side	15mm	40840/2615	20M QPSK 50%RB#0	0.178	0.101	-0.14	22.33	23.00	0.203	Battery 1#	Yes
Back Side	15mm	40840/2615	20M QPSK 50%RB#0	0.163	0.086	-0.02	22.33	23.00	0.190	Battery 1#	/
Front Side	15mm	40840/2615	20M QPSK 50%RB#0	0.150	0.079	-0.11	22.33	23.00	0.175	Battery 2#	/
Front Side	15mm	40840/2615	20M QPSK 50%RB#0	0.148	0.079	0.16	22.33	23.00	0.173	With SIM2	/
Front Side	15mm	40540/2585(PCC)	20M QPSK 1RB#99	0.169	0.096	0.00	21.69	23.00	0.229	Battery 1#	/
		40738/2604.8(SCC)	20M QPSK 1RB#0								
Main Antenna											
Front Side	15mm	40840/2615	20M QPSK 1RB#0	0.121	0.072	0.18	23.24	24.00	0.144	Battery 1#	/
Back Side	15mm	40840/2615	20M QPSK 1RB#0	0.144	0.087	0.08	23.24	24.00	0.172	Battery 1#	/
Front Side	15mm	40840/2615	20M QPSK 50%RB#50	0.084	0.046	-0.16	22.53	23.00	0.094	Battery 1#	/
Back Side	15mm	40840/2615	20M QPSK 50%RB#50	0.094	0.055	0.15	22.53	23.00	0.105	Battery 1#	/
Back Side	15mm	40840/2615	20M QPSK 1RB#0	0.146	0.087	0.19	23.24	24.00	0.174	Battery 2#	Yes
Back Side	15mm	40840/2615	20M QPSK 1RB#0	0.138	0.075	-0.13	23.24	24.00	0.164	With SIM2	/
Back Side	15mm	40840/2615(PCC)	20M QPSK 1RB#99	0.139	0.082	0.13	23.53	24.00	0.155	Battery 2#	/
		40642/2595.2(SCC)	20M QPSK 1RB#0								

Table 181: Body-Worn SAR test results of LTE Band 41

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g						
Second Antenna											
Front Side	10mm	40840/2615	20M QPSK 1RB#99	0.271	0.138	0.13	19.76	20.50	0.321	Battery 1#	/
Back Side	10mm	40840/2615	20M QPSK 1RB#99	0.506	0.263	0.00	19.76	20.50	0.600	Battery 1#	/
Left Side	10mm	40840/2615	20M QPSK 1RB#99	0.194	0.093	-0.11	19.76	20.50	0.230	Battery 1#	/
Right Side	10mm	40840/2615	20M QPSK 1RB#99	0.044	0.025	0.18	19.76	20.50	0.052	Battery 1#	/
Top Side	10mm	40840/2615	20M QPSK 1RB#99	0.536	0.270	0.06	19.76	20.50	0.636	Battery 1#	Yes
Top Side	10mm	40240/2555	20M QPSK 1RB#0	0.386	0.195	-0.06	19.51	20.50	0.485	Battery 1#	/
Top Side	10mm	40540/2585	20M QPSK 1RB#0	0.364	0.186	-0.09	19.43	20.50	0.466	Battery 1#	/
Top Side	10mm	41140/2645	20M QPSK 1RB#50	0.445	0.223	-0.04	19.56	20.50	0.553	Battery 1#	/
Front Side	10mm	40840/2615	20M QPSK 50%RB#50	0.331	0.164	0.19	19.86	20.50	0.384	Battery 1#	/
Back Side	10mm	40840/2615	20M QPSK 50%RB#50	0.306	0.151	0.19	19.86	20.50	0.355	Battery 1#	/
Left Side	10mm	40840/2615	20M QPSK 50%RB#50	0.170	0.082	-0.06	19.86	20.50	0.197	Battery 1#	/
Right Side	10mm	40840/2615	20M QPSK 50%RB#50	0.040	0.022	0.05	19.86	20.50	0.046	Battery 1#	/
Top Side	10mm	40840/2615	20M QPSK 50%RB#50	0.509	0.237	-0.16	19.86	20.50	0.590	Battery 1#	/
Top Side	10mm	40840/2615	20M QPSK 1RB#99	0.461	0.222	-0.17	19.76	20.50	0.547	Battery 2#	/
Top Side	10mm	40840/2615	20M QPSK 1RB#99	0.458	0.223	-0.16	19.76	20.50	0.543	With SIM2	/
Top Side	10mm	40540/2585(PCC)	20M QPSK 1RB#99	0.403	0.219	-0.15	19.21	20.50	0.542	Battery 1#	/
		40738/2604.8(SCC)	20M QPSK 1RB#0								
Main Antenna											
Front Side	10mm	40840/2615	20M QPSK 1RB#0	0.247	0.131	-0.19	23.24	24.00	0.294	Battery 1#	/
Back Side	10mm	40840/2615	20M QPSK 1RB#0	0.292	0.167	0.11	23.24	24.00	0.348	Battery 1#	/
Left Side	10mm	40840/2615	20M QPSK 1RB#0	0.102	0.052	-0.17	23.24	24.00	0.122	Battery 1#	/
Right Side	10mm	40840/2615	20M QPSK 1RB#0	0.036	0.017	0.02	23.24	24.00	0.043	Battery 1#	/
Bottom Side	10mm	40840/2615	20M QPSK 1RB#0	0.197	0.106	-0.12	23.24	24.00	0.235	Battery 1#	/
Front Side	10mm	40840/2615	20M QPSK 50%RB#50	0.189	0.099	0.19	22.53	23.00	0.211	Battery 1#	/
Back Side	10mm	40840/2615	20M QPSK 50%RB#50	0.215	0.114	-0.19	22.53	23.00	0.240	Battery 1#	/
Left Side	10mm	40840/2615	20M QPSK 50%RB#50	0.068	0.036	0.18	22.53	23.00	0.076	Battery 1#	/
Right Side	10mm	40840/2615	20M QPSK 50%RB#50	0.026	0.012	0.13	22.53	23.00	0.029	Battery 1#	/
Bottom Side	10mm	40840/2615	20M QPSK 50%RB#50	0.142	0.077	-0.18	22.53	23.00	0.158	Battery 1#	/
Back Side	10mm	40840/2615	20M QPSK 1RB#0	0.295	0.169	0.02	23.24	24.00	0.351	Battery 2#	Yes
Back Side	10mm	40840/2615	20M QPSK 1RB#0	0.246	0.130	0.11	23.24	24.00	0.293	With SIM2	/
Back Side	/	40840/2615(PCC)	20M QPSK 1RB#99	0.260	0.148	-0.17	23.53	24.00	0.290	Battery 2#	/
		40642/2595.2(SCC)	20M QPSK 1RB#0								

Table 182: Hotspot SAR test results of LTE Band 41

Per KDB648474D04, when hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled-up 1-g SAR (W/kg)	Product Specific 10-g SAR Exclusion
				1-g	10-g					
Second Antenna										
Front Side	10mm	40840/2615	20M QPSK 1RB#99	0.271	0.138	0.13	19.76	23.00	0.571	Yes
Back Side	10mm	40840/2615	20M QPSK 1RB#99	0.506	0.263	0.00	19.76	23.00	1.067	Yes
Left Side	10mm	40840/2615	20M QPSK 1RB#99	0.194	0.093	-0.11	19.76	23.00	0.409	Yes
Right Side	10mm	40840/2615	20M QPSK 1RB#99	0.044	0.025	0.18	19.76	23.00	0.092	Yes
Top Side	10mm	40840/2615	20M QPSK 1RB#99	0.536	0.270	0.06	19.76	23.00	1.130	Yes
Front Side	10mm	40840/2615	20M QPSK 50%RB#50	0.331	0.164	0.19	19.86	23.00	0.682	Yes
Back Side	10mm	40840/2615	20M QPSK 50%RB#50	0.306	0.151	0.19	19.86	23.00	0.631	Yes
Left Side	10mm	40840/2615	20M QPSK 50%RB#50	0.170	0.082	-0.06	19.86	23.00	0.350	Yes
Right Side	10mm	40840/2615	20M QPSK 50%RB#50	0.040	0.022	0.05	19.86	23.00	0.082	Yes
Top Side	10mm	40840/2615	20M QPSK 50%RB#50	0.509	0.237	-0.16	19.86	23.00	1.049	Yes
Top Side	10mm	40840/2615	20M QPSK 1RB#99	0.461	0.222	-0.17	19.76	23.00	0.972	Yes
Top Side	10mm	40840/2615	20M QPSK 1RB#99	0.458	0.223	-0.16	19.76	23.00	0.966	Yes
Top Side	10mm	40540/2585(PCC)	20M QPSK 1RB#99	0.403	0.219	-0.15	13.26	23.00	0.965	Yes
		40738/2604.8(SCC)	20M QPSK 1RB#0							

Table 183: Product Specific 10-g SAR test reduction evaluation of LTE Band 41

Note : According to the table above , Product Specific 10-g SAR test is not required for this frequency band.

## 7.2.15 SAR measurement Result of WiFi 2.4G

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
ANT1													
Left cheek	6/2437	802.11b	0.242	0.192	0.100	-0.17	99%	0.194	11.55	12.50	0.241	Battery 1#	/
Left tilt	6/2437	802.11b	0.265	0.224	0.106	-0.09	99%	0.226	11.55	12.50	0.282	Battery 1#	/
Right cheek	6/2437	802.11b	0.117	0.117	0.063	-0.07	99%	0.118	11.55	12.50	0.147	Battery 1#	/
Right tilt	6/2437	802.11b	0.126	0.128	0.066	0.12	99%	0.129	11.55	12.50	0.161	Battery 1#	/
Left tilt	6/2437	802.11b	0.236	0.204	0.097	-0.15	99%	0.206	11.55	12.50	0.256	Battery 2#	/
Left tilt	1/2412	802.11b	0.221	0.189	0.094	-0.14	99%	0.191	11.38	12.50	0.247	Battery 1#	/
Left tilt	11/2462	802.11b	0.244	0.217	0.103	-0.10	99%	0.219	11.37	12.50	0.284	Battery 1#	/
ANT2													
Left cheek	6/2437	802.11b	0.030	0.024	0.011	-0.17	99%	0.025	11.17	12.50	0.033	Battery 1#	/
Left tilt	6/2437	802.11b	0.031	0.025	0.011	-0.12	99%	0.025	11.17	12.50	0.034	Battery 1#	/
Right cheek	6/2437	802.11b	0.010	/	/	-0.19	99%	/	11.17	12.50	/	Battery 1#	/
Right tilt	6/2437	802.11b	0.010	/	/	-0.13	99%	/	11.17	12.50	/	Battery 1#	/
Left tilt	6/2437	802.11b	0.021	/	/	-0.11	99%	/	11.17	12.50	/	Battery 2#	/
Left tilt	1/2412	802.11b	0.025	0.023	0.010	-0.16	99%	0.023	10.95	12.50	0.033	Battery 1#	/
Left tilt	11/2462	802.11b	0.031	0.025	0.012	-0.12	99%	0.025	10.61	12.50	0.039	Battery 1#	/

Table 184: Head SAR test results of WiFi 2.4G SISO

Note: Per KDB248227D01, for Head SAR test of WiFi 2.4G, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. The highest *reported* SAR for DSSS is adjusted by the ratio of OFDM 802.11g/n to DSSS specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g/n is not required.

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
Test data of WiFi 2.4G CDD with ANT1													
Left cheek	6/2437	802.11g	0.302	0.260	0.122	-0.02	98%	0.265	11.70	12.50	0.319	Battery 1#	Yes
Left tilt	6/2437	802.11g	0.279	0.220	0.113	-0.02	98%	0.224	11.70	12.50	0.270	Battery 1#	/
Right cheek	6/2437	802.11g	0.108	/	/	-0.02	98%	/	11.70	12.50	/	Battery 1#	/
Right tilt	6/2437	802.11g	0.116	/	/	-0.14	98%	/	11.70	12.50	/	Battery 1#	/
Left cheek	6/2437	802.11g	0.256	0.230	0.112	-0.05	98%	0.235	11.70	12.50	0.282	Battery 2#	/
Left cheek	1/2412	802.11g	0.276	0.241	0.116	-0.12	98%	0.246	11.67	12.50	0.298	Battery 1#	/
Left cheek	11/2462	802.11g	0.254	0.244	0.117	-0.08	98%	0.249	11.58	12.50	0.308	Battery 1#	/
Test data of WiFi 2.4G CDD with ANT2													
Left cheek	6/2437	802.11g	0.026	0.020	0.011	-0.17	98%	0.020	11.11	12.50	0.028	Battery 1#	/
Left tilt	6/2437	802.11g	0.016	/	/	-0.14	98%	/	11.11	12.50	/	Battery 1#	/
Right cheek	6/2437	802.11g	0.011	/	/	-0.19	98%	/	11.11	12.50	/	Battery 1#	/
Right tilt	6/2437	802.11g	0.010	/	/	-0.17	98%	/	11.11	12.50	/	Battery 1#	/
Left cheek	6/2437	802.11g	0.025	0.023	0.010	-0.16	98%	0.024	11.11	12.50	0.033	Battery 2#	/
Left cheek	1/2412	802.11g	0.026	0.024	0.011	-0.17	98%	0.024	11.09	12.50	0.034	Battery 1#	/
Left cheek	11/2462	802.11g	0.027	0.027	0.011	-0.13	98%	0.027	10.77	12.50	0.040	Battery 1#	Yes

Table 185: Head SAR test results of WiFi 2.4G CDD

Test Position of Head	Dist.	Test Channel /Freq.(MHz)	Test Mode	WiFi Reported 1-g SAR (W/kg)			Accessory Information
				Ant 1	Ant 2	CDD/MIMO (Ant1+Ant2)	
CDD							
Left cheek	/	6/2437	802.11g	0.319	0.040	0.359	Battery 1#
Left tilt	/	6/2437	802.11g	0.319	0.040	0.359	Battery 1#
Right cheek	/	6/2437	802.11g	0.319	0.040	0.359	Battery 1#
Right tilt	/	6/2437	802.11g	0.319	0.040	0.359	Battery 1#
Left cheek	/	6/2437	802.11g	0.319	0.040	0.359	Battery 2#
Left cheek	/	1/2412	802.11g	0.319	0.040	0.359	Battery 1#
Left cheek	/	11/2462	802.11g	0.319	0.040	0.359	Battery 1#

Table 186: Head SAR of WiFi 2.4G CDD

Note: Per KDB248227D01, for Head SAR test of WiFi 2.4G, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. The highest *reported* SAR for DSSS is adjusted by the ratio of OFDM 802.11g/n to DSSS specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g/n is not required.

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
ANT1														
Front Side	15mm	11/2462	802.11 b	0.078	0.085	0.037	-0.15	98%	0.087	16.41	17.50	0.112	Battery 1#	/
Back Side	15mm	11/2462	802.11 b	0.085	0.084	0.042	0.10	98%	0.086	16.41	17.50	0.110	Battery 1#	/
Back Side	15mm	11/2462	802.11 b	0.089	0.090	0.044	-0.04	98%	0.091	16.41	17.50	0.117	Battery 2#	/
ANT2														
Front Side	15mm	6/2437	802.11 b	0.011	0.009	0.005	0.19	98%	0.009	16.09	17.50	0.012	Battery 1#	/
Back Side	15mm	6/2437	802.11 b	0.059	0.059	0.029	-0.08	98%	0.061	16.09	17.50	0.084	Battery 1#	/
Back Side	15mm	6/2437	802.11 b	0.063	0.064	0.031	0.07	98%	0.065	16.09	17.50	0.090	Battery 2#	Yes

Table 187: Body-Worn SAR test results of WiFi 2.4G SISO

Note: Per KDB248227D01, for Head SAR test of WiFi 2.4G, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. The highest *reported* SAR for DSSS is adjusted by the ratio of OFDM 802.11g/n to DSSS specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g/n is not required.

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
Test data of WiFi 2.4G CDD with ANT1														
Front Side	15mm	2/2417	802.11g	0.088	/	/	0.15	98%	/	16.01	17.50	/	Battery 1#	/
Back Side	15mm	2/2417	802.11g	0.083	0.081	0.040	-0.10	98%	0.083	16.01	17.50	0.116	Battery 1#	/
Back Side	15mm	2/2417	802.11g	0.100	0.096	0.047	-0.16	98%	0.098	16.01	17.50	0.138	Battery 2#	Yes
Test data of WiFi 2.4G CDD with ANT2														
Front Side	15mm	2/2417	802.11g	0.010	/	/	-0.18	98%	/	16.02	17.50	/	Battery 1#	/
Back Side	15mm	2/2417	802.11g	0.055	0.058	0.028	0.05	98%	0.059	16.02	17.50	0.083	Battery 1#	/
Back Side	15mm	2/2417	802.11g	0.051	0.053	0.026	-0.09	98%	0.054	16.02	17.50	0.076	Battery 2#	/

Table 188: Body-Worn SAR test results of WiFi 2.4G CDD

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	WiFi Reported 1-g SAR (W/kg)			Accessory Information
				Ant 1	Ant 2	CDD/MIMO (Ant1+Ant2)	
CDD							
Front Side	15mm	2/2417	802.11g	0.138	0.083	0.221	Battery 1#
Back Side	15mm	2/2417	802.11g	0.138	0.083	0.221	Battery 1#
Back Side	15mm	2/2417	802.11g	0.138	0.083	0.221	Battery 2#

Table 189: Body-Worn SAR of WiFi 2.4G CDD

Note: Per KDB248227D01, for Body-worn SAR test of WiFi 2.4G, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. The highest *reported* SAR for DSSS is adjusted by the ratio of OFDM 802.11g/n to DSSS specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g/n is not required.

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
ANT1														
Front Side	10mm	11/2462	802.11 b	0.146	0.149	0.079	-0.08	98%	0.152	16.41	17.50	0.195	Battery 1#	/
Back Side	10mm	11/2462	802.11 b	0.200	0.186	0.085	0.15	98%	0.190	16.41	17.50	0.244	Battery 1#	/
Right Side	10mm	11/2462	802.11 b	0.132	0.132	0.061	-0.02	98%	0.135	16.41	17.50	0.173	Battery 1#	/
Top Side	10mm	11/2462	802.11 b	0.177	0.178	0.090	-0.02	98%	0.182	16.41	17.50	0.233	Battery 1#	/
Back Side	10mm	11/2462	802.11 b	0.230	0.221	0.099	0.08	98%	0.226	16.41	17.50	0.290	Battery 2#	/
ANT2														
Front Side	10mm	6/2437	802.11 b	0.015	0.015	0.008	0.14	98%	0.015	16.09	17.50	0.020	Battery 1#	/
Back Side	10mm	6/2437	802.11 b	0.174	0.178	0.076	-0.08	98%	0.182	16.09	17.50	0.251	Battery 1#	/
Right Side	10mm	6/2437	802.11 b	0.057	0.058	0.028	-0.14	98%	0.059	16.09	17.50	0.081	Battery 1#	/
Top Side	10mm	6/2437	802.11 b	0.012	0.012	0.007	-0.16	98%	0.012	16.09	17.50	0.016	Battery 1#	/
Back Side	10mm	6/2437	802.11 b	0.164	0.181	0.077	0.17	98%	0.185	16.09	17.50	0.256	Battery 2#	Yes

Table 190: Hotspot SAR test results of WiFi 2.4G SISO

Note: Per KDB248227D01, for Head SAR test of WiFi 2.4G, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. The highest *reported* SAR for DSSS is adjusted by the ratio of OFDM 802.11g/n to DSSS specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g/n is not required.

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
Test data of WiFi 2.4G CDD with ANT1														
Front Side	10mm	2/2417	802.11g	0.182	/	/	-0.05	98%	/	16.01	17.50	/	Battery 1#	/
Back Side	10mm	2/2417	802.11g	0.241	0.237	0.107	0.09	98%	0.242	16.01	17.50	0.334	Battery 1#	Yes
Right Side	10mm	2/2417	802.11g	0.123	/	/	0.04	98%	/	16.01	17.50	/	Battery 1#	/
Top Side	10mm	2/2417	802.11g	0.204	/	/	-0.06	98%	/	16.01	17.50	/	Battery 1#	/
Back Side	10mm	2/2417	802.11g	0.233	0.225	0.102	0.15	98%	0.230	16.01	17.50	0.317	Battery 2#	/
Test data of WiFi 2.4G CDD with ANT2														
Front Side	10mm	2/2417	802.11g	0.018	/	/	-0.14	98%	/	16.02	17.50	/	Battery 1#	/
Back Side	10mm	2/2417	802.11g	0.145	0.150	0.065	-0.07	98%	0.153	16.02	17.50	0.215	Battery 1#	/
Right Side	10mm	2/2417	802.11g	0.046	/	/	0.05	98%	/	16.02	17.50	/	Battery 1#	/
Top Side	10mm	2/2417	802.11g	0.014	/	/	0.15	98%	/	16.02	17.50	/	Battery 1#	/
Back Side	10mm	2/2417	802.11g	0.139	0.150	0.065	-0.11	98%	0.153	16.02	17.50	0.215	Battery 2#	/

Table 191: Hotspot SAR test results of WiFi 2.4G CDD



Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	WiFi Reported 1-g SAR (W/kg)1-g SAR			Accessory Information
				Ant 1	Ant 2	CDD/MIMO (Ant1+Ant2)	
CDD							
Front Side	10mm	2/2417	802.11g	0.334	0.215	0.549	Battery 1#
Back Side	10mm	2/2417	802.11g	0.334	0.215	0.549	Battery 1#
Right Side	10mm	2/2417	802.11g	0.334	0.215	0.549	Battery 1#
Top Side	10mm	2/2417	802.11g	0.334	0.215	0.549	Battery 1#
Back Side	10mm	2/2417	802.11g	0.334	0.215	0.549	Battery 2#

Table 192: Hotspot SAR of WiFi 2.4G CDD

Note:

- 1) Per KDB248227D01, for Body-worn SAR test of WiFi 2.4G, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. The highest *reported* SAR for DSSS is adjusted by the ratio of OFDM 802.11g/n to DSSS specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g/n is not required.
- 2) According to the table above , Product Specific 10-g SAR test is not required for this frequency band.

## 7.2.16 SAR measurement Result of WiFi 5G

Test Position of Head	Test channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	SAR Value (W/kg)		Power Drift (dB)	Actual duty factor	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported SAR1-g (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
<b>ANT1</b>													
Test data of U-NII-1&U-NII-2A band													
Left cheek	54/5270	802.11n(40M)	0.093	0.108	0.034	-0.19	99%	0.109	9.75	11.00	0.145	Battery 1#	/
Left tilt	54/5270	802.11n(40M)	0.128	0.159	0.046	-0.12	99%	0.161	9.75	11.00	0.214	Battery 1#	/
Right cheek	54/5270	802.11n(40M)	0.069	/	/	-0.13	99%	/	9.75	11.00	/	Battery 1#	/
Right tilt	54/5270	802.11n(40M)	0.069	/	/	-0.06	99%	/	9.75	11.00	/	Battery 1#	/
Left cheek	54/5270	802.11n(40M)	0.106	0.112	0.034	-0.13	99%	0.113	9.75	11.00	0.151	Battery 2#	/
Left tilt	54/5270	802.11n(40M)	0.120	0.146	0.041	-0.04	99%	0.147	9.75	11.00	0.197	Battery 2#	/
Test data of U-NII-2C band													
Left cheek	110/5550	802.11n(40M)	0.157	0.145	0.044	-0.14	99%	0.146	9.46	11.00	0.209	Battery 1#	/
Left tilt	110/5550	802.11n(40M)	0.155	0.183	0.054	-0.18	99%	0.185	9.46	11.00	0.264	Battery 1#	/
Right cheek	110/5550	802.11n(40M)	0.106	/	/	-0.13	99%	/	9.46	11.00	/	Battery 1#	/
Right tilt	110/5550	802.11n(40M)	0.128	/	/	-0.02	99%	/	9.46	11.00	/	Battery 1#	/
Left tilt	110/5550	802.11n(40M)	0.158	0.186	0.054	-0.14	99%	0.188	9.46	11.00	0.268	Battery 2#	/
Test data of U-NII-3 band													
Left cheek	165/5825	802.11a	0.151	/	/	-0.14	99%	/	10.18	11.00	/	Battery 1#	/
Left tilt	165/5825	802.11a	0.173	0.190	0.048	-0.19	99%	0.192	10.18	11.00	0.232	Battery 1#	/
Right cheek	165/5825	802.11a	0.079	/	/	-0.15	99%	/	10.18	11.00	/	Battery 1#	/
Right tilt	165/5825	802.11a	0.095	/	/	-0.17	99%	/	10.18	11.00	/	Battery 1#	/
Left tilt	165/5825	802.11a	0.190	0.199	0.051	-0.19	99%	0.201	10.18	11.00	0.243	Battery 2#	Yes
<b>ANT2</b>													
Test data of U-NII-1&U-NII-2A band													
Left cheek	54/5270	802.11n(40M)	0.019	0.019	0.005	-0.04	99%	0.019	9.91	11.00	0.025	Battery 1#	/
Left tilt	54/5270	802.11n(40M)	0.003	/	/	0.00	99%	/	9.91	11.00	/	Battery 1#	/
Right cheek	54/5270	802.11n(40M)	0.001	/	/	0.00	99%	/	9.91	11.00	/	Battery 1#	/
Right tilt	54/5270	802.11n(40M)	0.003	/	/	0.00	99%	/	9.91	11.00	/	Battery 1#	/
Left cheek	54/5270	802.11n(40M)	0.011	0.007	0.003	-0.18	99%	0.007	9.91	11.00	0.009	Battery 2#	/
Test data of U-NII-2C band													
Left cheek	110/5550	802.11n(40M)	0.038	0.026	0.007	0.00	99%	0.026	10.21	11.00	0.031	Battery 1#	/
Left tilt	110/5550	802.11n(40M)	0.029	/	/	0.00	99%	/	10.21	11.00	/	Battery 1#	/
Right cheek	110/5550	802.11n(40M)	0.013	/	/	0.00	99%	/	10.21	11.00	/	Battery 1#	/
Right tilt	110/5550	802.11n(40M)	0.017	/	/	-0.16	99%	/	10.21	11.00	/	Battery 1#	/
Left cheek	110/5550	802.11n(40M)	0.028	0.027	0.007	-0.19	99%	0.027	10.21	11.00	0.032	Battery 2#	/
Test data of U-NII-3 band													
Left cheek	165/5825	802.11a	0.045	0.029	0.008	-0.18	99%	0.029	9.35	10.00	0.034	Battery 1#	/
Left tilt	165/5825	802.11a	0.040	0.033	0.008	0.12	99%	0.033	9.35	10.00	0.038	Battery 1#	/
Right cheek	165/5825	802.11a	0.034	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Right tilt	165/5825	802.11a	0.029	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Left tilt	165/5825	802.11a	0.045	0.033	0.009	-0.18	99%	0.033	9.35	10.00	0.039	Battery 2#	/

Table 193: Head SAR test results of WiFi 5G SISO

Note:

1) Per KDB248227D01, for Head SAR test of WiFi 5G, SAR is measured for 5 GHz 802.11a OFDM using the initial test position procedure. The highest reported SAR is adjusted by the ratio of 802.11a to other

WiFi 5G mode specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G mode is not required.

2) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest *reported* SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition);

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
Test data of WiFi 5G CDD with Ant1													
Test data of U-NII-1&U-NII-2A band													
Left cheek	54/5270	802.11n(HT40)	0.093	0.108	0.034	-0.19	99%	0.109	9.75	11.00	0.145	Battery 1#	/
Left tilt	54/5270	802.11n(HT40)	0.128	0.159	0.046	-0.12	99%	0.161	9.75	11.00	0.214	Battery 1#	/
Right cheek	54/5270	802.11n(HT40)	0.069	/	/	-0.13	99%	/	9.75	11.00	/	Battery 1#	/
Right tilt	54/5270	802.11n(HT40)	0.069	/	/	-0.06	99%	/	9.75	11.00	/	Battery 1#	/
Left cheek	54/5270	802.11n(HT40)	0.106	0.112	0.034	-0.13	99%	0.113	9.75	11.00	0.151	Battery 2#	/
Left tilt	54/5270	802.11n(HT40)	0.120	0.146	0.041	-0.04	99%	0.147	9.75	11.00	0.197	Battery 2#	/
Test data of U-NII-2C band													
Left cheek	110/5550	802.11n(HT40)	0.157	0.145	0.044	-0.14	99%	0.146	9.46	11.00	0.209	Battery 1#	/
Left tilt	110/5550	802.11n(HT40)	0.155	0.183	0.054	-0.18	99%	0.185	9.46	11.00	0.264	Battery 1#	/
Right cheek	110/5550	802.11n(HT40)	0.106	/	/	-0.13	99%	/	9.46	11.00	/	Battery 1#	/
Right tilt	110/5550	802.11n(HT40)	0.128	/	/	-0.02	99%	/	9.46	11.00	/	Battery 1#	/
Left tilt	110/5550	802.11n(HT40)	0.158	0.186	0.054	-0.14	99%	0.188	9.46	11.00	0.268	Battery 2#	/
Test data of U-NII-3 band													
Left cheek	165/5825	802.11a	0.151	/	/	-0.14	99%	/	10.18	11.00	/	Battery 1#	/
Left tilt	165/5825	802.11a	0.173	0.190	0.051	-0.15	99%	0.192	10.18	11.00	0.232	Battery 1#	/
Right cheek	165/5825	802.11a	0.079	/	/	-0.15	99%	/	10.18	11.00	/	Battery 1#	/
Right tilt	165/5825	802.11a	0.095	/	/	-0.17	99%	/	10.18	11.00	/	Battery 1#	/
Left tilt	165/5825	802.11a	0.190	0.199	0.051	-0.19	99%	0.201	10.18	11.00	0.243	Battery 2#	/
Test data of WiFi 5G CDD with Ant2													
Test data of U-NII-1&U-NII-2A band													
Left cheek	54/5270	802.11n(HT40)	0.019	0.019	0.005	-0.04	99%	0.019	9.91	11.00	0.025	Battery 1#	/
Left tilt	54/5270	802.11n(HT40)	0.003	/	/	0.00	99%	/	9.91	11.00	/	Battery 1#	/
Right cheek	54/5270	802.11n(HT40)	0.001	/	/	0.00	99%	/	9.91	11.00	/	Battery 1#	/
Right tilt	54/5270	802.11n(HT40)	0.003	/	/	0.00	99%	/	9.91	11.00	/	Battery 1#	/
Left cheek	54/5270	802.11n(HT40)	0.011	0.007	0.003	-0.18	99%	0.007	9.91	11.00	0.009	Battery 2#	/
Test data of U-NII-2C band													
Left cheek	110/5550	802.11n(HT40)	0.038	0.026	0.007	0.00	99%	0.026	10.21	11.00	0.031	Battery 1#	/
Left tilt	110/5550	802.11n(HT40)	0.029	/	/	0.00	99%	/	10.21	11.00	/	Battery 1#	/
Right cheek	110/5550	802.11n(HT40)	0.013	/	/	0.00	99%	/	10.21	11.00	/	Battery 1#	/
Right tilt	110/5550	802.11n(HT40)	0.017	/	/	-0.16	99%	/	10.21	11.00	/	Battery 1#	/
Left cheek	110/5550	802.11n(HT40)	0.028	0.027	0.007	-0.19	99%	0.027	10.21	11.00	0.032	Battery 2#	/
Test data of U-NII-3 band													
Left cheek	165/5825	802.11a	0.045	0.029	0.008	-0.18	99%	0.029	9.35	10.00	0.034	Battery 1#	/

Left tilt	165/5825	802.11a	0.040	0.033	0.008	0.12	99%	0.033	9.35	10.00	0.038	Battery 1#	/
Right cheek	165/5825	802.11a	0.034	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Right tilt	165/5825	802.11a	0.029	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Left tilt	165/5825	802.11a	0.045	0.033	0.009	-0.18	99%	0.033	9.35	10.00	0.039	Battery 2#	/

Table 194: Head SAR test results of WiFi 5G CDD

Test Position of Head	Dist.	Test Channel /Freq.(MHz)	Test Mode	WiFi 1-g SAR(W/kg)			Accessory Information
				Ant 1	Ant 2	CDD/MIMO (Ant1+Ant2)	
CDD/MIMO							
Test data of U-NII-1&U-NII-2A band							
Left cheek	/	54/5270	802.11n(HT40)	0.214	0.025	0.239	Battery 1#
Left tilt	/	54/5270	802.11n(HT40)	0.214	0.025	0.239	Battery 1#
Right cheek	/	54/5270	802.11n(HT40)	0.214	0.025	0.239	Battery 1#
Right tilt	/	54/5270	802.11n(HT40)	0.214	0.025	0.239	Battery 1#
Left cheek	/	54/5270	802.11n(HT40)	0.214	0.025	0.239	Battery 2#
Test data of U-NII-2C band							
Left cheek	/	110/5550	802.11n(HT40)	0.268	0.032	0.300	Battery 1#
Left tilt	/	110/5550	802.11n(HT40)	0.268	0.032	0.300	Battery 1#
Right cheek	/	110/5550	802.11n(HT40)	0.268	0.032	0.300	Battery 1#
Right tilt	/	110/5550	802.11n(HT40)	0.268	0.032	0.300	Battery 1#
Left tilt	/	110/5550	802.11n(HT40)	0.268	0.032	0.300	Battery 2#
Test data of U-NII-3 band							
Left cheek	/	165/5825	802.11a	0.243	0.039	0.282	Battery 1#
Left tilt	/	165/5825	802.11a	0.243	0.039	0.282	Battery 1#
Right cheek	/	165/5825	802.11a	0.243	0.039	0.282	Battery 1#
Right tilt	/	165/5825	802.11a	0.243	0.039	0.282	Battery 1#
Left tilt	/	165/5825	802.11a	0.243	0.039	0.282	Battery 2#

Note:

- 1) Per KDB248227D01, for Head SAR test of WiFi 5G, SAR is measured for 5 GHz 802.11a OFDM using the initial test position procedure. The highest *reported* SAR is adjusted by the ratio of 802.11a to other WiFi 5G mode specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G mode is not required.
- 2) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest *reported* SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition);

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory information	SAR Plot.
					1-g	10-g								
ANT1														
Test data of U-NII-1&U-NII-2A band														
Front Side	15mm	60/5300	802.11a	0.033	0.018	0.008	0.05	99%	0.018	15.16	16.00	0.022	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.089	0.076	0.027	0.13	99%	0.077	15.16	16.00	0.093	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.087	0.078	0.028	-0.11	99%	0.079	15.16	16.00	0.096	Battery 2#	/
Test data of U-NII-2C band														
Front Side	15mm	104/5520	802.11a	0.038	/	/	-0.13	99%	/	15.19	16.00	/	Battery 1#	/
Back Side	15mm	104/5520	802.11a	0.192	0.189	0.071	-0.10	99%	0.191	15.19	16.00	0.230	Battery 1#	/
Back Side	15mm	104/5520	802.11a	0.216	0.211	0.080	-0.14	99%	0.213	15.19	16.00	0.257	Battery 2#	/
Test data of U-NII-3 band														
Front Side	15mm	165/5825	802.11a	0.017	/	/	-0.14	99%	/	10.39	11.00	/	Battery 1#	/
Back Side	15mm	165/5825	802.11a	0.055	0.046	0.017	-0.16	99%	0.046	10.39	11.00	0.053	Battery 1#	/
Back Side	15mm	165/5825	802.11a	0.065	0.051	0.018	-0.15	99%	0.052	10.39	11.00	0.060	Battery 2#	/
ANT2														
Test data of U-NII-1&U-NII-2A band														
Front Side	15mm	60/5300	802.11a	0.039	/	/	-0.16	99%	/	14.93	15.00	/	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.318	0.243	0.088	-0.18	99%	0.245	14.93	15.00	0.249	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.421	0.470	0.132	-0.19	99%	0.475	14.93	15.00	0.482	Battery 2#	/
Test data of U-NII-2C band														
Front Side	15mm	104/5520	802.11a	0.017	/	/	-0.15	99%	/	14.95	15.00	/	Battery 1#	/
Back Side	15mm	104/5520	802.11a	0.082	0.075	0.025	-0.15	99%	0.076	14.95	15.00	0.077	Battery 1#	/
Back Side	15mm	104/5520	802.11a	0.079	0.069	0.024	-0.17	99%	0.069	14.95	15.00	0.070	Battery 2#	/
Test data of U-NII-3 band														
Front Side	15mm	165/5825	802.11a	0.018	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Back Side	15mm	165/5825	802.11a	0.031	0.021	0.009	-0.18	99%	0.021	9.35	10.00	0.024	Battery 1#	/
Back Side	15mm	165/5825	802.11a	0.029	0.024	0.009	-0.17	99%	0.024	9.35	10.00	0.028	Battery 2#	/

Table 195: Body-Worn SAR test results of WiFi 5G SISO

Note:

1) Per KDB248227D01, for Body-Worn SAR test of WiFi 5G , SAR is measured for 5GHz 802.11a using the initial test position procedure. The highest reported SAR is adjusted by the ratio of 802.11a to other WiFi 5G mode specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G mode is not required.

2) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition);

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory information	SAR Plot.
					1-g	10-g								
Test data of WiFi 5G CDD with ANT1														
Test data of U-NII-1&U-NII-2A band														
Front Side	15mm	60/5300	802.11a	0.033	0.018	0.008	0.05	99%	0.018	15.16	16.00	0.022	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.089	0.076	0.027	0.13	99%	0.077	15.16	16.00	0.093	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.087	0.078	0.028	-0.11	99%	0.079	15.16	16.00	0.096	Battery 2#	/
Test data of U-NII-2C band														
Front Side	15mm	104/5520	802.11a	0.038	/	/	-0.13	99%	/	15.19	16.00	/	Battery 1#	/
Back Side	15mm	104/5520	802.11a	0.192	0.189	0.071	-0.10	99%	0.191	15.19	16.00	0.230	Battery 1#	/
Back Side	15mm	104/5520	802.11a	0.216	0.211	0.080	-0.14	99%	0.213	15.19	16.00	0.257	Battery 2#	/
Test data of U-NII-3 band														
Front Side	15mm	165/5825	802.11a	0.017	/	/	-0.14	99%	/	10.39	11.00	/	Battery 1#	/
Back Side	15mm	165/5825	802.11a	0.055	0.046	0.017	-0.16	99%	0.046	10.39	11.00	0.053	Battery 1#	/
Back Side	15mm	165/5825	802.11a	0.065	0.051	0.018	-0.15	99%	0.052	10.39	11.00	0.060	Battery 2#	/
Test data of WiFi 5G CDD with ANT2														
Test data of U-NII-1&U-NII-2A band														
Front Side	15mm	60/5300	802.11a	0.039	/	/	-0.16	99%	/	14.93	15.00	/	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.318	0.243	0.088	-0.18	99%	0.245	14.93	15.00	0.249	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.421	0.470	0.132	-0.19	99%	0.475	14.93	15.00	0.482	Battery 2#	/
Test data of U-NII-2C band														
Front Side	15mm	104/5520	802.11a	0.017	/	/	-0.15	99%	/	14.95	15.00	/	Battery 1#	/
Back Side	15mm	104/5520	802.11a	0.082	0.075	0.025	-0.15	99%	0.076	14.95	15.00	0.077	Battery 1#	/
Back Side	15mm	104/5520	802.11a	0.079	0.069	0.024	-0.17	99%	0.069	14.95	15.00	0.070	Battery 2#	/
Test data of U-NII-3 band														
Front Side	15mm	165/5825	802.11a	0.018	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Back Side	15mm	165/5825	802.11a	0.031	0.021	0.009	-0.18	99%	0.021	9.35	10.00	0.024	Battery 1#	/
Back Side	15mm	165/5825	802.11a	0.029	0.024	0.009	-0.17	99%	0.024	9.35	10.00	0.028	Battery 2#	/

Table 196: Body-Worn SAR test results of WiFi 5G CDD

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	WiFi Reported 1-g SAR (W/kg)1-g SAR			Accessory Information
				Ant 1	Ant 2	CDD/MIMO (Ant1+Ant2)	
CDD/MIMO							
Test data of U-NII-1&U-NII-2A band							
Front Side	15mm	60/5300	802.11a	0.096	0.482	0.578	Battery 1#
Back Side	15mm	60/5300	802.11a	0.096	0.482	0.578	Battery 1#
Back Side	15mm	60/5300	802.11a	0.096	0.482	0.578	Battery 2#
Test data of U-NII-2C band							
Front Side	15mm	104/5520	802.11a	0.257	0.077	0.334	Battery 1#
Back Side	15mm	104/5520	802.11a	0.257	0.077	0.334	Battery 1#
Back Side	15mm	104/5520	802.11a	0.257	0.077	0.334	Battery 2#
Test data of U-NII-3 band							
Front Side	15mm	165/5825	802.11a	0.060	0.028	0.088	Battery 1#
Back Side	15mm	165/5825	802.11a	0.060	0.028	0.088	Battery 1#
Back Side	15mm	165/5825	802.11a	0.060	0.028	0.088	Battery 2#

Table 197: Body-Worn SAR of WiFi 5G CDD

**Note:**

1) Per KDB248227D01, for Body-Worn SAR test of WiFi 5G , SAR is measured for 5GHz 802.11a using the initial test position procedure. The highest reported SAR is adjusted by the ratio of 802.11a to other WiFi 5G mode specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G mode is not required.

2) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest *reported* SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition);

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
ANT1														
Test data of U-NII-1 band														
Front Side	10mm	48/5240	802.11a	0.052	0.040	0.014	-0.12	99%	0.040	15.02	16.00	0.050	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.121	0.118	0.042	-0.18	99%	0.119	15.02	16.00	0.149	Battery 1#	/
Right Side	10mm	48/5240	802.11a	0.048	/	/	0.09	99%	/	15.02	16.00	/	Battery 1#	/
Top Side	10mm	48/5240	802.11a	0.172	0.164	0.064	-0.14	99%	0.166	15.02	16.00	0.208	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.129	0.131	0.046	-0.15	99%	0.132	15.02	16.00	0.166	Battery 1#	/
Top Side	10mm	48/5240	802.11a	0.245	0.181	0.076	-0.18	99%	0.183	15.02	16.00	0.229	Battery 2#	/
Test data of U-NII-3 band														
Front Side	10mm	165/5825	802.11a	0.025	0.015	0.006	-0.16	99%	0.016	10.39	11.00	0.018	Battery 1#	/
Back Side	10mm	165/5825	802.11a	0.119	0.110	0.037	-0.13	99%	0.111	10.39	11.00	0.128	Battery 1#	/
Right Side	10mm	165/5825	802.11a	0.028	/	/	-0.13	99%	/	10.39	11.00	/	Battery 1#	/
Top Side	10mm	165/5825	802.11a	0.077	/	/	-0.16	99%	/	10.39	11.00	/	Battery 1#	/
Back Side	10mm	165/5825	802.11a	0.090	0.076	0.026	-0.16	99%	0.076	10.39	11.00	0.088	Battery 2#	/
ANT2														
Test data of U-NII-1 band														
Front Side	10mm	48/5240	802.11a	0.026	/	/	-0.17	99%	/	14.98	15.00	/	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.342	0.387	0.116	-0.02	99%	0.391	14.98	15.00	0.393	Battery 1#	/
Right Side	10mm	48/5240	802.11a	0.139	/	/	-0.19	99%	/	14.98	15.00	/	Battery 1#	/
Top Side	10mm	48/5240	802.11a	0.076	0.086	0.021	-0.17	99%	0.087	14.98	15.00	0.087	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.352	0.398	0.117	-0.11	99%	0.402	14.98	15.00	0.404	Battery 2#	/
Test data of U-NII-3 band														
Front Side	10mm	165/5825	802.11a	0.012	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Back Side	10mm	165/5825	802.11a	0.034	0.028	0.010	-0.14	99%	0.028	9.35	10.00	0.033	Battery 1#	/
Right Side	10mm	165/5825	802.11a	0.017	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Top Side	10mm	165/5825	802.11a	0.018	/	/	-0.18	99%	/	9.35	10.00	/	Battery 1#	/
Back Side	10mm	165/5825	802.11a	0.041	0.032	0.011	-0.14	99%	0.033	9.35	10.00	0.038	Battery 2#	/

Table 198: Hotspot SAR test results of WiFi 5G SISO

Note:

- 1) Per KDB248227D01, for Hotspot SAR test of WiFi 5G , SAR is measured for 5GHz 802.11a using the initial test position procedure. The highest reported SAR is adjusted by the ratio of 802.11a to other WiFi 5G mode specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G mode is not required.
- 2) The device do not support hotspot function at U-NII-2A & U-NII-2C band.



Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
Test data of WiFi 5G CDD with ANT1														
Test data of U-NII-1 band														
Front Side	10mm	48/5240	802.11a	0.052	0.040	0.014	-0.12	99%	0.040	15.02	16.00	0.050	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.121	0.118	0.042	-0.18	99%	0.119	15.02	16.00	0.149	Battery 1#	/
Right Side	10mm	48/5240	802.11a	0.048	/	/	0.09	99%	/	15.02	16.00	/	Battery 1#	/
Top Side	10mm	48/5240	802.11a	0.172	0.164	0.064	-0.14	99%	0.166	15.02	16.00	0.208	Battery 1#	/
Top Side	10mm	48/5240	802.11a	0.245	0.181	0.076	-0.18	99%	0.183	15.02	16.00	0.229	Battery 2#	/
Test data of U-NII-3 band														
Front Side	10mm	165/5825	802.11a	0.025	0.015	0.006	-0.16	99%	0.016	10.39	11.00	0.018	Battery 1#	/
Back Side	10mm	165/5825	802.11a	0.119	0.110	0.038	-0.13	99%	0.111	10.39	11.00	0.128	Battery 1#	/
Right Side	10mm	165/5825	802.11a	0.028	/	/	-0.13	99%	/	10.39	11.00	/	Battery 1#	/
Top Side	10mm	165/5825	802.11a	0.077	/	/	-0.16	99%	/	10.39	11.00	/	Battery 1#	/
Back Side	10mm	165/5825	802.11a	0.090	0.076	0.026	-0.16	99%	0.076	10.39	11.00	0.088	Battery 2#	/
Test data of WiFi 5G CDD with ANT2														
Test data of U-NII-1 band														
Front Side	10mm	48/5240	802.11a	0.026	/	/	-0.17	99%	/	14.98	15.00	/	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.342	0.387	0.116	-0.02	99%	0.391	14.98	15.00	0.393	Battery 1#	/
Right Side	10mm	48/5240	802.11a	0.139			-0.19	99%	0.000	14.98	15.00	0.000	Battery 1#	/
Top Side	10mm	48/5240	802.11a	0.076	0.086	0.021	-0.17	99%	0.087	14.98	15.00	0.087	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.352	0.398	0.117	-0.11	99%	0.402	14.98	15.00	0.404	Battery 2#	/
Test data of U-NII-3 band														
Front Side	10mm	165/5825	802.11a	0.012	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Back Side	10mm	165/5825	802.11a	0.034	0.028	0.010	-0.14	99%	0.028	9.35	10.00	0.033	Battery 1#	/
Right Side	10mm	165/5825	802.11a	0.017	/	/	0.00	99%	/	9.35	10.00	/	Battery 1#	/
Top Side	10mm	165/5825	802.11a	0.018	/	/	-0.18	99%	/	9.35	10.00	/	Battery 1#	/
Back Side	10mm	165/5825	802.11a	0.041	0.032	0.011	-0.14	99%	0.033	9.35	10.00	0.038	Battery 2#	/

Table 199: Hotspot SAR test results of WiFi 5G CDD

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	WiFi Reported 1-g SAR (W/kg)1-g SAR			Accessory Information
				Ant 1	Ant 2	CDD/MIMO (Ant1+Ant2)	
CDD/MIMO							
Test data of U-NII-1 band							
Front Side	10mm	48/5240	802.11a	0.050	0.404	0.633	Battery 1#
Back Side	10mm	48/5240	802.11a	0.229	0.404	0.633	Battery 1#
Right Side	10mm	48/5240	802.11a	0.229	0.404	0.633	Battery 1#
Top Side	10mm	48/5240	802.11a	0.229	0.404	0.633	Battery 1#
Top Side	10mm	48/5240	802.11a	0.229	0.404	0.633	Battery 2#
Test data of U-NII-3 band							
Front Side	10mm	165/5825	802.11a	0.128	0.038	0.166	Battery 1#
Back Side	10mm	165/5825	802.11a	0.128	0.038	0.166	Battery 1#
Right Side	10mm	165/5825	802.11a	0.128	0.038	0.166	Battery 1#
Top Side	10mm	165/5825	802.11a	0.128	0.038	0.166	Battery 1#
Back Side	10mm	165/5825	802.11a	0.128	0.038	0.166	Battery 2#

Table 200: Hotspot SAR of WiFi 5G CDD

Note:

- 1) Per KDB248227D01, for Hotspot SAR test of WiFi 5G , SAR is measured for 5GHz 802.11a using the initial test position procedure. The highest reported SAR is adjusted by the ratio of 802.11a to other WiFi 5G mode specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G mode is not required.
- 2) The device do not support hotspot function at U-NII-2A & U-NII-2C band.

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 10-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
ANT1														
Test data of U-NII-2A band														
Front Side	0mm	60/5300	802.11a	0.717	0.729	0.255	-0.10	99%	0.258	15.16	16.00	0.313	Battery 1#	/
Back Side	0mm	60/5300	802.11a	1.120	1.480	0.409	-0.12	99%	0.413	15.16	16.00	0.501	Battery 1#	/
Right Side	0mm	60/5300	802.11a	0.267	/	/	-0.13	99%	/	15.16	16.00	/	Battery 1#	/
Top Side	0mm	60/5300	802.11a	2.730	2.980	0.707	-0.12	99%	0.714	15.16	16.00	0.867	Battery 1#	/
Back Side	0mm	60/5300	802.11a	1.410	1.550	0.426	0.10	99%	0.430	15.16	16.00	0.522	Battery 2#	/
Top Side	0mm	60/5300	802.11a	2.710	3.760	1.020	0.18	99%	1.030	15.16	16.00	1.250	Battery 2#	Yes
Back Side	4mm*	60/5300	802.11a	0.317	0.409	0.122	-0.17	99%	0.123	15.16	16.00	0.150	Battery 1#	/
Test data of U-NII-2C band														
Front Side	0mm	104/5520	802.11a	1.090	0.998	0.340	0.00	99%	0.343	15.19	16.00	0.414	Battery 1#	/
Back Side	0mm	104/5520	802.11a	1.320	1.640	0.438	-0.14	99%	0.442	15.19	16.00	0.533	Battery 1#	/
Right Side	0mm	104/5520	802.11a	0.562	/	/	0.00	99%	/	15.19	16.00	/	Battery 1#	/
Top Side	0mm	104/5520	802.11a	3.150	4.060	0.995	0.16	99%	1.005	15.19	16.00	1.211	Battery 1#	/
Top Side	0mm	104/5520	802.11a	3.220	3.700	0.882	0.16	99%	0.891	15.19	16.00	1.074	Battery 2#	/
Back Side	4mm*	104/5520	802.11a	0.765	0.965	0.281	0.14	99%	0.284	15.19	16.00	0.342	Battery 1#	/
ANT2														
Test data of U-NII-2A band														
Front Side	0mm	60/5300	802.11a	0.128	0.151	0.045	0.00	99%	0.045	14.93	15.00	0.046	Battery 1#	/
Back Side	0mm	60/5300	802.11a	4.100	5.940	1.200	0.07	99%	1.212	14.93	15.00	1.232	Battery 1#	Yes
Right Side	0mm	60/5300	802.11a	1.500	1.680	0.376	-0.08	99%	0.380	14.93	15.00	0.386	Battery 1#	/
Top Side	0mm	60/5300	802.11a	0.524	0.519	0.127	-0.01	99%	0.128	14.93	15.00	0.130	Battery 1#	/
Back Side	0mm	60/5300	802.11a	0.690	6.930	1.170	-0.05	99%	1.182	14.93	15.00	1.201	Battery 2#	/
Back Side	4mm*	60/5300	802.11a	0.980	1.580	0.331	-0.14	99%	0.334	14.93	15.00	0.340	Battery 2#	/
Test data of U-NII-2C band														
Front Side	0mm	104/5520	802.11a	0.164	/	/	-0.14	99%	/	14.95	15.00	/	Battery 1#	/
Back Side	0mm	104/5520	802.11a	1.870	2.360	0.489	-0.08	99%	0.494	14.95	15.00	0.500	Battery 1#	/
Right Side	0mm	104/5520	802.11a	0.604	/	/	-0.07	99%	/	14.95	15.00	/	Battery 1#	/
Top Side	0mm	104/5520	802.11a	0.187	/	/	-0.17	99%	/	14.95	15.00	/	Battery 1#	/
Top Side	0mm	104/5520	802.11a	0.254	0.298	0.063	0.13	99%	0.064	14.95	15.00	0.065	Battery 1#	/
Back Side	0mm	104/5520	802.11a	2.980	3.790	0.767	0.06	99%	0.775	14.95	15.00	0.784	Battery 2#	/
Back Side	4mm*	104/5520	802.11a	0.527	0.894	0.194	-0.14	99%	0.196	14.93	15.00	0.199	Battery 2#	/

Table 201: Product Specific 10-g SAR test results of WiFi 5G SISO

Note:

- 1) Per KDB248227D01, for Product Specific 10-g SAR test of WiFi 5G , SAR is measured for 5GHz 802.11a using the initial test position procedure. The highest reported SAR is adjusted by the ratio of 802.11a to other WiFi 5G mode specified maximum output power and the adjusted SAR is < 75% limit, so SAR for other WiFi 5G mode is not required.
- 2) \* These additional SAR test results are only used to determine Simultaneous Transmission SAR test exclusion(Refer to section 7.3.3 for details).

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 10-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
Test data of WiFi 5G CDD with ANT1														
Test data of U-NII-2A band														
Front Side	0mm	60/5300	802.11a	0.717	0.729	0.255	-0.10	99%	0.258	15.16	16.00	0.313	Battery 1#	/
Back Side	0mm	60/5300	802.11a	1.120	1.480	0.409	-0.12	99%	0.413	15.16	16.00	0.501	Battery 1#	/
Right Side	0mm	60/5300	802.11a	0.267	/	/	-0.13	99%	/	15.16	16.00	/	Battery 1#	/
Top Side	0mm	60/5300	802.11a	2.710	3.760	1.020	0.18	99%	1.030	15.16	16.00	1.250	Battery 1#	/
Back Side	0mm	60/5300	802.11a	1.410	1.550	0.426	0.10	99%	0.430	15.16	16.00	0.522	Battery 2#	
Back Side	4mm*	60/5300	802.11a	0.317	0.409	0.122	-0.17	99%	0.123	15.16	16.00	0.150	Battery 1#	/
Test data of U-NII-2C band														
Front Side	0mm	104/5520	802.11a	1.090	0.998	0.340	0.00	99%	0.343	15.19	16.00	0.414	Battery 1#	/
Back Side	0mm	104/5520	802.11a	1.320	1.640	0.438	-0.14	99%	0.442	15.19	16.00	0.533	Battery 1#	/
Right Side	0mm	104/5520	802.11a	0.562	/	/	0.00	99%	/	15.19	16.00	/	Battery 1#	/
Top Side	0mm	104/5520	802.11a	3.150	4.060	0.995	0.16	99%	1.005	15.19	16.00	1.211	Battery 1#	/
Top Side	0mm	104/5520	802.11a	3.220	3.700	0.882	0.16	99%	0.891	15.19	16.00	1.074	Battery 2#	/
Back Side	4mm*	104/5520	802.11a	0.765	0.965	0.281	0.14	99%	0.284	15.19	16.00	0.342	Battery 1#	/
Test data of WiFi 5G CDD with ANT2														
Test data of U-NII-2A band														
Front Side	0mm	60/5300	802.11a	0.128	0.151	0.045	0.00	99%	0.045	14.93	15.00	0.046	Battery 1#	/
Back Side	0mm	60/5300	802.11a	4.100	5.940	1.200	0.07	99%	1.212	14.93	15.00	1.232	Battery 1#	Yes
Right Side	0mm	60/5300	802.11a	1.500	1.680	0.376	-0.08	99%	0.380	14.93	15.00	0.386	Battery 1#	/
Top Side	0mm	60/5300	802.11a	0.524	0.519	0.127	-0.01	99%	0.128	14.93	15.00	0.130	Battery 1#	/
Back Side	0mm	60/5300	802.11a	0.690	6.930	1.170	-0.05	99%	1.182	14.93	15.00	1.201	Battery 2#	/
Back Side	4mm*	60/5300	802.11a	0.980	1.580	0.331	-0.14	99%	0.334	14.93	15.00	0.340	Battery 2#	/
Test data of U-NII-2C band														
Front Side	0mm	104/5520	802.11a	0.147	0.178	0.053	-0.14	99%	0.053	14.95	15.00	0.054	Battery 1#	/
Back Side	0mm	104/5520	802.11a	1.870	2.360	0.489	-0.08	99%	0.494	14.95	15.00	0.500	Battery 1#	/
Right Side	0mm	104/5520	802.11a	0.604	/	/	-0.07	99%	/	14.95	15.00	/	Battery 1#	/
Top Side	0mm	104/5520	802.11a	0.187	/	/	-0.17	99%	/	14.95	15.00	/	Battery 1#	/
Top Side	0mm	104/5520	802.11a	0.254	0.298	0.063	0.13	99%	0.064	14.95	15.00	0.065	Battery 2#	/
Back Side	0mm	104/5520	802.11a	2.980	3.790	0.767	0.06	99%	0.775	14.95	15.00	0.784	Battery 2#	/
Back Side	4mm*	104/5520	802.11a	0.527	0.894	0.194	-0.14	99%	0.196	14.93	15.00	0.199	Battery 2#	/

Table 202: Product Specific 10-g SAR test results of WiFi 5G CDD

Note : \* These additional SAR test results are only used to determine Simultaneous Transmission SAR test exclusion(Refer to section 7.3.3 for details).

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	WiFi Reported 1-g SAR(W/kg)			Accessory Information
				Ant 1	Ant 2	CDD/MIMO (Ant1+Ant2)	
CDDMIMO							
Test data of U-NII-2A band							
Front Side	0mm	60/5300	802.11a	0.313	0.046	0.359	Battery 1#
Back Side	0mm	60/5300	802.11a	0.522	1.232	1.754	Battery 1#
Right Side	0mm	60/5300	802.11a	1.250	0.386	1.636	Battery 1#
Top Side	0mm	60/5300	802.11a	1.250	0.130	1.380	Battery 1#
Back Side	4mm*	60/5300	802.11a	0.150	0.340	0.490	Battery 1#
Test data of U-NII-2C band							
Front Side	0mm	104/5520	802.11a	0.414	0.054	0.468	Battery 1#
Back Side	0mm	104/5520	802.11a	0.533	0.784	1.317	Battery 1#
Right Side	0mm	104/5520	802.11a	1.211	0.784	1.995	Battery 1#
Top Side	0mm	104/5520	802.11a	1.211	0.065	1.276	Battery 1#
Back Side	4mm*	104/5520	802.11a	0.342	0.199	0.541	Battery 1#

Table 203: Product Specific 10-g SAR of WiFi 5G CDD

Note:

- 1) Per KDB248227D01, for Product Specific 10-g SAR test of WiFi 5G , SAR is measured for 5GHz 802.11a using the initial test position procedure. The highest reported SAR is adjusted by the ratio of 802.11a to other WiFi 5G mode specified maximum output power and the adjusted SAR is < 75% limit, so SAR for other WiFi 5G mode is not required.
- 2) \* These additional SAR test results are only used to determine Simultaneous Transmission SAR test exclusion(Refer to section 7.3.3 for details).

### 7.2.17 SAR measurement Result of BT

Test Position of Head	Test channel /Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Actual duty factor	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported SAR1-g (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g								
Left cheek	70/2472	DH5	0.051	0.021	-0.08	77%	0.066	8.78	10.00	0.088	Battery 1#	Yes
Left tilt	70/2472	DH5	0.044	0.020	0.10	77%	0.057	8.78	10.00	0.058	Battery 1#	/
Right cheek	70/2472	DH5	0.022	0.010	-0.02	77%	0.029	8.78	10.00	0.030	Battery 1#	/
Right tilt	70/2472	DH5	0.024	0.012	0.02	77%	0.032	8.78	10.00	0.032	Battery 1#	/
Left cheek	70/2472	DH5	0.037	0.014	-0.11	77%	0.048	8.78	10.00	0.049	Battery 2#	/
Left cheek	11/2413	DH5	0.031	0.014	0.03	77%	0.040	8.02	10.00	0.049	Battery 1#	/
Left cheek	78/2480	DH5	0.038	0.015	0.05	77%	0.049	8.30	10.00	0.055	Battery 1#	/

Table 204: Head SAR test results of BT

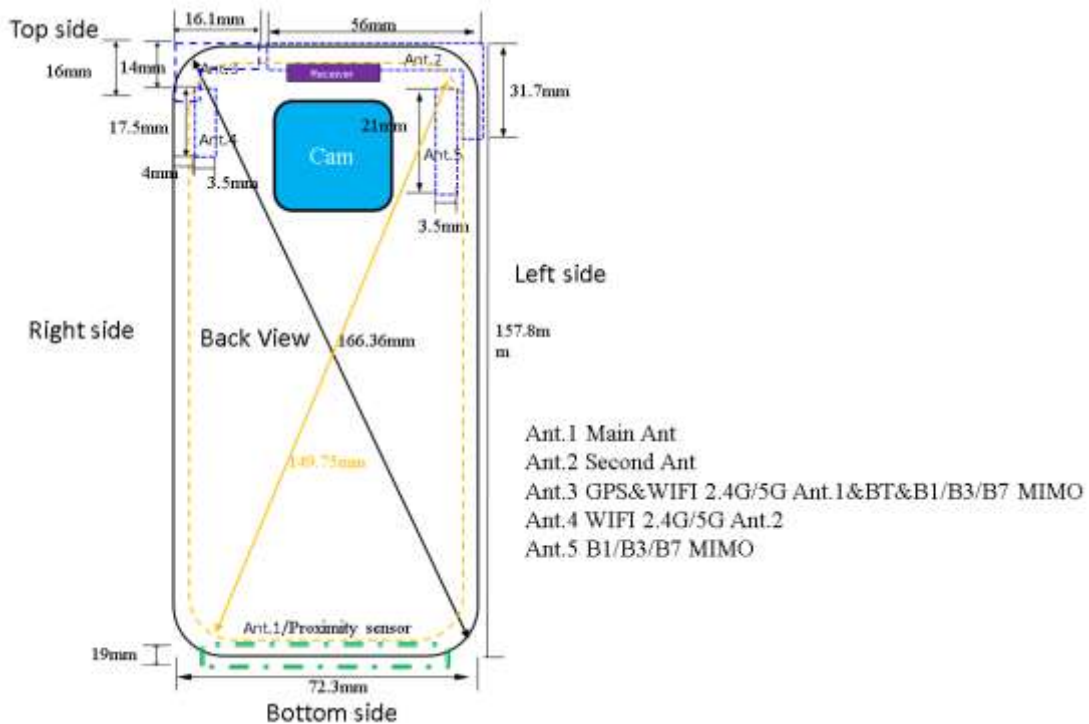
Product Specific 10-g SAR	Test channel /Freq.(MHz)	Test Mode	SAR Value (W/kg)		Power Drift (dB)	Actual duty factor	Scaled 10-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported SAR10-g (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g								
Front Side	70/2472	DH5	0.159	0.075	0.06	77%	0.098	8.78	10.00	0.130	Battery 1#	/
Back Side	70/2472	DH5	0.152	0.067	0.13	77%	0.087	8.78	10.00	0.115	Battery 1#	/
Right Side	70/2472	DH5	0.001	0.000	0.14	77%	0.001	8.78	10.00	0.001	Battery 1#	/
Top Side	70/2472	DH5	0.291	0.100	0.15	77%	0.130	8.78	10.00	0.172	Battery 1#	Yes
Top Side	70/2472	DH5	0.258	0.099	-0.12	77%	0.128	8.78	10.00	0.170	Battery 2#	/

Table 205: Product Specific 10-g SAR test results of BT

### 7.3 Multiple Transmitter Evaluation

The following tables list information which is relevant for the decision if a simultaneous transmit evaluation is necessary according to FCC KDB 447498D01 General RF Exposure Guidance v06.

The location of the antennas inside the device is shown as below picture:



Note:

- 1) Per KDB 648474 D04, because the diagonal distance of this device is  $\geq 160\text{mm}$ , so it is a phablet .
- 2) Main antenna(Ant1) and Secondary antenna(Ant.2) can't transmit simultaneously. Only one antenna can be used for 2G/3G/4G transmission at a time. Ant.1, Ant.2, Ant.3, Ant.5 supports DL LTE 4\*4 MIMO (LTE Band B7).
- 3) Ant.5 does not support TX function.

Mode	Exposure Condition	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
Main Ant	Hotspot/ Product specific 10g SAR	Yes	Yes	Yes	Yes	No	Yes
Second Ant	Hotspot/ Product specific 10g SAR	Yes	Yes	Yes	Yes	Yes	No
WiFi2.4G/5G Ant 1/BT Ant	Hotspot/ Product specific 10g SAR	Yes	Yes	No	Yes	Yes	No
WiFi2.4G/5G Ant 2	Hotspot/ Product specific 10g SAR	Yes	Yes	No	Yes	Yes	No

Table 206: Sides for Hotspot testing

Note:

- 1) Per KDB 941225 D06 and KDB 648474 D04, particular DUT edges were not required to be evaluated for Hotspot SAR if the antenna-to-edge distance is greater than 2.5cm;
- 2) WiFi 5G U-NII-2A and U-NII-2C band does not support hotspot function, therefore U-NII-2A and U-NII-2C were not evaluated for hotspot SAR .

### 7.3.1 Stand-alone SAR test exclusion

Per FCC KDB 447498D01v06, the 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where:

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	Position	$P_{\text{max}}$ (dBm)*	$P_{\text{max}}$ (mW)	Distance (mm)	f (GHz)	Calculation Result	SAR Exclusion threshold	SAR test exclusion
BT	Body-Worn	10.00	10.00	15	2.480	1.05	3.00	Yes
BT	Hotspot	10.00	10.00	10	2.480	1.57	3.00	Yes

Table 207: Standalone SAR test exclusion for BT

Note:

1)\* - maximum possible output power declared by manufacturer

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

$(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})}/x] \text{ W/kg}$  for test separation distances  $\leq 50$  mm, where  $x = 7.5$  for 1-g SAR and  $x = 18.75$  for 10-g SAR.

When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	Position	$P_{\text{max}}$ (dBm)*	$P_{\text{max}}$ (mW)	Distance (mm)	f (GHz)	X	Estimated SAR (W/kg)*
BT	Body-worn	10.00	10.00	15	2.480	7.50	0.140
BT	Hotspot	10.00	10.00	10	2.450	7.50	0.209

Table 208: Estimated SAR calculation for BT

Note:

1) \* - maximum possible output power declared by manufacturer



### 7.3.2 Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Simultaneous TX Combination	Head	Body-worn	Hotspot	Product Specific 10-g (0mm)
1	GSM Voice(Ant 1) + BT	Yes	Yes	N/A	Yes
2	GSM DATA(Ant 1) + BT	N/A	Yes	Yes	Yes
3	GSM Voice(Ant 2) + BT	Yes	Yes	N/A	Yes
4	GSM DATA (Ant 2)+ BT	N/A	Yes	Yes	Yes
5	GSM Voice(Ant 1) + Wi-Fi 2.4G (Ant 1)/ Wi-Fi 2.4G (Ant 2)/ Wi- Fi 2.4G MIMO	Yes	Yes	N/A	Yes
6	GSM DATA(Ant 1) + Wi-Fi 2.4G (Ant 1)/ Wi-Fi 2.4G (Ant 2)/ Wi-Fi 2.4G MIMO	N/A	Yes	Yes	Yes
7	GSM Voice(Ant 2) + Wi-Fi 2.4G (Ant 1)/ Wi-Fi 2.4G (Ant 2)/ Wi-Fi 2.4G MIMO	Yes	Yes	N/A	Yes
8	GSM DATA(Ant 2) + Wi-Fi 2.4G (Ant 1)/ Wi-Fi 2.4G (Ant 2)/ Wi-Fi 2.4G MIMO	N/A	Yes	Yes	Yes
9	UMTS (Ant 1) + BT	Yes	Yes	Yes	Yes
10	UMTS (Ant 2) + BT	Yes	Yes	Yes	Yes
11	UMTS (Ant 1) + Wi-Fi 2.4G (Ant 1)/ Wi-Fi 2.4G (Ant 2)/ Wi-Fi 2.4G MIMO	Yes	Yes	Yes	Yes
12	UMTS (Ant 2) + Wi-Fi 2.4G (Ant 1)/ Wi-Fi 2.4G (Ant 2)/ Wi-Fi 2.4G MIMO	Yes	Yes	Yes	Yes
13	LTE (Ant 1) + Wi-Fi 2.4G (Ant 1)/ Wi-Fi 2.4G (Ant 2)/ Wi-Fi 2.4G MIMO	Yes	Yes	Yes	Yes
14	LTE(Ant 1) + BT	Yes	Yes	Yes	Yes
15	LTE (Ant 2) + Wi-Fi 2.4G (Ant 1)/ Wi-Fi 2.4G (Ant 2)/ Wi-Fi 2.4G MIMO	Yes	Yes	Yes	Yes
16	LTE (Ant 2) + BT	Yes	Yes	Yes	Yes
17	GSM Voice(Ant 1) + Wi-Fi 5G (Ant 1)/ Wi-Fi 5G (Ant 2)/ Wi-Fi 5G MIMO	Yes	Yes	N/A	Yes
18	GSM DATA(Ant 1) + Wi-Fi 5G (Ant 1)/ Wi-Fi 5G (Ant 2)/ Wi- Fi 5G MIMO	N/A	Yes	Yes	Yes
19	GSM Voice(Ant 2) + Wi-Fi 5G (Ant 1)/ Wi-Fi 5G (Ant 2)/ Wi-Fi 5G MIMO	Yes	Yes	N/A	Yes
20	GSM DATA(Ant 2) + Wi-Fi 5G (Ant 1)/ Wi-Fi 5G (Ant 2)/ Wi-Fi 5G MIMO	N/A	Yes	Yes	Yes
21	UMTS (Ant 1) + Wi-Fi 5G (Ant 1)/ Wi-Fi 5G (Ant 2)/ Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes
22	UMTS (Ant 2) + Wi-Fi 5G (Ant 1)/ Wi-Fi 5G (Ant 2)/ Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes
23	LTE (Ant 1) + Wi-Fi 5G (Ant 1)/ Wi-Fi 5G (Ant 2)/ Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes
24	LTE (Ant 2) + Wi-Fi 5G (Ant 1)/ Wi-Fi 5G (Ant 2)/ Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes
25	GSM Voice(Ant 1) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2)	Yes	Yes	N/A	Yes
26	GSM DATA(Ant 1) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2)	N/A	Yes	Yes	Yes
27	GSM Voice(Ant 2) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2)	Yes	Yes	N/A	Yes
28	GSM DATA(Ant 2) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2)	N/A	Yes	Yes	Yes
29	UMTS (Ant 1) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2)	Yes	Yes	Yes	Yes

30	UMTS (Ant 2) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2)	Yes	Yes	Yes	Yes
31	LTE (Ant 1) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2)	Yes	Yes	Yes	Yes
32	LTE (Ant 2) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2)	Yes	Yes	Yes	Yes
33	GSM Voice(Ant 1) + BT+ Wi-Fi 5G (Ant1/ Ant2/ MIMO)	Yes	Yes	N/A	Yes
34	GSM DATA(Ant 1) + BT+ Wi-Fi 5G (Ant1/ Ant2/ MIMO)	N/A	Yes	Yes	Yes
35	GSM Voice(Ant 2) + BT+ Wi-Fi 5G (Ant1/ Ant2/ MIMO)	Yes	Yes	N/A	Yes
36	GSM DATA (Ant 2)+ BT+ Wi-Fi 5G (Ant1/ Ant2/ MIMO)	N/A	Yes	Yes	Yes
37	UMTS (Ant 1) + BT+ Wi-Fi 5G (Ant1/ Ant2/ MIMO)	Yes	Yes	Yes	Yes
38	UMTS (Ant 2) + BT+ Wi-Fi 5G (Ant1/ Ant2/ MIMO)	Yes	Yes	Yes	Yes
39	LTE (Ant 1) + BT+ Wi-Fi 5G (Ant1/ Ant2/ MIMO)	Yes	Yes	Yes	Yes
40	LTE (Ant 2) + BT+ Wi-Fi 5G (Ant1/ Ant2/ MIMO)	Yes	Yes	Yes	Yes

Table 209: Simultaneous Transmission Possibilities

Note:

- 1) Neither Wi-Fi 2.4G Ant.1 nor Wi-Fi 2.4G Ant.2 can transmit simultaneously with Bluetooth.
- 2) Wi-Fi 5G Ant.1 can transmit simultaneously with Bluetooth and Ant.2 also can transmit simultaneously with Bluetooth.
- 3) Wi-Fi 2.4G has two TX antennas. Wi-Fi 2.4G 802.11g/n support 2\*2 CDD/MIMO function.
- 4) Wi-Fi 5G has two TX antennas. Wi-Fi 5G 802.11 a/n/ac support 2\*2 CDD/MIMO function.
- 5) Wi-Fi 2.4G& Wi-Fi 5G can't work at same mode, but they can transmit simultaneously at different modes (Wi-Fi station/P-to-P) by using different Wi-Fi antennas. Only Wi-Fi 2.4G Ant1 station mode and Wi-Fi 5G Ant2 P-to-P mode or Wi-Fi 2.4G Ant1 P-to-P mode and Wi-Fi 5G Ant2 P-to-P mode can transmit simultaneously.
- 6) The device does not support DTM function.
- 7) \* VoLTE or pre-installed VOIP applications are considered.
- 8) The Main Antenna (Ant1) and Second Antenna (Ant 2) can't transmit simultaneously.
- 9) For Wi-Fi 5G, U-NII-2A (5250-5350 MHz) and U-NII-2C (5470-5725 MHz) bands does not support hotspot function.
- 10) The device supports Vo- WiFi function.
- 11) WiFi 5G ANT1 and WiFi 2.4G ANT2 can not transmit simultaneously.

### 7.3.3 SAR Summation Scenario

Test Position		Second antenna SARMax														ΣSecond antenna MaxSAR
		GSM850	GSM1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B26	LTE B38	LTE B41	
Head	Left cheek	0.422	0.196	0.217	0.137	0.558	0.160	0.231	0.516	0.235	0.546	/	0.468	0.195	0.186	0.558
	Left tilt	0.310	0.205	0.247	0.130	0.394	0.189	0.176	0.298	0.309	0.383	/	0.488	0.244	0.232	0.488
	Right cheek	0.402	0.283	0.330	0.231	0.496	0.230	0.367	0.357	0.329	0.420	/	0.583	0.343	0.464	0.583
	Right tilt	0.319	0.353	0.395	0.207	0.411	0.293	0.257	0.249	0.568	0.349	/	0.411	0.415	0.355	0.568
Body Worn	Front Side	0.049	0.035	0.127	0.118	0.184	0.173	0.065	0.171	0.126	0.188	/	0.169	0.141	0.229	0.229
	Back Side	0.060	0.041	0.148	0.159	0.194	0.192	0.109	0.138	0.169	0.169	/	0.141	0.131	0.190	0.194
Hotspot	Front Side	0.119	0.076	0.326	0.267	0.325	0.361	0.120	0.276	0.253	0.405	/	0.376	0.202	0.384	0.405
	Back Side	0.113	0.106	0.322	0.273	0.363	0.406	0.186	0.258	0.360	0.433	/	0.352	0.292	0.600	0.600
	Left Side	0.089	0.015	0.033	0.022	0.207	0.072	0.014	0.180	0.163	0.201	/	0.218	0.124	0.230	0.230
	Right Side	0.019	0.006	0.008	0.016	0.050	0.016	0.023	0.038	0.053	0.051	/	0.052	0.045	0.052	0.053
	Top Side	0.075	0.190	0.423	0.346	0.202	0.723	0.157	0.153	0.762	0.256	/	0.285	0.522	0.636	0.762
	Bottom Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Product Specific 10-g SAR	Front Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Back Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Left Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Right Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Top Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Bottom Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Table 210: Second antenna Max SAR

Test Position		Main antenna SARMax														ΣMain antenna MaxSAR
		GSM850	GSM1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B26	LTE B38	LTE B41	
Head	Left cheek	0.125	0.087	0.178	0.173	0.144	0.066	0.154	0.162	0.052	0.128	/	0.132	0.035	0.020	0.178
	Left tilt	0.060	0.025	0.173	0.055	0.069	0.038	0.044	0.097	0.042	0.087	/	0.100	0.022	0.020	0.173
	Right cheek	0.225	0.050	0.109	0.092	0.256	0.092	0.083	0.295	0.073	0.162	/	0.302	0.049	0.056	0.302
	Right tilt	0.075	0.037	0.082	0.058	0.087	0.066	0.051	0.092	0.029	0.072	/	0.069	0.015	0.014	0.092
Body Worn	Front Side	0.187	0.301	0.673	0.737	0.185	0.799	0.634	0.212	0.279	0.198	/	0.212	0.143	0.144	0.799
	Back Side	0.242	0.368	0.807	0.782	0.273	0.605	0.796	0.283	0.196	0.252	/	0.315	0.163	0.174	0.807
Hotspot	Front Side	0.393	0.202	0.264	0.391	0.263	0.263	0.278	0.336	0.328	0.289	/	0.276	0.299	0.294	0.393
	Back Side	0.519	0.256	0.366	0.420	0.394	0.313	0.359	0.458	0.275	0.326	/	0.404	0.345	0.351	0.519
	Left Side	0.152	0.018	0.029	0.024	0.086	0.022	0.020	0.107	0.202	0.135	/	0.093	0.145	0.122	0.202
	Right Side	0.362	0.034	0.049	0.055	0.324	0.219	0.042	0.346	0.026	0.301	/	0.303	0.042	0.043	0.362
	Top Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0
	Bottom Side	0.198	0.503	0.765	0.674	0.163	0.612	0.582	0.210	0.524	0.143	/	0.224	0.325	0.235	0.765
Product Specific 10-g	Front Side	/	/	2.579	2.208	/	2.581	/	/	/	/	/	/	/	/	2.581
	Back Side (4mm)	/	/	2.472	2.594	/	1.791	2.420	/	/	/	/	/	/	/	2.594
	Back Side (0mm)	/	/	1.678	1.809	/	1.986	1.583	/	/	/	/	/	/	/	1.986
	Left Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Right Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Top Side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Bottom Side	/	2.368	3.171	2.945	/	2.860	3.050	/	/	/	/	/	/	/	3.171

Table 211: Main antenna Max SAR

Test Position		ΣSecond antenna MaxSAR	WIFI2.4G ANT1	WIFI2.4G ANT2	WIFI 2.4G CDD	WIFI 5G ANT1	WIFI 5G ANT2	WIFI 5G CDD	BT	Simultaneously Transmission SAR			
										1	2	3	4
Head	Left cheek	0.558	0.319	0.040	0.359	0.268	0.039	0.300	0.088	0.917	0.946	0.916	0.646
	Left tilt	0.488	0.319	0.040	0.359	0.268	0.039	0.300	0.058	0.847	0.846	0.846	0.546
	Right cheek	0.583	0.319	0.040	0.359	0.268	0.039	0.300	0.030	<b>0.942</b>	0.913	0.941	0.613
	Right tilt	0.568	0.319	0.040	0.359	0.268	0.039	0.300	0.032	0.927	0.900	0.926	0.600
Body Worn	Front Side	0.229	0.138	0.090	0.221	0.257	0.482	0.578	0.140	0.450	<b>0.947</b>	0.849	0.369
	Back Side	0.194	0.138	0.090	0.221	0.257	0.482	0.578	0.140	0.415	0.912	0.814	0.334
Hotspot	Front Side	0.405	0.334	0.256	0.549	0.229	0.404	0.633	0.209	0.954	1.247	1.143	0.614
	Back Side	0.600	0.334	0.256	0.549	0.229	0.404	0.633	0.209	1.149	1.442	1.338	0.809
	Left Side	0.230	/	/	/	/	/	/	/	0.230	0.23	0.230	0.230
	Right Side	0.053	0.334	0.256	0.549	0.229	0.000	0.633	0.209	0.602	0.895	0.387	0.262
	Top Side	0.762	0.334	0.256	0.549	0.229	0.404	0.316	0.209	1.311	1.375	<b>1.500</b>	0.971
	Bottom Side	/	/	/	/	/	/	/	/	/	/	/	/
Product Specific 10-g SAR	Front Side	/	/	/	/	0.414	0.046	0.596	0.130	/	0.726	0.046	0.130
	Back Side (4mm)	/	/	/	/	0.342	0.340	0.541	0.115	/	0.656	0.340	0.115
	Back Side (0mm)	/	/	/	/	0.533	1.232	1.754	0.115	/	1.869	1.232	0.115
	Left Side	/	/	/	/	/	/	/	/	/	/	/	/
	Right Side	/	/	/	/	1.250	0.386	1.995	0.001	/	<b>1.996</b>	0.386	0.001
	Top Side	/	/	/	/	1.211	0.130	1.380	0.172	/	1.552	0.130	0.172
	Bottom Side	/	/	/	/	/	/	/	/	/	/	/	/

Table 212: SAR Simultaneous Tx Combination of Second antenna with WiFi & BT Scenario

Test Position		ΣMain antenna MaxSAR	WIFI2.4G ANT1	WIFI2.4G ANT2	WIFI 2.4G CDD	WIFI 5G ANT1	WIFI 5G ANT2	WIFI 5G CDD	BT	Simultaneously Transmission SAR			
										1	2	3	4
Head	Left cheek	0.178	0.319	0.040	0.359	0.268	0.039	0.300	0.088	0.537	0.566	0.536	0.266
	Left tilt	0.173	0.319	0.040	0.359	0.268	0.039	0.300	0.058	0.532	0.531	0.531	0.231
	Right cheek	0.302	0.319	0.040	0.359	0.268	0.039	0.300	0.030	<b>0.661</b>	0.632	0.660	0.332
	Right tilt	0.092	0.319	0.040	0.359	0.268	0.039	0.300	0.032	0.451	0.424	0.450	0.124
Body Worn	Front Side	0.799	0.138	0.090	0.221	0.257	0.482	0.578	0.140	1.020	1.517	1.419	0.939
	Back Side	0.807	0.138	0.090	0.221	0.257	0.482	0.578	0.140	1.028	<b>1.525</b>	1.427	0.947
Hotspot	Front Side	0.393	0.334	0.256	0.549	0.229	0.404	0.633	0.209	0.942	1.235	1.131	0.602
	Back Side	0.519	0.334	0.256	0.549	0.229	0.404	0.633	0.209	1.068	<b>1.361</b>	1.257	0.728
	Left Side	0.202	/	/	/	/	/	/	/	0.202	0.202	0.202	0.202
	Right Side	0.362	0.334	0.256	0.549	0.229	0.000	0.633	0.209	0.911	1.204	0.696	0.571
	Top Side	0	0.334	0.256	0.549	0.229	0.404	0.316	0.209	0.549	0.613	0.738	0.209
	Bottom Side	0.765	/	/	/	/	/	/	/	0.765	0.765	0.765	0.765
Product Specific 10-g SAR	Front Side	2.581	/	/	/	0.414	0.046	0.596	0.130	2.581	3.307	2.627	2.711
	Back Side (4mm)	2.594	/	/	/	0.342	0.340	0.541	0.115	2.594	3.250	2.934	2.709
	Back Side (0mm)	1.986	/	/	/	0.533	1.232	1.754	0.115	1.986	<b>3.855</b>	3.218	2.001
	Left Side	/	/	/	/	/	/	/	/	/	/	/	/
	Right Side	/	/	/	/	1.250	0.386	1.995	0.001	/	1.996	0.386	0.001
	Top Side	/	/	/	/	1.211	0.130	1.380	0.172	/	1.552	0.130	0.142
	Bottom Side	3.171	/	/	/	/	/	/	/	3.171	3.171	3.171	3.171

Table 213: SAR Simultaneous Tx Combination of Main antenna with WiFi & BT Scenario

The device also supports Tx wireless charging function. When the device is working on Tx wireless charging mode, other Tx antennas(2G/3G/4G/WIFI/BT) can still work. So this simultaneous transmission should also be considered.

Per KDB 447498D01, the following test exclusion conditions should be satisfied for all combinations of simultaneous transmission configurations:

**The [Σ of (the highest measured or estimated SAR for each standalone antenna configuration, adjusted for maximum tune-up tolerance) / 1.6 W/kg] + [Σ of MPE ratios] is ≤ 1.0.**

Similarly For Product Specific 10-g SAR, the test exclusion conditions should be:

**The [Σ of (the highest measured or estimated SAR for each standalone antenna configuration, adjusted for maximum tune-up tolerance) / 4.0 W/kg] + [Σ of MPE ratios] is ≤ 1.0.**

The RF exposure ratios for all combinations of simultaneous transmission configurations are calculated as below:

exposure condition	MAX Simultaneous Transmission SAR (W/kg)	SAR Limit (W/kg)	Max E-field (V/m)	MPE Limit (V/m)	RF exposure ratio (≤ 1.0)	Conclusion
Head	0.942	1.6	1.300	614	0.591	PASS
Body-worn	1.525	1.6	1.300	614	0.955	PASS
Hotspot	1.500	1.6	1.300	614	0.940	PASS
Product Specific 10-g SAR	3.855	4.0	1.300	614	<b>0.966</b>	PASS

Table 214: Simultaneous transmission RF exposure ratios for SAR & MPE(E-Field)

exposure condition	MAX Simultaneous Transmission SAR (W/kg)	SAR Limit (W/kg)	Max H-field (V/m)	MPE Limit (A/m)	RF exposure ratio (≤ 1.0)	Conclusion
Head	0.942	1.6	0.003	1.63	0.591	PASS
Body-worn	1.525	1.6	0.003	1.63	0.955	PASS
Hotspot	1.500	1.6	0.003	1.63	0.939	PASS
Product Specific 10-g SAR	3.855	4.0	0.003	1.63	<b>0.966</b>	PASS

Table 215: Simultaneous transmission RF exposure ratios for SAR & MPE(H-Field)

Note: Please refer to the Partial RF exposure test report of Wireless Charging for detailed E-field and H-field results.

### 7.3.4 Simultaneous Transmission Conclusion

The above numeral summed SAR results and RF exposure ratio calculation results are sufficient to determine that simultaneous transmission RF exposure test exclusion applies per KDB 447498 D01.

**Appendix A. System Check Plots**

(Please See Appendix No.: SYBH(Z-SAR) 20200307029001-2A, total: 36 pages)

**Appendix B. SAR Measurement Plots**

(Please See Appendix No.: SYBH(Z-SAR) 20200307029001-2B, total: 101 pages)

**Appendix C. Calibration Certificate**

(Please See Appendix No.: SYBH(Z-SAR) 20200307029001-2C, total: 191 pages)

**Appendix D. Photo documentation**

(Please See Appendix No.: SYBH(Z-SAR) 20200307029001-2D, total: 7 pages)

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**End**