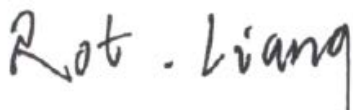


FCC SAR Test Report

FCC ID: R9C-CPH1941

Project No. : 1909C106
Equipment : Mobile Phone
Brand Name : OPPO
Test Model : CPH1941
Series Model : N/A
Date of Receipt : Sep. 19, 2019
Date of Test : Sep. 28, 2019 ~ Oct. 24, 2019
Issued Date : Oct. 30, 2019
Report Version : R01
Test Sample : Engineering Sample No.: DG20190920156, DG20190920147,
DG20190920151, DG20190920155,
DG20190920154
Standard(s) : Please refer to page 2.
Applicant : GuangDong Oppo Mobile Telecommunications Corp., Ltd.
Address : NO. 18 HaiBin Road, WuSha village, Chang An Town, DongGuan
City,Guangdong,China.
Manufacturer : GuangDong Oppo Mobile Telecommunications Corp., Ltd.
Address : NO. 18 HaiBin Road, WuSha village, Chang An Town, DongGuan
City,Guangdong,China.
Factory : GuangDong Oppo Mobile Telecommunications Corp., Ltd.
Address : NO. 18 HaiBin Road, WuSha village, Chang An Town, DongGuan
City,Guangdong,China.

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.



Prepared by : Rot Liang



Approved by : Herbert Liu



Certificate #5123.02

Add: No.3, Jinshagang 1st Road, Shixia, Dalang Town,Dongguan, Guangdong, China.

Tel: +86-769-8318-3000

Web: www.newbtl.com

Standard(s) : **ANSI Std C95.1-1992** Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.(IEEE Std C95.1-1991)

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 Mode V02r01
KDB447498 D01 General RF Exposure Guidance v06
KDB648474 D04 Handset SAR v01r03
KDB248227 D01 802. 11 Wi-Fi SAR v02r02
KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
KDB865664 D02 SAR Reporting v01r02
KDB690783 D01 SAR Listings on Grants v01r03

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

The report must not be used by the client to claim product certification, approval, or endorsement by NIST, A2LA, or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Oct. 29, 2019
R01	1. Updated the description in section 7.3.1. 2. Updated the data of BT.	Oct. 30, 2019

1. RF EMISSIONS MEASUREMENT

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is **SAR room** at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

1.2 MEASUREMENT UNCERTAINTY

Note: 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.

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Mobile Phone		
Brand Name	OPPO		
Model Name	CPH1941		
IMEI Code	Sample 1	868467040020176	
	Sample 2	868467040020416	
	Sample 3	868467040020044	
	Sample 4	868467040020093	
	Sample 5	868467040020028	
Hardware Version	11		
Software Version	ColorOS V6.0.1		
Firmware Version	TBD		
Modulation	GSM(GMSK/8PSK), UMTS(QPSK), LTE(QPSK/16QAM/64QAM), WiFi(DSSS/OFDM), BT(GFSK/π/4-DQPSK/8-DPSK)		
Operation Frequency Range(s)	Band	TX (MHz)	RX (MHz)
	GSM850	824~849	869~894
	GSM1900	1850~1910	1930~1990
	UMTS B2	1850~1910	1930~1990
	UMTS B4	1710~1755	2110~2155
	UMTS B5	824~849	869~894
	LTE B2	1850~1910	1930~1990
	LTE B4	1710~1755	2110~2155
	LTE B5	824~849	869~894
	LTE B7	2500~2570	2620~2690
	LTE B26	814~849	859~894
	LTE B38	2570~2620	
	LTE B41	2496~2690	
	Bluetooth	2402~2480	
	2.4G WLAN	2412~2462	
	5.2G WLAN	5150~5250	
	5.3G WLAN	5250~5350	
	5.6G WLAN	5470~5725	
	5.8G WLAN	5725~5850	
GPRS/EDGE Multislot Class(12)	Max Number of Timeslots in Uplink:		4
	Max Number of Timeslots in Downlink:		4
	Max Total Timeslot:		5
GSM Device class	Class B		
HSDPA UE Category	14		
HSUPA UE Category	6		
DC-HSDPA Category	24		
Power Class	4,tested with power level 5(GSM850)		
	1,tested with power level 0(GSM1900)		
	3, tested with power control “all up bits”(UMTS B2/4/5)		
	3, tested with power control “all Max” (LTE B2/4/5/7/26/38/41)		

Test Channels (low-mid-high)	128-190-251 (GSM850)				
	512-661-810 (GSM1900)				
	9262-9400-9538 (UMTS B2)				
	1312-1413-1513 (UMTS B4)				
	4132-4182-4233 (UMTS B5)				
	18700-18900-19100 (LTE B2 BW=20MHz)				
	20050-20175-20300 (LTE B4 BW=20MHz)				
	20450-20525-20600 (LTE B5 BW=10MHz)				
	20850-21100-21350 (LTE B7 BW=20MHz)				
	26765-26865-26965 (LTE B26 BW=15MHz)				
	37850-38000-38150 (LTE B38 BW=20MHz)				
	39750-40620-41490 (LTE B41 BW=20MHz)				
	0-39-78 (BT)				
	0-19-39 (BLE)				
	1-6-11 (2.4G WIFI 802.11b/g/n HT20)				

2.2 STATEMENT OF COMPLIANCE

Mode	Highest Reported Head SAR-1g (W/kg)	Highest Reported Body-worn (15mm) SAR-1g (W/kg)	Highest Reported Hotspot (10mm) SAR-1g (W/kg)	Highest Reported Product Specific (0mm) SAR-10g (W/kg)
GSM850	0.99	0.12	0.26	/
GSM1900	0.77	0.21	0.62	/
UMTS B2	1.07	0.31	0.80	/
UMTS B4	1.07	0.31	0.92	/
UMTS B5	0.31	0.15	0.24	/
LTE B2	0.98	0.32	0.85	/
LTE B4	1.06	0.36	0.92	/
LTE B5	0.70	0.25	0.48	/
LTE B7	0.96	0.30	0.82	/
LTE B26	0.41	0.17	0.22	/
LTE B38	0.89	0.29	0.74	/
LTE B41	0.82	0.25	0.66	/
2.4G WLAN	0.77	0.10	0.26	/
5.2G WLAN	/	/	0.18	/
5.3G WLAN	0.64	0.14	/	0.77
5.6G WLAN	0.64	0.16	/	0.43
5.8G WLAN	0.58	0.20	0.41	/
Bluetooth	0.24	0.03	/	/
Note: The highest reported SAR for head, body-worn, hotspot, product Specific SAR-10g and simultaneous transmission exposure conditions are 1.07W/kg, 0.36W/kg, 0.92W/kg, 0.77W/kg and 1.45W/kg respectively.				

Note: 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 .

2.3 LABORATORY ENVIRONMENT

Temperature	Min. = 18°C, Max. = 25°C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5Ω
Ambient noise is checked and found very low and in compliance with requirement of standards.	
Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2.4 MAIN TEST INSTRUMENTS

Item	Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. Interval
1	Data Acquisition Electronics	Speag	DAE4	878	Dec. 12, 2018	1 Year
2	Data Acquisition Electronics	Speag	DAE3	420	Jun. 21, 2019	1 Year
3	E-field Probe	Speag	EX3DV4	7544	Sep. 09, 2019	1 Year
4	E-field Probe	Speag	ES3DV3	3162	Apr. 12, 2019	1 Year
5	System Validation Dipole	Speag	D835V2	4d160	Jun. 05, 2018	3 Years
6	System Validation Dipole	Speag	D1750V2	1101	Jun. 07, 2018	3 Years
7	System Validation Dipole	Speag	D1900V2	5d179	Jun. 07, 2018	3 Years
8	System Validation Dipole	Speag	D2450V2	919	Jun. 11, 2018	3 Years
9	System Validation Dipole	Speag	D2600V2	1067	Jun. 11, 2018	3 Years
10	System Validation Dipole	Speag	D5GHzV2	1160	Jun. 20, 2018	3 Years
11	Twin Sam Phantom	Speag	Twin Sam Phantom V5.0	1469	N/A	N/A
12	Twin Sam Phantom	Speag	Twin Sam Phantom V5.0	1784	N/A	N/A
13	Twin Sam Phantom	Speag	Twin Sam Phantom V5.0	1896	N/A	N/A
14	8960 Series 10 Wireless Com Test set	Agilent	E5515E	MY52112163	Aug. 03, 2019	1 Year
15	Radio Communication Analver	Anritsu	MT8820C	6201525877	Aug. 03, 2019	1 Year
16	Wideband radio communication tester	R&S	CMW500	152372	Mar. 10, 2019	1 Year
17	CMW500-Wideband Radio Communication Tester	R&S	CMW500	153883	Mar. 10, 2019	1 Year
18	Power Amplifier	Mini-Circuits	ZHL-42W+	QA1333003	Feb. 25, 2019	1 Year
19	Power Amplifier	Mini-Circuits	ZVE-8G+	520701341	Feb. 25, 2019	1 Year
20	DC Source	Iteck	OT6154	M00157	Aug. 03, 2019	1 Year
21	ENA Network Analyzer	Agilent	E5071C	MY46102965	Mar. 10, 2019	1 Year
22	MXG Analog Signal Generator	Agilent	N5181A	MY49060710	Aug. 03, 2019	1 Year
23	Signal Generator	Agilent	E4438C	MY4907131	Mar. 10, 2019	1 Year
24	Peak Power Analyzer	Keysight	8990B	MY51000506	Nov. 26, 2018	1 Year
25	Wideband Power Sensor	Keysight	N1923A	MY58310004	Nov. 26, 2018	1 Year
26	Smart Power Sensor	R&S	NRP-Z21	102209	Mar. 01, 2019	1 Year
27	Dielectric Assessment Kit	Speag	DAK-3.5	1226	N/A	N/A
28	Dual directional coupler	Woken	TS-PCC0M-05	107090019	Mar. 10, 2019	1 Year
29	Coupler	Woken	0110A05601O-10	COM5BNW1A2	Mar. 10, 2019	1 Year
30	Digital Themometer	LKM	DTM3000	3519	Jul. 08, 2019	1 Year

Remark:

1. "N/A" denotes no model name, serial No. or calibration specified.
2. * These test equipments have been recalibrated between the test periods. All these test equipments were within the valid period when the tests were performed.
3. 1) Per KDB865664 D01 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 5Ω from the previous measurement.
- 2) Network analyzer probe calibration against air, distilled water and a short block performed before measuring liquid parameters.

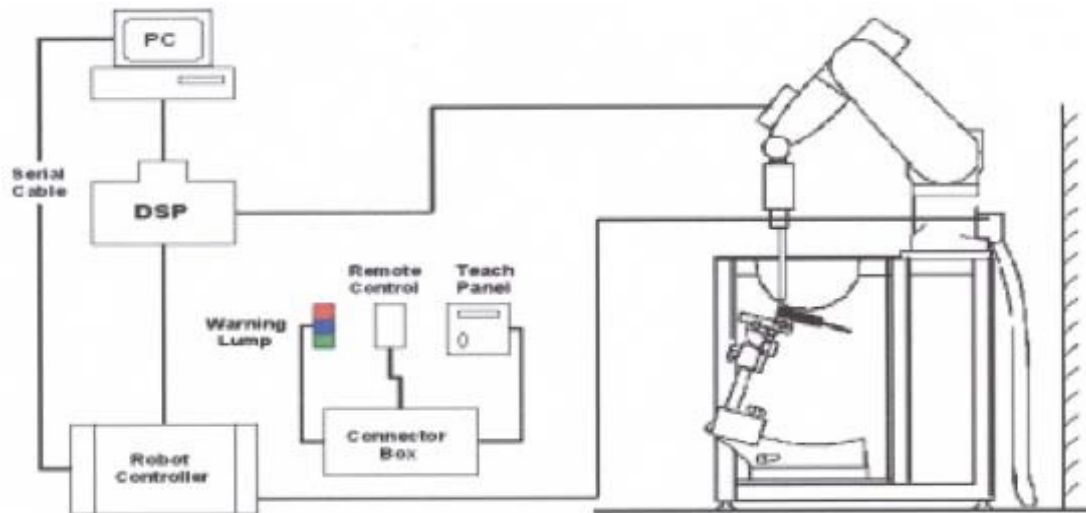
3. SAR MEASUREMENTS SYSTEM CONFIGURATION

3.1 SAR MEASUREMENT SET-UP

The DASY5 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. 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.
3. 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.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. 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 DASY5 measurement server.
6. The DASY5 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
7. DASY5 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

3.1.1 TEST SETUP LAYOUT



3.2 DASY5E-FIELDPROBESYSTEM

The SAR measurements were conducted with the dosimetric probe EX3DV4 and ES3DV3 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

3.2.1 PROBE SPECIFICATION

EX3DV4

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 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Distance from probe tip to dipole centers: 1.0 mm

ES3DV3

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: ± 0.2 dB (30 MHz to 4 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	5 μ W/g to > 100 mW/g Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 4 mm (Body: 12 mm) Distance from probe tip to dipole centers: 1.0 mm



E-field Probe

3.2.2 E-FIELD PROBE CALIBRATION

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than $\pm 10\%$. The spherical isotropy was evaluated and found to be better than $\pm 0.25\text{dB}$. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies below 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$\text{SAR} = C \frac{\Delta T}{\Delta t}$$

Where: Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

Or
$$\text{SAR} = \frac{|E|^2 \sigma}{\rho}$$

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

3.2.3 OTHER TEST EQUIPMENT

3.2.3.1. Device Holder for Transmitters

Construction: Simple but effective and easy-to-use extension for Mounting Device that facilitates the testing of larger devices (e.g., laptops, cameras, etc.) It is light weight and fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin SAM, ELI4 and SAM v6.0 Phantoms.

Material: POM, Acrylic glass, Foam

3.2.3.2 Phantom

Model	Twin SAM	
Construction	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.	
Shell Thickness	2 ± 0.2 mm	
Filling Volume	Approx. 25 liters	
Dimensions	Length:1000mm; Width: 500mm Height: adjustable feet	
Available	Special	

3.2.4 SCANNING PROCEDURE

The DASY5 installation includes predefined files with recommended procedures for measurements and validation. 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. $\pm 5\%$.

The “surface check” measurement tests the optical surface detection system of the DASY5 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 $\pm 30^\circ$.)

- Area Scan

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.

- Zoom Scan

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.

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

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

3.2.5 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, Computer mathematik, 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

DASY5 uses the advanced extrapolation option which is able to compensate boundary effects on E-field probes.

3.2.6 DATA STORAGE AND EVALUATION

3.2.6.1 Data Storage

The DASY5 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 "DAE". 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/cm²], [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.

3.2.7 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	Normi, ai0, ai1, ai2
	Conversion factor	ConvFi
	Diode compression point	Dcpj
Device parameters:	Frequency	f
	Crest factor	cf
Media parameters:	Conductivity	
	Density	

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 DASY5 components. In the direct measuring mode of the multi meter 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_i = compensated signal of channel i	(i = x, y, z)
	U_i = input signal of channel i	(i = x, y, z)
	cf = crest factor of exciting field	(DASY parameter)
	dcpj = diode compression point	(DASY parameter)

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

$$\text{E-field probes: } E_i = (V_i / \text{Norm}_i \cdot \text{ConvF})^{1/2}$$

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

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)²] 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):

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

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

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

With SAR = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

= conductivity in [mho/m] or [Siemens/m]

= equivalent tissue density in g/cm³

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.

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

With P_{pwe} = equivalent power density of a plane wave in mW/cm²

E_{tot} = total 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 parameter 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.

Tissue Type	Bactericide	DGBE	HEC	NaCl	Sucrose	Triton X-100	Water	Diethylene Glycol Mono-hexylether
Head 835	0.2	-	0.2	1.5	57.0	-	41.1	-
Head 1750	-	47.0	-	0.4	-	-	52.6	-
Head 1900	-	44.5	-	0.2	-	-	55.3	-
Head 2450	-	45.0	-	0.1	-	-	54.9	-
Head 2600	-	45.1	-	0.1	-	-	54.8	-
Head 5G	-	-	-	-	-	17.2	65.5	17.3

Salt: 99+% Pure Sodium Chloride; Sugar: 98+% Pure Sucrose; Water: De-ionized, 16M + 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

Tissue Verification									
Tissue Type	Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Targeted Conductivity (σ)	Targeted Permittivity (ϵ_r)	Deviation Conductivity (σ) (%)	Deviation Permittivity (ϵ_r) (%)	Date
Head	835	22.4	0.902	42.401	0.90	41.5	0.22	2.17	Oct. 03, 2019
Head	835	22.2	0.901	42.791	0.90	41.5	0.11	3.11	Oct. 06, 2019
Head	835	22.5	0.900	42.763	0.90	41.5	0.00	3.04	Oct. 08, 2019
Head	835	22.3	0.902	42.411	0.90	41.5	0.22	2.20	Oct. 09, 2019
Head	835	22.3	0.890	42.987	0.90	41.5	-1.11	3.58	Oct. 15, 2019
Head	835	22.5	0.890	42.994	0.90	41.5	-1.11	3.60	Oct. 16, 2019
Head	1750	22.4	1.419	38.360	1.37	40.1	3.58	-4.34	Sep. 29, 2019
Head	1750	22.3	1.421	38.420	1.37	40.1	3.72	-4.19	Oct. 01, 2019
Head	1750	22.2	1.358	39.714	1.37	40.1	-0.88	-0.96	Oct. 02, 2019
Head	1750	22.1	1.412	41.149	1.37	40.1	3.07	2.62	Oct. 11, 2019
Head	1900	22.4	1.384	39.557	1.40	40.0	-1.14	-1.11	Sep. 28, 2019
Head	1900	22.3	1.379	39.603	1.40	40.0	-1.50	-0.99	Oct. 10, 2019
Head	1900	22.5	1.422	39.337	1.40	40.0	1.57	-1.66	Oct. 11, 2019
Head	1900	22.5	1.375	39.027	1.40	40.0	-1.79	-2.43	Oct. 12, 2019
Head	2450	22.4	1.885	38.186	1.80	39.2	4.72	-2.59	Oct. 17, 2019
Head	2600	23.1	2.048	37.722	1.96	39.0	4.49	-3.28	Sep. 29, 2019
Head	2600	22.4	2.051	37.628	1.96	39.0	4.64	-3.52	Oct. 02, 2019
Head	2600	23.3	2.038	37.715	1.96	39.0	3.98	-3.29	Oct. 03, 2019
Head	2600	22.5	2.024	38.836	1.96	39.0	3.27	-0.42	Oct. 09, 2019
Head	2600	22.5	2.054	37.977	1.96	39.0	4.80	-2.62	Oct. 14, 2019
Head	2600	22.4	2.024	38.632	1.96	39.0	3.27	-0.94	Oct. 17, 2019
Head	2600	22.3	2.049	37.739	1.96	39.0	4.54	-3.23	Oct. 18, 2019
Head	5200	22.4	4.755	35.658	4.66	36.0	2.04	-0.95	Oct. 24, 2019
Head	5300	22.5	4.815	35.945	4.76	35.9	1.16	0.13	Oct. 13, 2019
Head	5300	22.4	4.861	35.499	4.76	35.9	2.12	-1.12	Oct. 24, 2019
Head	5500	22.5	5.037	35.487	4.96	35.6	1.55	-0.32	Oct. 13, 2019
Head	5500	22.4	5.083	35.182	4.96	35.6	2.48	-1.17	Oct. 24, 2019
Head	5600	22.5	5.158	35.271	5.07	35.5	1.74	-0.65	Oct. 13, 2019
Head	5600	22.4	5.197	35.011	5.07	35.5	2.50	-1.38	Oct. 24, 2019
Head	5800	22.5	5.411	34.839	5.27	35.3	2.68	-1.31	Oct. 14, 2019

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.
- 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 Std 1528 (described above). The following table shows system check results for all frequency bands and tissue liquids used during the tests.

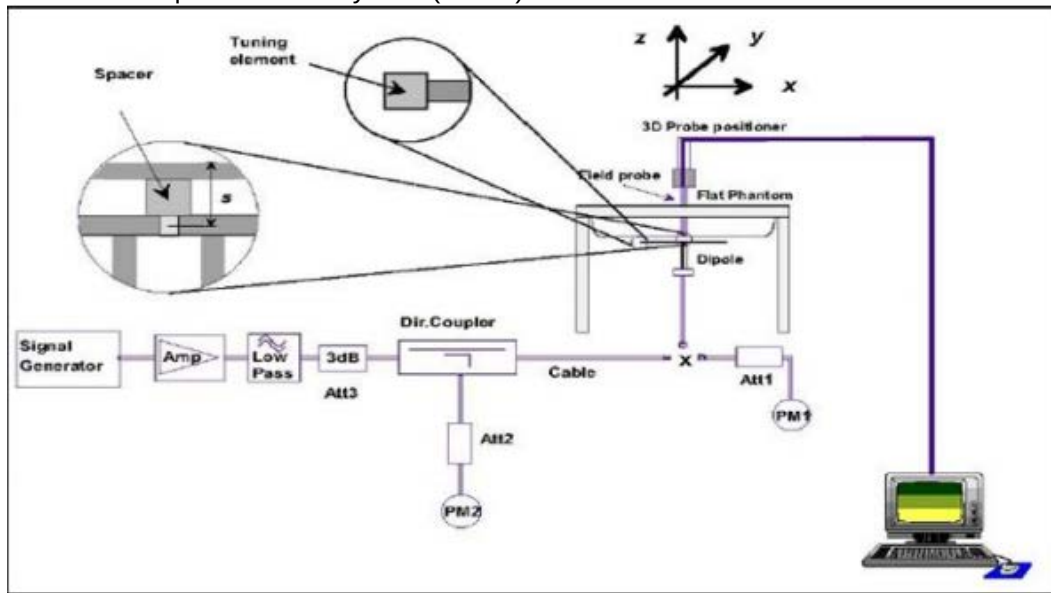
System Check	Date	Frequency (MHz)	Targeted SAR-1g (W/kg)	Measured SAR-1g (W/kg)	normalized SAR-1g (W/kg)	Deviation (%)	Dipole S/N
Head	Oct. 03, 2019	835	9.23	2.39	9.56	3.58	4d160
Head	Oct. 06, 2019	835	9.23	2.40	9.60	4.01	4d160
Head	Oct. 08, 2019	835	9.23	2.42	9.68	4.88	4d160
Head	Oct. 09, 2019	835	9.23	2.41	9.64	4.44	4d160
Head	Oct. 15, 2019	835	9.23	2.23	8.92	-3.36	4d160
Head	Oct. 16, 2019	835	9.23	2.39	9.56	3.58	4d160
Head	Sep. 29, 2019	1750	37.00	9.19	36.76	-0.65	1101
Head	Oct. 01, 2019	1750	37.00	9.32	37.28	0.76	1101
Head	Oct. 02, 2019	1750	37.00	9.12	36.48	-1.41	1101
Head	Oct. 11, 2019	1750	37.00	9.65	38.60	4.32	1101
Head	Sep. 28, 2019	1900	39.50	9.77	39.08	-1.06	5d179
Head	Oct. 10, 2019	1900	39.50	10.20	40.80	3.29	5d179
Head	Oct. 11, 2019	1900	39.50	10.34	41.36	4.71	5d179
Head	Oct. 12, 2019	1900	39.50	10.30	41.20	4.30	5d179
Head	Oct. 17, 2019	2450	52.10	13.50	54.00	3.65	919
Head	Sep. 29, 2019	2600	56.10	14.20	56.80	1.25	1067
Head	Oct. 02, 2019	2600	56.10	14.20	56.80	1.25	1067
Head	Oct. 03, 2019	2600	56.10	14.50	58.00	3.39	1067
Head	Oct. 09, 2019	2600	56.10	14.20	56.80	1.25	1067
Head	Oct. 14, 2019	2600	56.10	14.71	58.84	4.88	1067
Head	Oct. 17, 2019	2600	56.10	14.30	57.20	1.96	1067
Head	Oct. 18, 2019	2600	56.10	14.68	58.72	4.67	1067
Head	Oct. 24, 2019	5200	75.30	7.24	72.40	-3.85	1160
Head	Oct. 13, 2019	5300	76.80	7.39	73.90	-3.78	1160
Head	Oct. 24, 2019	5300	76.80	7.36	73.60	-4.17	1160
Head	Oct. 13, 2019	5500	80.80	7.99	79.90	-1.11	1160
Head	Oct. 24, 2019	5500	80.80	8.06	80.60	-0.25	1160
Head	Oct. 13, 2019	5600	78.60	7.98	79.80	1.53	1160
Head	Oct. 24, 2019	5600	78.60	8.04	80.40	2.29	1160
Head	Oct. 14, 2019	5800	77.90	7.78	77.80	-0.13	1160

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 SMA. It is fed with a power of 250mW (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.

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 ($\pm 10\%$).



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 ≥ 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 ≥ 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 ≥ 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.

6. OPERATIONAL CONDITIONS DURING TEST

6.1 SAR TEST CONFIGURATION

6.1.1 GSM TEST CONFIGURATION

SAR tests for GSM850 and GSM1900, a communication link is set up with a base station by air link. Using 8960 Series the power lever 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.

According to specification 3GPP TS 51.010, the maximum power of the GSM can do the power reduction for the multi-slot.

The allowed power reduction in the multi-slot configuration is as following:

Number of timeslots in uplink assignment		Reduction of maximum output power (dB)		
Band	Time Slots	GPRS (GMSK)	EGPRS (GMSK)	EGPRS (8PSK)
GSM850	1 TX slot	0.0	0.0	6.4
	2 TX slots	3.0	3.0	9.4
	3 TX slots	4.8	4.8	11.2
	4 TX slots	6.0	6.0	12.4
GSM1900	1 TX slot	0.0	0.0	4.3
	2 TX slots	3.0	3.0	7.3
	3 TX slots	4.8	4.8	9.1
	4 TX slots	6.0	6.0	10.3

6.1.2 UMTS TEST CONFIGURATION

1. Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the procedures description in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all "1s" for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Result for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HSDPA, HSPA) should be tabulated in the SAR report. All configuration that are not supported by the DUT or cannot be measured due to technical or equipment limitation should be clearly identified.

2. WCDMA

(1).Head SAR Measurements

SAR for next to ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1s". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR with 3.4kbps SRB(signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

(2).Body SAR Measurements

SAR for body-worn accessory is measured using the 12.2 kbps RMC with the TPC bits configured to all "1s". The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by 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 ≤ 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 β_c and β_d gain factors for DPCCH and DPDCH were set according to the values in the below table, β_{hs} for HS-DPCCH is set automatically to the correct value when $\Delta ACK, \Delta NACK, \Delta CQI = 8$. The variation of the β_c / β_d ratio causes a power reduction at sub-tests 2 - 4.

Sub-test ^o	β_c ^o	β_d ^o	β_d (SF) ^o	β_c / β_d ^o	β_{hs} (1) ^o	CM(dB)(2) ^o	MPR (dB) ^o
1 ^o	2/15 ^o	15/15 ^o	64 ^o	2/15 ^o	4/15 ^o	0.0 ^o	0 ^o
2 ^o	12/15(3) ^o	15/15(3) ^o	64 ^o	12/15(3) ^o	24/15 ^o	1.0 ^o	0 ^o
3 ^o	15/15 ^o	8/15 ^o	64 ^o	15/8 ^o	30/15 ^o	1.5 ^o	0.5 ^o
4 ^o	15/15 ^o	4/15 ^o	64 ^o	15/4 ^o	30/15 ^o	1.5 ^o	0.5 ^o

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, 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.
Note 3 : For subtest 2 the β_c / β_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 $\beta_d = 15/15$

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

Settings of required H-Set 1 QPSK acc. to 3GPP 34.121

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

HSDPA UE category

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

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 ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

Per KDB941225 D01, the 3G SAR test reduction procedures 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 HSUPA, 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.

Subtests for WCDMA Release 6 HSUPA

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

Note 1: ΔACK , $\Delta NACK$ 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, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference²

Note 3 : For subtest 1 the β_c/β_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 $\beta_d = 15/15$ ²

Note 4 : For subtest 5 the β_c/β_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 $\beta_d = 15/15$ ²

Note 5 : Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g²

Note 6: β_{ed} can not be set directly; it is set by Absolute Grant Value.²

HSUPA UE category

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&2SF4	11484	5.76
	4	4	2		20000	2.00
7 (No DPDCH)	4	8	2	2SF2&2SF4	22996	?
	4	4	10		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).

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
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

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.

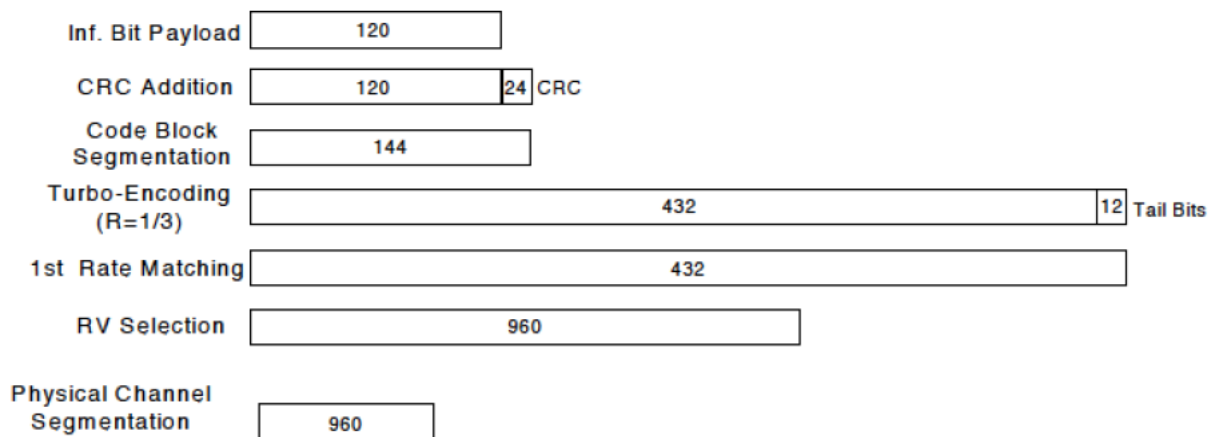


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

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

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

Note 1: ΔACK , $\Delta NACK$ 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, 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.
Note 3: For subtest 2 the β_c/β_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 support HSDPA and HSUPA 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.

6.1.3 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 Wide Band 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 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	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

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 ≤ 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 ≤ 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.

LTE (TDD) Test Configuration

According to KDB 941225 D05 SAR for LTE Devices V02r05, 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 B38/41 supports 3GPP TS 36 for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the slot, according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

TDD LTE B38/41 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

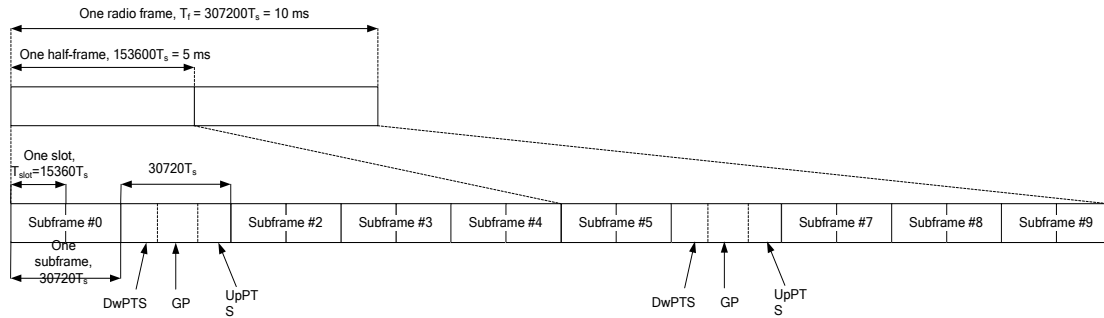


Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

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

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:

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

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 B38/41, Duty Cycle can be calculated with formula as below .all these sets are ok when we test, or we can set as below.

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

And we can get different Duty cycles under different configurations:

Uplink-downlink configuration	Subframe number			Configuration of special subframe							
				Normal cyclic prefix in downlink				Extended cyclic prefix in downlink			
				Normal cyclic prefix in uplink		Extended cyclic prefix in uplink		Normal cyclic prefix in uplink		Extended cyclic prefix in uplink	
	D	S	U	configuration 0-4	configuration 5-9	configuration 0-4	configuration 5-9	configuration 0-3	configuration 4-7	configuration 0-3	configuration 4-7
0	2	2	6	61.43%	62.85%	61.67%	63.33%	61.43%	62.85%	61.67%	63.33%
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.

6.1.4 LTE CARRIER AGGREGATION POWER

LTE Rel.11 Carrier Aggregation

As the KDB 941225 D05A, when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than 1/4dB higher than the maximum output power measured when downlink carrier aggregation is inactive, the CA test is not required.

E-UTRA CA configurations and bandwidth combination sets defined for intra-band contiguous CA

E-UTRA CA configuration / Bandwidth combination set					
E-UTRA CA configuration	Uplink CA configurations	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]		
CA_7C	CA_7C	15	15	40	0
		20	20		
		10	20		
		15	15, 20	40	1
		20	10, 15, 20		
		15	10,15		
CA_38C	CA_38C	20	15,20	40	2
		15	15		
CA_38C	CA_38C	15	15	40	0
		20	20		
CA_41C	CA_41C	10	20	40	0
		15	15,20		
		20	10, 15,20		
		5, 10	20	40	1
		15	15,20		
		20	5,10, 15, 20		
		10	15,20	40	2

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

E-UTRA CA configurations and bandwidth combination sets defined for noncontiguous intra-band CA (with two sub-blocks)

E-UTRA CA configuration / Bandwidth combination set					
E-UTRA CA configuration	Uplink CA configurations	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]		
CA_7A-7A	-	5	15	40	0
		10	10,15		
		15	15,20		
		20	20		
CA_41A-41A	-	10,15,20	10,15,20	40	0
		5,10,15,20	5,10,15,20	40	1

NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-3 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.

E-UTRA CA configurations and bandwidth combination sets defined for inter-band CA (two bands)

E-UTRA CA configuration / Bandwidth combination set										
E-UTRA CA configuration	Uplink CA configurations	EUTRA Bands	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	Maximum aggregated bandwidth [MHz]	Bandwidth combination set
CA_2A-5A	-	2			Yes	Yes	Yes	Yes	30	0
		5			Yes	Yes				
		2			Yes	Yes			20	1
		5			Yes	Yes				
CA_4A-5A	-	4			Yes	Yes			20	0
		5			Yes	Yes				
		4			Yes	Yes	Yes	Yes	30	1
		5			Yes	Yes				

NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-2 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.

Note:

- 1) For the inter-band CA combinations, all the listed bands above can be used as PCC or SCC.
- 2) The channel spacing and aggregated channel bandwidth for CA are identical to the associated specification in 3GPP TS 36.101 V13.2.0.
- 3) The reference test frequencies for CA refers to 3GPP TS 36.508 V13.1.0

1. Carrier Aggregation power test results (Uplink)

Main antenna Receiver on

E-UTRA CA configuration		PCC						SCC						Tune-up For LTE CA TX Power	LTE CA TX Power
		Band	Band width [MHZ]	Modulation	Channel (UL)	Frequency [MHZ]	RB Size/Offset	Band	Band width [MHZ]	Modulation	Channel (UL)	Frequency [MHZ]	RB Size/Offset		
CA_7C	Low	LTE B7	20	QPSK	20850	2510	1/99	LTE B7	20	QPSK	21048	2529.8	1/0	25	23.24
	Mid	LTE B7	20	QPSK	21100	2535	1/99	LTE B7	20	QPSK	21298	2554.8	1/0	25	23.83
	Mid	LTE B7	20	QPSK	21100	2535	1/0	LTE B7	20	QPSK	20902	2515.2	1/99	25	24.02
	High	LTE B7	20	QPSK	21152	2540.2	1/99	LTE B7	20	QPSK	21350	2560	1/0	25	23.16
CA_38C	Low	LTE B38	20	QPSK	37850	2580	1/99	LTE B38	20	QPSK	38048	2599.8	1/0	25	23.87
	Mid	LTE B38	20	QPSK	37901	2585.1	1/99	LTE B38	20	QPSK	38099	2604.9	1/0	25	23.81
	High	LTE B38	20	QPSK	37952	2590.2	1/99	LTE B38	20	QPSK	38150	2610	1/0	25	23.95
CA_41C	Low	LTE B41	20	QPSK	39750	2506	1/99	LTE B41	20	QPSK	39948	2525.8	1/0	25	23.48
	Mid	LTE B41	20	QPSK	40620	2593	1/99	LTE B41	20	QPSK	40818	2612.8	1/0	25	24.17
	Mid	LTE B41	20	QPSK	40620	2593	1/0	LTE B41	20	QPSK	40422	2573.2	1/99	25	24.31
	High	LTE B41	20	QPSK	41292	2660.2	1/99	LTE B41	20	QPSK	41490	2680	1/0	25	23.54

Main antenna Receiver off

E-UTRA CA configuration		PCC						SCC						Tune-up For LTE CA TX Power	LTE CA TX Power
		Band	Band width [MHZ]	Modulation	Channel (UL)	Frequency [MHZ]	RB Size/Offset	Band	Band width [MHZ]	Modulation	Channel (UL)	Frequency [MHZ]	RB Size/Offset		
CA_7C	Low	LTE B7	20	QPSK	20850	2510	1/99	LTE B7	20	QPSK	21048	2529.8	1/0	21.5	21.49
	Mid	LTE B7	20	QPSK	21100	2535	1/99	LTE B7	20	QPSK	21298	2554.8	1/0	21.5	21.4
	Mid	LTE B7	20	QPSK	21100	2535	1/0	LTE B7	20	QPSK	20902	2515.2	1/99	21.5	21.47
	High	LTE B7	20	QPSK	21152	2540.2	1/99	LTE B7	20	QPSK	21350	2560	1/0	21.5	21.32
CA_38C	Low	LTE B38	20	QPSK	37850	2580	1/99	LTE B38	20	QPSK	38048	2599.8	1/0	23	22.56
	Mid	LTE B38	20	QPSK	37901	2585.1	1/99	LTE B38	20	QPSK	38099	2604.9	1/0	23	22.43
	High	LTE B38	20	QPSK	37952	2590.2	1/99	LTE B38	20	QPSK	38150	2610	1/0	23	22.59
CA_41C	Low	LTE B41	20	QPSK	39750	2506	1/99	LTE B41	20	QPSK	39948	2525.8	1/0	24	23.51
	Mid	LTE B41	20	QPSK	40620	2593	1/99	LTE B41	20	QPSK	40818	2612.8	1/0	24	23.1
	Mid	LTE B41	20	QPSK	40620	2593	1/0	LTE B41	20	QPSK	40422	2573.2	1/99	24	23.22
	High	LTE B41	20	QPSK	41292	2660.2	1/99	LTE B41	20	QPSK	41490	2680	1/0	24	23.01

Second antenna Receiver on

E-UTRA CA configuration		PCC						SCC						Tune-up For LTE CA TX Power	LTE CA TX Power
		Band	Band width [MHZ]	Modulation	Channel (UL)	Frequency [MHZ]	RB Size/Offset	Band	Band width [MHZ]	Modulation	Channel (UL)	Frequency [MHZ]	RB Size/Offset		
CA_7C	Low	LTE B7	20	QPSK	20850	2510	1/99	LTE B7	20	QPSK	21048	2529.8	1/0	15.5	15.19
	Mid	LTE B7	20	QPSK	21100	2535	1/99	LTE B7	20	QPSK	21298	2554.8	1/0	15.5	14.92
	Mid	LTE B7	20	QPSK	21100	2535	1/0	LTE B7	20	QPSK	20902	2515.2	1/99	15.5	15.04
	High	LTE B7	20	QPSK	21152	2540.2	1/99	LTE B7	20	QPSK	21350	2560	1/0	15.5	14.98
CA_38C	Low	LTE B38	20	QPSK	37850	2580	1/99	LTE B38	20	QPSK	38048	2599.8	1/0	17.5	17.21
	Mid	LTE B38	20	QPSK	37901	2585.1	1/99	LTE B38	20	QPSK	38099	2604.9	1/0	17.5	17.16
	High	LTE B38	20	QPSK	37952	2590.2	1/99	LTE B38	20	QPSK	38150	2610	1/0	17.5	17.25
CA_41C	Low	LTE B41	20	QPSK	39750	2506	1/99	LTE B41	20	QPSK	39948	2525.8	1/0	17	16.56
	Mid	LTE B41	20	QPSK	40620	2593	1/99	LTE B41	20	QPSK	40818	2612.8	1/0	17	16.38
	Mid	LTE B41	20	QPSK	40620	2593	1/0	LTE B41	20	QPSK	40422	2573.2	1/99	17	16.47
	High	LTE B41	20	QPSK	41292	2660.2	1/99	LTE B41	20	QPSK	41490	2680	1/0	17	16.67

Second antenna Receiver off

E-UTRA CA configuration		PCC						SCC						Tune-up For LTE CA TX Power	LTE CA TX Power
		Band	Band width [MHZ]	Modulation	Channel (UL)	Frequency [MHZ]	RB Size/Offset	Band	Band width [MHZ]	Modulation	Channel (UL)	Frequency [MHZ]	RB Size/Offset		
CA_7C	Low	LTE B7	20	QPSK	20850	2510	1/99	LTE B7	20	QPSK	21048	2529.8	1/0	17	16.66
	Mid	LTE B7	20	QPSK	21100	2535	1/99	LTE B7	20	QPSK	21298	2554.8	1/0	17	16.57
	Mid	LTE B7	20	QPSK	21100	2535	1/0	LTE B7	20	QPSK	20902	2515.2	1/99	17	16.63
	High	LTE B7	20	QPSK	21152	2540.2	1/99	LTE B7	20	QPSK	21350	2560	1/0	17	16.52
CA_38C	Low	LTE B38	20	QPSK	37850	2580	1/99	LTE B38	20	QPSK	38048	2599.8	1/0	19	18.69
	Mid	LTE B38	20	QPSK	37901	2585.1	1/99	LTE B38	20	QPSK	38099	2604.9	1/0	19	18.66
	High	LTE B38	20	QPSK	37952	2590.2	1/99	LTE B38	20	QPSK	38150	2610	1/0	19	18.75
CA_41C	Low	LTE B41	20	QPSK	39750	2506	1/99	LTE B41	20	QPSK	39948	2525.8	1/0	20	19.51
	Mid	LTE B41	20	QPSK	40620	2593	1/99	LTE B41	20	QPSK	40818	2612.8	1/0	20	19.32
	Mid	LTE B41	20	QPSK	40620	2593	1/0	LTE B41	20	QPSK	40422	2573.2	1/99	20	19.44
	High	LTE B41	20	QPSK	41292	2660.2	1/99	LTE B41	20	QPSK	41490	2680	1/0	20	19.63

2. Carrier Aggregation power test results (Downlink)

Main antenna_Receiver on

E-UTRA CA configuration		CC-Combo	PCC								Wgap [MHz]	SCC				Tune-up For TX Power With DL CA	Power	
			Band	Band width [MHz]	Modulation	RB Size/Offset	Channel (UL)	Frequency [MHz]	Channel (DL)	Frequency [MHz]		Band	Band width [MHz]	Channel (DL)	Frequency [MHz]		TX Power With DL CA	TX Power Single Carrier
CA_7C	Low	20M+20M	LTE B7	20	QPSK	1/0	20850	2510	2850	2630	-	LTE B7	20	3048	2649.8	24.5	23.86	24.08
	Mid	20M+20M	LTE B7	20	QPSK	1/0	21001	2525.1	3001	2645.1		LTE B7	20	3199	2664.9	24.5	23.95	24.18
	High	20M+20M	LTE B7	20	QPSK	1/0	21152	2540.2	3152	2660.2		LTE B7	20	3350	2680	24.5	23.9	24.11
CA_38C	Low	20M+20M	LTE B38	20	QPSK	1/0	37850	2580	37850	2580	-	LTE B38	20	38048	2599.8	24.5	23.72	23.92
	Mid	20M+20M	LTE B38	20	QPSK	1/0	37901	2585.1	37901	2585.1		LTE B38	20	38099	2604.9	24.5	23.84	23.89
	High	20M+20M	LTE B38	20	QPSK	1/0	37952	2590.2	37952	2590.2		LTE B38	20	38150	2610	24.5	23.66	23.85
CA_41C	Low	20M+20M	LTE B41	20	QPSK	1/0	39750	2506	39750	2506	-	LTE B41	20	39948	2525.8	24.5	24.12	24.05
	Mid	20M+20M	LTE B41	20	QPSK	1/0	40521	2583.1	40521	2583.1		LTE B41	20	40719	2602.9	24.5	23.98	24.00
	High	20M+20M	LTE B41	20	QPSK	1/0	41292	2660.2	41292	2660.2		LTE B41	20	41490	2680	24.5	23.89	23.95
CA_7A-7A	N/A	20M+20M	LTE B7	20	QPSK	1/0	20850	2510	2850	2630	30	LTE B7	20	3350	2680	24.5	23.79	24.08
		20M+20M	LTE B7	20	QPSK	1/0	21000	2525	3000	2645	15	LTE B7	20	3350	2680	24.5	23.99	24.18
CA_41A-41A	N/A	20M+20M	LTE B41	20	QPSK	1/0	39750	2506	39750	2506	154	LTE B41	20	41490	2680	24.5	24.01	24.05
CA_2A-5A	N/A	20M+10M	LTE B2	20	QPSK	1/0	18900	1880	900	1960	-	LTE B5	10	2600	889	24.5	23.83	24.09
CA_4A-5A	N/A	20M+10M	LTE B4	20	QPSK	1/0	20175	1732.5	2175	2132.5	-	LTE B5	10	2525	881.5	24.5	23.75	24.01

Main antenna_Receiver off

E-UTRA CA configuration		CC-Combo	PCC								Wgap [MHz]	SCC				Tune-up For TX Power With DL CA	Power	
			Band	Band width [MHz]	Modulation	RB Size/Offset	Channel (UL)	Frequency [MHz]	Channel (DL)	Frequency [MHz]		Band	Band width [MHz]	Channel (DL)	Frequency [MHz]		TX Power With DL CA	TX Power Single Carrier
CA_7C	Low	20M+20M	LTE B7	20	QPSK	1/0	20850	2510	2850	2630	-	LTE B7	20	3048	2649.8	21	20.63	20.80
	Mid	20M+20M	LTE B7	20	QPSK	1/0	21001	2525.1	3001	2645.1		LTE B7	20	3199	2664.9	21	20.78	20.99
	High	20M+20M	LTE B7	20	QPSK	1/0	21152	2540.2	3152	2660.2		LTE B7	20	3350	2680	21	20.73	20.98
CA_38C	Low	20M+20M	LTE B38	20	QPSK	1/0	37850	2580	37850	2580	-	LTE B38	20	38048	2599.8	23	22.39	22.66
	Mid	20M+20M	LTE B38	20	QPSK	1/0	37901	2585.1	37901	2585.1		LTE B38	20	38099	2604.9	23	22.52	22.59
	High	20M+20M	LTE B38	20	QPSK	1/0	37952	2590.2	37952	2590.2		LTE B38	20	38150	2610	23	22.44	22.53
CA_41C	Low	20M+20M	LTE B41	20	QPSK	1/0	39750	2506	39750	2506	-	LTE B41	20	39948	2525.8	23	22.74	22.59
	Mid	20M+20M	LTE B41	20	QPSK	1/0	40521	2583.1	40521	2583.1		LTE B41	20	40719	2602.9	23	22.81	22.69
	High	20M+20M	LTE B41	20	QPSK	1/0	41292	2660.2	41292	2660.2		LTE B41	20	41490	2680	23	22.79	22.66
CA_7A-7A	N/A	20M+20M	LTE B7	20	QPSK	1/0	20850	2510	2850	2630	30	LTE B7	20	3350	2680	21	20.68	20.80
		20M+20M	LTE B7	20	QPSK	1/0	21000	2525	3000	2645	15	LTE B7	20	3350	2680	21	20.56	20.99
CA_41A-41A	N/A	20M+20M	LTE B41	20	QPSK	1/0	39750	2506	39750	2506	154	LTE B41	20	41490	2680	23	20.67	22.59
CA_2A-5A	N/A	20M+10M	LTE B2	20	QPSK	1/0	18900	1880	900	1960	-	LTE B5	10	2600	889	21	20.36	20.21
CA_4A-5A	N/A	20M+10M	LTE B4	20	QPSK	1/0	20175	1732.5	2175	2132.5	-	LTE B5	10	2525	881.5	21.5	21.42	21.23

Second antenna Receiver on

E-UTRA CA configuration		CC-Combo	PCC								Wgap [MHz]	SCC				Tune-up For TX Power With DL CA	Power	
			Band	Band width [MHZ]	Modulation	RB Size/Offset	Channel (UL)	Frequency [MHZ]	Channel (DL)	Frequency [MHZ]		Band	Band width [MHZ]	Channel (DL)	Frequency [MHZ]		TX Power With DL CA	TX Power Single Carrier
CA_7C	Low	20M+20M	LTE B7	20	QPSK	1/0	20850	2510	2850	2630	-	LTE B7	20	3048	2649.8	16	15.33	15.46
	Mid	20M+20M	LTE B7	20	QPSK	1/0	21001	2525.1	3001	2645.1		LTE B7	20	3199	2664.9	16	15.42	15.39
	High	20M+20M	LTE B7	20	QPSK	1/0	21152	2540.2	3152	2660.2		LTE B7	20	3350	2680	16	15.37	15.43
CA_38C	Low	20M+20M	LTE B38	20	QPSK	1/0	37850	2580	37850	2580	-	LTE B38	20	38048	2599.8	17.5	17.27	17.22
	Mid	20M+20M	LTE B38	20	QPSK	1/0	37901	2585.1	37901	2585.1		LTE B38	20	38099	2604.9	17.5	17.13	17.20
	High	20M+20M	LTE B38	20	QPSK	1/0	37952	2590.2	37952	2590.2		LTE B38	20	38150	2610	17.5	17.22	17.18
CA_41C	Low	20M+20M	LTE B41	20	QPSK	1/0	39750	2506	39750	2506	-	LTE B41	20	39948	2525.8	17.5	17.02	16.84
	Mid	20M+20M	LTE B41	20	QPSK	1/0	40521	2583.1	40521	2583.1		LTE B41	20	40719	2602.9	17.5	16.84	16.75
	High	20M+20M	LTE B41	20	QPSK	1/0	41292	2660.2	41292	2660.2		LTE B41	20	41490	2680	17.5	16.67	16.85
CA_7A-7A	N/A	20M+20M	LTE B7	20	QPSK	1/0	20850	2510	2850	2630	30	LTE B7	20	3350	2680	16	15.63	15.46
		20M+20M	LTE B7	20	QPSK	1/0	21000	2525	3000	2645	15	LTE B7	20	3350	2680	16	15.15	15.39
CA_41A-41A	N/A	20M+20M	LTE B41	20	QPSK	1/0	39750	2506	39750	2506	154	LTE B41	20	41490	2680	17	16.68	16.84
CA_2A-5A	N/A	20M+10M	LTE B2	20	QPSK	1/0	18900	1880	900	1960	-	LTE B5	10	2600	889	17.5	17.29	17.02
CA_4A-5A	N/A	20M+10M	LTE B4	20	QPSK	1/0	20175	1732.5	2175	2132.5	-	LTE B5	10	2525	881.5	20	19.53	19.34

Second antenna Receiver off

E-UTRA CA configuration		CC-Combo	PCC								Wgap [MHz]	SCC				Tune-up For TX Power With DL CA	Power	
			Band	Band width [MHZ]	Modulation	RB Size/Offset	Channel (UL)	Frequency [MHZ]	Channel (DL)	Frequency [MHZ]		Band	Band width [MHZ]	Channel (DL)	Frequency [MHZ]		TX Power With DL CA	TX Power Single Carrier
CA_7C	Low	20M+20M	LTE B7	20	QPSK	1/0	20850	2510	2850	2630	-	LTE B7	20	3048	2649.8	17.5	17.12	16.90
	Mid	20M+20M	LTE B7	20	QPSK	1/0	21001	2525.1	3001	2645.1		LTE B7	20	3199	2664.9	17.5	16.77	16.95
	High	20M+20M	LTE B7	20	QPSK	1/0	21152	2540.2	3152	2660.2		LTE B7	20	3350	2680	17.5	17.05	16.92
CA_38C	Low	20M+20M	LTE B38	20	QPSK	1/0	37850	2580	37850	2580	-	LTE B38	20	38048	2599.8	19.5	19.32	19.16
	Mid	20M+20M	LTE B38	20	QPSK	1/0	37901	2585.1	37901	2585.1		LTE B38	20	38099	2604.9	19.5	19.05	19.17
	High	20M+20M	LTE B38	20	QPSK	1/0	37952	2590.2	37952	2590.2		LTE B38	20	38150	2610	19.5	19.33	19.21
CA_41C	Low	20M+20M	LTE B41	20	QPSK	1/0	39750	2506	39750	2506	-	LTE B41	20	39948	2525.8	21	20.61	20.46
	Mid	20M+20M	LTE B41	20	QPSK	1/0	40521	2583.1	40521	2583.1		LTE B41	20	40719	2602.9	21	20.41	20.55
	High	20M+20M	LTE B41	20	QPSK	1/0	41292	2660.2	41292	2660.2		LTE B41	20	41490	2680	21	20.47	20.63
CA_7A-7A	N/A	20M+20M	LTE B7	20	QPSK	1/0	20850	2510	2850	2630	30	LTE B7	20	3350	2680	17.5	17.05	16.90
		20M+20M	LTE B7	20	QPSK	1/0	21000	2525	3000	2645	15	LTE B7	20	3350	2680	17.5	17.12	16.95
CA_41A-41A	N/A	20M+20M	LTE B41	20	QPSK	1/0	39750	2506	39750	2506	154	LTE B41	20	41490	2680	21	20.51	20.45
CA_2A-5A	N/A	20M+10M	LTE B2	20	QPSK	1/0	18900	1880	900	1960	-	LTE B5	10	2600	889	21	20.79	20.67
CA_4A-5A	N/A	20M+10M	LTE B4	20	QPSK	1/0	20175	1732.5	2175	2132.5	-	LTE B5	10	2525	881.5	22.5	22.26	22.42

6.1.5 WIFI TEST CONFIGURATION

For WLAN SAR testing, WLAN engineering testing software installed on the DUT can provide continuous transmitting RF signal.

2.4G

Mode	802.11b	802.11g	802.11n HT20
Duty cycle	100%		
Crest factor	1		

5G

Mode	802.11a	802.11n HT20	802.11n HT40	802.11ac HT20	802.11ac HT40	802.11ac VH80
Duty cycle	100%					
Crest factor	1					

For WiFi SAR testing, a communication link is set up with the test mode 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 248227 D01 are applied.

6.1.5.1 2.4G SAR Test Requirements

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 for the exposure configuration is ≤ 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.

2.4 GHz 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. 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 ≤ 1.2 W/kg.

SAR Test Requirements for OFDM configurations

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. 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.

6.1.5.2 5G SAR Test Requirements

✧ U-NII-1 and U-NII-2A Band

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If 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); otherwise, both bands are tested independently for SAR. 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 ≤ 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.

✧ U-NII-2C, 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.

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

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.¹¹ 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.

6.1.5.3 OFDM transmission mode and SAR test channel selection

For the 2.4GHz and 5GHz 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 then 802.11n and 802.11ac, or 802.11g then 802.11n) is used for SAR measurement. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

6.1.5.4 Initial test configuration procedure

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

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

6.2 TEST POSITION

6.2.1 HEAD TEST CONFIGURATION

Measurements were made in “cheek” and “tilt” positions on both the left hand and right hand sides of the phantom.

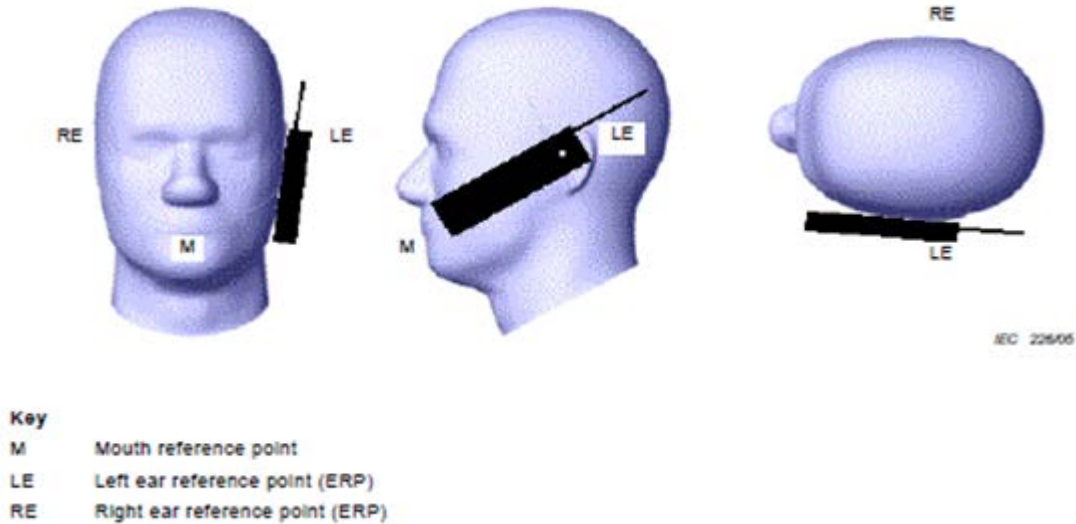


Figure 1 Cheek position of the wireless device on the left side of SAM

Note1: Cheek position of the wireless device on Right side of SAM also is similar to the left side represented above.



Figure 2 Tilt position of the wireless device on the left side of SAM

Note2: Tilt position of the wireless device on Right side of SAM also is similar to the left side represented above.

6.2.2 BODY-WORN TEST CONFIGURATION

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. Devices with a headset output should be tested with a headset connected to the device. The distance between the device and the phantom was kept 15mm.

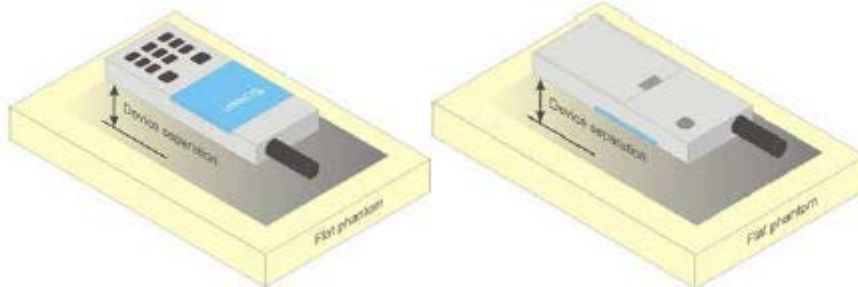


Figure 3 Test positions for body-worn device

6.2.3 HOTSPOT TEST CONFIGURATION

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 10mm is required for hotspot mode SAR measurements. A test separation distance of 5mm 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 25mm 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.

6.2.4 PRODUCT SPECIFIC 10-G SAR TEST CONFIGURATION

Per KDB 648474 D04, for smart phones with a display diagonal dimension $> 15.0\text{cm}$ or an overall diagonal dimension $> 16.0\text{cm}$ that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, the device is marketed as “Phablet”. The UMPC mini-tablets procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at $\leq 25\text{mm}$ 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 $> 1.2\text{W/kg}$; 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.

6.3 GENERAL DESCRIPTION OF TEST PROCEDURES

Connection to the EUT is established via air interface with Agilent 8960 & R&S CMW500 & Anritsu MT8820C, and the EUT is set to maximum output power by Agilent 8960 & R&S CMW500 & Anritsu MT8820C. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. The antenna connected to the output of the base station simulator shall be placed at least 50cm away from the EUT. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the EUT by at least 30dB.

6.4 RECEIVER DETECTION MECHANISM

6.4.1 GENERAL DESCRIPTION OF RECEIVER DETECTION MECHANISM

The device supports the receiver detection mechanism. The main purpose is to minimize triggering associated with power reduction scenarios by receiver detection mechanisms and provide enhanced user experience. This device uses the receiver to indicate whether the user is making a call in head scenario or not. The selection between head and body power levels is based on the receiver detection mechanism. It can determine proximity to head or body and set the relevant power level for 2G&3G&4G antenna accordingly.

Table: Summary of Receiver detection mechanism

Antenna	Receiver on (Head)	Receiver off (Body-worn & Hotspot)
2G&3G&4G second ant	Power Level A1	Power Level B1
2G&3G&4G main ant	Power Level A2	Power Level B2

The location of the antenna inside EUT, please refer to Appendix E.

Main Antenna												
Power scenario	GSM 850	GSM 1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B26	LTE B38	LTE B41
Receiver on (Head)	34	31	23	25	23	25	25	25	25	25	25	25
Receiver off (Body-worn & Hotspot)	32	28	21	21.5	23	20.5	21.5	24.5	21.5	25	23	23

Second Antenna												
Power scenario	GSM 850	GSM 1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B26	LTE B38	LTE B41
Receiver on (Head)	32.5	26	17.5	19.5	22	17.5	19.5	24.5	15.5	25	17.5	17
Receiver off (Body-worn & Hotspot)	33	29	21	22	22	21	22.5	25	17	25	19.5	21

6.4.2 MORE DETAILS INFORMATION FOLLOWINGS

For head SAR test,

- 1) Standalone Head SAR of 2G&3G&4G second ant is evaluated at power level A1;
- 2) Standalone Head SAR of 2G&3G&4G Main ant is evaluated at power level A2;

Note: As the receiver only works in voice mode when the user is making a call in head scenario, In LTE Data/ WCDMA RMC (Data) mode, the mobile phone won't ring and answer, it just can be connected with the test instrument. Therefore, for Head SAR test of UMTS and LTE, we're planning to test LTE Data/ WCDMA RMC (Data) mode through triggering the receiver on by XML test scripts in order to simulate the users' scene (LTE VOIP, WCDMA VOIP).

For body-worn & hotspot SAR test,

- 1) Standalone body-worn & hotspot SAR of 2G&3G&4G second ant is evaluated at power level B1;
- 2) Standalone body-worn & hotspot SAR of 2G&3G&4G Main ant is evaluated at power level B2;

Note: As the receiver will not work during body-worn voice mode operation with the headset connected. When the receiver is off, the power level with headset connected is the same as those without headset connected. So body-worn & hotspot SAR with headset is tested at the body-worn & hotspot SAR worst case without headset connected at the same power level.

7. TEST RESULT

7.1 CONDUCTED POWER RESULTS

7.1.1 CONDUCTED POWER MEASUREMENTS OF GSM

1. Main antenna Receiver on

GSM850		Max Burst Average Power (dBm)				Max Frame Average Power (dBm)			
		Max. Tune-up	Channel/Frequency(MHz)			Max. Tune-up	Channel/Frequency(MHz)		
			128/ 824.2	190/ 836.6	251/ 848.8		128/ 824.2	190/ 836.6	251/ 848.8
GSM (CS)		34.00	32.84	32.76	32.84	24.81	23.65	23.57	23.65
GPRS/ EDGE (GMSK)	1 Tx Slot	34.00	32.88	32.78	32.91	24.81	23.69	23.59	23.72
	2 Tx Slot	30.50	30.29	30.00	30.06	24.37	24.16	23.87	23.93
	3 Tx Slot	29.00	28.31	28.24	28.28	24.58	23.89	23.82	23.86
	4 Tx Slot	27.50	27.05	26.92	26.86	24.32	23.87	23.74	23.68
EDGE (8PSK)	1 Tx Slot	27.50	27.20	27.03	26.95	18.31	18.01	17.84	17.76
	2 Tx Slot	25.50	24.72	24.49	24.97	19.37	18.59	18.36	18.84
	3 Tx Slot	24.50	23.68	23.64	24.03	20.08	19.26	19.22	19.61
	4 Tx Slot	23.50	23.09	22.96	22.87	20.32	19.91	19.78	19.69
GSM1900		Max Burst Average Power (dBm)				Max Frame Average Power (dBm)			
		Max. Tune-up	Channel/Frequency(MHz)			Max. Tune-up	Channel/Frequency(MHz)		
			512/ 1850.2	661/ 1880	810/ 1909.8		512/ 1850.2	661/ 1880	810/ 1909.8
GSM (CS)		31.00	29.71	30.14	30.05	21.81	20.52	20.95	20.86
GPRS/E DGE (GMSK)	1 Tx Slot	31.00	29.73	30.15	30.04	21.81	20.54	20.96	20.85
	2 Tx Slot	28.00	27.06	27.42	27.38	21.87	20.93	21.29	21.25
	3 Tx Slot	27.00	25.93	26.34	26.06	22.58	21.51	21.92	21.64
	4 Tx Slot	25.00	24.04	24.68	24.46	21.82	20.86	21.50	21.28
EDGE (8PSK)	1 Tx Slot	26.50	25.59	26.07	26.09	17.31	16.40	16.88	16.90
	2 Tx Slot	24.50	23.86	24.16	24.25	18.37	17.73	18.03	18.12
	3 Tx Slot	23.50	22.75	22.64	22.88	19.08	18.33	18.22	18.46
	4 Tx Slot	22.00	21.58	21.71	21.45	18.82	18.40	18.53	18.27

2. Main antenna Receiver off

GSM850		Max Burst Average Power (dBm)				Max Frame Average Power (dBm)			
		Max. Tune-up	Channel/Frequency(MHz)			Max. Tune-up	Channel/Frequency(MHz)		
			128/ 824.2	190/ 836.6	251/ 848.8		128/ 824.2	190/ 836.6	251/ 848.8
GSM (CS)		32.00	31.38	31.31	31.44	22.81	22.19	22.12	22.25
GPRS/ EDGE (GMSK)	1 Tx Slot	32.00	31.38	31.31	31.44	22.81	22.19	22.12	22.25
	2 Tx Slot	29.50	28.66	28.45	28.75	23.37	22.53	22.32	22.62
	3 Tx Slot	28.00	27.10	26.62	26.80	23.58	22.68	22.20	22.38
	4 Tx Slot	26.50	25.90	25.33	25.50	23.32	22.72	22.15	22.32
EDGE (8PSK)	1 Tx Slot	26.50	25.98	25.72	25.68	17.31	16.79	16.53	16.49
	2 Tx Slot	24.50	23.68	23.24	23.40	18.37	17.55	17.11	17.27
	3 Tx Slot	23.50	22.52	22.42	22.47	19.08	18.10	18.00	18.05
	4 Tx Slot	22.50	21.93	22.19	22.34	19.32	18.75	19.01	19.16
GSM1900		Max Burst Average Power (dBm)				Max Frame Average Power (dBm)			
		Max. Tune-up	Channel/Frequency(MHz)			Max. Tune-up	Channel/Frequency(MHz)		
			512/ 1850.2	661/ 1880	810/ 1909.8		512/ 1850.2	661/ 1880	810/ 1909.8
GSM (CS)		28.00	27.44	27.57	27.62	18.81	18.25	18.38	18.43
GPRS/ EDGE (GMSK)	1 Tx Slot	28.00	27.44	27.57	27.62	18.81	18.25	18.38	18.43
	2 Tx Slot	25.00	24.52	24.60	24.73	18.87	18.39	18.47	18.60
	3 Tx Slot	24.00	23.22	23.39	23.45	19.58	18.80	18.97	19.03
	4 Tx Slot	22.00	21.52	21.77	21.72	18.82	18.34	18.59	18.54
EDGE (8PSK)	1 Tx Slot	24.00	23.11	23.18	23.08	14.81	13.92	13.99	13.89
	2 Tx Slot	22.00	21.12	21.22	21.20	15.87	14.99	15.09	15.07
	3 Tx Slot	21.00	20.74	20.91	20.90	16.58	16.32	16.49	16.48
	4 Tx Slot	20.00	19.78	19.93	19.89	16.82	16.60	16.75	16.71

3. Second antenna Receiver on

GSM850		Max Burst Average Power (dBm)				Max Frame Average Power (dBm)			
		Max. Tune-up	Channel/Frequency(MHz)			Max. Tune-up	Channel/Frequency(MHz)		
			128/ 824.2	190/ 836.6	251/ 848.8		128/ 824.2	190/ 836.6	251/ 848.8
GSM (CS)		32.50	32.13	31.68	31.93	23.31	22.94	22.49	22.74
GPRS/ EDGE (GMSK)	1 Tx Slot	32.50	32.13	31.68	31.93	23.31	22.94	22.49	22.74
	2 Tx Slot	29.50	28.90	28.80	29.28	23.37	22.77	22.67	23.15
	3 Tx Slot	27.50	27.25	26.90	27.30	23.08	22.83	22.48	22.88
	4 Tx Slot	26.50	26.04	25.67	26.08	23.32	22.86	22.49	22.90
EDGE (8PSK)	1 Tx Slot	26.50	26.18	26.18	26.27	17.31	16.99	16.99	17.08
	2 Tx Slot	24.50	23.90	23.86	23.85	18.37	17.77	17.73	17.72
	3 Tx Slot	23.50	22.75	22.84	23.04	19.08	18.33	18.42	18.62
	4 Tx Slot	23.00	22.50	22.52	22.49	19.82	19.32	19.34	19.31
GSM1900		Max Burst Average Power (dBm)				Max Frame Average Power (dBm)			
		Max. Tune-up	Channel/Frequency(MHz)			Max. Tune-up	Channel/Frequency(MHz)		
			512/ 1850.2	661/ 1880	810/ 1909.8		512/ 1850.2	661/ 1880	810/ 1909.8
GSM (CS)		26.00	25.30	25.74	25.53	16.81	16.11	16.55	16.34
GPRS/ EDGE (GMSK)	1 Tx Slot	26.00	25.30	25.74	25.53	16.81	16.11	16.55	16.34
	2 Tx Slot	23.00	22.35	22.83	22.60	13.81	16.22	16.70	16.47
	3 Tx Slot	22.00	21.13	21.71	21.43	12.81	16.71	17.29	17.01
	4 Tx Slot	20.00	19.56	19.80	19.75	10.81	16.38	16.62	16.57
EDGE (8PSK)	1 Tx Slot	22.00	21.60	21.79	21.73	12.81	12.41	12.60	12.54
	2 Tx Slot	21.00	19.81	20.30	20.10	11.81	13.68	14.17	13.97
	3 Tx Slot	19.00	18.60	18.73	18.61	9.81	14.18	14.31	14.19
	4 Tx Slot	18.00	17.28	17.52	17.64	14.82	14.10	14.34	14.46

4. Second antenna Receiver off

GSM850		Max Burst Average Power (dBm)				Max Frame Average Power (dBm)			
		Max. Tune-up	Channel/Frequency(MHz)			Max. Tune-up	Channel/Frequency(MHz)		
			128/ 824.2	190/ 836.6	251/ 848.8		128/ 824.2	190/ 836.6	251/ 848.8
GSM (CS)		33.00	32.74	32.77	32.98	23.81	23.55	23.58	23.79
GPRS/ EDGE (GMSK)	1 Tx Slot	33.00	32.74	32.77	32.98	23.81	23.55	23.58	23.79
	2 Tx Slot	30.50	30.01	29.60	30.12	24.37	23.88	23.47	23.99
	3 Tx Slot	28.50	28.15	27.80	28.23	24.08	23.73	23.38	23.81
	4 Tx Slot	27.50	26.90	26.66	27.11	24.32	23.72	23.48	23.93
EDGE (8PSK)	1 Tx Slot	27.50	27.23	27.07	27.20	18.31	18.04	17.88	18.01
	2 Tx Slot	25.00	24.82	24.73	24.88	18.87	18.69	18.60	18.75
	3 Tx Slot	24.00	23.60	23.47	23.71	19.58	19.18	19.05	19.29
	4 Tx Slot	23.50	22.80	22.94	23.10	20.32	19.62	19.76	19.92
GSM1900		Max Burst Average Power (dBm)				Max Frame Average Power (dBm)			
		Max. Tune-up	Channel/Frequency(MHz)			Max. Tune-up	Channel/Frequency(MHz)		
			512/ 1850.2	661/ 1880	810/ 1909.8		512/ 1850.2	661/ 1880	810/ 1909.8
GSM (CS)		29.00	28.68	28.82	28.71	19.81	19.49	19.63	19.52
GPRS/ EDGE (GMSK)	1 Tx Slot	29.00	28.68	28.82	28.71	19.81	19.49	19.63	19.52
	2 Tx Slot	26.00	25.63	24.80	25.69	19.87	19.50	18.67	19.56
	3 Tx Slot	25.00	24.43	24.50	24.47	20.58	20.01	20.08	20.05
	4 Tx Slot	23.00	22.69	22.93	22.81	19.82	19.51	19.75	19.63
EDGE (8PSK)	1 Tx Slot	24.50	24.31	24.26	24.10	15.31	15.12	15.07	14.91
	2 Tx Slot	22.50	22.28	22.30	22.10	16.37	16.15	16.17	15.97
	3 Tx Slot	21.50	21.13	21.13	20.96	17.08	16.71	16.71	16.54
	4 Tx Slot	21.00	20.75	20.97	20.71	17.82	17.57	17.79	17.53

Note:

- 1) The conducted power of GSM is measured with RMS detector.
- 2) 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 time slots.
- 3) The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:
Frame-averaged power=10 x log (Burst-averaged power mW x Slot used/8)
- 4) The tested channels are marks in bold.

7.1.2 CONDUCTED POWER MEASUREMENTS OF UMTS

1. Main antenna Receiver on

Band	UMTS B2 Average Conducted Power(dBm)				UMTS B4 Average Conducted Power(dBm)			
Tx Channel	Max.	9262	9400	9538	Max.	1312	1413	1513
Frequency(MHz)	Tune-up	1852.4	1880	1907.6	Tune-up	1712.4	1732.6	1752.6
AMR Voice	23.00	21.27	21.49	21.60	25.00	24.40	24.43	24.50
RMC 12.2K	23.00	21.27	21.49	21.60	25.00	24.40	24.43	24.50
RMC 64K	23.00	21.29	21.54	21.64	25.00	24.36	24.42	24.33
RMC 144K	23.00	21.43	21.53	21.62	25.00	24.34	24.44	24.26
RMC 384K	23.00	21.28	21.55	21.61	25.00	24.35	24.38	24.32
HSDPA Subtest-1	22.00	21.44	21.53	21.60	24.00	23.37	23.40	23.35
HSDPA Subtest-2	22.00	21.37	21.53	21.58	24.00	23.34	23.39	23.28
HSDPA Subtest-3	21.50	20.95	21.07	21.15	23.50	22.89	22.91	22.82
HSDPA Subtest-4	21.50	20.83	21.11	21.09	23.50	22.84	22.85	22.82
HSUPA Subtest-1	21.50	20.65	20.88	20.94	23.50	23.33	23.42	23.34
HSUPA Subtest-2	19.00	18.41	18.54	18.74	22.00	21.48	21.37	21.35
HSUPA Subtest-3	20.00	19.43	19.52	19.60	22.50	22.34	22.41	22.32
HSUPA Subtest-4	19.00	18.33	18.57	18.44	22.00	21.38	21.39	21.27
HSUPA Subtest-5	22.00	21.43	21.53	21.64	23.50	23.35	23.43	23.29
DC-HSDPA Subtest-1	22.00	21.44	21.53	21.60	24.00	23.37	23.40	23.35
DC-HSDPA Subtest-2	22.00	21.37	21.53	21.58	24.00	23.34	23.39	23.28
DC-HSDPA Subtest-3	21.50	20.95	21.07	21.15	23.50	22.89	22.91	22.82
DC-HSDPA Subtest-4	21.50	20.83	21.11	21.09	23.50	22.84	22.85	22.82

Band	UMTS B5 Average Conducted Power(dBm)			
Tx Channel	Max.	4132	4182	4233
Frequency(MHz)	Tune-up	826.4	836.4	846.6
AMR Voice	23.00	21.34	21.37	21.42
RMC 12.2K	23.00	21.34	21.37	21.42
RMC 64K	23.00	21.33	21.36	21.35
RMC 144K	23.00	21.35	21.40	21.41
RMC 384K	23.00	21.41	21.39	21.43
HSDPA Subtest-1	22.00	21.36	21.39	21.35
HSDPA Subtest-2	22.00	21.42	21.44	21.41
HSDPA Subtest-3	21.00	20.39	20.43	20.48
HSDPA Subtest-4	21.00	20.30	20.44	20.42
HSUPA Subtest-1	21.00	20.72	20.75	20.81
HSUPA Subtest-2	19.00	18.40	18.46	18.38
HSUPA Subtest-3	20.00	19.42	19.37	19.44
HSUPA Subtest-4	19.00	18.41	18.39	18.37
HSUPA Subtest-5	22.00	21.37	21.34	21.31
DC-HSDPA Subtest-1	22.00	21.36	21.39	21.35
DC-HSDPA Subtest-2	22.00	21.42	21.44	21.41
DC-HSDPA Subtest-3	21.00	20.39	20.43	20.48
DC-HSDPA Subtest-4	21.00	20.30	20.44	20.42

2. Main antenna Receiver off

Band	UMTS B2 Average Conducted Power(dBm)				UMTS B4 Average Conducted Power(dBm)			
Tx Channel	Max.	9262	9400	9538	Max.	1312	1413	1513
Frequency(MHz)	Tune-up	1852.4	1880	1907.6	Tune-up	1712.4	1732.6	1752.6
AMR Voice	21.00	20.44	20.54	20.49	21.50	21.23	21.28	21.04
RMC 12.2K	21.00	20.44	20.54	20.49	21.50	21.23	21.28	21.04
RMC 64K	21.00	20.47	20.55	20.43	21.50	21.15	21.23	21.07
RMC 144K	21.00	20.48	20.52	20.46	21.50	21.08	21.21	21.01
RMC 384K	21.00	20.46	20.51	20.55	21.50	21.12	21.22	21.15
HSDPA Subtest-1	20.00	19.43	19.55	19.50	20.50	20.10	20.28	20.02
HSDPA Subtest-2	20.00	19.51	19.60	19.52	20.50	20.10	19.95	20.40
HSDPA Subtest-3	19.50	18.96	19.02	18.98	20.00	19.61	19.83	19.54
HSDPA Subtest-4	19.50	19.06	18.93	19.03	20.00	19.66	19.78	19.58
HSUPA Subtest-1	20.00	19.42	19.58	19.46	20.50	20.05	20.16	20.05
HSUPA Subtest-2	18.00	17.61	17.68	17.47	18.50	18.08	18.28	18.12
HSUPA Subtest-3	19.00	18.55	18.59	18.47	19.50	19.17	19.20	19.06
HSUPA Subtest-4	18.00	17.50	17.67	17.52	18.50	18.18	18.27	18.12
HSUPA Subtest-5	20.00	19.49	19.56	19.50	20.50	20.14	20.25	20.06
DC-HSDPA Subtest-1	20.00	19.43	19.55	19.50	20.50	20.10	20.28	20.02
DC-HSDPA Subtest-2	20.00	19.51	19.60	19.52	20.50	20.10	19.95	20.40
DC-HSDPA Subtest-3	19.50	18.96	19.02	18.98	20.00	19.61	19.83	19.54
DC-HSDPA Subtest-4	19.50	19.06	18.93	19.03	20.00	19.66	19.78	19.58

Band	UMTS B5 Average Conducted Power(dBm)			
Tx Channel	Max.	4132	4182	4233
Frequency(MHz)	Tune-up	826.4	836.4	846.6
AMR Voice	23.00	21.34	21.37	21.42
RMC 12.2K	23.00	21.34	21.37	21.42
RMC 64K	23.00	21.33	21.36	21.35
RMC 144K	23.00	21.35	21.40	21.41
RMC 384K	23.00	21.41	21.39	21.43
HSDPA Subtest-1	22.00	21.36	21.39	21.35
HSDPA Subtest-2	22.00	21.42	21.44	21.41
HSDPA Subtest-3	21.00	20.39	20.43	20.48
HSDPA Subtest-4	21.00	20.30	20.44	20.42
HSUPA Subtest-1	21.00	20.72	20.75	20.81
HSUPA Subtest-2	19.00	18.40	18.46	18.38
HSUPA Subtest-3	20.00	19.42	19.37	19.44
HSUPA Subtest-4	19.00	18.41	18.39	18.37
HSUPA Subtest-5	22.00	21.37	21.34	21.31
DC-HSDPA Subtest-1	22.00	21.36	21.39	21.35
DC-HSDPA Subtest-2	22.00	21.42	21.44	21.41
DC-HSDPA Subtest-3	21.00	20.39	20.43	20.48
DC-HSDPA Subtest-4	21.00	20.30	20.44	20.42

3. Second antenna Receiver on

Band	UMTS B2 Average Conducted Power(dBm)				UMTS B4 Average Conducted Power(dBm)			
Tx Channel	Max.	9262	9400	9538	Max.	1312	1413	1513
Frequency(MHz)	Tune-up	1852.4	1880	1907.6	Tune-up	1712.4	1732.6	1752.6
AMR Voice	17.50	17.08	17.10	17.09	19.50	19.00	19.19	18.99
RMC 12.2K	17.50	17.08	17.10	17.09	19.50	19.00	19.19	18.99
RMC 64K	17.50	17.12	17.20	17.03	19.50	18.98	19.13	19.03
RMC 144K	17.50	17.09	17.18	17.07	19.50	19.00	19.15	19.00
RMC 384K	17.50	17.08	17.05	16.98	19.50	19.01	19.10	18.96
HSDPA Subtest-1	16.50	16.02	16.11	16.03	18.50	18.05	18.14	18.01
HSDPA Subtest-2	16.50	16.04	16.17	16.01	18.50	18.04	18.21	18.05
HSDPA Subtest-3	16.50	16.10	16.13	15.97	18.50	18.06	18.30	18.12
HSDPA Subtest-4	16.50	16.01	16.08	16.00	18.50	18.02	18.10	18.02
HSUPA Subtest-1	16.50	16.01	16.09	15.14	17.50	17.07	17.30	17.13
HSUPA Subtest-2	14.50	14.12	13.87	13.78	16.50	16.15	16.23	16.12
HSUPA Subtest-3	15.50	15.05	15.13	14.91	17.50	17.00	17.10	17.06
HSUPA Subtest-4	14.50	14.00	14.11	14.01	16.50	16.07	16.23	16.03
HSUPA Subtest-5	16.50	16.11	16.22	16.15	18.50	18.05	18.28	18.12
DC-HSDPA Subtest-1	16.50	16.02	16.11	16.03	18.50	18.05	18.14	18.01
DC-HSDPA Subtest-2	16.50	16.04	16.17	16.01	18.50	18.04	18.21	18.05
DC-HSDPA Subtest-3	16.50	16.10	16.13	15.97	18.50	18.06	18.30	18.12
DC-HSDPA Subtest-4	16.50	16.01	16.08	16.00	18.50	18.02	18.10	18.02

Band	UMTS B5 Average Conducted Power(dBm)			
Tx Channel	Max.	4132	4182	4233
Frequency(MHz)	Tune-up	826.4	836.4	846.6
AMR Voice	22.00	21.56	21.54	21.58
RMC 12.2K	22.00	21.56	21.54	21.58
RMC 64K	22.00	21.57	21.56	21.62
RMC 144K	22.00	21.54	21.57	21.59
RMC 384K	22.00	21.56	21.57	21.56
HSDPA Subtest-1	22.00	21.55	21.56	21.59
HSDPA Subtest-2	22.00	21.62	21.58	21.60
HSDPA Subtest-3	21.00	20.63	20.55	20.67
HSDPA Subtest-4	21.00	20.64	20.65	20.62
HSUPA Subtest-1	21.50	20.96	21.05	20.98
HSUPA Subtest-2	19.00	18.54	18.58	18.64
HSUPA Subtest-3	20.00	19.57	19.62	19.64
HSUPA Subtest-4	19.00	18.66	18.57	18.61
HSUPA Subtest-5	22.00	21.52	21.57	21.63
DC-HSDPA Subtest-1	22.00	21.55	21.56	21.59
DC-HSDPA Subtest-2	22.00	21.62	21.58	21.60
DC-HSDPA Subtest-3	21.00	20.63	20.55	20.67
DC-HSDPA Subtest-4	21.00	20.64	20.65	20.62

4. Second antenna Receiver off

Band	UMTS B2 Average Conducted Power(dBm)				UMTS B4 Average Conducted Power(dBm)			
Tx Channel	Max.	9262	9400	9538	Max.	1312	1413	1513
Frequency(MHz)	Tune-up	1852.4	1880	1907.6	Tune-up	1712.4	1732.6	1752.6
AMR Voice	21.00	20.82	20.93	20.95	22.00	21.36	21.59	21.42
RMC 12.2K	21.00	20.82	20.93	20.95	22.00	21.36	21.59	21.42
RMC 64K	21.00	20.87	20.92	20.88	22.00	21.43	21.54	21.41
RMC 144K	21.00	20.85	20.90	20.86	22.00	21.40	21.52	21.44
RMC 384K	21.00	20.88	20.94	20.93	22.00	21.37	21.61	21.43
HSDPA Subtest-1	20.50	19.89	19.96	19.90	21.00	20.70	20.57	20.46
HSDPA Subtest-2	20.50	19.95	20.02	19.98	21.00	20.39	20.56	20.45
HSDPA Subtest-3	20.50	19.47	19.58	19.44	20.50	19.92	20.09	19.93
HSDPA Subtest-4	20.50	19.43	19.49	19.51	20.50	19.93	20.09	19.94
HSUPA Subtest-1	20.50	19.84	19.94	19.85	21.00	20.32	20.51	20.43
HSUPA Subtest-2	18.50	17.93	17.96	17.85	19.00	18.37	18.53	18.45
HSUPA Subtest-3	19.50	18.85	19.02	18.94	20.00	19.42	19.55	19.39
HSUPA Subtest-4	18.50	17.95	18.01	17.98	19.00	18.45	18.61	18.41
HSUPA Subtest-5	20.50	20.40	20.01	19.89	21.00	20.36	20.54	20.47
DC-HSDPA Subtest-1	20.50	19.89	19.96	19.90	21.00	20.70	20.57	20.46
DC-HSDPA Subtest-2	20.50	19.95	20.02	19.98	21.00	20.39	20.56	20.45
DC-HSDPA Subtest-3	20.50	19.47	19.58	19.44	20.50	19.92	20.09	19.93
DC-HSDPA Subtest-4	20.50	19.43	19.49	19.51	20.50	19.93	20.09	19.94

Band	UMTS B5 Average Conducted Power(dBm)			
Tx Channel	Max.	4132	4182	4233
Frequency(MHz)	Tune-up	826.4	836.4	846.6
AMR Voice	22.00	21.56	21.54	21.58
RMC 12.2K	22.00	21.56	21.54	21.58
RMC 64K	22.00	21.57	21.56	21.62
RMC 144K	22.00	21.54	21.57	21.59
RMC 384K	22.00	21.56	21.57	21.56
HSDPA Subtest-1	22.00	21.55	21.56	21.59
HSDPA Subtest-2	22.00	21.62	21.58	21.60
HSDPA Subtest-3	21.00	20.63	20.55	20.67
HSDPA Subtest-4	21.00	20.64	20.65	20.62
HSUPA Subtest-1	21.50	20.96	21.05	20.98
HSUPA Subtest-2	19.00	18.54	18.58	18.64
HSUPA Subtest-3	20.00	19.57	19.62	19.64
HSUPA Subtest-4	19.00	18.66	18.57	18.61
HSUPA Subtest-5	22.00	21.52	21.57	21.63
DC-HSDPA Subtest-1	22.00	21.55	21.56	21.59
DC-HSDPA Subtest-2	22.00	21.62	21.58	21.60
DC-HSDPA Subtest-3	21.00	20.63	20.55	20.67
DC-HSDPA Subtest-4	21.00	20.64	20.65	20.62

Note:

- 1) The conducted power of UMTS is measured with RMS detector.
- 2) Note: Per KDB941225 D01, 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 ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.
- 3) The tested channels are marks in bold.
- 4) The power of single channel and double channel is smaller than RMC12.2K, so SAR need not be tested.

7.1.3 CONDUCTED POWER MEASUREMENTS OF LTE

1. Conducted power measurement results of LTE B2

1) Main antenna Receiver on

LTE B2/BW=1.4M		Average Conducted Power(dBm)				LTE B2/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18607/1850.7	18900/1880	19193/1909.3				18615/1851.5	18900/1880	19185/1908.5
QPSK	1/0	25.00	23.52	23.82	23.73	QPSK	1/0	25.00	23.60	23.89	23.76
	1/2	25.00	23.61	23.87	23.79		1/7	25.00	23.74	23.97	23.83
	1/5	25.00	23.53	23.82	23.70		1/14	25.00	23.74	23.85	23.76
	3/0	25.00	23.52	23.73	23.72		8/0	24.00	22.85	23.12	23.03
	3/1	25.00	23.60	23.78	23.78		8/3	24.00	22.88	23.13	23.02
	3/3	25.00	23.59	23.77	23.77		8/7	24.00	22.91	23.09	22.98
	6/0	24.00	22.78	23.00	22.95		15/0	24.00	22.94	23.05	23.04
16QAM	1/0	24.00	22.93	23.39	23.02	16QAM	1/0	24.00	22.79	23.54	23.11
	1/2	24.00	22.99	23.49	23.06		1/7	24.00	22.90	23.64	23.19
	1/5	24.00	22.94	23.43	23.04		1/14	24.00	22.85	23.48	23.08
	3/0	24.00	22.84	23.24	23.14		8/0	23.00	22.07	22.30	22.17
	3/1	24.00	22.91	23.29	23.17		8/3	23.00	22.07	22.31	22.20
	3/3	24.00	22.91	23.25	23.20		8/7	23.00	22.09	22.25	22.16
	6/0	23.00	22.02	22.03	22.24		15/0	23.00	22.03	22.23	22.11
64QAM	1/0	23.00	21.78	21.90	22.02	64QAM	1/0	23.00	21.97	21.89	21.94
	1/2	23.00	21.83	21.96	22.11		1/7	23.00	22.04	22.02	21.94
	1/5	23.00	21.72	21.91	21.99		1/14	23.00	22.06	21.89	21.83
	3/0	23.00	21.74	21.70	21.89		8/0	22.00	20.78	20.85	20.71
	3/1	23.00	21.80	21.70	21.99		8/3	22.00	20.79	20.86	20.78
	3/3	23.00	21.75	21.69	21.89		8/7	22.00	20.86	20.87	20.73
	6/0	22.00	20.93	20.79	20.67		15/0	22.00	20.73	20.85	20.76

LTE B2/BW=5M		Average Conducted Power(dBm)				LTE B2/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18625/1852.5	18900/1880	19175/1907.5				18650/1855	18900/1880	19150/1905
QPSK	1/0	25.00	23.79	23.91	23.91	QPSK	1/0	25.00	23.71	23.97	23.88
	1/12	25.00	23.91	23.91	23.92		1/24	25.00	23.76	23.92	23.77
	1/24	25.00	23.85	23.86	23.84		1/49	25.00	23.75	23.85	23.76
	12/0	24.00	22.91	23.14	23.09		25/0	24.00	23.01	23.12	23.08
	12/6	24.00	22.97	23.12	23.08		25/12	24.00	23.02	23.14	23.08
	12/13	24.00	22.96	23.10	23.05		25/25	24.00	22.94	23.10	23.08
	25/0	24.00	23.00	23.15	23.06		50/0	24.00	22.96	23.13	23.07
16QAM	1/0	24.00	23.09	23.68	23.24	16QAM	1/0	24.00	22.86	23.56	23.21
	1/12	24.00	23.19	23.73	23.27		1/24	24.00	22.91	23.49	23.10
	1/24	24.00	23.12	23.62	23.19		1/49	24.00	22.85	23.48	23.05
	12/0	23.00	22.07	22.36	22.23		25/0	23.00	22.04	22.25	22.28
	12/6	23.00	22.10	22.33	22.18		25/12	23.00	22.03	22.26	22.28
	12/13	23.00	22.12	22.30	22.18		25/25	23.00	22.02	22.20	22.25
	25/0	23.00	22.05	22.24	22.07		50/0	23.00	22.00	22.25	22.15
64QAM	1/0	23.00	21.65	22.13	21.98	64QAM	1/0	23.00	22.02	21.94	21.96
	1/12	23.00	21.83	22.15	22.02		1/24	23.00	22.06	21.92	21.89
	1/24	23.00	21.76	22.09	21.95		1/49	23.00	22.05	21.89	21.90
	12/0	22.00	20.79	20.78	20.86		25/0	22.00	20.81	20.88	20.88
	12/6	22.00	20.89	20.77	20.83		25/12	22.00	20.83	20.91	20.88
	12/13	22.00	20.87	20.76	20.81		25/25	22.00	20.78	20.87	20.88
	25/0	22.00	20.78	20.76	20.83		50/0	22.00	20.80	20.87	20.80

LTE B2/BW=15M		Average Conducted Power(dBm)				LTE B2/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18675/1857.5	18900/1880	19125/1902.5				18700/1860	18900/1880	19100/1900
QPSK	1/0	25.00	23.77	24.06	24.05	QPSK	1/0	25.00	23.78	24.01	24.08
	1/37	25.00	23.76	23.93	23.87		1/50	25.00	23.77	23.91	23.85
	1/74	25.00	23.70	23.89	23.88		1/99	25.00	23.77	23.89	23.84
	36/0	24.00	23.03	23.16	23.16		50/0	24.00	23.03	23.22	23.25
	36/19	24.00	22.94	23.16	23.11		50/25	24.00	23.01	23.15	23.13
	36/39	24.00	22.92	23.09	23.08		50/50	24.00	23.02	23.10	23.09
	75/0	24.00	22.99	23.11	23.11		100/0	24.00	23.04	23.15	23.19
16QAM	1/0	24.00	22.94	23.67	23.61	16QAM	1/0	24.00	23.56	23.72	23.63
	1/37	24.00	22.90	23.52	23.46		1/50	24.00	23.54	23.60	23.46
	1/74	24.00	22.94	23.48	23.46		1/99	24.00	23.52	23.52	23.47
	36/0	23.00	22.10	22.32	22.22		50/0	23.00	22.12	22.34	22.26
	36/19	23.00	22.02	22.31	22.17		50/25	23.00	22.06	22.27	22.21
	36/39	23.00	21.99	22.23	22.14		50/50	23.00	22.15	22.24	22.14
	75/0	23.00	22.05	22.23	22.17		100/0	23.00	22.09	22.24	22.23
64QAM	1/0	23.00	22.11	22.07	22.43	64QAM	1/0	23.00	22.03	22.56	22.29
	1/37	23.00	22.05	21.95	22.32		1/50	23.00	22.09	22.47	22.12
	1/74	23.00	22.04	21.92	22.35		1/99	23.00	22.11	22.43	22.13
	36/0	22.00	20.87	20.94	20.91		50/0	22.00	20.87	20.92	21.04
	36/19	22.00	20.87	20.95	20.85		50/25	22.00	20.89	20.90	20.99
	36/39	22.00	20.83	20.88	20.85		50/50	22.00	20.94	20.86	20.97
	75/0	22.00	20.79	20.85	20.90		100/0	22.00	20.87	20.87	20.99

2) Main antenna Receiver off

LTE B2/BW=1.4M		Average Conducted Power(dBm)				LTE B2/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18607/1850.7	18900/1880	19193/1909.3				18615/1851.5	18900/1880	19185/1908.5
QPSK	1/0	20.50	19.92	19.81	19.80	QPSK	1/0	20.50	19.92	19.91	19.79
	1/2	20.50	19.95	19.90	19.85		1/7	20.50	20.01	20.13	19.87
	1/5	20.50	19.91	19.90	19.81		1/14	20.50	19.90	19.99	19.81
	3/0	20.50	19.90	19.84	19.73		8/0	20.50	19.95	20.04	19.85
	3/1	20.50	19.96	19.98	19.78		8/3	20.50	19.93	20.05	19.88
	3/3	20.50	19.90	19.94	19.75		8/7	20.50	19.91	20.03	19.80
	6/0	20.50	19.85	19.93	19.75		15/0	20.50	19.92	20.00	19.86
16QAM	1/0	20.50	20.01	20.04	19.87	16QAM	1/0	20.50	19.91	20.03	19.79
	1/2	20.50	20.03	20.07	19.92		1/7	20.50	19.93	19.95	19.85
	1/5	20.50	20.00	20.16	19.81		1/14	20.50	19.87	20.17	19.72
	3/0	20.50	20.11	20.00	20.00		8/0	20.50	20.13	19.89	20.00
	3/1	20.50	19.90	19.83	20.06		8/3	20.50	20.13	19.92	20.00
	3/3	20.50	19.82	19.82	19.98		8/7	20.50	20.09	19.86	19.96
	6/0	20.50	20.14	20.18	19.77		15/0	20.50	20.06	19.82	19.96
64QAM	1/0	20.50	20.07	19.77	19.99	64QAM	1/0	20.50	20.04	19.78	20.14
	1/2	20.50	20.13	19.84	20.04		1/7	20.50	20.10	20.02	19.84
	1/5	20.50	20.00	19.82	20.01		1/14	20.50	20.01	19.93	20.08
	3/0	20.50	19.99	19.80	19.82		8/0	20.50	19.83	19.88	19.89
	3/1	20.50	20.06	19.91	19.90		8/3	20.50	19.85	19.94	19.97
	3/3	20.50	19.96	19.90	19.80		8/7	20.50	19.81	19.87	19.89
	6/0	20.50	19.93	20.03	19.90		15/0	20.50	19.73	19.89	19.97

LTE B2/BW=5M		Average Conducted Power(dBm)				LTE B2/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18625/1852.5	18900/1880	19175/1907.5				18650/1855	18900/1880	19150/1905
QPSK	1/0	20.50	20.08	19.97	19.93	QPSK	1/0	20.50	19.95	19.98	19.98
	1/12	20.50	20.09	20.09	19.92		1/24	20.50	19.90	20.05	19.79
	1/24	20.50	20.01	20.01	19.87		1/49	20.50	19.96	19.90	19.78
	12/0	20.50	19.94	19.92	19.86		25/0	20.50	19.92	19.95	19.89
	12/6	20.50	19.96	20.03	19.89		25/12	20.50	20.07	20.08	19.93
	12/13	20.50	19.92	20.02	19.84		25/25	20.50	20.02	20.01	19.90
	25/0	20.50	19.98	20.07	19.86		50/0	20.50	20.05	20.02	19.88
16QAM	1/0	20.50	19.87	19.91	19.75	16QAM	1/0	20.50	19.76	19.61	20.13
	1/12	20.50	19.90	20.07	19.75		1/24	20.50	19.72	19.72	19.96
	1/24	20.50	19.78	20.01	19.70		1/49	20.50	19.68	19.54	19.95
	12/0	20.50	19.80	19.88	19.71		25/0	20.50	19.80	19.74	19.69
	12/6	20.50	19.84	19.98	19.68		25/12	20.50	19.90	19.84	19.71
	12/13	20.50	19.80	19.93	19.67		25/25	20.50	19.83	19.76	19.70
	25/0	20.50	19.77	19.84	19.57		50/0	20.50	19.88	19.80	19.69
64QAM	1/0	20.50	19.74	20.06	19.91	64QAM	1/0	20.50	20.02	19.90	19.96
	1/12	20.50	19.75	19.92	19.91		1/24	20.50	19.98	19.91	19.79
	1/24	20.50	19.64	20.10	19.89		1/49	20.50	20.05	19.79	19.79
	12/0	20.50	19.81	19.71	19.73		25/0	20.50	19.76	19.83	19.77
	12/6	20.50	19.83	19.81	19.72		25/12	20.50	19.89	19.94	19.75
	12/13	20.50	19.79	19.78	19.70		25/25	20.50	19.82	19.92	19.73
	25/0	20.50	19.75	19.85	19.69		50/0	20.50	19.82	19.88	19.73

LTE B2/BW=15M		Average Conducted Power(dBm)				LTE B2/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18675/1857.5	18900/1880	19125/1902.5				18700/1860	18900/1880	19100/1900
QPSK	1/0	20.50	20.11	20.08	20.05	QPSK	1/0	20.50	20.18	20.21	20.13
	1/37	20.50	20.09	20.05	19.99		1/50	20.50	20.12	20.15	20.08
	1/74	20.50	19.94	19.89	19.89		1/99	20.50	20.10	20.04	19.94
	36/0	20.50	20.09	19.89	19.98		50/0	20.50	20.10	20.11	20.03
	36/19	20.50	20.03	20.04	19.92		50/25	20.50	20.06	20.13	19.95
	36/39	20.50	20.02	20.03	19.89		50/50	20.50	20.05	20.04	19.91
	75/0	20.50	20.04	20.04	19.92		100/0	20.50	20.08	20.09	20.01
16QAM	1/0	20.50	19.74	20.18	20.11	16QAM	1/0	20.50	19.87	19.94	19.66
	1/37	20.50	19.67	20.10	20.11		1/50	20.50	19.79	19.79	19.57
	1/74	20.50	19.59	20.04	19.98		1/99	20.50	19.92	19.76	19.49
	36/0	20.50	19.83	20.04	19.73		50/0	20.50	19.90	19.94	19.76
	36/19	20.50	19.86	19.93	19.71		50/25	20.50	19.87	19.90	19.69
	36/39	20.50	19.81	19.89	19.65		50/50	20.50	19.79	19.83	19.67
	75/0	20.50	19.83	19.90	19.71		100/0	20.50	19.87	19.90	19.73
64QAM	1/0	20.50	20.14	19.96	20.04	64QAM	1/0	20.50	20.07	19.89	20.09
	1/37	20.50	20.09	19.95	20.00		1/50	20.50	20.10	19.84	20.01
	1/74	20.50	19.94	19.81	19.97		1/99	20.50	20.10	19.80	19.93
	36/0	20.50	19.88	19.81	19.79		50/0	20.50	19.91	19.95	19.86
	36/19	20.50	19.85	19.95	19.75		50/25	20.50	19.88	19.90	19.77
	36/39	20.50	19.85	19.92	19.71		50/50	20.50	19.84	19.88	19.73
	75/0	20.50	19.83	19.91	19.78		100/0	20.50	19.84	19.90	19.78

3) Second antenna Receiver on

LTE B2/BW=1.4M		Average Conducted Power(dBm)				LTE B2/BW=3M		Average Conducted Power(dBm)			
Modula -tion	RB Size/ Offset	Max. Tune-up	Channel/Frequency(MHz)			Modula -tion	RB Size/ Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18607/ 1850.7	18900/ 1880	19193/ 1909.3				18615/ 1851.5	18900/ 1880	19185/ 1908.5
QPSK	1/0	17.50	16.67	16.72	16.52	QPSK	1/0	17.50	16.69	16.77	16.63
	1/2	17.50	16.75	16.72	16.57		1/7	17.50	16.78	16.96	16.70
	1/5	17.50	16.69	16.76	16.52		1/14	17.50	16.70	16.86	16.58
	3/0	17.50	16.63	16.76	16.54		8/0	17.50	16.72	16.86	16.65
	3/1	17.50	16.67	16.86	16.62		8/3	17.50	16.72	16.87	16.68
	3/3	17.50	16.62	16.81	16.55		8/7	17.50	16.69	16.85	16.61
	6/0	17.50	16.67	16.74	16.54		15/0	17.50	16.72	16.87	16.67
16QAM	1/0	17.50	16.73	16.86	16.99	16QAM	1/0	17.50	16.72	16.92	16.78
	1/2	17.50	16.82	16.93	16.76		1/7	17.50	16.79	16.78	16.84
	1/5	17.50	16.77	16.99	16.70		1/14	17.50	16.68	16.70	16.71
	3/0	17.50	16.90	16.88	16.90		8/0	17.50	16.93	16.72	16.80
	3/1	17.50	16.98	17.00	16.94		8/3	17.50	16.94	16.74	16.80
	3/3	17.50	16.89	16.96	16.85		8/7	17.50	16.94	16.71	16.77
	6/0	17.50	16.92	17.01	16.57		15/0	17.50	16.87	16.99	16.74
64QAM	1/0	17.50	16.88	16.88	16.81	64QAM	1/0	17.50	16.84	16.91	16.92
	1/2	17.50	16.94	16.95	16.86		1/7	17.50	16.93	16.82	16.94
	1/5	17.50	16.84	16.94	16.82		1/14	17.50	16.79	16.70	16.82
	3/0	17.50	16.76	16.90	16.61		8/0	17.50	16.93	16.98	16.66
	3/1	17.50	16.86	16.75	16.70		8/3	17.50	16.92	16.70	16.70
	3/3	17.50	16.80	16.71	16.58		8/7	17.50	16.93	16.97	16.64
	6/0	17.50	16.78	16.82	16.74		15/0	17.50	16.81	16.95	16.78

LTE B2/BW=5M		Average Conducted Power(dBm)				LTE B2/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18625/1852.5	18900/1880	19175/1907.5				18650/1855	18900/1880	19150/1905
QPSK	1/0	17.50	16.85	16.75	16.77	QPSK	1/0	17.50	16.75	16.82	16.83
	1/12	17.50	16.88	16.86	16.75		1/24	17.50	16.70	16.87	16.63
	1/24	17.50	16.81	16.83	16.73		1/49	17.50	16.79	16.78	16.63
	12/0	17.50	16.73	16.82	16.72		25/0	17.50	16.75	16.81	16.73
	12/6	17.50	16.76	16.88	16.71		25/12	17.50	16.93	16.92	16.71
	12/13	17.50	16.71	16.88	16.66		25/25	17.50	16.86	16.87	16.69
	25/0	17.50	16.77	16.92	16.67		50/0	17.50	16.86	16.89	16.72
16QAM	1/0	17.50	16.72	16.77	16.90	16QAM	1/0	17.50	16.78	16.96	16.96
	1/12	17.50	16.76	16.90	16.91		1/24	17.50	16.73	17.00	16.79
	1/24	17.50	16.97	16.85	16.86		1/49	17.50	16.77	16.87	16.72
	12/0	17.50	16.97	16.70	16.84		25/0	17.50	16.91	16.94	16.92
	12/6	17.50	16.96	16.83	16.86		25/12	17.50	16.99	16.75	16.91
	12/13	17.50	16.94	16.78	16.85		25/25	17.50	16.90	16.97	16.89
	25/0	17.50	16.89	16.73	16.73		50/0	17.50	16.96	16.94	16.86
64QAM	1/0	17.50	16.83	16.88	16.96	64QAM	1/0	17.50	16.92	16.73	16.80
	1/12	17.50	16.88	17.01	16.94		1/24	17.50	16.80	16.77	16.91
	1/24	17.50	16.74	16.91	16.96		1/49	17.50	16.85	16.92	16.85
	12/0	17.50	16.94	16.84	16.84		25/0	17.50	16.91	16.99	16.90
	12/6	17.50	16.93	16.91	16.86		25/12	17.50	16.99	16.79	16.89
	12/13	17.50	16.93	16.88	16.81		25/25	17.50	16.99	16.71	16.87
	25/0	17.50	16.87	16.94	16.81		50/0	17.50	16.97	16.77	16.83

LTE B2/BW=15M		Average Conducted Power(dBm)				LTE B2/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18675/1857.5	18900/1880	19125/1902.5				18700/1860	18900/1880	19100/1900
QPSK	1/0	17.50	16.85	16.98	16.92	QPSK	1/0	17.50	16.95	17.02	16.90
	1/37	17.50	16.81	16.90	16.78		1/50	17.50	16.84	16.86	16.78
	1/74	17.50	16.67	16.76	16.71		1/99	17.50	16.84	16.79	16.64
	36/0	17.50	16.93	16.76	16.82		50/0	17.50	16.92	17.00	16.85
	36/19	17.50	16.87	16.92	16.72		50/25	17.50	16.89	16.94	16.78
	36/39	17.50	16.83	16.87	16.69		50/50	17.50	16.86	16.86	16.76
	75/0	17.50	16.89	16.90	16.75		100/0	17.50	16.91	16.93	16.79
16QAM	1/0	17.50	16.88	16.78	16.76	16QAM	1/0	17.50	16.75	17.00	16.82
	1/37	17.50	16.83	16.74	16.95		1/50	17.50	16.82	16.67	16.96
	1/74	17.50	16.71	16.89	16.88		1/99	17.50	16.88	16.79	16.85
	36/0	17.50	16.71	16.89	16.87		50/0	17.50	16.78	16.81	16.65
	36/19	17.50	16.93	16.79	16.83		50/25	17.50	16.73	16.80	16.59
	36/39	17.50	16.92	16.74	16.77		50/50	17.50	16.67	16.72	16.54
	75/0	17.50	16.71	16.77	16.87		100/0	17.50	16.73	16.75	16.58
64QAM	1/0	17.50	16.99	16.85	16.90	64QAM	1/0	17.50	16.85	16.81	16.98
	1/37	17.50	16.93	16.79	16.82		1/50	17.50	16.80	16.62	16.88
	1/74	17.50	16.82	16.95	16.71		1/99	17.50	16.83	16.84	16.73
	36/0	17.50	16.72	16.95	16.87		50/0	17.50	16.77	16.85	16.96
	36/19	17.50	16.99	16.76	16.84		50/25	17.50	16.71	16.83	16.88
	36/39	17.50	16.98	16.73	16.80		50/50	17.50	16.92	16.76	16.87
	75/0	17.50	16.75	16.71	16.89		100/0	17.50	16.72	16.76	16.85

4) Second antenna Receiver off

LTE B2/BW=1.4M		Average Conducted Power(dBm)				LTE B2/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18607/1850.7	18900/1880	19193/1909.3				18615/1851.5	18900/1880	19185/1908.5
QPSK	1/0	21.00	20.32	20.35	20.18	QPSK	1/0	21.00	20.37	20.44	20.24
	1/2	21.00	20.34	20.40	20.25		1/7	21.00	20.45	20.60	20.30
	1/5	21.00	20.26	20.47	20.19		1/14	21.00	20.39	20.47	20.19
	3/0	21.00	20.31	20.29	20.21		8/0	21.00	20.37	20.53	20.25
	3/1	21.00	20.33	20.45	20.27		8/3	21.00	20.43	20.52	20.29
	3/3	21.00	20.34	20.42	20.22		8/7	21.00	20.38	20.51	20.24
	6/0	21.00	20.34	20.41	20.16		15/0	21.00	20.41	20.47	20.27
16QAM	1/0	21.00	20.45	20.55	20.49	16QAM	1/0	21.00	20.36	20.58	20.42
	1/2	21.00	20.48	20.58	20.56		1/7	21.00	20.39	20.56	20.46
	1/5	21.00	20.44	20.60	20.57		1/14	21.00	20.33	20.62	20.31
	3/0	21.00	20.57	20.48	20.43		8/0	21.00	20.62	20.48	20.39
	3/1	21.00	20.53	20.51	20.41		8/3	21.00	20.59	20.50	20.44
	3/3	21.00	20.49	20.48	20.32		8/7	21.00	20.59	20.46	20.38
	6/0	21.00	20.52	20.52	20.11		15/0	21.00	20.51	20.43	20.33
64QAM	1/0	21.00	20.52	20.48	20.32	64QAM	1/0	21.00	20.52	20.42	20.58
	1/2	21.00	20.57	20.57	20.41		1/7	21.00	20.59	20.63	20.57
	1/5	21.00	20.57	20.61	20.26		1/14	21.00	20.50	20.51	20.55
	3/0	21.00	20.34	20.45	20.36		8/0	21.00	20.49	20.49	20.39
	3/1	21.00	20.37	20.61	20.44		8/3	21.00	20.54	20.51	20.44
	3/3	21.00	20.29	20.60	20.35		8/7	21.00	20.51	20.50	20.33
	6/0	21.00	20.43	20.43	20.55		15/0	21.00	20.41	20.50	20.45

LTE B2/BW=5M		Average Conducted Power(dBm)				LTE B2/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18625/1852.5	18900/1880	19175/1907.5				18650/1855	18900/1880	19150/1905
QPSK	1/0	21.00	20.49	20.45	20.38	QPSK	1/0	21.00	20.38	20.51	20.47
	1/12	21.00	20.55	20.57	20.38		1/24	21.00	20.36	20.53	20.24
	1/24	21.00	20.46	20.52	20.36		1/49	21.00	20.43	20.38	20.21
	12/0	21.00	20.43	20.42	20.35		25/0	21.00	20.40	20.47	20.34
	12/6	21.00	20.45	20.54	20.30		25/12	21.00	20.51	20.56	20.36
	12/13	21.00	20.38	20.51	20.29		25/25	21.00	20.48	20.50	20.33
	25/0	21.00	20.46	20.54	20.34		50/0	21.00	20.49	20.54	20.34
16QAM	1/0	21.00	20.61	20.43	20.52	16QAM	1/0	21.00	20.42	20.51	20.61
	1/12	21.00	20.63	20.58	20.53		1/24	21.00	20.32	20.56	20.41
	1/24	21.00	20.48	20.47	20.44		1/49	21.00	20.40	20.40	20.32
	12/0	21.00	20.51	20.58	20.48		25/0	21.00	20.53	20.37	20.58
	12/6	21.00	20.50	20.67	20.48		25/12	21.00	20.65	20.46	20.55
	12/13	21.00	20.62	20.53	20.42		25/25	21.00	20.60	20.44	20.50
	25/0	21.00	20.54	20.51	20.40		50/0	21.00	20.62	20.46	20.45
64QAM	1/0	21.00	20.50	20.36	20.58	64QAM	1/0	21.00	20.55	20.49	20.57
	1/12	21.00	20.51	20.49	20.59		1/24	21.00	20.52	20.54	20.47
	1/24	21.00	20.49	20.42	20.55		1/49	21.00	20.56	20.43	20.44
	12/0	21.00	20.60	20.54	20.49		25/0	21.00	20.39	20.44	20.52
	12/6	21.00	20.59	20.53	20.51		25/12	21.00	20.52	20.54	20.48
	12/13	21.00	20.59	20.50	20.46		25/25	21.00	20.48	20.52	20.43
	25/0	21.00	20.52	20.56	20.47		50/0	21.00	20.46	20.52	20.41

LTE B2/BW=15M		Average Conducted Power(dBm)				LTE B2/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18675/1857.5	18900/1880	19125/1902.5				18700/1860	18900/1880	19100/1900
QPSK	1/0	21.00	20.51	20.61	20.53	QPSK	1/0	21.00	20.56	20.67	20.58
	1/37	21.00	20.49	20.55	20.48		1/50	21.00	20.47	20.52	20.40
	1/74	21.00	20.33	20.41	20.37		1/99	21.00	20.48	20.42	20.27
	36/0	21.00	20.53	20.41	20.46		50/0	21.00	20.58	20.63	20.50
	36/19	21.00	20.51	20.53	20.36		50/25	21.00	20.56	20.62	20.43
	36/39	21.00	20.49	20.52	20.32		50/50	21.00	20.52	20.56	20.39
	75/0	21.00	20.51	20.53	20.39		100/0	21.00	20.54	20.58	20.44
16QAM	1/0	21.00	20.53	20.60	20.52	16QAM	1/0	21.00	20.53	20.65	20.46
	1/37	21.00	20.46	20.56	20.51		1/50	21.00	20.59	20.25	20.57
	1/74	21.00	20.41	20.48	20.32		1/99	21.00	20.50	20.47	20.49
	36/0	21.00	20.49	20.58	20.48		50/0	21.00	20.54	20.56	20.37
	36/19	21.00	20.47	20.52	20.51		50/25	21.00	20.46	20.50	20.34
	36/39	21.00	20.39	20.49	20.42		50/50	21.00	20.45	20.48	20.29
	75/0	21.00	20.43	20.49	20.48		100/0	21.00	20.48	20.48	20.32
64QAM	1/0	21.00	20.65	20.52	20.59	64QAM	1/0	21.00	20.48	20.52	20.63
	1/37	21.00	20.61	20.48	20.51		1/50	21.00	20.53	20.48	20.63
	1/74	21.00	20.61	20.44	20.56		1/99	21.00	20.63	20.54	20.50
	36/0	21.00	20.54	20.44	20.49		50/0	21.00	20.54	20.55	20.43
	36/19	21.00	20.51	20.60	20.47		50/25	21.00	20.54	20.51	20.37
	36/39	21.00	20.49	20.54	20.41		50/50	21.00	20.48	20.46	20.32
	75/0	21.00	20.50	20.51	20.48		100/0	21.00	20.51	20.52	20.37

Note: The tested channels are marks in bold.

2. Conducted power measurement results of LTE B4

1) Main antenna_Receiver on

LTE B4/BW=1.4M		Average Conducted Power(dBm)				LTE B4/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19957/1710.7	20175/1732.5	20393/1754.3				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1/0	25.00	23.88	23.82	23.69	QPSK	1/0	25.00	23.85	23.94	23.78
	1/2	25.00	23.92	23.90	23.78		1/7	25.00	23.98	24.03	23.86
	1/5	25.00	23.87	23.83	23.72		1/14	25.00	23.91	23.91	23.76
	3/0	25.00	23.79	23.83	23.68		8/0	24.00	23.13	23.13	22.96
	3/1	25.00	23.83	23.88	23.73		8/3	24.00	23.17	23.15	23.04
	3/3	25.00	23.86	23.91	23.77		8/7	24.00	23.11	23.14	22.98
	6/0	24.00	23.02	23.02	22.92		15/0	24.00	23.13	23.14	23.02
16QAM	1/0	24.00	23.21	23.45	23.00	16QAM	1/0	24.00	23.10	23.56	23.13
	1/2	24.00	23.27	23.50	23.09		1/7	24.00	23.17	23.59	23.16
	1/5	24.00	23.22	23.45	23.05		1/14	24.00	23.04	23.49	23.09
	3/0	24.00	23.14	23.27	23.12		8/0	23.00	22.29	22.28	22.12
	3/1	24.00	23.21	23.32	23.23		8/3	23.00	22.29	22.26	22.13
	3/3	24.00	23.20	23.30	23.21		8/7	23.00	22.27	22.23	22.06
	6/0	23.00	22.27	22.06	22.16		15/0	23.00	22.23	22.25	22.05
64QAM	1/0	23.00	22.08	22.03	22.17	64QAM	1/0	23.00	22.24	22.07	22.08
	1/2	23.00	22.16	22.11	22.31		1/7	23.00	22.34	22.19	22.16
	1/5	23.00	22.11	22.03	22.19		1/14	23.00	22.23	22.11	22.03
	3/0	23.00	21.88	22.04	22.14		8/0	22.00	21.03	21.07	20.83
	3/1	23.00	21.95	22.12	22.18		8/3	22.00	21.09	21.10	20.92
	3/3	23.00	21.85	22.04	22.07		8/7	22.00	21.02	21.04	20.84
	6/0	22.00	21.02	21.24	20.80		15/0	22.00	20.95	21.03	20.93

LTE B4/BW=5M		Average Conducted Power(dBm)				LTE B4/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19975/1712.5	20175/1732.5	20375/1752.5				20000/1715	20175/1732.5	20350/1750
QPSK	1/0	25.00	24.04	23.97	23.93	QPSK	1/0	25.00	23.96	24.07	23.78
	1/12	25.00	24.06	23.98	23.93		1/24	25.00	23.86	23.93	23.78
	1/24	25.00	23.99	23.94	23.82		1/49	25.00	23.97	23.88	23.74
	12/0	24.00	23.08	23.19	23.05		25/0	24.00	23.17	23.17	23.08
	12/6	24.00	23.09	23.19	23.06		25/12	24.00	23.13	23.20	23.07
	12/13	24.00	23.11	23.14	23.05		25/25	24.00	23.20	23.13	23.03
	25/0	24.00	23.17	23.16	23.02		50/0	24.00	23.23	23.13	23.02
16QAM	1/0	24.00	23.38	23.73	23.24	16QAM	1/0	24.00	23.19	23.61	23.12
	1/12	24.00	23.38	23.75	23.26		1/24	24.00	23.03	23.50	23.09
	1/24	24.00	23.34	23.65	23.19		1/49	24.00	23.15	23.44	23.03
	12/0	23.00	22.30	22.34	22.17		25/0	23.00	22.25	22.32	22.22
	12/6	23.00	22.28	22.35	22.20		25/12	23.00	22.26	22.27	22.24
	12/13	23.00	22.24	22.35	22.13		25/25	23.00	22.30	22.25	22.16
	25/0	23.00	22.22	22.27	22.05		50/0	23.00	22.33	22.23	22.16
64QAM	1/0	23.00	21.92	22.36	22.15	64QAM	1/0	23.00	22.36	22.21	22.01
	1/12	23.00	21.97	22.36	22.19		1/24	23.00	22.24	22.12	22.04
	1/24	23.00	21.92	22.25	22.13		1/49	23.00	22.34	22.10	22.01
	12/0	22.00	21.06	20.98	20.98		25/0	22.00	21.05	21.14	21.00
	12/6	22.00	21.06	20.98	20.98		25/12	22.00	21.05	21.14	21.02
	12/13	22.00	21.01	20.96	20.96		25/25	22.00	21.11	21.13	21.00
	25/0	22.00	21.00	20.99	20.92		50/0	22.00	21.15	21.11	20.90

LTE B4/BW=15M		Average Conducted Power(dBm)				LTE B4/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20025/1717.5	20175/1732.5	20325/1747.5				20050/1720	20175/1732.5	20300/1745
QPSK	1/0	25.00	24.06	24.01	24.02	QPSK	1/0	25.00	24.01	24.09	24.00
	1/37	25.00	23.88	23.92	23.86		1/50	25.00	23.97	23.91	23.74
	1/74	25.00	23.86	23.96	23.86		1/99	25.00	23.94	23.88	23.81
	36/0	24.00	23.18	23.20	23.13		50/0	24.00	23.28	23.30	23.18
	36/19	24.00	23.20	23.15	23.09		50/25	24.00	23.23	23.22	23.15
	36/39	24.00	23.17	23.16	23.02		50/50	24.00	23.17	23.15	23.03
	75/0	24.00	23.23	23.17	23.08		100/0	24.00	23.20	23.19	23.09
16QAM	1/0	24.00	23.21	23.61	23.55	16QAM	1/0	24.00	23.82	23.82	23.61
	1/37	24.00	23.03	23.53	23.50		1/50	24.00	23.74	23.57	23.36
	1/74	24.00	23.06	23.47	23.48		1/99	24.00	23.72	23.52	23.46
	36/0	23.00	22.29	22.34	22.21		50/0	23.00	22.39	22.34	22.22
	36/19	23.00	22.34	22.28	22.18		50/25	23.00	22.34	22.26	22.18
	36/39	23.00	22.27	22.25	22.11		50/50	23.00	22.29	22.23	22.13
	75/0	23.00	22.33	22.30	22.16		100/0	23.00	22.31	22.21	22.18
64QAM	1/0	23.00	22.36	22.17	22.58	64QAM	1/0	23.00	22.27	22.48	22.65
	1/37	23.00	22.23	22.10	22.43		1/50	23.00	22.22	22.27	22.41
	1/74	23.00	22.22	22.09	22.48		1/99	23.00	22.25	22.27	22.52
	36/0	22.00	21.10	21.14	20.98		50/0	22.00	21.18	21.17	21.07
	36/19	22.00	21.16	21.10	20.97		50/25	22.00	21.15	21.13	21.05
	36/39	22.00	21.12	21.07	20.94		50/50	22.00	21.10	21.05	20.97
	75/0	22.00	21.14	21.08	20.99		100/0	22.00	21.12	21.08	20.98

2) Main antenna Receiver off

LTE B4/BW=1.4M		Average Conducted Power(dBm)				LTE B4/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19957/1710.7	20175/1732.5	20393/1754.3				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1/0	21.50	20.94	20.94	20.94	QPSK	1/0	21.50	21.05	21.03	20.88
	1/2	21.50	21.03	21.01	21.00		1/7	21.50	21.14	21.10	21.06
	1/5	21.50	20.98	20.95	20.94		1/14	21.50	21.04	20.98	20.98
	3/0	21.50	20.96	20.88	20.94		8/0	21.50	21.07	20.98	20.90
	3/1	21.50	21.04	20.96	20.99		8/3	21.50	21.12	20.99	20.92
	3/3	21.50	20.96	20.87	20.93		8/7	21.50	21.07	20.99	20.96
	6/0	21.50	20.98	20.88	20.88		15/0	21.50	21.05	20.98	20.88
16QAM	1/0	21.50	20.77	20.76	20.97	16QAM	1/0	21.50	20.73	20.81	20.65
	1/2	21.50	20.84	20.84	21.08		1/7	21.50	20.82	20.91	20.80
	1/5	21.50	20.82	20.76	20.99		1/14	21.50	20.72	20.83	20.77
	3/0	21.50	20.93	20.75	20.90		8/0	21.50	20.93	20.85	20.72
	3/1	21.50	21.01	20.82	20.93		8/3	21.50	20.96	20.86	20.72
	3/3	21.50	20.93	20.77	20.87		8/7	21.50	20.96	20.80	20.76
	6/0	21.50	20.94	20.80	20.59		15/0	21.50	20.87	20.84	20.62
64QAM	1/0	21.50	20.82	20.79	20.81	64QAM	1/0	21.50	21.08	20.84	20.84
	1/2	21.50	20.94	20.87	20.90		1/7	21.50	21.18	20.94	21.00
	1/5	21.50	20.82	20.73	20.84		1/14	21.50	21.06	20.83	20.92
	3/0	21.50	21.02	20.80	20.63		8/0	21.50	20.94	20.81	20.64
	3/1	21.50	21.11	20.87	20.73		8/3	21.50	20.96	20.82	20.67
	3/3	21.50	21.02	21.13	20.97		8/7	21.50	20.91	20.78	20.72
	6/0	21.50	20.73	21.00	20.77		15/0	21.50	20.87	20.81	20.72

LTE B4/BW=5M		Average Conducted Power(dBm)				LTE B4/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19975/1712.5	20175/1732.5	20375/1752.5				20000/1715	20175/1732.5	20350/1750
QPSK	1/0	21.50	21.16	21.13	20.88	QPSK	1/0	21.50	21.06	21.08	21.01
	1/12	21.50	21.15	21.12	20.91		1/24	21.50	21.02	21.01	20.83
	1/24	21.50	21.14	21.09	21.03		1/49	21.50	21.16	20.97	20.92
	12/0	21.50	21.12	21.01	20.95		25/0	21.50	21.11	21.01	20.93
	12/6	21.50	21.11	21.03	20.93		25/12	21.50	21.06	21.00	20.95
	12/13	21.50	21.10	20.97	20.93		25/25	21.50	21.06	20.97	20.87
	25/0	21.50	21.08	21.01	20.94		50/0	21.50	21.07	21.00	20.94
16QAM	1/0	21.50	21.04	21.00	20.79	16QAM	1/0	21.50	20.81	21.15	20.70
	1/12	21.50	21.07	21.03	20.76		1/24	21.50	20.72	21.09	20.47
	1/24	21.50	21.05	20.99	20.89		1/49	21.50	20.82	21.12	20.58
	12/0	21.50	20.93	20.96	20.76		25/0	21.50	20.90	20.84	20.75
	12/6	21.50	20.96	20.96	20.73		25/12	21.50	20.87	20.83	20.73
	12/13	21.50	20.92	20.89	20.76		25/25	21.50	20.86	20.81	20.71
	25/0	21.50	20.89	20.85	20.63		50/0	21.50	20.86	20.83	20.69
64QAM	1/0	21.50	21.08	20.72	20.97	64QAM	1/0	21.50	21.16	20.90	21.00
	1/12	21.50	21.06	20.75	21.01		1/24	21.50	21.09	20.84	20.79
	1/24	21.50	21.03	20.68	21.03		1/49	21.50	21.18	20.88	20.84
	12/0	21.50	20.91	20.87	20.68		25/0	21.50	20.94	20.86	20.82
	12/6	21.50	20.94	20.85	20.65		25/12	21.50	20.94	20.85	20.77
	12/13	21.50	20.89	20.79	20.65		25/25	21.50	20.87	20.83	20.74
	25/0	21.50	20.86	20.75	20.67		50/0	21.50	20.87	20.84	20.69

LTE B4/BW=15M		Average Conducted Power(dBm)				LTE B4/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20025/1717.5	20175/1732.5	20325/1747.5				20050/1720	20175/1732.5	20300/1745
QPSK	1/0	21.50	21.19	21.15	21.10	QPSK	1/0	21.50	21.25	21.23	21.15
	1/37	21.50	21.01	20.98	21.07		1/50	21.50	21.10	21.03	21.01
	1/74	21.50	21.03	20.99	21.05		1/99	21.50	20.97	21.04	20.99
	36/0	21.50	21.11	20.99	20.99		50/0	21.50	21.15	21.10	21.04
	36/19	21.50	21.12	21.04	20.96		50/25	21.50	21.08	21.02	20.98
	36/39	21.50	21.07	20.98	20.89		50/50	21.50	21.03	21.04	20.92
	75/0	21.50	21.07	20.99	20.91		100/0	21.50	21.09	21.04	21.00
16QAM	1/0	21.50	20.56	20.91	20.93	16QAM	1/0	21.50	21.18	21.00	20.91
	1/37	21.50	20.41	20.79	20.86		1/50	21.50	21.08	20.88	21.13
	1/74	21.50	20.38	20.78	20.89		1/99	21.50	21.01	20.99	21.12
	36/0	21.50	20.61	20.78	20.45		50/0	21.50	20.96	20.91	21.09
	36/19	21.50	20.61	20.56	20.43		50/25	21.50	20.94	20.89	21.08
	36/39	21.50	20.57	20.57	20.42		50/50	21.50	20.88	20.85	21.03
	75/0	21.50	20.55	20.55	20.41		100/0	21.50	20.91	20.84	21.08
64QAM	1/0	21.50	20.91	20.71	21.03	64QAM	1/0	21.50	20.92	20.88	21.15
	1/37	21.50	20.77	20.53	21.00		1/50	21.50	20.87	20.28	21.07
	1/74	21.50	20.77	20.54	21.07		1/99	21.50	20.84	20.85	21.09
	36/0	21.50	20.93	21.14	20.80		50/0	21.50	20.97	20.94	20.88
	36/19	21.50	20.94	20.93	20.73		50/25	21.50	20.90	20.86	20.80
	36/39	21.50	20.87	20.85	20.69		50/50	21.50	20.88	20.82	20.78
	75/0	21.50	20.87	20.85	20.81		100/0	21.50	20.88	20.83	20.76

3) Second antenna Receiver on

LTE B4/BW=1.4M		Average Conducted Power(dBm)				LTE B4/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19957/1710.7	20175/1732.5	20393/1754.3				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1/0	19.50	19.03	19.00	19.02	QPSK	1/0	19.50	19.06	19.08	18.98
	1/2	19.50	19.10	19.05	19.06		1/7	19.50	19.15	19.13	19.13
	1/5	19.50	19.02	18.97	18.97		1/14	19.50	19.03	19.08	19.07
	3/0	19.50	18.99	19.01	18.99		8/0	19.50	19.06	19.02	18.99
	3/1	19.50	19.07	19.04	19.08		8/3	19.50	19.11	19.10	19.07
	3/3	19.50	19.04	18.98	19.04		8/7	19.50	19.08	19.02	19.11
	6/0	19.50	19.01	18.94	19.05		15/0	19.50	19.08	19.08	19.03
16QAM	1/0	19.50	19.20	19.24	19.07	16QAM	1/0	19.50	19.11	19.12	19.11
	1/2	19.50	19.26	19.28	19.11		1/7	19.50	19.15	19.21	19.26
	1/5	19.50	19.21	19.24	19.13		1/14	19.50	19.07	19.08	19.18
	3/0	19.50	19.19	19.10	19.27		8/0	19.50	19.31	19.22	19.12
	3/1	19.50	19.25	19.16	19.17		8/3	19.50	19.15	19.24	19.18
	3/3	19.50	19.17	19.06	19.27		8/7	19.50	19.26	19.22	19.21
	6/0	19.50	19.25	19.00	19.28		15/0	19.50	19.24	19.20	19.09
64QAM	1/0	19.50	19.18	18.99	19.08	64QAM	1/0	19.50	19.05	19.07	19.13
	1/2	19.50	19.25	19.06	19.13		1/7	19.50	19.13	19.17	19.23
	1/5	19.50	19.22	18.97	19.11		1/14	19.50	19.05	19.07	19.16
	3/0	19.50	19.23	18.99	19.11		8/0	19.50	19.04	19.19	19.08
	3/1	19.50	19.29	19.11	19.20		8/3	19.50	19.08	19.23	19.14
	3/3	19.50	19.19	19.02	19.11		8/7	19.50	19.06	19.16	19.13
	6/0	19.50	19.07	19.16	19.19		15/0	19.50	19.16	19.19	19.14

LTE B4/BW=5M		Average Conducted Power(dBm)				LTE B4/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19975/1712.5	20175/1732.5	20375/1752.5				20000/1715	20175/1732.5	20350/1750
QPSK	1/0	19.50	19.25	19.10	19.11	QPSK	1/0	19.50	19.13	19.16	19.17
	1/12	19.50	19.20	19.09	19.11		1/24	19.50	19.08	19.06	18.97
	1/24	19.50	19.19	19.08	19.16		1/49	19.50	19.20	19.11	19.06
	12/0	19.50	19.08	19.10	19.08		25/0	19.50	19.17	19.16	19.10
	12/6	19.50	19.10	19.13	19.08		25/12	19.50	19.11	19.11	19.04
	12/13	19.50	19.08	19.10	19.06		25/25	19.50	19.14	19.09	19.07
	25/0	19.50	19.14	19.13	19.03		50/0	19.50	19.14	19.12	19.04
16QAM	1/0	19.50	19.18	19.15	19.02	16QAM	1/0	19.50	19.17	19.21	19.25
	1/12	19.50	19.22	19.13	19.00		1/24	19.50	19.09	19.11	19.06
	1/24	19.50	19.14	19.10	19.13		1/49	19.50	19.15	19.13	19.15
	12/0	19.50	19.13	19.15	19.05		25/0	19.50	19.28	19.09	19.28
	12/6	19.50	19.10	18.95	19.03		25/12	19.50	19.06	19.08	19.30
	12/13	19.50	19.12	19.11	19.20		25/25	19.50	19.07	19.06	19.22
	25/0	19.50	19.21	19.24	19.12		50/0	19.50	19.27	19.08	19.18
64QAM	1/0	19.50	19.15	19.13	19.21	64QAM	1/0	19.50	19.32	19.17	19.25
	1/12	19.50	19.18	19.15	19.22		1/24	19.50	19.26	19.06	19.05
	1/24	19.50	19.15	19.07	19.28		1/49	19.50	19.17	19.08	19.13
	12/0	19.50	19.29	19.18	19.23		25/0	19.50	19.12	19.08	19.26
	12/6	19.50	19.29	19.18	19.24		25/12	19.50	19.08	19.07	19.25
	12/13	19.50	19.27	19.12	19.20		25/25	19.50	19.23	19.26	19.24
	25/0	19.50	19.21	19.16	19.17		50/0	19.50	19.30	19.25	19.17

LTE B4/BW=15M		Average Conducted Power(dBm)				LTE B4/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20025/1717.5	20175/1732.5	20325/1747.5				20050/1720	20175/1732.5	20300/1745
QPSK	1/0	19.50	19.25	19.26	19.26	QPSK	1/0	19.50	19.36	19.34	19.31
	1/37	19.50	19.07	19.10	19.17		1/50	19.50	19.16	19.12	19.12
	1/74	19.50	19.05	19.09	19.20		1/99	19.50	19.05	19.14	19.10
	36/0	19.50	19.15	19.09	19.10		50/0	19.50	19.25	19.21	19.17
	36/19	19.50	19.14	19.12	19.08		50/25	19.50	19.21	19.19	19.12
	36/39	19.50	19.10	19.09	19.04		50/50	19.50	19.12	19.15	19.07
	75/0	19.50	19.12	19.12	19.10		100/0	19.50	19.15	19.18	19.14
16QAM	1/0	19.50	19.24	19.08	19.10	16QAM	1/0	19.50	19.26	19.07	19.09
	1/37	19.50	19.04	19.21	19.21		1/50	19.50	19.09	18.69	18.93
	1/74	19.50	19.00	19.24	19.28		1/99	19.50	19.11	19.11	19.02
	36/0	19.50	19.29	19.14	19.22		50/0	19.50	19.10	19.03	18.95
	36/19	19.50	19.26	19.25	19.16		50/25	19.50	19.04	18.97	18.93
	36/39	19.50	19.20	19.26	19.14		50/50	19.50	18.99	18.96	18.87
	75/0	19.50	19.25	19.26	19.17		100/0	19.50	19.02	18.99	18.96
64QAM	1/0	19.50	19.21	19.25	19.13	64QAM	1/0	19.50	19.03	19.17	19.22
	1/37	19.50	19.26	19.09	19.07		1/50	19.50	19.31	19.03	19.11
	1/74	19.50	19.27	19.10	19.12		1/99	19.50	18.93	19.09	19.12
	36/0	19.50	19.16	19.10	19.02		50/0	19.50	19.10	19.03	19.00
	36/19	19.50	19.11	19.09	19.01		50/25	19.50	19.04	19.00	18.95
	36/39	19.50	19.04	19.11	18.96		50/50	19.50	19.03	18.95	18.93
	75/0	19.50	19.05	19.05	19.03		100/0	19.50	18.99	18.95	18.94

4) Second antenna Receiver off

LTE B4/BW=1.4M		Average Conducted Power(dBm)				LTE B4/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19957/1710.7	20175/1732.5	20393/1754.3				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1/0	22.50	22.17	22.16	22.19	QPSK	1/0	22.50	22.26	22.24	22.17
	1/2	22.50	22.23	22.24	22.27		1/7	22.50	22.30	22.36	22.29
	1/5	22.50	22.13	22.20	22.21		1/14	22.50	22.28	22.22	22.24
	3/0	22.50	22.15	22.14	22.20		8/0	22.50	22.27	22.25	22.17
	3/1	22.50	22.22	22.18	22.31		8/3	22.50	22.29	22.24	22.23
	3/3	22.50	22.19	22.15	22.21		8/7	22.50	22.29	22.22	22.29
	6/0	22.50	22.20	22.17	22.21		15/0	22.50	22.26	22.23	22.21
16QAM	1/0	22.50	22.35	22.19	22.34	16QAM	1/0	22.50	22.13	22.36	22.31
	1/2	22.50	22.39	22.27	22.42		1/7	22.50	22.26	22.39	22.44
	1/5	22.50	22.35	22.25	22.37		1/14	22.50	22.12	22.30	22.37
	3/0	22.50	22.37	22.38	22.29		8/0	22.50	22.11	22.07	22.00
	3/1	22.50	22.42	22.45	22.37		8/3	22.50	22.14	22.11	22.04
	3/3	22.50	22.35	22.38	22.31		8/7	22.50	22.13	22.07	22.08
	6/0	22.50	21.85	22.07	22.10		15/0	22.50	22.04	22.05	21.90
64QAM	1/0	22.50	22.05	22.03	22.34	64QAM	1/0	22.50	22.30	22.05	22.18
	1/2	22.50	22.12	22.13	22.45		1/7	22.50	22.40	22.18	22.30
	1/5	22.50	22.01	22.08	22.33		1/14	22.50	22.29	22.07	22.22
	3/0	22.50	22.06	21.87	22.30		8/0	22.50	21.12	21.04	20.93
	3/1	22.50	22.16	21.95	22.38		8/3	22.50	21.15	21.10	20.96
	3/3	22.50	22.07	21.90	22.28		8/7	22.50	21.10	21.04	20.99
	6/0	22.50	21.26	20.98	20.97		15/0	22.50	21.04	21.03	21.02

LTE B4/BW=5M		Average Conducted Power(dBm)				LTE B4/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19975/1712.5	20175/1732.5	20375/1752.5				20000/1715	20175/1732.5	20350/1750
QPSK	1/0	22.50	22.40	22.20	22.26	QPSK	1/0	22.50	22.26	22.28	22.31
	1/12	22.50	22.37	22.24	22.28		1/24	22.50	22.19	22.22	22.12
	1/24	22.50	22.32	22.26	22.32		1/49	22.50	22.32	22.25	22.22
	12/0	22.50	22.28	22.26	22.21		25/0	22.50	22.29	22.25	22.23
	12/6	22.50	22.24	22.27	22.24		25/12	22.50	22.28	22.24	22.20
	12/13	22.50	22.27	22.25	22.18		25/25	22.50	22.27	22.23	22.19
	25/0	22.50	22.26	22.24	22.22		50/0	22.50	22.29	22.27	22.22
16QAM	1/0	22.50	22.47	22.40	22.29	16QAM	1/0	22.50	22.22	22.40	22.44
	1/12	22.50	22.37	22.30	22.30		1/24	22.50	22.20	22.32	22.25
	1/24	22.50	22.32	22.39	22.38		1/49	22.50	22.31	22.33	22.35
	12/0	22.50	22.06	22.11	22.07		25/0	22.50	22.05	22.09	22.08
	12/6	22.50	22.09	22.13	22.06		25/12	22.50	22.06	22.09	22.12
	12/13	22.50	22.04	22.12	22.01		25/25	22.50	22.03	22.06	22.06
	25/0	22.50	22.06	22.08	21.93		50/0	22.50	22.00	22.02	22.00
64QAM	1/0	22.50	22.00	22.27	22.22	64QAM	1/0	22.50	22.33	22.15	22.28
	1/12	22.50	22.00	22.31	22.23		1/24	22.50	22.25	22.09	22.09
	1/24	22.50	21.97	22.22	22.33		1/49	22.50	22.37	22.09	22.17
	12/0	22.50	21.06	20.98	21.04		25/0	22.50	21.12	21.10	21.06
	12/6	22.50	21.08	20.95	21.06		25/12	22.50	21.05	21.08	21.06
	12/13	22.50	21.06	20.93	21.05		25/25	22.50	21.09	21.13	21.04
	25/0	22.50	21.03	21.00	21.00		50/0	22.50	21.08	21.08	20.99

LTE B4/BW=15M		Average Conducted Power(dBm)				LTE B4/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20025/1717.5	20175/1732.5	20325/1747.5				20050/1720	20175/1732.5	20300/1745
QPSK	1/0	22.50	22.35	22.37	22.33	QPSK	1/0	22.50	22.48	22.43	22.45
	1/37	22.50	22.21	22.20	22.31		1/50	22.50	22.31	22.29	22.31
	1/74	22.50	22.24	22.22	22.37		1/99	22.50	22.26	22.31	22.33
	36/0	22.50	22.33	22.22	22.23		50/0	22.50	22.35	22.33	22.30
	36/19	22.50	22.27	22.30	22.26		50/25	22.50	22.29	22.28	22.26
	36/39	22.50	22.27	22.25	22.21		50/50	22.50	22.29	22.27	22.27
	75/0	22.50	22.26	22.22	22.20		100/0	22.50	22.30	22.27	22.30
16QAM	1/0	22.50	22.24	22.35	22.38	16QAM	1/0	22.50	22.30	22.26	22.31
	1/37	22.50	22.16	22.19	22.30		1/50	22.50	22.34	22.09	22.43
	1/74	22.50	22.20	22.21	22.34		1/99	22.50	22.36	22.32	22.37
	36/0	22.50	22.08	22.11	22.04		50/0	22.50	22.13	22.14	22.19
	36/19	22.50	22.07	22.06	21.98		50/25	22.50	22.11	22.07	22.09
	36/39	22.50	22.04	22.06	21.96		50/50	22.50	22.09	22.05	22.00
	75/0	22.50	22.04	22.05	21.99		100/0	22.50	22.09	22.08	22.09
64QAM	1/0	22.50	22.40	22.22	22.31	64QAM	1/0	22.50	22.31	22.42	22.30
	1/37	22.50	22.25	22.07	22.29		1/50	22.50	22.27	21.06	22.31
	1/74	22.50	22.29	22.11	22.32		1/99	22.50	22.20	22.41	22.30
	36/0	22.50	21.15	22.11	21.04		50/0	22.50	21.13	21.15	21.11
	36/19	22.50	21.10	21.12	21.05		50/25	22.50	21.11	21.12	21.08
	36/39	22.50	21.10	21.13	21.02		50/50	22.50	21.06	21.11	21.09
	75/0	22.50	21.06	21.06	21.07		100/0	22.50	21.07	21.10	21.04

Note: The tested channels are marks in bold.

3. Conducted power measurement results of LTE B5

1) Main antenna_Receiver on

LTE B5/BW=1.4M		Average Conducted Power(dBm)				LTE B5/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20407/824.7	20525/836.5	20643/848.3				20415/825.5	20525/836.5	20635/847.5
QPSK	1/0	25.00	24.08	24.01	24.10	QPSK	1/0	25.00	24.16	24.07	24.01
	1/2	25.00	24.12	24.06	24.12		1/7	25.00	24.11	24.13	24.04
	1/5	25.00	24.04	23.97	24.05		1/14	25.00	24.04	24.02	24.06
	3/0	25.00	24.01	23.93	24.09		8/0	24.00	23.36	23.23	23.26
	3/1	25.00	24.10	23.98	24.12		8/3	24.00	23.41	23.28	23.27
	3/3	25.00	24.08	23.98	24.12		8/7	24.00	23.25	23.19	23.21
	6/0	24.00	23.32	23.20	23.25		15/0	24.00	23.36	23.26	23.23
16QAM	1/0	24.00	23.38	23.37	23.66	16QAM	1/0	24.00	23.34	23.74	23.40
	1/2	24.00	23.46	23.43	23.71		1/7	24.00	23.27	23.75	23.39
	1/5	24.00	23.37	23.35	23.64		1/14	24.00	23.19	23.65	23.35
	3/0	24.00	23.49	23.28	23.48		8/0	23.00	22.54	22.39	22.36
	3/1	24.00	23.58	23.35	23.53		8/3	23.00	22.55	22.41	22.38
	3/3	24.00	23.56	23.34	23.51		8/7	23.00	22.39	22.33	22.32
	6/0	23.00	22.55	22.40	22.25		15/0	23.00	22.44	22.37	22.25
64QAM	1/0	23.00	22.21	22.14	22.38	64QAM	1/0	23.00	22.46	22.14	22.25
	1/2	23.00	22.33	22.21	22.49		1/7	23.00	22.39	22.23	22.25
	1/5	23.00	22.21	22.19	22.37		1/14	23.00	22.29	22.17	22.25
	3/0	23.00	22.20	21.89	22.28		8/0	22.00	21.21	21.09	20.96
	3/1	23.00	22.27	21.96	22.34		8/3	22.00	21.25	21.11	21.00
	3/3	23.00	22.23	21.91	22.27		8/7	22.00	21.09	21.05	20.94
	6/0	22.00	21.40	21.05	21.01		15/0	22.00	21.12	21.06	21.03

LTE B5/BW=5M		Average Conducted Power(dBm)				LTE B5/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20425/826.5	20525/836.5	20625/846.5				20450/829	20525/836.5	20600/844
QPSK	1/0	25.00	24.31	24.12	24.16	QPSK	1/0	25.00	24.36	24.33	24.19
	1/12	25.00	24.16	24.08	24.12		1/24	25.00	24.09	24.05	24.02
	1/24	25.00	24.15	24.02	24.17		1/49	25.00	24.07	24.08	24.09
	12/0	24.00	23.39	23.29	23.32		25/0	24.00	23.44	23.32	23.23
	12/6	24.00	23.35	23.31	23.30		25/12	24.00	23.40	23.27	23.33
	12/13	24.00	23.35	23.28	23.25		25/25	24.00	23.29	23.22	23.25
	25/0	24.00	23.37	23.28	23.26		50/0	24.00	23.34	23.30	23.29
16QAM	1/0	24.00	23.65	23.89	23.55	16QAM	1/0	24.00	23.48	23.82	23.44
	1/12	24.00	23.50	23.89	23.48		1/24	24.00	23.32	23.68	23.37
	1/24	24.00	23.58	23.81	23.48		1/49	24.00	23.28	23.74	23.33
	12/0	23.00	22.52	22.48	22.39		25/0	23.00	22.45	22.42	22.37
	12/6	23.00	22.51	22.48	22.38		25/12	23.00	22.44	22.36	22.43
	12/13	23.00	22.47	22.42	22.36		25/25	23.00	22.37	22.32	22.36
	25/0	23.00	22.45	22.36	22.28		50/0	23.00	22.38	22.32	22.36
64QAM	1/0	23.00	22.16	22.41	22.37	64QAM	1/0	23.00	22.52	22.30	22.28
	1/12	23.00	22.04	22.43	22.36		1/24	23.00	22.42	22.17	22.25
	1/24	23.00	22.12	22.32	22.38		1/49	23.00	22.40	22.25	22.27
	12/0	22.00	21.23	21.03	21.10		25/0	22.00	21.17	21.14	21.06
	12/6	22.00	21.23	21.01	21.11		25/12	22.00	21.18	21.14	21.15
	12/13	22.00	21.19	20.97	21.08		25/25	22.00	21.14	21.08	21.10
	25/0	22.00	21.14	21.01	21.05		50/0	22.00	21.11	21.09	21.06

2) Main antenna Receiver off

LTE B5/BW=1.4M		Average Conducted Power(dBm)				LTE B5/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20407/824.7	20525/836.5	20643/848.3				20415/825.5	20525/836.5	20635/847.5
QPSK	1/0	24.50	23.00	23.15	23.09	QPSK	1/0	24.50	23.09	23.21	23.03
	1/2	24.50	23.06	23.19	23.13		1/7	24.50	23.25	23.26	23.17
	1/5	24.50	23.01	23.11	23.07		1/14	24.50	23.18	23.16	23.07
	3/0	24.50	22.98	23.02	23.09		8/0	23.50	22.90	22.93	22.75
	3/1	24.50	23.05	23.09	23.12		8/3	23.50	22.93	22.89	22.87
	3/3	24.50	22.98	23.06	23.05		8/7	23.50	22.87	22.86	22.83
	6/0	23.50	22.78	22.84	22.80		15/0	23.50	22.92	22.90	22.75
16QAM	1/0	23.50	22.83	22.96	23.14	16QAM	1/0	23.50	22.77	23.30	22.86
	1/2	23.50	22.87	23.01	23.18		1/7	23.50	22.96	23.33	22.95
	1/5	23.50	22.86	22.95	23.10		1/14	23.50	22.83	23.26	22.83
	3/0	23.50	22.92	22.86	22.92		8/0	22.50	22.07	22.00	21.85
	3/1	23.50	22.97	22.92	23.01		8/3	22.50	22.11	22.01	21.98
	3/3	23.50	22.91	22.87	22.90		8/7	22.50	22.04	21.98	21.91
	6/0	22.50	21.99	22.03	21.73		15/0	22.50	21.99	21.97	21.75
64QAM	1/0	22.50	21.89	22.03	22.16	64QAM	1/0	22.50	22.15	22.04	22.04
	1/2	22.50	21.99	22.09	22.27		1/7	22.50	22.30	22.11	22.12
	1/5	22.50	21.87	22.04	22.14		1/14	22.50	22.22	22.03	22.03
	3/0	22.50	21.88	21.77	22.05		8/0	21.50	21.01	20.98	20.77
	3/1	22.50	21.99	21.85	22.14		8/3	21.50	21.07	21.02	20.90
	3/3	22.50	21.90	21.76	22.06		8/7	21.50	20.99	20.95	20.84
	6/0	21.50	21.09	20.94	20.81		15/0	21.50	20.93	20.97	20.84

LTE B5/BW=5M		Average Conducted Power(dBm)				LTE B5/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20425/826.5	20525/836.5	20625/846.5				20450/829	20525/836.5	20600/844
QPSK	1/0	24.50	23.26	23.12	23.16	QPSK	1/0	24.50	23.26	23.25	23.24
	1/12	24.50	23.36	23.22	23.28		1/24	24.50	23.25	23.25	23.21
	1/24	24.50	23.28	23.08	23.22		1/49	24.50	23.32	23.38	23.41
	12/0	23.50	22.92	22.95	22.83		25/0	23.50	22.92	22.98	22.87
	12/6	23.50	22.95	22.90	22.83		25/12	23.50	22.93	22.96	22.85
	12/13	23.50	22.92	22.90	22.89		25/25	23.50	22.89	22.90	22.77
	25/0	23.50	22.95	22.93	22.79		50/0	23.50	22.88	22.91	22.80
16QAM	1/0	23.50	23.10	23.16	23.00	16QAM	1/0	23.50	22.88	23.29	22.90
	1/12	23.50	23.18	23.30	23.08		1/24	23.50	22.84	23.28	22.86
	1/24	23.50	23.16	23.14	22.99		1/49	23.50	22.81	23.28	22.88
	12/0	22.50	22.06	22.08	21.89		25/0	22.50	21.96	22.05	21.98
	12/6	22.50	22.07	22.08	21.91		25/12	22.50	21.97	21.99	21.97
	12/13	22.50	22.04	22.06	22.00		25/25	22.50	21.93	21.95	21.92
	25/0	22.50	22.02	21.98	21.80		50/0	22.50	21.92	21.98	21.89
64QAM	1/0	22.50	21.84	22.15	22.13	64QAM	1/0	22.50	22.21	22.05	22.11
	1/12	22.50	21.94	22.31	22.20		1/24	22.50	22.21	22.07	22.13
	1/24	22.50	21.88	22.08	22.14		1/49	22.50	22.20	22.07	22.19
	12/0	21.50	21.03	20.92	20.89		25/0	21.50	21.02	21.04	20.92
	12/6	21.50	21.02	20.91	20.89		25/12	21.50	20.99	21.04	20.93
	12/13	21.50	20.98	20.91	20.97		25/25	21.50	20.95	21.00	20.86
	25/0	21.50	20.95	20.91	20.85		50/0	21.50	20.94	21.00	20.85

3) Second antenna Receiver on

LTE B5/BW=1.4M		Average Conducted Power(dBm)				LTE B5/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20407/824.7	20525/836.5	20643/848.3				20415/825.5	20525/836.5	20635/847.5
QPSK	1/0	24.50	23.39	23.44	23.36	QPSK	1/0	24.50	23.41	23.53	23.39
	1/2	24.50	23.46	23.51	23.43		1/7	24.50	23.58	23.59	23.50
	1/5	24.50	23.39	23.46	23.36		1/14	24.50	23.52	23.54	23.45
	3/0	24.50	23.30	23.42	23.35		8/0	23.50	23.24	23.20	23.09
	3/1	24.50	23.37	23.48	23.42		8/3	23.50	23.26	23.24	23.22
	3/3	24.50	23.32	23.42	23.35		8/7	23.50	23.21	23.19	23.15
	6/0	23.50	23.10	23.16	23.14		15/0	23.50	23.22	23.22	23.12
16QAM	1/0	23.50	23.14	23.30	23.43	16QAM	1/0	23.50	23.13	23.33	23.17
	1/2	23.50	23.22	23.34	23.22		1/7	23.50	23.28	23.38	23.27
	1/5	23.50	23.19	23.28	23.45		1/14	23.50	23.17	23.33	23.20
	3/0	23.50	23.26	23.19	23.25		8/0	22.50	22.43	22.34	22.17
	3/1	23.50	23.35	23.26	23.33		8/3	22.50	22.45	22.35	22.30
	3/3	23.50	23.24	23.20	23.25		8/7	22.50	22.34	22.29	22.26
	6/0	22.50	22.34	22.33	22.08		15/0	22.50	22.32	22.30	22.08
64QAM	1/0	22.50	22.48	22.28	22.28	64QAM	1/0	22.50	22.49	22.38	22.36
	1/2	22.50	22.31	22.38	22.34		1/7	22.50	22.33	22.45	22.45
	1/5	22.50	22.47	22.28	22.32		1/14	22.50	22.26	22.35	22.38
	3/0	22.50	22.45	22.27	22.02		8/0	21.50	21.36	21.30	21.09
	3/1	22.50	22.22	22.35	22.13		8/3	21.50	21.42	21.34	21.24
	3/3	22.50	22.41	22.28	22.05		8/7	21.50	21.33	21.27	21.18
	6/0	21.50	21.12	21.20	21.25		15/0	21.50	21.26	21.27	21.17

LTE B5/BW=5M		Average Conducted Power(dBm)				LTE B5/BW=10M					
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20425/826.5	20525/836.5	20625/846.5				20450/829	20525/836.5	20600/844
QPSK	1/0	24.50	23.59	23.45	23.48	QPSK	1/0	24.50	23.69	23.77	23.65
	1/12	24.50	23.71	23.54	23.61		1/24	24.50	23.50	23.64	23.40
	1/24	24.50	23.65	23.42	23.54		1/49	24.50	23.48	23.52	23.49
	12/0	23.50	23.27	23.28	23.14		25/0	23.50	23.27	23.29	23.23
	12/6	23.50	23.25	23.25	23.17		25/12	23.50	23.26	23.24	23.20
	12/13	23.50	23.26	23.24	23.21		25/25	23.50	23.24	23.24	23.17
	25/0	23.50	23.29	23.25	23.16		50/0	23.50	23.22	23.21	23.19
16QAM	1/0	23.50	23.41	23.30	23.34	16QAM	1/0	23.50	23.21	23.33	23.22
	1/12	23.50	23.22	23.44	23.39		1/24	23.50	23.18	23.33	23.23
	1/24	23.50	23.46	23.28	23.33		1/49	23.50	23.15	23.35	23.24
	12/0	22.50	22.39	22.43	22.26		25/0	22.50	22.32	22.35	22.32
	12/6	22.50	22.41	22.45	22.25		25/12	22.50	22.33	22.38	22.34
	12/13	22.50	22.38	22.41	22.33		25/25	22.50	22.27	22.30	22.26
	25/0	22.50	22.31	22.35	22.14		50/0	22.50	22.26	22.32	22.25
64QAM	1/0	22.50	22.17	22.50	22.49	64QAM	1/0	22.50	22.23	22.38	22.38
	1/12	22.50	22.29	22.33	22.24		1/24	22.50	22.25	22.41	22.37
	1/24	22.50	22.23	22.42	22.45		1/49	22.50	22.22	22.39	22.40
	12/0	21.50	21.34	21.25	21.27		25/0	21.50	21.34	21.40	21.29
	12/6	21.50	21.35	21.24	21.25		25/12	21.50	21.33	21.38	21.28
	12/13	21.50	21.35	21.19	21.33		25/25	21.50	21.30	21.32	21.26
	25/0	21.50	21.29	21.24	21.19		50/0	21.50	21.28	21.32	21.21

4) Second antenna Receiver off

LTE B5/BW=1.4M		Average Conducted Power(dBm)				LTE B5/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20407/824.7	20525/836.5	20643/848.3				20415/825.5	20525/836.5	20635/847.5
QPSK	1/0	25.00	23.84	23.98	23.89	QPSK	1/0	25.00	23.92	24.06	23.88
	1/2	25.00	23.91	24.05	23.95		1/7	25.00	24.09	24.12	24.00
	1/5	25.00	23.85	23.96	23.87		1/14	25.00	24.00	24.04	23.90
	3/0	25.00	23.79	23.91	23.91		8/0	24.00	23.21	23.25	23.08
	3/1	25.00	23.87	23.97	23.97		8/3	24.00	23.25	23.26	23.24
	3/3	25.00	23.80	23.95	23.87		8/7	24.00	23.20	23.20	23.19
	6/0	24.00	23.10	23.17	23.10		15/0	24.00	23.25	23.18	23.12
16QAM	1/0	24.00	23.12	23.27	23.47	16QAM	1/0	24.00	23.12	23.62	23.18
	1/2	24.00	23.22	23.33	23.52		1/7	24.00	23.29	23.69	23.27
	1/5	24.00	23.18	23.31	23.43		1/14	24.00	23.19	23.63	23.19
	3/0	24.00	23.25	23.22	23.27		8/0	23.00	22.42	22.34	22.16
	3/1	24.00	23.31	23.27	23.32		8/3	23.00	22.45	22.38	22.33
	3/3	24.00	23.26	23.21	23.24		8/7	23.00	22.39	22.31	22.23
	6/0	23.00	22.31	22.37	22.09		15/0	23.00	22.32	22.28	22.05
64QAM	1/0	23.00	22.27	22.59	22.25	64QAM	1/0	23.00	22.49	22.37	22.38
	1/2	23.00	22.37	22.67	22.33		1/7	23.00	22.64	22.46	22.45
	1/5	23.00	22.31	22.58	22.21		1/14	23.00	22.57	22.39	22.35
	3/0	23.00	22.06	22.48	22.22		8/0	22.00	21.36	21.31	21.10
	3/1	23.00	22.17	22.56	22.31		8/3	22.00	21.42	21.36	21.25
	3/3	23.00	22.06	22.47	22.22		8/7	22.00	21.34	21.29	21.18
	6/0	22.00	21.23	21.21	21.46		15/0	22.00	21.28	21.29	21.18

LTE B5/BW=5M		Average Conducted Power(dBm)				LTE B5/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20425/826.5	20525/836.5	20625/846.5				20450/829	20525/836.5	20600/844
QPSK	1/0	25.00	24.13	23.97	24.02	QPSK	1/0	25.00	24.09	24.16	24.02
	1/12	25.00	24.14	24.08	24.11		1/24	25.00	23.99	24.06	23.93
	1/24	25.00	24.11	23.92	24.05		1/49	25.00	23.97	24.04	23.95
	12/0	24.00	23.24	23.28	23.17		25/0	24.00	23.27	23.27	23.20
	12/6	24.00	23.30	23.29	23.16		25/12	24.00	23.23	23.31	23.21
	12/13	24.00	23.24	23.25	23.25		25/25	24.00	23.20	23.23	23.13
	25/0	24.00	23.27	23.29	23.15		50/0	24.00	23.25	23.27	23.17
16QAM	1/0	24.00	23.42	23.73	23.35	16QAM	1/0	24.00	23.21	23.64	23.14
	1/12	24.00	23.51	23.87	23.41		1/24	24.00	23.18	23.65	23.12
	1/24	24.00	23.47	23.70	23.36		1/49	24.00	23.15	23.64	23.10
	12/0	23.00	22.39	22.45	22.26		25/0	23.00	22.33	22.35	22.26
	12/6	23.00	22.41	22.45	22.26		25/12	23.00	22.30	22.35	22.27
	12/13	23.00	22.39	22.42	22.33		25/25	23.00	22.30	22.33	22.22
	25/0	23.00	22.35	22.34	22.13		50/0	23.00	22.28	22.30	22.21
64QAM	1/0	23.00	22.20	22.54	22.49	64QAM	1/0	23.00	22.57	22.53	22.30
	1/12	23.00	22.28	22.66	22.56		1/24	23.00	22.56	22.57	22.31
	1/24	23.00	22.24	22.43	22.50		1/49	23.00	22.52	22.55	22.39
	12/0	22.00	21.37	21.26	21.25		25/0	22.00	21.35	21.34	21.28
	12/6	22.00	21.37	21.28	21.25		25/12	22.00	21.36	21.35	21.29
	12/13	22.00	21.35	21.22	21.34		25/25	22.00	21.31	21.28	21.26
	25/0	22.00	21.29	21.26	21.21		50/0	22.00	21.30	21.30	21.23

Note: The tested channels are marks in bold.

4. Conducted power measurement results of LTE B7

1) Main antenna_ Receiver on

LTE B7/BW=5M		Average Conducted Power(dBm)				LTE B7/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20775/2502.5	21100/2535	21425/2567.5				20800/2505	21100/2535	21400/2565
QPSK	1/0	25.00	23.85	23.97	23.88	QPSK	1/0	25.00	23.78	23.92	23.80
	1/12	25.00	23.92	24.14	23.92		1/24	25.00	23.72	24.00	23.74
	1/24	25.00	23.79	24.00	23.85		1/49	25.00	23.82	23.92	23.79
	12/0	24.00	23.00	23.20	23.10		25/0	24.00	23.03	23.25	22.99
	12/6	24.00	23.02	23.20	23.12		25/12	24.00	22.99	23.22	23.02
	12/13	24.00	22.98	23.20	23.10		25/25	24.00	23.09	23.19	22.97
	25/0	24.00	22.99	23.22	23.10		50/0	24.00	23.03	23.16	22.98
16QAM	1/0	24.00	23.22	23.63	23.29	16QAM	1/0	24.00	23.00	23.55	23.14
	1/12	24.00	23.27	23.78	23.29		1/24	24.00	22.92	23.56	23.07
	1/24	24.00	23.17	23.69	23.22		1/49	24.00	22.89	23.53	23.08
	12/0	23.00	22.15	22.40	22.23		25/0	23.00	22.06	22.31	22.18
	12/6	23.00	22.13	22.42	22.24		25/12	23.00	22.09	22.31	22.14
	12/13	23.00	22.07	22.42	22.21		25/25	23.00	22.16	22.27	22.12
	25/0	23.00	22.03	22.33	22.12		50/0	23.00	22.08	22.28	22.05
64QAM	1/0	23.00	22.07	21.89	22.24	64QAM	1/0	23.00	22.15	22.09	22.06
	1/12	23.00	22.13	22.07	22.31		1/24	23.00	22.13	22.18	22.05
	1/24	23.00	22.05	21.95	22.18		1/49	23.00	22.19	22.14	22.05
	12/0	22.00	20.89	21.13	20.92		25/0	22.00	20.91	21.16	20.92
	12/6	22.00	20.90	21.14	20.94		25/12	22.00	20.88	21.17	20.97
	12/13	22.00	20.90	21.08	20.91		25/25	22.00	21.00	21.14	20.91
	25/0	22.00	20.84	21.04	20.95		50/0	22.00	20.94	21.10	20.83

LTE B7/BW=15M		Average Conducted Power(dBm)				LTE B7/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20825/2507.5	21100/2535	21375/2562.5				20850/2510	21100/2535	21350/2560
QPSK	1/0	25.00	23.85	23.98	23.96	QPSK	1/0	25.00	24.08	24.18	24.11
	1/37	25.00	23.71	23.96	23.84		1/50	25.00	23.91	24.04	23.89
	1/74	25.00	23.66	23.97	23.91		1/99	25.00	23.84	23.99	23.93
	36/0	24.00	23.01	23.10	23.03		50/0	24.00	23.07	23.26	23.08
	36/19	24.00	23.11	23.21	22.99		50/25	24.00	23.04	23.22	23.04
	36/39	24.00	23.02	23.14	22.95		50/50	24.00	23.05	23.14	22.94
	75/0	24.00	23.06	23.16	22.99		100/0	24.00	23.03	23.21	23.02
16QAM	1/0	24.00	23.07	23.60	23.47	16QAM	1/0	24.00	23.67	23.65	23.50
	1/37	24.00	22.87	23.55	23.45		1/50	24.00	23.56	23.60	23.43
	1/74	24.00	22.86	23.51	23.49		1/99	24.00	23.54	23.48	23.44
	36/0	23.00	22.12	22.26	22.12		50/0	23.00	22.23	22.33	22.12
	36/19	23.00	22.21	22.34	22.11		50/25	23.00	22.17	22.28	22.07
	36/39	23.00	22.10	22.26	22.03		50/50	23.00	22.09	22.23	22.03
	75/0	23.00	22.17	22.27	22.10		100/0	23.00	22.17	22.31	22.08
64QAM	1/0	23.00	22.22	22.21	22.47	64QAM	1/0	23.00	22.23	22.35	22.58
	1/37	23.00	22.10	22.16	22.40		1/50	23.00	22.17	22.30	22.50
	1/74	23.00	22.06	22.14	22.46		1/99	23.00	22.18	22.28	22.48
	36/0	22.00	20.92	21.11	20.94		50/0	22.00	21.03	21.16	20.98
	36/19	22.00	21.03	21.20	20.93		50/25	22.00	21.03	21.15	20.96
	36/39	22.00	21.00	21.15	20.88		50/50	22.00	20.92	21.10	20.88
	75/0	22.00	20.95	21.11	20.91		100/0	22.00	20.93	21.10	20.87

2) Main antenna Receiver off

LTE B7/BW=5M		Average Conducted Power(dBm)				LTE B7/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20775/2502.5	21100/2535	21425/2567.5				20800/2505	21100/2535	21400/2565
QPSK	1/0	21.50	20.66	20.79	20.80	QPSK	1/0	21.50	20.68	20.89	20.86
	1/12	21.50	20.71	20.95	20.85		1/24	21.50	20.73	20.93	20.79
	1/24	21.50	20.80	20.88	20.76		1/49	21.50	20.64	20.92	20.76
	12/0	21.50	20.71	20.93	20.84		25/0	21.50	20.84	20.98	20.84
	12/6	21.50	20.70	20.95	20.90		25/12	21.50	20.83	20.94	20.87
	12/13	21.50	20.69	20.90	20.86		25/25	21.50	20.81	20.91	20.83
	25/0	21.50	20.83	20.95	20.86		50/0	21.50	20.84	20.97	20.88
16QAM	1/0	21.50	20.81	20.67	20.75	16QAM	1/0	21.50	20.67	20.64	20.64
	1/12	21.50	20.87	20.83	20.82		1/24	21.50	20.75	20.71	20.57
	1/24	21.50	20.92	20.81	20.76		1/49	21.50	20.64	20.69	20.56
	12/0	21.50	20.78	20.74	20.72		25/0	21.50	20.92	20.76	20.67
	12/6	21.50	20.80	20.75	20.72		25/12	21.50	20.90	20.77	20.71
	12/13	21.50	20.76	20.73	20.72		25/25	21.50	20.90	20.75	20.62
	25/0	21.50	20.78	20.65	20.61		50/0	21.50	20.82	20.73	20.65
64QAM	1/0	21.50	20.63	20.52	20.83	64QAM	1/0	21.50	20.80	20.73	20.77
	1/12	21.50	20.71	20.64	20.91		1/24	21.50	20.85	20.77	20.75
	1/24	21.50	20.77	20.54	20.78		1/49	21.50	20.68	20.80	20.67
	12/0	21.50	20.30	20.52	20.34		25/0	21.50	20.41	20.55	20.49
	12/6	21.50	20.33	20.54	20.34		25/12	21.50	20.40	20.59	20.49
	12/13	21.50	20.31	20.52	20.33		25/25	21.50	20.40	20.55	20.50
	25/0	21.50	20.37	20.44	20.34		50/0	21.50	20.39	20.53	20.38

LTE B7/BW=15M		Average Conducted Power(dBm)				LTE B7/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20825/2507.5	21100/2535	21375/2562.5				20850/2510	21100/2535	21350/2560
QPSK	1/0	21.50	20.72	20.91	20.81	QPSK	1/0	21.50	20.80	20.99	20.98
	1/37	21.50	20.70	20.82	20.80		1/50	21.50	20.55	20.79	20.84
	1/74	21.50	20.67	20.79	20.73		1/99	21.50	20.63	20.86	20.77
	36/0	21.50	20.82	20.94	20.82		50/0	21.50	20.83	20.91	20.73
	36/19	21.50	20.81	20.89	20.88		50/25	21.50	20.82	20.86	20.81
	36/39	21.50	20.75	20.92	20.85		50/50	21.50	20.72	20.55	20.86
	75/0	21.50	20.74	20.92	20.74		100/0	21.50	20.76	20.96	20.77
16QAM	1/0	21.50	20.70	20.78	20.68	16QAM	1/0	21.50	20.80	20.88	20.90
	1/37	21.50	20.71	20.68	20.64		1/50	21.50	20.58	20.75	20.78
	1/74	21.50	20.67	20.63	20.67		1/99	21.50	20.65	20.71	20.76
	36/0	21.50	20.89	20.74	20.86		50/0	21.50	20.58	20.73	20.61
	36/19	21.50	20.84	20.73	20.91		50/25	21.50	20.56	20.75	20.58
	36/39	21.50	20.84	20.70	20.87		50/50	21.50	20.53	20.69	20.59
	75/0	21.50	20.85	20.70	20.81		100/0	21.50	20.57	20.74	20.55
64QAM	1/0	21.50	20.80	20.84	20.82	64QAM	1/0	21.50	20.71	20.86	20.77
	1/37	21.50	20.82	20.75	20.83		1/50	21.50	20.58	20.85	20.82
	1/74	21.50	20.77	20.69	20.80		1/99	21.50	20.71	20.80	20.69
	36/0	21.50	20.44	20.58	20.34		50/0	21.50	20.42	20.60	20.38
	36/19	21.50	20.42	20.59	20.43		50/25	21.50	20.44	20.58	20.38
	36/39	21.50	20.35	20.58	20.42		50/50	21.50	20.35	20.55	20.39
	75/0	21.50	20.36	20.54	20.36		100/0	21.50	20.34	20.53	20.29

3) Second antenna Receiver on

LTE B7/BW=5M		Average Conducted Power(dBm)				LTE B7/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20775/2502.5	21100/2535	21425/2567.5				20800/2505	21100/2535	21400/2565
QPSK	1/0	15.50	15.35	15.18	15.24	QPSK	1/0	15.50	15.28	15.24	15.25
	1/12	15.50	15.34	15.28	15.29		1/24	15.50	15.26	15.27	15.18
	1/24	15.50	15.34	15.22	15.20		1/49	15.50	15.17	15.23	15.14
	12/0	15.50	15.24	15.30	15.23		25/0	15.50	15.32	15.33	15.25
	12/6	15.50	15.22	15.30	15.21		25/12	15.50	15.34	15.27	15.21
	12/13	15.50	15.16	15.29	15.18		25/25	15.50	15.31	15.23	15.17
	25/0	15.50	15.33	15.27	15.23		50/0	15.50	15.27	15.24	15.25
16QAM	1/0	15.50	15.21	15.20	15.39	16QAM	1/0	15.50	15.16	15.31	15.29
	1/12	15.50	15.24	15.32	15.43		1/24	15.50	15.17	15.35	15.19
	1/24	15.50	15.26	15.22	15.32		1/49	15.50	15.01	15.30	15.13
	12/0	15.50	15.35	15.37	15.43		25/0	15.50	15.33	15.29	15.30
	12/6	15.50	15.33	15.39	15.45		25/12	15.50	15.27	15.25	15.28
	12/13	15.50	15.33	15.37	15.38		25/25	15.50	15.27	15.21	15.24
	25/0	15.50	15.36	15.36	15.32		50/0	15.50	15.28	15.22	15.18
64QAM	1/0	15.50	15.35	15.27	15.23	64QAM	1/0	15.50	15.29	15.27	15.24
	1/12	15.50	15.36	15.40	15.25		1/24	15.50	15.32	15.31	15.35
	1/24	15.50	15.35	15.33	15.17		1/49	15.50	15.17	15.28	15.27
	12/0	15.50	15.26	15.44	15.34		25/0	15.50	15.16	15.37	15.33
	12/6	15.50	15.28	15.43	15.34		25/12	15.50	15.11	15.35	15.32
	12/13	15.50	15.21	15.36	15.30		25/25	15.50	15.28	15.32	15.25
	25/0	15.50	15.31	15.37	15.24		50/0	15.50	15.28	15.28	15.19

LTE B7/BW=15M		Average Conducted Power(dBm)				LTE B7/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20825/2507.5	21100/2535	21375/2562.5				20850/2510	21100/2535	21350/2560
QPSK	1/0	15.50	15.32	15.42	15.33	QPSK	1/0	15.50	15.46	15.39	15.43
	1/37	15.50	15.23	15.24	15.26		1/50	15.50	15.21	15.31	15.29
	1/74	15.50	15.19	15.18	15.19		1/99	15.50	15.25	15.26	15.23
	36/0	15.50	15.36	15.28	15.18		50/0	15.50	15.34	15.33	15.28
	36/19	15.50	15.29	15.26	15.22		50/25	15.50	15.29	15.28	15.19
	36/39	15.50	15.24	15.20	15.17		50/50	15.50	15.19	15.23	15.21
	75/0	15.50	15.28	15.22	15.14		100/0	15.50	15.26	15.29	15.15
16QAM	1/0	15.50	15.22	15.25	15.23	16QAM	1/0	15.50	15.19	15.20	15.28
	1/37	15.50	15.16	15.12	15.17		1/50	15.50	15.16	15.31	15.22
	1/74	15.50	15.06	15.07	15.08		1/99	15.50	15.25	15.27	15.11
	36/0	15.50	15.35	15.31	15.13		50/0	15.50	15.32	15.32	15.22
	36/19	15.50	15.32	15.28	15.20		50/25	15.50	15.28	15.30	15.16
	36/39	15.50	15.25	15.22	15.15		50/50	15.50	15.18	15.19	15.15
	75/0	15.50	15.33	15.23	15.12		100/0	15.50	15.26	15.29	15.15
64QAM	1/0	15.50	15.34	15.25	15.29	64QAM	1/0	15.50	15.26	15.33	15.32
	1/37	15.50	15.25	15.33	15.26		1/50	15.50	15.26	15.28	15.21
	1/74	15.50	15.40	15.24	15.16		1/99	15.50	15.29	15.17	15.15
	36/0	15.50	15.37	15.38	15.22		50/0	15.50	15.38	15.33	15.28
	36/19	15.50	15.34	15.37	15.27		50/25	15.50	15.30	15.35	15.24
	36/39	15.50	15.25	15.29	15.14		50/50	15.50	15.24	15.32	15.27
	75/0	15.50	15.26	15.31	15.15		100/0	15.50	15.27	15.33	15.26

4) Second antenna Receiver off

LTE B7/BW=5M		Average Conducted Power(dBm)				LTE B7/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20775/2502.5	21100/2535	21425/2567.5				20800/2505	21100/2535	21400/2565
QPSK	1/0	17.00	16.85	16.87	16.85	QPSK	1/0	17.00	16.79	16.85	16.90
	1/12	17.00	16.89	16.92	16.87		1/24	17.00	16.83	16.84	16.78
	1/24	17.00	16.89	16.92	16.79		1/49	17.00	16.74	16.78	16.74
	12/0	17.00	16.83	16.86	16.85		25/0	17.00	16.92	16.90	16.91
	12/6	17.00	16.83	16.87	16.86		25/12	17.00	16.92	16.84	16.85
	12/13	17.00	16.76	16.85	16.85		25/25	17.00	16.87	16.81	16.83
	25/0	17.00	16.91	16.85	16.89		50/0	17.00	16.86	16.87	16.88
16QAM	1/0	17.00	16.90	16.88	16.89	16QAM	1/0	17.00	16.75	16.83	16.89
	1/12	17.00	16.94	16.84	16.87		1/24	17.00	16.73	16.83	16.80
	1/24	17.00	16.94	16.86	16.94		1/49	17.00	16.62	16.80	16.72
	12/0	17.00	16.81	16.89	16.84		25/0	17.00	16.94	16.87	16.93
	12/6	17.00	16.82	16.92	16.95		25/12	17.00	16.87	16.91	16.85
	12/13	17.00	16.81	16.88	16.95		25/25	17.00	16.88	16.84	16.89
	25/0	17.00	16.81	16.87	16.90		50/0	17.00	16.86	16.86	16.89
64QAM	1/0	17.00	16.75	16.88	16.75	64QAM	1/0	17.00	16.87	16.83	16.92
	1/12	17.00	16.85	16.92	16.79		1/24	17.00	16.88	16.82	16.85
	1/24	17.00	16.83	16.84	16.70		1/49	17.00	16.82	16.85	16.82
	12/0	17.00	16.78	16.94	16.92		25/0	17.00	16.75	16.84	16.83
	12/6	17.00	16.76	16.93	16.90		25/12	17.00	16.76	16.88	16.85
	12/13	17.00	16.71	16.90	16.86		25/25	17.00	16.73	16.94	16.86
	25/0	17.00	16.89	16.89	16.79		50/0	17.00	16.72	16.88	16.87

LTE B7/BW=15M		Average Conducted Power(dBm)				LTE B7/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20825/2507.5	21100/2535	21375/2562.5				20850/2510	21100/2535	21350/2560
QPSK	1/0	17.00	16.88	16.92	16.89	QPSK	1/0	17.00	16.90	16.95	16.92
	1/37	17.00	16.85	16.82	16.83		1/50	17.00	16.70	16.80	16.82
	1/74	17.00	16.73	16.77	16.82		1/99	17.00	16.74	16.75	16.75
	36/0	17.00	16.89	16.88	16.75		50/0	17.00	16.85	16.94	16.84
	36/19	17.00	16.85	16.88	16.84		50/25	17.00	16.89	16.91	16.81
	36/39	17.00	16.81	16.78	16.79		50/50	17.00	16.78	16.82	16.88
	75/0	17.00	16.81	16.83	16.73		100/0	17.00	16.82	16.86	16.81
16QAM	1/0	17.00	16.78	16.91	16.94	16QAM	1/0	17.00	16.80	16.90	16.78
	1/37	17.00	16.73	16.81	16.86		1/50	17.00	16.64	16.72	16.79
	1/74	17.00	16.64	16.78	16.83		1/99	17.00	16.70	16.64	16.75
	36/0	17.00	16.90	16.86	16.76		50/0	17.00	16.85	16.86	16.77
	36/19	17.00	16.89	16.90	16.89		50/25	17.00	16.79	16.76	16.74
	36/39	17.00	16.79	16.81	16.78		50/50	17.00	16.67	16.71	16.77
	75/0	17.00	16.81	16.83	16.74		100/0	17.00	16.76	16.77	16.68
64QAM	1/0	17.00	16.86	16.81	16.75	64QAM	1/0	17.00	16.75	16.81	16.85
	1/37	17.00	16.83	16.84	16.85		1/50	17.00	16.81	16.90	16.89
	1/74	17.00	16.87	16.86	16.92		1/99	17.00	16.83	16.88	16.87
	36/0	17.00	16.86	16.87	16.83		50/0	17.00	16.87	16.93	16.81
	36/19	17.00	16.83	16.85	16.93		50/25	17.00	16.77	16.89	16.72
	36/39	17.00	16.79	16.81	16.82		50/50	17.00	16.72	16.79	16.77
	75/0	17.00	16.79	16.82	16.78		100/0	17.00	16.77	16.79	16.70

Note: The tested channels are marks in bold.

5. Conducted power measurement results of LTE B26

1) Main antenna_Receiver on

LTE B26/BW=1.4M		Average Conducted Power(dBm)				LTE B26/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26697/814.7	26865/831	27033/848.3				26705/815.5	26865/831	27025/847.5
QPSK	1/0	25.00	23.85	23.81	23.55	QPSK	1/0	25.00	20.03	23.85	23.69
	1/2	25.00	23.84	23.95	23.58		1/7	25.00	24.00	23.99	23.62
	1/5	25.00	23.79	23.90	23.56		1/14	25.00	24.01	23.90	23.63
	3/0	25.00	23.79	23.91	23.59		8/0	24.00	23.24	23.20	22.90
	3/1	25.00	23.82	23.95	23.59		8/3	24.00	23.23	23.18	22.93
	3/3	25.00	23.80	23.90	23.57		8/7	24.00	23.21	23.15	22.86
	6/0	24.00	23.07	23.09	22.81		15/0	24.00	23.27	23.19	22.90
16QAM	1/0	24.00	23.25	23.07	22.93	16QAM	1/0	24.00	19.61	23.20	23.09
	1/2	24.00	23.36	23.23	23.00		1/7	24.00	23.44	23.31	22.92
	1/5	24.00	23.22	23.19	22.91		1/14	24.00	23.36	23.22	23.01
	3/0	24.00	22.99	23.26	22.78		8/0	23.00	22.31	22.28	22.00
	3/1	24.00	23.00	23.35	22.78		8/3	23.00	22.32	22.30	21.99
	3/3	24.00	23.01	23.24	22.79		8/7	23.00	22.30	22.24	21.93
	6/0	23.00	22.20	22.35	21.77		15/0	23.00	22.23	22.19	21.91
64QAM	1/0	23.00	21.96	22.23	22.08	64QAM	1/0	23.00	19.42	22.38	22.29
	1/2	23.00	22.44	22.39	22.17		1/7	23.00	22.59	22.49	22.28
	1/5	23.00	22.37	22.32	22.07		1/14	23.00	22.49	22.38	22.19
	3/0	23.00	22.09	22.04	22.05		8/0	22.00	21.31	21.23	21.03
	3/1	23.00	22.15	22.15	22.15		8/3	22.00	21.35	21.25	21.05
	3/3	23.00	22.17	22.04	22.11		8/7	22.00	21.29	21.19	21.01
	6/0	22.00	21.40	21.28	21.31		15/0	22.00	21.21	21.28	21.09

LTE B26/BW=5M		Average Conducted Power(dBm)				LTE B26/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26715/816.5	26865/831	27015/846.5				26740/819	26865/831	26990/844
QPSK	1/0	25.00	21.01	23.98	23.77	QPSK	1/0	25.00	23.93	24.00	23.69
	1/12	25.00	24.12	24.07	23.80		1/24	25.00	23.94	23.93	23.71
	1/24	25.00	24.15	23.95	23.65		1/49	25.00	23.77	23.88	23.55
	12/0	24.00	23.30	23.23	22.97		25/0	24.00	23.22	23.22	22.97
	12/6	24.00	23.27	23.22	22.99		25/12	24.00	23.20	23.23	22.99
	12/13	24.00	23.26	23.18	22.99		25/25	24.00	23.18	23.15	22.96
	25/0	24.00	23.33	23.19	22.92		50/0	24.00	23.18	23.20	22.91
16QAM	1/0	24.00	20.02	23.31	23.25	16QAM	1/0	24.00	23.11	23.32	23.22
	1/12	24.00	23.60	23.39	23.23		1/24	24.00	23.15	23.22	23.15
	1/24	24.00	23.59	23.31	23.08		1/49	24.00	22.95	23.13	23.00
	12/0	23.00	22.43	22.33	22.07		25/0	23.00	22.33	22.36	22.04
	12/6	23.00	22.39	22.32	22.10		25/12	23.00	22.24	22.39	22.02
	12/13	23.00	22.38	22.30	22.07		25/25	23.00	22.22	22.32	22.02
	25/0	23.00	22.38	22.20	22.01		50/0	23.00	22.25	22.30	21.93
64QAM	1/0	23.00	19.16	22.44	22.35	64QAM	1/0	23.00	22.47	22.50	22.32
	1/12	23.00	22.24	22.55	22.39		1/24	23.00	22.53	22.40	22.39
	1/24	23.00	22.25	22.47	22.29		1/49	23.00	22.34	22.32	22.27
	12/0	22.00	21.31	21.33	21.18		25/0	22.00	21.35	21.36	21.09
	12/6	22.00	21.33	21.33	21.17		25/12	22.00	21.28	21.35	21.18
	12/13	22.00	21.37	21.30	21.15		25/25	22.00	21.24	21.30	21.12
	25/0	22.00	21.34	21.28	21.09		50/0	22.00	21.25	21.25	21.01

LTE B26/BW=15M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26765/821.5	26865/831	26965/841.5
QPSK	1/0	25.00	24.08	23.85	23.85
	1/37	25.00	23.97	23.83	23.80
	1/74	25.00	23.91	23.77	23.57
	36/0	24.00	23.12	23.08	22.98
	36/19	24.00	23.19	23.09	22.99
	36/39	24.00	23.21	23.10	23.01
	75/0	24.00	23.17	23.08	22.94
16QAM	1/0	24.00	23.16	23.06	23.39
	1/37	24.00	23.13	23.04	23.35
	1/74	24.00	23.09	22.96	23.12
	36/0	23.00	22.27	22.18	22.17
	36/19	23.00	22.24	22.19	22.15
	36/39	23.00	22.27	22.19	22.16
	75/0	23.00	22.22	22.14	22.01
64QAM	1/0	23.00	22.52	22.45	22.64
	1/37	23.00	22.47	22.42	22.68
	1/74	23.00	22.45	22.31	22.57
	36/0	22.00	21.33	21.25	21.09
	36/19	22.00	21.28	21.23	21.06
	36/39	22.00	21.29	21.17	21.11
	75/0	22.00	21.24	21.16	21.08

2) Main antenna Receiver off

LTE B26/BW=1.4M		Average Conducted Power(dBm)				LTE B26/BW=3M		Average Conducted Power(dBm)			
Modula -tion	RB Size/ Offset	Max. Tune-up	Channel/Frequency(MHz)			Modula -tion	RB Size/ Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26697/ 814.7	26865/ 831	27033/ 848.3				26705/ 815.5	26865/ 831	27025/ 847.5
QPSK	1/0	25.00	23.85	23.81	23.55	QPSK	1/0	25.00	20.03	23.85	23.69
	1/2	25.00	23.84	23.95	23.58		1/7	25.00	24.00	23.99	23.62
	1/5	25.00	23.79	23.90	23.56		1/14	25.00	24.01	23.90	23.63
	3/0	25.00	23.79	23.91	23.59		8/0	24.00	23.24	23.20	22.90
	3/1	25.00	23.82	23.95	23.59		8/3	24.00	23.23	23.18	22.93
	3/3	25.00	23.80	23.90	23.57		8/7	24.00	23.21	23.15	22.86
	6/0	24.00	23.07	23.09	22.81		15/0	24.00	23.27	23.19	22.90
16QAM	1/0	24.00	23.25	23.07	22.93	16QAM	1/0	24.00	19.61	23.20	23.09
	1/2	24.00	23.36	23.23	23.00		1/7	24.00	23.44	23.31	22.92
	1/5	24.00	23.22	23.19	22.91		1/14	24.00	23.36	23.22	23.01
	3/0	24.00	22.99	23.26	22.78		8/0	23.00	22.31	22.28	22.00
	3/1	24.00	23.00	23.35	22.78		8/3	23.00	22.32	22.30	21.99
	3/3	24.00	23.01	23.24	22.79		8/7	23.00	22.30	22.24	21.93
	6/0	23.00	22.20	22.35	21.77		15/0	23.00	22.23	22.19	21.91
64QAM	1/0	23.00	21.96	22.23	22.08	64QAM	1/0	23.00	19.42	22.38	22.29
	1/2	23.00	22.44	22.39	22.17		1/7	23.00	22.59	22.49	22.28
	1/5	23.00	22.37	22.32	22.07		1/14	23.00	22.49	22.38	22.19
	3/0	23.00	22.09	22.04	22.05		8/0	22.00	21.31	21.23	21.03
	3/1	23.00	22.15	22.15	22.15		8/3	22.00	21.35	21.25	21.05
	3/3	23.00	22.17	22.04	22.11		8/7	22.00	21.29	21.19	21.01
	6/0	22.00	21.40	21.28	21.31		15/0	22.00	21.21	21.28	21.09

LTE B26/BW=5M		Average Conducted Power(dBm)				LTE B26/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26715/816.5	26865/831	27015/846.5				26740/819	26865/831	26990/844
QPSK	1/0	25.00	21.01	23.98	23.77	QPSK	1/0	25.00	23.93	24.00	23.69
	1/12	25.00	24.12	24.07	23.80		1/24	25.00	23.94	23.93	23.71
	1/24	25.00	24.15	23.95	23.65		1/49	25.00	23.77	23.88	23.55
	12/0	24.00	23.30	23.23	22.97		25/0	24.00	23.22	23.22	22.97
	12/6	24.00	23.27	23.22	22.99		25/12	24.00	23.20	23.23	22.99
	12/13	24.00	23.26	23.18	22.99		25/25	24.00	23.18	23.15	22.96
	25/0	24.00	23.33	23.19	22.92		50/0	24.00	23.18	23.20	22.91
16QAM	1/0	24.00	20.02	23.31	23.25	16QAM	1/0	24.00	23.11	23.32	23.22
	1/12	24.00	23.60	23.39	23.23		1/24	24.00	23.15	23.22	23.15
	1/24	24.00	23.59	23.31	23.08		1/49	24.00	22.95	23.13	23.00
	12/0	23.00	22.43	22.33	22.07		25/0	23.00	22.33	22.36	22.04
	12/6	23.00	22.39	22.32	22.10		25/12	23.00	22.24	22.39	22.02
	12/13	23.00	22.38	22.30	22.07		25/25	23.00	22.22	22.32	22.02
	25/0	23.00	22.38	22.20	22.01		50/0	23.00	22.25	22.30	21.93
64QAM	1/0	23.00	19.16	22.44	22.35	64QAM	1/0	23.00	22.47	22.50	22.32
	1/12	23.00	22.24	22.55	22.39		1/24	23.00	22.53	22.40	22.39
	1/24	23.00	22.25	22.47	22.29		1/49	23.00	22.34	22.32	22.27
	12/0	22.00	21.31	21.33	21.18		25/0	22.00	21.35	21.36	21.09
	12/6	22.00	21.33	21.33	21.17		25/12	22.00	21.28	21.35	21.18
	12/13	22.00	21.37	21.30	21.15		25/25	22.00	21.24	21.30	21.12
	25/0	22.00	21.34	21.28	21.09		50/0	22.00	21.25	21.25	21.01

LTE B26/BW=15M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26765/821.5	26865/831	26965/841.5
QPSK	1/0	25.00	24.08	23.85	23.85
	1/37	25.00	23.97	23.83	23.80
	1/74	25.00	23.91	23.77	23.57
	36/0	24.00	23.12	23.08	22.98
	36/19	24.00	23.19	23.09	22.99
	36/39	24.00	23.21	23.10	23.01
	75/0	24.00	23.17	23.08	22.94
16QAM	1/0	24.00	23.16	23.06	23.39
	1/37	24.00	23.13	23.04	23.35
	1/74	24.00	23.09	22.96	23.12
	36/0	23.00	22.27	22.18	22.17
	36/19	23.00	22.24	22.19	22.15
	36/39	23.00	22.27	22.19	22.16
	75/0	23.00	22.22	22.14	22.01
64QAM	1/0	23.00	22.52	22.45	22.64
	1/37	23.00	22.47	22.42	22.68
	1/74	23.00	22.45	22.31	22.57
	36/0	22.00	21.33	21.25	21.09
	36/19	22.00	21.28	21.23	21.06
	36/39	22.00	21.29	21.17	21.11
	75/0	22.00	21.24	21.16	21.08

3) Second antenna Receiver on

LTE B26/BW=1.4M		Average Conducted Power(dBm)				LTE B26/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26697/814.7	26865/831	27033/848.3				26705/815.5	26865/831	27025/847.5
QPSK	1/0	25.00	24.18	24.07	24.13	QPSK	1/0	25.00	20.41	24.18	24.26
	1/2	25.00	24.24	24.24	24.18		1/7	25.00	24.28	24.31	24.30
	1/5	25.00	24.15	24.16	24.10		1/14	25.00	24.21	24.20	24.20
	3/0	25.00	24.11	24.17	24.15		8/0	24.00	23.48	23.50	23.46
	3/1	25.00	24.18	24.25	24.21		8/3	24.00	23.49	23.53	23.44
	3/3	25.00	24.14	24.18	24.13		8/7	24.00	23.42	23.47	23.39
	6/0	24.00	23.39	23.43	23.34		15/0	24.00	23.48	23.50	23.43
16QAM	1/0	24.00	23.75	23.48	23.35	16QAM	1/0	24.00	19.40	23.52	23.84
	1/2	24.00	23.80	23.63	23.39		1/7	24.00	23.44	23.62	23.92
	1/5	24.00	23.74	23.55	23.36		1/14	24.00	23.32	23.49	23.76
	3/0	24.00	23.56	23.49	23.47		8/0	23.00	22.60	22.63	22.56
	3/1	24.00	23.63	23.55	23.57		8/3	23.00	22.62	22.63	22.59
	3/3	24.00	23.55	23.47	23.48		8/7	23.00	22.55	22.57	22.51
	6/0	23.00	22.38	22.66	22.60		15/0	23.00	22.52	22.54	22.52
64QAM	1/0	23.00	22.80	22.55	22.52	64QAM	1/0	23.00	19.77	22.71	22.58
	1/2	23.00	22.89	22.70	22.56		1/7	23.00	22.82	22.80	22.66
	1/5	23.00	22.75	22.67	22.49		1/14	23.00	22.74	22.71	22.55
	3/0	23.00	22.68	22.37	22.45		8/0	22.00	21.54	21.55	21.55
	3/1	23.00	22.75	22.49	22.52		8/3	22.00	21.60	21.55	21.57
	3/3	23.00	22.66	22.37	22.46		8/7	22.00	21.52	21.51	21.52
	6/0	22.00	21.45	21.61	21.70		15/0	22.00	21.49	21.62	21.54

LTE B26/BW=5M		Average Conducted Power(dBm)				LTE B26/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26715/816.5	26865/831	27015/846.5				26740/819	26865/831	26990/844
QPSK	1/0	25.00	21.56	24.26	24.29	QPSK	1/0	25.00	24.27	24.35	24.25
	1/12	25.00	24.26	24.29	24.16		1/24	25.00	24.30	24.26	24.29
	1/24	25.00	24.39	24.32	24.19		1/49	25.00	24.11	24.15	24.17
	12/0	24.00	23.48	23.54	23.52		25/0	24.00	23.57	23.57	23.47
	12/6	24.00	23.48	23.56	23.49		25/12	24.00	23.56	23.54	23.52
	12/13	24.00	23.55	23.56	23.46		25/25	24.00	23.50	23.47	23.47
	25/0	24.00	23.57	23.55	23.51		50/0	24.00	23.55	23.53	23.41
16QAM	1/0	24.00	20.65	23.63	23.93	16QAM	1/0	24.00	23.41	23.65	23.86
	1/12	24.00	23.66	23.69	23.94		1/24	24.00	23.45	23.55	23.86
	1/24	24.00	23.70	23.63	23.89		1/49	24.00	23.26	23.46	23.71
	12/0	23.00	22.59	22.68	22.68		25/0	23.00	22.60	22.71	22.53
	12/6	23.00	22.61	22.66	22.69		25/12	23.00	22.60	22.73	22.60
	12/13	23.00	22.66	22.65	22.65		25/25	23.00	22.54	22.61	22.58
	25/0	23.00	22.65	22.54	22.57		50/0	23.00	22.54	22.60	22.45
64QAM	1/0	23.00	19.47	22.72	22.80	64QAM	1/0	23.00	22.80	22.80	22.59
	1/12	23.00	22.50	22.84	22.86		1/24	23.00	22.83	22.71	22.63
	1/24	23.00	22.53	22.74	22.72		1/49	23.00	22.64	22.61	22.58
	12/0	22.00	21.56	21.68	21.50		25/0	22.00	21.65	21.69	21.56
	12/6	22.00	21.56	21.65	21.50		25/12	22.00	21.62	21.67	21.64
	12/13	22.00	21.64	21.64	21.47		25/25	22.00	21.55	21.64	21.61
	25/0	22.00	21.56	21.61	21.50		50/0	22.00	21.53	21.57	21.47

LTE B26/BW=15M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26765/821.5	26865/831	26965/841.5
QPSK	1/0	25.00	24.27	24.34	24.29
	1/37	25.00	24.39	24.31	24.32
	1/74	25.00	24.36	24.22	24.17
	36/0	24.00	23.65	23.22	23.43
	36/19	24.00	23.63	23.52	23.44
	36/39	24.00	23.62	23.44	23.47
	75/0	24.00	23.62	23.51	23.42
16QAM	1/0	24.00	23.42	23.98	23.87
	1/37	24.00	23.43	23.86	23.90
	1/74	24.00	23.41	23.82	23.70
	36/0	23.00	22.58	22.82	22.58
	36/19	23.00	22.53	22.56	22.54
	36/39	23.00	22.57	22.53	22.57
	75/0	23.00	22.51	22.56	22.51
64QAM	1/0	23.00	22.83	22.63	22.68
	1/37	23.00	22.81	22.58	22.66
	1/74	23.00	22.76	22.51	22.53
	36/0	22.00	21.62	21.51	21.58
	36/19	22.00	21.59	21.59	21.59
	36/39	22.00	21.63	21.55	21.62
	75/0	22.00	21.55	21.61	21.51

4) Second antenna Receiver off

LTE B26/BW=1.4M		Average Conducted Power(dBm)				LTE B26/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26697/814.7	26865/831	27033/848.3				26705/815.5	26865/831	27025/847.5
QPSK	1/0	25.00	24.18	24.07	24.13	QPSK	1/0	25.00	20.41	24.18	24.26
	1/2	25.00	24.24	24.24	24.18		1/7	25.00	24.28	24.31	24.30
	1/5	25.00	24.15	24.16	24.10		1/14	25.00	24.21	24.20	24.20
	3/0	25.00	24.11	24.17	24.15		8/0	24.00	23.48	23.50	23.46
	3/1	25.00	24.18	24.25	24.21		8/3	24.00	23.49	23.53	23.44
	3/3	25.00	24.14	24.18	24.13		8/7	24.00	23.42	23.47	23.39
	6/0	24.00	23.39	23.43	23.34		15/0	24.00	23.48	23.50	23.43
16QAM	1/0	24.00	23.75	23.48	23.35	16QAM	1/0	24.00	19.40	23.52	23.84
	1/2	24.00	23.80	23.63	23.39		1/7	24.00	23.44	23.62	23.92
	1/5	24.00	23.74	23.55	23.36		1/14	24.00	23.32	23.49	23.76
	3/0	24.00	23.56	23.49	23.47		8/0	23.00	22.60	22.63	22.56
	3/1	24.00	23.63	23.55	23.57		8/3	23.00	22.62	22.63	22.59
	3/3	24.00	23.55	23.47	23.48		8/7	23.00	22.55	22.57	22.51
	6/0	23.00	22.38	22.66	22.60		15/0	23.00	22.52	22.54	22.52
64QAM	1/0	23.00	22.80	22.55	22.52	64QAM	1/0	23.00	19.77	22.71	22.58
	1/2	23.00	22.89	22.70	22.56		1/7	23.00	22.82	22.80	22.66
	1/5	23.00	22.75	22.67	22.49		1/14	23.00	22.74	22.71	22.55
	3/0	23.00	22.68	22.37	22.45		8/0	22.00	21.54	21.55	21.55
	3/1	23.00	22.75	22.49	22.52		8/3	22.00	21.60	21.55	21.57
	3/3	23.00	22.66	22.37	22.46		8/7	22.00	21.52	21.51	21.52
	6/0	22.00	21.45	21.61	21.70		15/0	22.00	21.49	21.62	21.54

LTE B26/BW=5M		Average Conducted Power(dBm)				LTE B26/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26715/816.5	26865/831	27015/846.5				26740/819	26865/831	26990/844
QPSK	1/0	25.00	21.56	24.26	24.29	QPSK	1/0	25.00	24.27	24.35	24.25
	1/12	25.00	24.26	24.29	24.16		1/24	25.00	24.30	24.26	24.29
	1/24	25.00	24.39	24.32	24.19		1/49	25.00	24.11	24.15	24.17
	12/0	24.00	23.48	23.54	23.52		25/0	24.00	23.57	23.57	23.47
	12/6	24.00	23.48	23.56	23.49		25/12	24.00	23.56	23.54	23.52
	12/13	24.00	23.55	23.56	23.46		25/25	24.00	23.50	23.47	23.47
	25/0	24.00	23.57	23.55	23.51		50/0	24.00	23.55	23.53	23.41
16QAM	1/0	24.00	20.65	23.63	23.93	16QAM	1/0	24.00	23.41	23.65	23.86
	1/12	24.00	23.66	23.69	23.94		1/24	24.00	23.45	23.55	23.86
	1/24	24.00	23.70	23.63	23.89		1/49	24.00	23.26	23.46	23.71
	12/0	23.00	22.59	22.68	22.68		25/0	23.00	22.60	22.71	22.53
	12/6	23.00	22.61	22.66	22.69		25/12	23.00	22.60	22.73	22.60
	12/13	23.00	22.66	22.65	22.65		25/25	23.00	22.54	22.61	22.58
	25/0	23.00	22.65	22.54	22.57		50/0	23.00	22.54	22.60	22.45
64QAM	1/0	23.00	19.47	22.72	22.80	64QAM	1/0	23.00	22.80	22.80	22.59
	1/12	23.00	22.50	22.84	22.86		1/24	23.00	22.83	22.71	22.63
	1/24	23.00	22.53	22.74	22.72		1/49	23.00	22.64	22.61	22.58
	12/0	22.00	21.56	21.68	21.50		25/0	22.00	21.65	21.69	21.56
	12/6	22.00	21.56	21.65	21.50		25/12	22.00	21.62	21.67	21.64
	12/13	22.00	21.64	21.64	21.47		25/25	22.00	21.55	21.64	21.61
	25/0	22.00	21.56	21.61	21.50		50/0	22.00	21.53	21.57	21.47

LTE B26/BW=15M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			26765/821.5	26865/831	26965/841.5
QPSK	1/0	25.00	24.27	24.34	24.29
	1/37	25.00	24.39	24.31	24.32
	1/74	25.00	24.36	24.22	24.17
	36/0	24.00	23.65	23.22	23.43
	36/19	24.00	23.63	23.52	23.44
	36/39	24.00	23.62	23.44	23.47
	75/0	24.00	23.62	23.51	23.42
16QAM	1/0	24.00	23.42	23.98	23.87
	1/37	24.00	23.43	23.86	23.90
	1/74	24.00	23.41	23.82	23.70
	36/0	23.00	22.58	22.82	22.58
	36/19	23.00	22.53	22.56	22.54
	36/39	23.00	22.57	22.53	22.57
	75/0	23.00	22.51	22.56	22.51
64QAM	1/0	23.00	22.83	22.63	22.68
	1/37	23.00	22.81	22.58	22.66
	1/74	23.00	22.76	22.51	22.53
	36/0	22.00	21.62	21.51	21.58
	36/19	22.00	21.59	21.59	21.59
	36/39	22.00	21.63	21.55	21.62
	75/0	22.00	21.55	21.61	21.51

Note: The tested channels are marks in bold.

6. Conducted power measurement results of LTE B38

1) Main antenna_ Receiver on

LTE B38/BW=5M		Average Conducted Power(dBm)				LTE B38/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			37775/2572.5	38000/2595	38225/2617.5				37800/2575	38000/2595	38200/2615
QPSK	1/0	25.00	23.78	23.68	23.78	QPSK	1/0	25.00	23.75	23.88	23.83
	1/12	25.00	23.86	23.80	23.92		1/24	25.00	23.74	23.86	23.72
	1/24	25.00	23.77	23.74	23.84		1/49	25.00	23.79	23.81	23.75
	12/0	24.00	22.99	22.90	22.95		25/0	24.00	22.98	22.99	22.96
	12/6	24.00	22.99	22.99	23.09		25/12	24.00	23.09	23.00	22.97
	12/13	24.00	22.96	22.98	23.09		25/25	24.00	23.02	22.96	22.86
	25/0	24.00	22.96	22.96	22.96		50/0	24.00	23.04	22.97	22.84
16QAM	1/0	24.00	23.29	23.20	23.30	16QAM	1/0	24.00	23.30	23.43	23.42
	1/12	24.00	23.30	23.35	23.42		1/24	24.00	23.25	23.41	23.26
	1/24	24.00	23.19	23.23	23.34		1/49	24.00	23.32	23.35	23.30
	12/0	23.00	22.06	21.92	21.99		25/0	23.00	22.00	22.05	21.98
	12/6	23.00	22.07	22.03	22.12		25/12	23.00	22.10	22.08	21.96
	12/13	23.00	22.06	22.02	22.10		25/25	23.00	22.07	22.03	21.91
	25/0	23.00	21.99	22.04	21.92		50/0	23.00	22.10	22.04	21.94
64QAM	1/0	23.00	22.11	21.79	22.26	64QAM	1/0	23.00	21.66	22.37	22.10
	1/12	23.00	22.16	21.96	22.40		1/24	23.00	21.58	22.34	21.93
	1/24	23.00	22.05	21.86	22.30		1/49	23.00	21.70	22.28	21.98
	12/0	22.00	20.73	20.69	20.79		25/0	22.00	20.84	20.77	20.67
	12/6	22.00	20.78	20.82	20.93		25/12	22.00	20.95	20.78	20.68
	12/13	22.00	20.73	20.83	20.92		25/25	22.00	20.91	20.77	20.62
	25/0	22.00	20.70	20.87	20.70		50/0	22.00	20.89	20.75	20.68

LTE B38/BW=15M		Average Conducted Power(dBm)				LTE B38/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			37825/2577.5	38000/2595	38175/2612.5				37850/2580	38000/2595	38150/2610
QPSK	1/0	25.00	23.79	23.85	23.81	QPSK	1/0	25.00	23.92	23.89	23.85
	1/37	25.00	23.81	23.82	23.77		1/50	25.00	23.72	23.84	23.78
	1/74	25.00	23.63	23.77	23.74		1/99	25.00	23.65	23.73	23.67
	36/0	24.00	23.09	23.02	22.91		50/0	24.00	23.11	23.04	22.95
	36/19	24.00	23.05	22.97	22.86		50/25	24.00	23.06	23.00	22.91
	36/39	24.00	23.02	22.92	22.82		50/50	24.00	22.87	22.93	22.80
	75/0	24.00	23.03	22.99	22.87		100/0	24.00	23.07	22.97	22.89
16QAM	1/0	24.00	23.35	23.38	23.34	16QAM	1/0	24.00	23.42	23.17	23.50
	1/37	24.00	23.33	23.38	23.30		1/50	24.00	23.29	23.14	23.38
	1/74	24.00	23.10	23.38	23.27		1/99	24.00	23.17	23.07	23.34
	36/0	23.00	22.14	22.05	22.01		50/0	23.00	22.11	22.10	22.02
	36/19	23.00	22.12	22.05	21.97		50/25	23.00	22.09	22.07	21.99
	36/39	23.00	22.06	21.98	21.92		50/50	23.00	21.93	22.01	21.92
	75/0	23.00	22.10	22.04	21.95		100/0	23.00	22.07	22.04	21.94
64QAM	1/0	23.00	21.70	22.27	21.94	64QAM	1/0	23.00	22.41	21.94	22.26
	1/37	23.00	21.68	22.28	21.89		1/50	23.00	22.30	21.95	22.17
	1/74	23.00	21.56	22.24	21.85		1/99	23.00	22.23	21.87	22.16
	36/0	22.00	21.03	20.93	20.72		50/0	22.00	20.96	20.87	20.83
	36/19	22.00	21.01	20.92	20.71		50/25	22.00	20.93	20.86	20.80
	36/39	22.00	20.95	20.85	20.67		50/50	22.00	20.75	20.80	20.72
	75/0	22.00	20.93	20.82	20.75		100/0	22.00	20.91	20.83	20.81

2) Main antenna Receiver off

LTE B38/BW=5M		Average Conducted Power(dBm)				LTE B38/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			37775/2572.5	38000/2595	38225/2617.5				37800/2575	38000/2595	38200/2615
QPSK	1/0	23.00	22.46	22.46	22.48	QPSK	1/0	23.00	22.45	22.54	22.54
	1/12	23.00	22.52	22.55	22.56		1/24	23.00	22.41	22.50	22.46
	1/24	23.00	22.46	22.43	22.46		1/49	23.00	22.31	22.58	22.41
	12/0	23.00	22.50	22.48	22.50		25/0	23.00	22.49	22.50	22.61
	12/6	23.00	22.53	22.47	22.61		25/12	23.00	22.55	22.52	22.54
	12/13	23.00	22.49	22.49	22.60		25/25	23.00	22.50	22.46	22.49
	25/0	23.00	22.54	22.45	22.47		50/0	23.00	22.50	22.49	22.47
16QAM	1/0	23.00	22.52	22.45	22.41	16QAM	1/0	23.00	22.58	22.32	22.59
	1/12	23.00	22.58	22.53	22.50		1/24	23.00	22.54	22.33	22.53
	1/24	23.00	22.47	22.44	22.39		1/49	23.00	22.38	22.41	22.51
	12/0	22.00	21.44	21.42	21.31		25/0	22.00	21.43	21.38	21.37
	12/6	22.00	21.47	21.44	21.33		25/12	22.00	21.41	21.38	21.36
	12/13	22.00	21.45	21.40	21.33		25/25	22.00	21.40	21.33	21.34
	25/0	22.00	21.38	21.33	21.37		50/0	22.00	21.41	21.32	21.34
64QAM	1/0	22.00	21.62	21.36	21.87	64QAM	1/0	22.00	21.23	21.88	21.62
	1/12	22.00	21.68	21.46	21.93		1/24	22.00	21.16	21.83	21.61
	1/24	22.00	21.60	21.32	21.83		1/49	22.00	21.05	21.90	21.57
	12/0	21.00	20.31	20.29	20.43		25/0	21.00	20.44	20.33	20.28
	12/6	21.00	20.33	20.36	20.46		25/12	21.00	20.42	20.33	20.28
	12/13	21.00	20.32	20.32	20.45		25/25	21.00	20.45	20.31	20.27
	25/0	21.00	20.28	20.36	20.34		50/0	21.00	20.38	20.28	20.31

LTE B38/BW=15M		Average Conducted Power(dBm)				LTE B38/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			37825/2577.5	38000/2595	38175/2612.5				37850/2580	38000/2595	38150/2610
QPSK	1/0	23.00	22.40	22.51	22.53	QPSK	1/0	23.00	22.66	22.59	22.53
	1/37	23.00	22.24	22.38	22.38		1/50	23.00	22.38	22.37	22.36
	1/74	23.00	22.29	22.38	22.36		1/99	23.00	22.35	22.31	22.33
	36/0	23.00	22.46	22.39	22.42		50/0	23.00	22.47	22.46	22.38
	36/19	23.00	22.45	22.37	22.40		50/25	23.00	22.46	22.40	22.43
	36/39	23.00	22.38	22.33	22.35		50/50	23.00	22.38	22.37	22.38
	75/0	23.00	22.41	22.40	22.40		100/0	23.00	22.41	22.37	22.33
16QAM	1/0	23.00	22.62	22.47	22.57	16QAM	1/0	23.00	22.52	22.54	22.55
	1/37	23.00	22.44	22.41	22.38		1/50	23.00	22.48	22.36	22.42
	1/74	23.00	22.52	22.51	22.41		1/99	23.00	22.46	22.33	22.39
	36/0	22.00	21.43	21.38	21.45		50/0	22.00	21.42	21.39	21.35
	36/19	22.00	21.43	21.37	21.41		50/25	22.00	21.39	21.40	21.43
	36/39	22.00	21.38	21.36	21.38		50/50	22.00	21.31	21.33	21.36
	75/0	22.00	21.42	21.37	21.35		100/0	22.00	21.37	21.38	21.30
64QAM	1/0	22.00	21.26	21.91	21.27	64QAM	1/0	22.00	21.97	21.55	21.78
	1/37	22.00	21.10	21.86	21.16		1/50	22.00	21.89	21.42	21.75
	1/74	22.00	21.17	21.79	21.13		1/99	22.00	21.86	21.39	21.72
	36/0	21.00	20.53	20.46	20.49		50/0	21.00	20.48	20.42	20.36
	36/19	21.00	20.51	20.45	20.44		50/25	21.00	20.44	20.41	20.45
	36/39	21.00	20.47	20.38	20.44		50/50	21.00	20.39	20.35	20.37
	75/0	21.00	20.42	20.39	20.38		100/0	21.00	20.41	20.41	20.36

3) Second antenna Receiver on

LTE B38/BW=5M		Average Conducted Power(dBm)				LTE B38/BW=10M		Average Conducted Power(dBm)			
Modula -tion	RB Size/ Offset	Max. Tune-up	Channel/Frequency(MHz)			Modula -tion	RB Size/ Offset	Max. Tune-up	Channel/Frequency(MHz)		
			37775/ 2572.5	38000/ 2595	38225/ 2617.5				37800/ 2575	38000/ 2595	38200/ 2615
QPSK	1/0	17.50	17.15	17.00	17.04	QPSK	1/0	17.50	17.09	17.07	17.12
	1/12	17.50	17.19	17.05	17.04		1/24	17.50	17.05	17.00	17.02
	1/24	17.50	17.08	16.99	16.97		1/49	17.50	16.89	17.08	16.98
	12/0	17.50	17.19	17.03	17.05		25/0	17.50	17.12	17.04	17.11
	12/6	17.50	17.18	17.02	17.07		25/12	17.50	17.12	17.07	17.11
	12/13	17.50	17.17	17.00	17.05		25/25	17.50	17.09	17.02	17.04
	25/0	17.50	17.14	16.99	17.03		50/0	17.50	17.14	17.04	17.06
16QAM	1/0	17.50	17.14	17.06	17.10	16QAM	1/0	17.50	17.10	17.15	17.16
	1/12	17.50	17.16	17.08	17.18		1/24	17.50	17.09	17.09	17.13
	1/24	17.50	17.06	17.01	17.10		1/49	17.50	17.01	17.15	17.07
	12/0	17.50	17.09	17.13	17.15		25/0	17.50	16.97	16.82	16.95
	12/6	17.50	17.13	17.10	17.16		25/12	17.50	16.96	16.83	16.92
	12/13	17.50	17.11	17.09	17.14		25/25	17.50	16.89	16.78	16.89
	25/0	17.50	17.03	17.13	17.15		50/0	17.50	16.94	16.84	16.92
64QAM	1/0	17.50	17.09	16.92	17.04	64QAM	1/0	17.50	17.05	17.07	17.07
	1/12	17.50	17.10	16.93	17.14		1/24	17.50	16.93	17.04	17.01
	1/24	17.50	17.00	16.87	16.98		1/49	17.50	16.84	16.94	16.89
	12/0	17.50	17.00	17.05	17.19		25/0	17.50	17.12	17.01	17.00
	12/6	17.50	17.04	17.06	17.20		25/12	17.50	17.07	17.00	17.03
	12/13	17.50	16.99	17.06	17.20		25/25	17.50	17.03	16.96	17.01
	25/0	17.50	16.98	17.05	17.04		50/0	17.50	17.03	17.00	17.09

LTE B38/BW=15M		Average Conducted Power(dBm)				LTE B38/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			37825/2577.5	38000/2595	38175/2612.5				37850/2580	38000/2595	38150/2610
QPSK	1/0	17.50	17.16	17.17	17.18	QPSK	1/0	17.50	17.22	17.20	17.19
	1/37	17.50	16.92	17.03	17.04		1/50	17.50	17.06	17.03	17.02
	1/74	17.50	16.93	16.93	16.99		1/99	17.50	17.00	16.94	16.96
	36/0	17.50	17.11	17.03	17.12		50/0	17.50	17.12	17.10	17.09
	36/19	17.50	17.10	17.02	17.04		50/25	17.50	17.07	17.03	17.06
	36/39	17.50	17.02	16.95	17.00		50/50	17.50	17.06	16.98	17.03
	75/0	17.50	17.07	17.03	17.06		100/0	17.50	17.16	17.05	16.96
16QAM	1/0	17.50	17.07	16.89	16.86	16QAM	1/0	17.50	17.03	17.09	16.96
	1/37	17.50	16.87	17.06	17.02		1/50	17.50	17.07	16.88	16.81
	1/74	17.50	16.88	17.00	16.98		1/99	17.50	16.99	16.87	16.75
	36/0	17.50	17.11	17.01	17.05		50/0	17.50	16.92	16.92	16.87
	36/19	17.50	17.09	17.00	17.01		50/25	17.50	16.88	16.87	16.93
	36/39	17.50	17.02	16.92	17.04		50/50	17.50	16.83	16.77	16.86
	75/0	17.50	17.02	16.99	17.09		100/0	17.50	16.91	16.86	16.78
64QAM	1/0	17.50	17.00	17.02	17.09	64QAM	1/0	17.50	17.04	17.01	17.05
	1/37	17.50	16.85	17.00	17.00		1/50	17.50	17.06	16.95	16.96
	1/74	17.50	16.91	16.96	16.98		1/99	17.50	17.01	16.87	17.10
	36/0	17.50	17.02	16.91	17.00		50/0	17.50	17.01	17.18	17.06
	36/19	17.50	17.10	17.01	17.03		50/25	17.50	17.00	17.11	17.05
	36/39	17.50	17.02	16.91	17.01		50/50	17.50	17.08	16.97	17.07
	75/0	17.50	17.00	16.94	17.04		100/0	17.50	17.02	17.02	16.92

4) Second antenna Receiver off

LTE B38/BW=5M		Average Conducted Power(dBm)				LTE B38/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			37775/2572.5	38000/2595	38225/2617.5				37800/2575	38000/2595	38200/2615
QPSK	1/0	19.50	18.87	18.74	18.73	QPSK	1/0	19.50	18.87	18.83	18.90
	1/12	19.50	18.90	18.78	18.82		1/24	19.50	18.80	18.78	18.77
	1/24	19.50	18.83	18.74	18.69		1/49	19.50	18.72	18.85	18.78
	12/0	19.50	18.90	18.80	18.82		25/0	19.50	18.88	18.84	18.87
	12/6	19.50	18.90	18.79	18.82		25/12	19.50	18.87	18.84	18.87
	12/13	19.50	18.85	18.79	18.82		25/25	19.50	18.85	18.79	18.83
	25/0	19.50	18.90	18.75	18.84		50/0	19.50	18.88	18.83	18.84
16QAM	1/0	19.50	19.02	18.71	18.88	16QAM	1/0	19.50	18.91	18.87	19.08
	1/12	19.50	19.03	18.78	18.93		1/24	19.50	18.84	18.76	18.97
	1/24	19.50	18.96	18.69	18.82		1/49	19.50	18.74	18.91	18.99
	12/0	19.50	19.01	18.88	18.89		25/0	19.50	18.94	18.87	19.00
	12/6	19.50	19.01	18.87	18.93		25/12	19.50	18.98	18.85	18.99
	12/13	19.50	18.97	18.83	18.88		25/25	19.50	18.93	18.83	18.92
	25/0	19.50	18.95	18.84	18.97		50/0	19.50	18.95	18.88	18.98
64QAM	1/0	19.50	19.09	19.15	19.01	64QAM	1/0	19.50	18.58	19.17	18.97
	1/12	19.50	19.12	19.19	19.02		1/24	19.50	18.52	19.13	18.91
	1/24	19.50	19.04	19.12	18.93		1/49	19.50	18.38	19.17	18.87
	12/0	19.50	18.90	18.99	18.82		25/0	19.50	18.98	18.90	18.89
	12/6	19.50	18.90	19.00	18.82		25/12	19.50	18.99	18.88	18.88
	12/13	19.50	18.87	18.96	18.82		25/25	19.50	18.96	18.84	18.82
	25/0	19.50	18.89	18.87	18.82		50/0	19.50	18.94	18.86	18.91

LTE B38/BW=15M		Average Conducted Power(dBm)				LTE B38/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			37825/2577.5	38000/2595	38175/2612.5				37850/2580	38000/2595	38150/2610
QPSK	1/0	19.50	18.91	18.88	18.92	QPSK	1/0	19.50	19.16	19.17	19.21
	1/37	19.50	18.70	18.74	18.80		1/50	19.50	18.89	18.86	18.95
	1/74	19.50	18.75	18.70	18.74		1/99	19.50	18.84	18.84	18.87
	36/0	19.50	18.91	18.80	18.85		50/0	19.50	18.93	18.82	18.83
	36/19	19.50	18.86	18.80	18.83		50/25	19.50	18.90	18.85	18.90
	36/39	19.50	18.85	18.77	18.75		50/50	19.50	18.79	18.76	18.83
	75/0	19.50	18.88	18.78	18.84		100/0	19.50	18.88	18.83	18.78
16QAM	1/0	19.50	18.99	18.89	19.04	16QAM	1/0	19.50	18.98	19.10	18.86
	1/37	19.50	18.73	18.78	18.91		1/50	19.50	18.82	18.93	18.82
	1/74	19.50	18.76	18.70	18.82		1/99	19.50	18.74	18.85	18.77
	36/0	19.50	18.95	18.90	19.03		50/0	19.50	18.97	18.98	18.86
	36/19	19.50	18.95	18.85	18.96		50/25	19.50	18.93	18.93	18.97
	36/39	19.50	18.88	18.83	18.94		50/50	19.50	18.87	18.91	18.89
	75/0	19.50	18.94	18.85	18.93		100/0	19.50	18.93	18.87	18.84
64QAM	1/0	19.50	18.64	19.11	18.85	64QAM	1/0	19.50	19.10	19.19	18.87
	1/37	19.50	18.37	19.07	18.69		1/50	19.50	18.92	19.11	18.75
	1/74	19.50	18.41	19.01	18.64		1/99	19.50	18.89	19.04	18.70
	36/0	19.50	19.06	19.01	18.92		50/0	19.50	19.07	19.00	18.93
	36/19	19.50	19.07	18.97	18.90		50/25	19.50	19.03	18.96	18.98
	36/39	19.50	19.03	18.90	18.83		50/50	19.50	18.96	18.91	18.91
	75/0	19.50	18.98	18.90	18.95		100/0	19.50	19.02	18.92	18.86

Note: The tested channels are marks in bold.

7. Conducted power measurement results of LTE B41

1) Main antenna_Receiver on

LTE B41/ BW=5M		Average Conducted Power(dBm)						LTE B41/ BW=10M		Average Conducted Power(dBm)					
Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)					Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)				
			39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5				39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685
QPSK	1/0	25.00	23.96	23.70	23.81	23.67	23.77	QPSK	1/0	25.00	23.89	23.74	23.92	23.58	23.88
	1/12	25.00	23.96	23.68	23.83	23.64	23.82		1/24	25.00	23.84	23.72	23.88	23.54	23.78
	1/24	25.00	23.91	23.72	23.75	23.60	23.74		1/49	25.00	23.74	23.67	23.81	23.50	23.74
	12/0	24.00	23.14	22.93	22.97	22.81	23.06		25/0	24.00	23.13	22.96	23.03	22.84	23.10
	12/6	24.00	23.18	22.94	23.05	22.84	23.07		25/12	24.00	23.14	22.96	23.04	22.81	23.05
	12/13	24.00	23.12	22.88	22.99	22.79	23.03		25/25	24.00	23.08	22.88	22.98	22.77	23.04
	25/0	24.00	23.12	22.91	22.99	22.79	23.04		50/0	24.00	23.12	22.94	22.99	22.80	23.06
16QAM	1/0	24.00	23.44	22.87	23.30	23.13	23.37	16QAM	1/0	24.00	23.42	23.22	23.50	23.13	23.42
	1/12	24.00	23.44	22.85	23.35	23.08	23.44		1/24	24.00	23.39	23.11	23.43	23.04	23.33
	1/24	24.00	23.35	22.86	23.24	23.06	23.35		1/49	24.00	23.32	23.03	23.38	23.03	23.36
	12/0	23.00	22.24	21.96	22.07	22.88	22.19		25/0	23.00	22.19	22.06	22.07	22.88	22.13
	12/6	23.00	22.26	21.97	22.09	22.87	22.19		25/12	23.00	22.17	22.04	22.05	22.86	22.16
	12/13	23.00	22.20	22.95	22.03	22.88	22.18		25/25	23.00	22.13	22.00	22.02	22.83	22.11
	25/0	23.00	22.15	21.98	22.07	22.94	22.10		50/0	23.00	22.17	22.01	22.06	21.86	22.13
64QAM	1/0	23.00	22.47	22.19	22.14	22.09	21.79	64QAM	1/0	23.00	21.77	22.27	22.38	21.77	22.05
	1/12	23.00	22.53	22.07	22.18	22.05	21.89		1/24	23.00	21.74	22.14	22.35	21.68	21.94
	1/24	23.00	22.44	22.10	22.11	22.03	21.77		1/49	23.00	21.65	22.13	22.30	21.65	21.94
	12/0	22.00	21.04	21.23	20.80	20.88	20.82		25/0	22.00	20.99	21.02	20.77	20.90	20.76
	12/6	22.00	21.09	21.03	20.82	20.91	20.77		25/12	22.00	20.97	20.99	20.80	20.87	20.74
	12/13	22.00	21.03	20.97	20.79	20.86	20.79		25/25	22.00	20.93	20.95	20.78	20.83	20.72
	25/0	22.00	20.91	20.90	20.71	20.89	20.79		50/0	22.00	20.91	21.00	20.82	20.84	20.80

LTE B41/ BW=15M		Average Conducted Power(dBm)						LTE B41/ BW=20M		Average Conducted Power(dBm)					
Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)					Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)				
			39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680
QPSK	1/0	25.00	23.94	23.80	23.98	23.80	23.93	QPSK	1/0	25.00	24.05	23.91	24.00	23.90	23.95
	1/37	25.00	23.85	23.65	23.81	23.65	23.81		1/50	25.00	23.76	23.73	23.84	23.73	23.78
	1/74	25.00	23.73	23.61	23.78	23.59	23.77		1/99	25.00	23.68	23.70	23.77	23.67	23.73
	36/0	24.00	23.12	22.93	22.99	22.84	23.09		50/0	24.00	23.14	23.08	23.08	22.95	23.12
	36/19	24.00	23.11	22.88	22.99	22.80	23.08		50/25	24.00	23.10	23.03	22.99	22.93	23.09
	36/39	24.00	23.07	22.87	22.92	22.76	23.00		50/50	24.00	22.96	22.91	22.91	22.89	23.03
	75/0	24.00	23.11	22.88	22.96	22.82	23.07		100/0	24.00	23.11	23.02	22.99	22.95	23.06
16QAM	1/0	24.00	23.51	23.40	23.52	23.19	23.49	16QAM	1/0	24.00	23.56	23.35	23.34	23.39	23.55
	1/37	24.00	23.41	23.24	23.42	23.05	23.33		1/50	24.00	23.34	23.19	23.16	23.23	23.35
	1/74	24.00	23.30	23.18	23.41	23.00	23.32		1/99	24.00	23.27	23.13	23.13	23.17	23.42
	36/0	23.00	22.23	22.04	22.07	21.96	22.21		50/0	23.00	22.18	22.09	22.12	22.09	22.21
	36/19	23.00	22.20	22.04	22.04	21.94	22.17		50/25	23.00	22.19	22.07	22.06	22.04	22.15
	36/39	23.00	22.18	21.96	22.00	21.88	22.14		50/50	23.00	22.01	21.98	22.01	21.95	22.08
	75/0	23.00	22.23	22.00	22.04	21.87	22.14		100/0	23.00	22.15	22.08	22.05	22.04	22.11
64QAM	1/0	23.00	21.83	21.70	22.42	22.11	21.95	64QAM	1/0	23.00	22.54	22.25	22.05	22.26	22.42
	1/37	23.00	21.74	22.33	22.31	22.03	21.83		1/50	23.00	22.34	22.09	21.95	22.02	22.27
	1/74	23.00	21.64	22.29	22.27	21.88	21.76		1/99	23.00	22.33	21.99	21.88	22.08	22.22
	36/0	22.00	21.07	21.11	20.94	20.95	20.85		50/0	22.00	20.98	21.18	20.89	21.10	20.94
	36/19	22.00	21.06	21.07	20.92	20.90	20.81		50/25	22.00	21.00	21.13	20.88	21.04	20.88
	36/39	22.00	20.99	20.96	20.86	20.83	20.77		50/50	22.00	20.82	21.04	20.81	20.96	20.79
	75/0	22.00	20.92	21.52	20.82	20.90	20.84		100/0	22.00	20.92	21.08	20.87	21.03	20.83

2) Main antenna Receiver off

LTE B41/ BW=5M		Average Conducted Power(dBm)						LTE B41/ BW=10M		Average Conducted Power(dBm)					
Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)					Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)				
			39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5				39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685
QPSK	1/0	23.00	22.50	22.25	22.55	22.23	22.42	QPSK	1/0	23.00	22.42	22.30	22.53	22.29	22.48
	1/12	23.00	22.55	22.20	22.64	22.19	22.46		1/24	23.00	22.35	22.25	22.55	22.23	22.36
	1/24	23.00	22.43	22.19	22.52	22.17	22.37		1/49	23.00	22.35	22.20	22.50	22.18	22.27
	12/0	23.00	22.52	22.31	22.59	22.22	22.47		25/0	23.00	22.43	22.29	22.48	22.25	22.38
	12/6	23.00	22.55	22.33	22.59	22.20	22.42		25/12	23.00	22.45	22.27	22.47	22.23	22.37
	12/13	23.00	22.53	22.26	22.60	22.18	22.44		25/25	23.00	22.43	22.26	22.49	22.19	22.32
	25/0	23.00	22.55	22.25	22.58	22.16	22.43		50/0	23.00	22.43	22.25	22.45	22.22	22.38
16QAM	1/0	23.00	22.61	22.49	22.47	22.49	22.42	16QAM	1/0	23.00	22.37	22.48	22.59	22.66	22.59
	1/12	23.00	22.69	22.52	22.56	22.46	22.45		1/24	23.00	22.37	22.52	22.56	22.62	22.42
	1/24	23.00	22.61	22.42	22.48	22.40	22.38		1/49	23.00	22.40	22.43	22.60	22.60	22.45
	12/0	22.00	21.45	21.40	21.45	21.23	21.29		25/0	22.00	21.37	21.40	21.43	21.34	21.32
	12/6	22.00	21.51	21.45	21.48	21.26	21.29		25/12	22.00	21.37	21.41	21.42	21.32	21.35
	12/13	22.00	21.47	21.38	21.44	21.25	21.24		25/25	22.00	21.37	21.32	21.42	21.27	21.31
	25/0	22.00	21.38	21.34	21.38	21.22	21.27		50/0	22.00	21.36	21.35	21.38	21.25	21.33
64QAM	1/0	22.00	21.86	21.54	21.62	21.63	21.29	64QAM	1/0	22.00	21.16	21.57	21.88	21.73	21.61
	1/12	22.00	21.93	21.57	21.69	21.55	21.35		1/24	22.00	21.09	21.51	21.88	21.67	21.48
	1/24	22.00	21.81	21.46	21.59	21.54	21.24		1/49	22.00	21.15	21.46	21.81	21.62	21.41
	12/0	21.00	20.43	20.31	20.33	20.28	20.23		25/0	21.00	20.36	20.36	20.30	20.28	20.25
	12/6	21.00	20.51	20.37	20.32	20.32	20.23		25/12	21.00	20.38	20.33	20.33	20.26	20.22
	12/13	21.00	20.45	20.35	20.32	20.25	20.22		25/25	21.00	20.35	20.23	20.28	20.25	20.19
	25/0	21.00	20.30	20.37	20.25	20.18	20.28		50/0	21.00	20.35	20.29	20.35	20.26	20.29

LTE B41/ BW=15M		Average Conducted Power(dBm)						LTE B41/ BW=20M		Average Conducted Power(dBm)					
Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)					Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)				
			39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680
QPSK	1/0	23.00	22.34	22.38	22.50	22.31	22.46	QPSK	1/0	23.00	22.59	22.41	22.69	22.36	22.66
	1/37	23.00	22.24	22.27	22.38	22.34	22.25		1/50	23.00	22.44	22.23	22.59	22.20	22.51
	1/74	23.00	22.26	22.23	22.37	22.12	22.18		1/99	23.00	22.40	22.18	22.55	22.15	22.35
	36/0	23.00	22.33	22.26	22.38	22.23	22.27		50/0	23.00	22.35	22.36	22.46	22.28	22.42
	36/19	23.00	22.32	22.26	22.33	22.22	22.25		50/25	23.00	22.31	22.30	22.36	22.24	22.26
	36/39	23.00	22.29	22.21	22.32	22.15	22.22		50/50	23.00	22.24	22.22	22.34	22.17	22.24
	75/0	23.00	22.30	22.24	22.35	22.19	22.24		100/0	23.00	22.31	22.27	22.33	22.23	22.27
16QAM	1/0	23.00	22.44	22.57	22.66	22.57	22.57	16QAM	1/0	23.00	22.49	22.68	22.51	22.61	22.38
	1/37	23.00	22.35	22.44	22.57	22.65	22.36		1/50	23.00	22.42	22.56	22.40	22.54	22.27
	1/74	23.00	22.34	22.36	22.56	22.58	22.28		1/99	23.00	22.36	22.50	22.40	22.47	22.15
	36/0	22.00	21.38	21.42	21.41	21.53	21.40		50/0	22.00	21.38	21.40	21.39	21.34	21.45
	36/19	22.00	21.35	21.39	21.39	21.30	21.40		50/25	22.00	21.36	21.35	21.37	21.28	21.32
	36/39	22.00	21.32	21.29	21.35	21.22	21.29		50/50	22.00	21.30	21.29	21.33	21.22	21.27
	75/0	22.00	21.34	21.32	21.39	21.27	21.32		100/0	22.00	21.36	21.34	21.38	21.29	21.32
64QAM	1/0	22.00	21.19	21.52	21.93	21.78	21.56	64QAM	1/0	22.00	21.89	21.82	21.55	21.54	21.83
	1/37	22.00	21.09	21.38	21.78	21.58	21.35		1/50	22.00	21.82	21.66	21.41	21.34	21.67
	1/74	22.00	21.09	21.40	21.81	21.51	21.24		1/99	22.00	21.75	21.60	21.37	21.32	21.56
	36/0	21.00	20.40	20.38	20.47	20.35	20.28		50/0	21.00	20.38	20.37	20.43	20.39	20.50
	36/19	21.00	20.42	20.36	20.41	20.33	20.29		50/25	21.00	20.34	20.30	20.39	20.31	20.32
	36/39	21.00	20.38	20.30	20.39	20.24	20.20		50/50	21.00	20.32	20.26	20.35	20.26	20.29
	75/0	21.00	20.31	20.37	20.35	20.28	20.32		100/0	21.00	20.30	20.37	20.34	20.34	20.33

3) Second antenna Receiver on

LTE B41/ BW=5M		Average Conducted Power(dBm)						LTE B41/ BW=10M		Average Conducted Power(dBm)					
Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)					Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)				
			39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5				39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685
QPSK	1/0	17.00	16.72	16.49	16.57	16.48	16.63	QPSK	1/0	17.00	16.68	16.66	16.67	16.56	16.79
	1/12	17.00	16.78	16.44	16.58	16.40	16.66		1/24	17.00	16.62	16.55	16.61	16.45	16.58
	1/24	17.00	16.70	16.46	16.48	16.42	16.56		1/49	17.00	16.61	16.52	16.57	16.42	16.57
	12/0	17.00	16.72	16.58	16.58	16.50	16.66		25/0	17.00	16.75	16.64	16.62	16.52	16.68
	12/6	17.00	16.78	16.61	16.61	16.47	16.65		25/12	17.00	16.76	16.58	16.66	16.51	16.68
	12/13	17.00	16.73	16.60	16.56	16.46	16.60		25/25	17.00	16.66	16.56	16.61	16.50	16.59
	25/0	17.00	16.73	16.57	16.63	16.48	16.60		50/0	17.00	16.71	16.60	16.61	16.47	16.64
16QAM	1/0	17.00	16.72	16.77	16.63	16.55	16.66	16QAM	1/0	17.00	16.57	16.69	16.65	16.35	16.78
	1/12	17.00	16.80	16.54	16.64	16.51	16.70		1/24	17.00	16.49	16.55	16.59	16.31	16.58
	1/24	17.00	16.70	16.71	16.56	16.49	16.59		1/49	17.00	16.49	16.32	16.59	16.24	16.56
	12/0	17.00	16.68	16.64	16.64	16.56	16.64		25/0	17.00	16.57	16.42	16.46	16.37	16.46
	12/6	17.00	16.68	16.63	16.66	16.54	16.64		25/12	17.00	16.56	16.38	16.44	16.39	16.45
	12/13	17.00	16.62	16.61	16.68	16.51	16.58		25/25	17.00	16.52	16.35	16.40	16.36	16.46
	25/0	17.00	16.55	16.55	16.60	16.46	16.63		50/0	17.00	16.53	16.39	16.43	16.31	16.49
64QAM	1/0	17.00	16.63	16.61	16.54	16.71	16.68	64QAM	1/0	17.00	16.61	16.67	16.58	16.72	16.79
	1/12	17.00	16.68	16.60	16.55	16.66	16.74		1/24	17.00	16.50	16.58	16.51	16.66	16.61
	1/24	17.00	16.58	16.58	16.48	16.61	16.82		1/49	17.00	16.51	16.78	16.61	16.69	16.59
	12/0	17.00	16.59	16.39	16.52	16.50	16.57		25/0	17.00	16.83	16.63	16.60	16.59	16.63
	12/6	17.00	16.58	16.37	16.52	16.48	16.56		25/12	17.00	16.80	16.60	16.65	16.56	16.56
	12/13	17.00	16.53	16.42	16.56	16.48	16.57		25/25	17.00	16.77	16.54	16.60	16.47	16.55
	25/0	17.00	16.56	16.34	16.42	16.53	16.54		50/0	17.00	16.77	16.56	16.58	16.50	16.64

LTE B41/ BW=15M		Average Conducted Power(dBm)						LTE B41/ BW=20M		Average Conducted Power(dBm)					
Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)					Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)				
			39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680
QPSK	1/0	17.00	16.76	16.66	16.77	16.68	16.81	QPSK	1/0	17.00	16.84	16.66	16.75	16.63	16.85
	1/37	17.00	16.59	16.55	16.61	16.51	16.61		1/50	17.00	16.67	16.49	16.52	16.48	16.66
	1/74	17.00	16.55	16.48	16.54	16.46	16.52		1/99	17.00	16.61	16.44	16.50	16.43	16.53
	36/0	17.00	16.74	16.55	16.59	16.50	16.61		50/0	17.00	16.73	16.62	16.56	16.57	16.76
	36/19	17.00	16.72	16.54	16.58	16.45	16.63		50/25	17.00	16.68	16.59	16.54	16.58	16.59
	36/39	17.00	16.67	16.50	16.53	16.42	16.53		50/50	17.00	16.57	16.54	16.45	16.47	16.48
	75/0	17.00	16.66	16.49	16.55	16.44	16.60		100/0	17.00	16.66	16.58	16.51	16.54	16.58
16QAM	1/0	17.00	16.64	16.71	16.72	16.78	16.73	16QAM	1/0	17.00	16.80	16.62	16.60	16.64	16.73
	1/37	17.00	16.53	16.55	16.55	16.72	16.52		1/50	17.00	16.83	16.63	16.65	16.72	16.82
	1/74	17.00	16.50	16.51	16.54	16.59	16.63		1/99	17.00	16.76	16.57	16.60	16.66	16.81
	36/0	17.00	16.73	16.56	16.62	16.58	16.69		50/0	17.00	16.70	16.52	16.61	16.54	16.74
	36/19	17.00	16.71	16.57	16.63	16.54	16.65		50/25	17.00	16.65	16.48	16.56	16.48	16.57
	36/39	17.00	16.65	16.50	16.55	16.46	16.58		50/50	17.00	16.58	16.47	16.53	16.39	16.55
	75/0	17.00	16.70	16.53	16.61	16.55	16.65		100/0	17.00	16.62	16.42	16.56	16.44	16.53
64QAM	1/0	17.00	16.64	16.68	16.75	16.67	16.65	64QAM	1/0	17.00	16.77	16.71	16.78	16.73	16.75
	1/37	17.00	16.50	16.50	16.64	16.56	16.69		1/50	17.00	16.68	16.51	16.57	16.54	16.67
	1/74	17.00	16.48	16.84	16.57	16.50	16.62		1/99	17.00	16.66	16.44	16.53	16.47	16.76
	36/0	17.00	16.75	16.66	16.71	16.54	16.66		50/0	17.00	16.74	16.55	16.64	16.51	16.78
	36/19	17.00	16.80	16.59	16.70	16.50	16.61		50/25	17.00	16.75	16.58	16.54	16.44	16.61
	36/39	17.00	16.78	16.54	16.62	16.46	16.56		50/50	17.00	16.63	16.47	16.52	16.42	16.56
	75/0	17.00	16.73	16.61	16.60	16.53	16.68		100/0	17.00	16.70	16.51	16.58	16.42	16.62

4) Second antenna Receiver off

LTE B41/ BW=5M		Average Conducted Power(dBm)						LTE B41/ BW=10M		Average Conducted Power(dBm)					
Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)					Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)				
			39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5				39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685
QPSK	1/0	21.00	20.26	20.07	20.33	20.01	20.24	QPSK	1/0	21.00	20.23	20.21	20.40	20.07	20.44
	1/12	21.00	20.30	20.05	20.38	19.99	20.29		1/24	21.00	20.20	20.09	20.37	20.00	20.26
	1/24	21.00	20.27	20.01	20.31	19.94	20.19		1/49	21.00	20.22	20.07	20.37	19.90	20.24
	12/0	21.00	20.28	20.13	20.36	20.04	20.29		25/0	21.00	20.27	20.15	20.40	20.02	20.35
	12/6	21.00	20.36	20.14	20.40	20.02	20.28		25/12	21.00	20.32	20.16	20.42	20.00	20.29
	12/13	21.00	20.28	20.12	20.39	19.99	20.24		25/25	21.00	20.30	20.01	20.40	19.98	20.28
	25/0	21.00	20.29	20.11	20.43	20.02	20.24		50/0	21.00	20.32	20.12	20.38	20.01	20.27
16QAM	1/0	21.00	20.18	20.16	20.25	20.13	20.28	16QAM	1/0	21.00	20.39	20.41	20.35	20.13	20.36
	1/12	21.00	20.27	20.15	20.34	20.06	20.33		1/24	21.00	20.38	20.36	20.31	20.04	20.26
	1/24	21.00	20.20	20.11	20.26	20.04	20.26		1/49	21.00	20.36	20.34	20.33	20.00	20.27
	12/0	21.00	20.13	20.10	20.17	19.99	20.15		25/0	21.00	20.23	20.03	20.31	19.94	20.25
	12/6	21.00	20.18	20.12	20.23	19.96	20.16		25/12	21.00	20.23	20.03	20.30	19.93	20.24
	12/13	21.00	20.15	20.11	20.20	19.96	20.16		25/25	21.00	20.18	19.94	20.29	19.91	20.19
	25/0	21.00	20.12	20.09	20.26	19.98	20.10		50/0	21.00	20.18	19.98	20.29	19.89	20.24
64QAM	1/0	21.00	20.30	20.27	20.26	20.32	20.29	64QAM	1/0	21.00	20.07	20.44	20.27	20.10	20.21
	1/12	21.00	20.36	20.26	20.33	20.30	20.36		1/24	21.00	19.97	20.39	20.26	20.07	20.43
	1/24	21.00	20.28	20.20	20.25	20.22	20.27		1/49	21.00	19.99	20.33	20.19	20.04	20.36
	12/0	21.00	20.08	20.07	20.22	19.96	20.20		25/0	21.00	20.25	20.04	20.29	19.87	20.18
	12/6	21.00	20.13	20.10	20.24	20.02	20.23		25/12	21.00	20.29	20.00	20.30	19.88	20.16
	12/13	21.00	20.10	20.08	20.20	19.99	20.20		25/25	21.00	20.24	19.99	20.28	19.85	20.16
	25/0	21.00	20.04	20.12	20.28	19.88	20.07		50/0	21.00	20.19	19.99	20.29	19.85	20.22

LTE B41/ BW=15M		Average Conducted Power(dBm)						LTE B41/ BW=20M		Average Conducted Power(dBm)					
Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)					Modulation	RB Size/ Offset	Max. Tune up	Channel/Frequency(MHz)				
			39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680
QPSK	1/0	21.00	20.27	20.31	20.46	20.12	20.49	QPSK	1/0	21.00	20.46	20.22	20.55	20.13	20.63
	1/37	21.00	20.13	20.11	20.36	19.95	20.27		1/50	21.00	20.26	20.11	20.32	20.02	20.45
	1/74	21.00	20.16	20.06	20.38	19.90	20.19		1/99	21.00	20.24	20.04	20.31	19.93	20.26
	36/0	21.00	20.28	20.15	20.43	20.04	20.30		50/0	21.00	20.32	20.18	20.45	20.11	20.49
	36/19	21.00	20.26	20.10	20.38	19.99	20.30		50/25	21.00	20.31	20.13	20.45	20.08	20.34
	36/39	21.00	20.27	20.06	20.37	19.96	20.26		50/50	21.00	20.28	20.08	20.36	19.99	20.25
	75/0	21.00	20.27	20.12	20.38	20.00	20.32		100/0	21.00	20.32	20.18	20.40	20.07	20.35
16QAM	1/0	21.00	20.43	20.24	20.32	20.36	20.26	16QAM	1/0	21.00	20.38	20.35	20.28	20.25	20.39
	1/37	21.00	20.34	20.15	20.20	20.21	20.04		1/50	21.00	20.26	20.19	20.14	20.15	20.22
	1/74	21.00	20.34	20.04	20.21	20.25	19.95		1/99	21.00	20.25	20.14	20.14	20.09	20.15
	36/0	21.00	20.22	20.02	20.33	19.94	20.29		50/0	21.00	20.04	19.89	20.13	19.84	20.00
	36/19	21.00	20.23	20.00	20.29	19.91	20.27		50/25	21.00	20.02	19.82	20.15	19.74	20.05
	36/39	21.00	20.19	19.94	20.28	19.88	20.24		50/50	21.00	19.98	19.78	20.11	19.71	20.01
	75/0	21.00	20.21	19.95	20.29	19.95	20.21		100/0	21.00	20.05	19.80	20.13	19.79	20.04
64QAM	1/0	21.00	20.09	20.18	20.29	20.34	20.28	64QAM	1/0	21.00	20.41	20.28	20.38	20.18	20.33
	1/37	21.00	19.93	20.02	20.36	20.25	20.08		1/50	21.00	20.29	20.09	20.25	20.05	20.45
	1/74	21.00	19.99	19.98	20.38	20.17	20.19		1/99	21.00	20.29	20.08	20.28	19.97	20.29
	36/0	21.00	20.32	20.01	20.43	19.98	20.23		50/0	21.00	20.10	19.88	20.22	19.81	20.24
	36/19	21.00	20.32	20.03	20.42	19.95	20.28		50/25	21.00	20.08	19.74	20.20	19.77	20.07
	36/39	21.00	20.32	19.95	20.38	19.85	20.16		50/50	21.00	20.05	19.71	20.15	19.69	20.01
	75/0	21.00	20.25	20.00	20.34	19.93	20.28		100/0	21.00	20.07	19.80	20.22	19.79	20.05

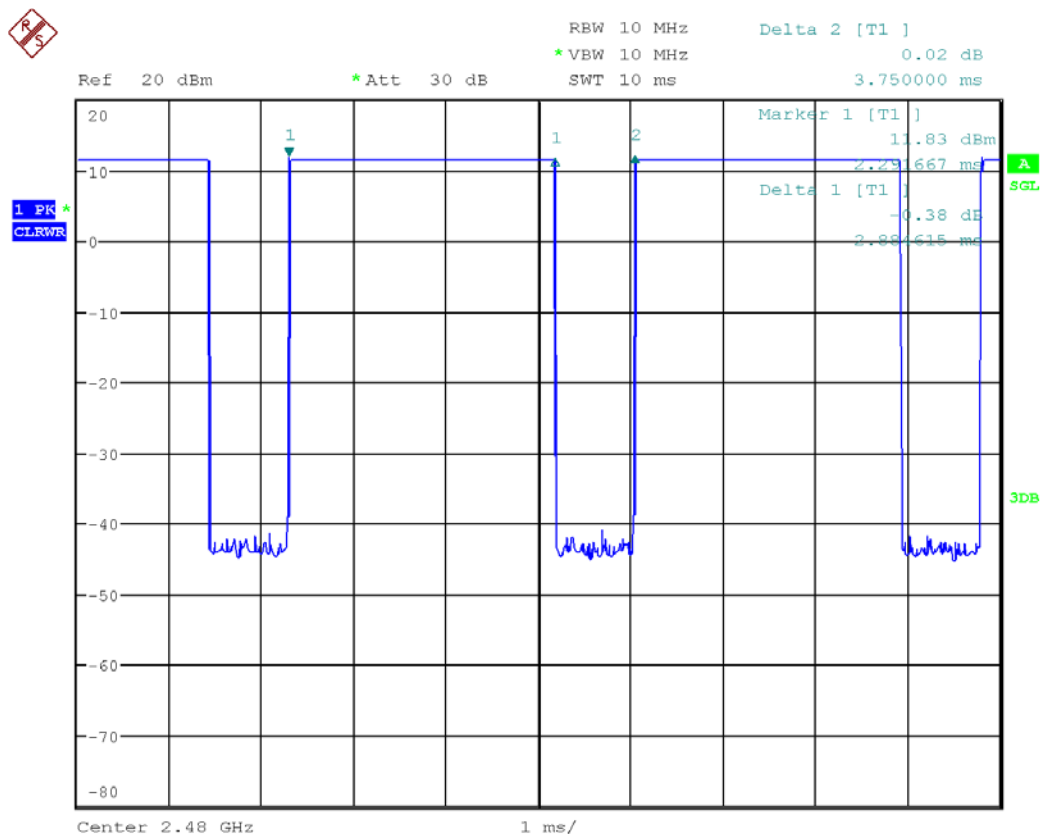
Note: The tested channels are marks in bold.

7.1.4 CONDUCTED POWER MEASUREMENTS OF BT

For BT SAR testing, BT engineering testing software installed on the EUT can provide continuous transmitting RF signal with maximum output power, and the CBT control the EUT operating with hopping off and data rate set for 2DH5. The SAR measurement takes full account of the BT duty cycle and is reflected in the report, and the duty factor of the device is as follow:

BT	Average Conducted Power(dBm)			
	Max. Tune up	CH0	CH39	CH78
		2402MHz	2441MHz	2480MHz
DH5	12.00	11.02	11.17	11.22
2DH5	12.00	8.43	8.33	8.90
3DH5	12.00	8.41	8.34	8.88

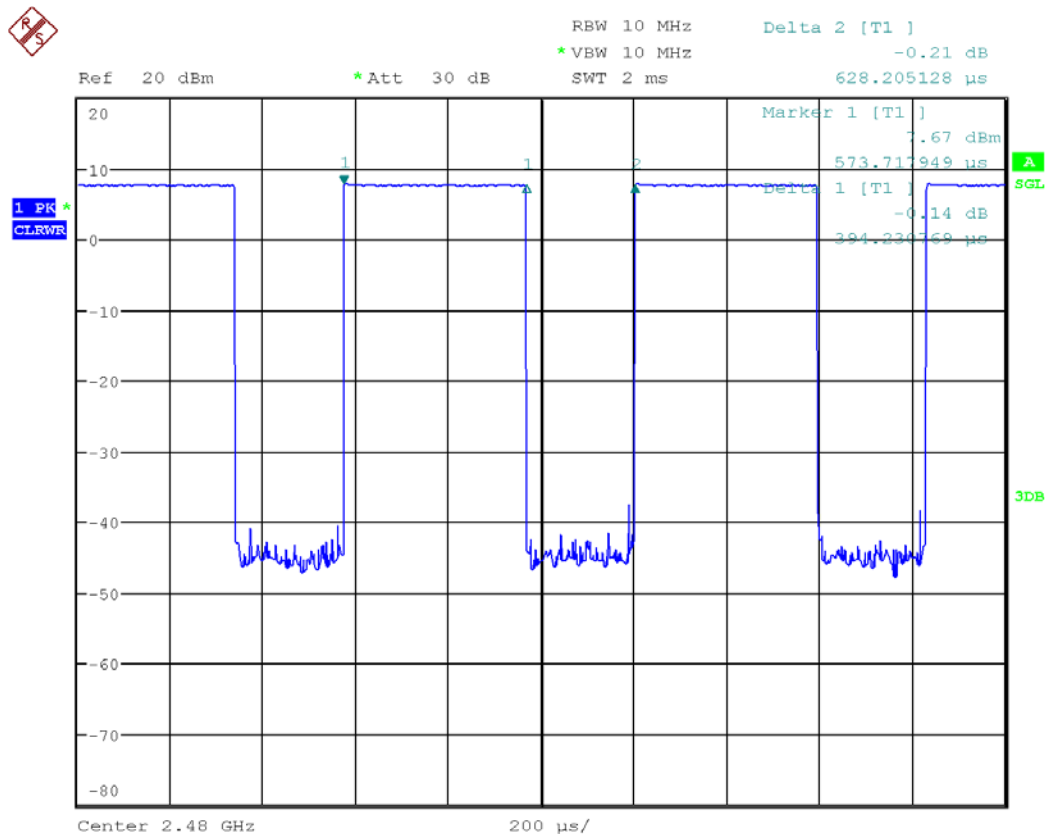
MODE	ON Time (ms)	Total Time (ms)	Duty cycle
BT	2.88	3.75	77%



Date: 24.OCT.2019 20:09:16

BT	Average Conducted Power(dBm)			
	Max. Tune up	CH0	CH19	CH39
		2402MHz	2441MHz	2480MHz
BLE(1M)	8.00	4.01	4.98	6.52
BLE(2M)	8.00	1.22	2.21	3.74

MODE	ON Time (ms)	Total Time (ms)	Duty cycle
BLE	0.39	0.63	63%



Date: 24.OCT.2019 20:11:29

Note:

- 1) The conducted power of BT is measured with RMS detector.
- 2) The tested channels are marks in bold.

7.1.5 CONDUCTED POWER MEASUREMENTS OF WIFI

1. Conducted power measurement results of WiFi 2.4G

Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
802.11b	1	2412	1	19.00	18.78
	6	2437		19.00	18.71
	11	2462		19.00	18.97
802.11g	1	2412	6	17.00	16.85
	6	2437		17.00	16.82
	11	2462		17.00	16.74
802.11n HT20	1	2412	6.5	17.00	16.71
	6	2437		17.00	16.64
	11	2462		17.00	16.61

Note:

- 1) The Average conducted power of WiFi 2.4G is measured with RMS detector.
- 2) Per KDB248227 D01, for WiFi 2.4GHz, the highest measured maximum output power Channel for DSSS modes (802.11b) was selected for SAR measurement. SAR for OFDM modes (2.4GHz 802.11g/n) was not required When the highest reported SAR for DSSS is adjusted by the ratio of OFDM modes (802.11g/n) to DSSS modes (802.11b) specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
- 3) The tested channels are marks in bold.

2. Conducted power measurement results of WiFi 5.2G

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune-up	Average Power(dBm)
5.2G	802.11a	36	5180	6	18.00	17.89
		40	5200		18.00	17.76
		44	5220		18.00	17.24
		48	5240		18.00	17.56
	802.11n HT20	36	5180	MCS0	18.00	17.75
		40	5200		18.00	17.58
		44	5220		18.00	17.18
		48	5240		18.00	17.85
	802.11n HT40	38	5190	MCS0	15.00	14.55
		46	5230		17.00	16.61
	802.11ac VHT20	36	5180	MCS0	18.00	17.75
		40	5200		18.00	17.54
		44	5220		18.00	17.56
		48	5240		18.00	17.85
	802.11ac VHT40	38	5190	MCS0	15.00	14.22
		46	5230		17.00	16.64
	802.11ac VHT80	42	5210	MCS0	14.00	13.46

Note: The Average conducted power of WiFi 5.2G is measured with RMS detector.

3. Conducted power measurement results of WiFi 5.3G

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune-up	Average Power(dBm)
5.3G	802.11a	52	5260	6	18.00	17.65
		56	5280		18.00	17.86
		60	5300		18.00	17.98
		64	5320		18.00	17.77
	802.11n HT20	52	5260	MCS0	18.00	17.89
		56	5280		18.00	17.71
		60	5300		18.00	17.89
		64	5320		18.00	17.63
	802.11n HT40	54	5270	MCS0	17.00	16.64
		62	5310		17.00	16.58
	802.11ac VHT20	52	5260	MCS0	18.00	17.87
		56	5280		18.00	17.85
		60	5300		18.00	17.36
		64	5320		18.00	17.59
	802.11ac VHT40	54	5270	MCS0	17.00	16.62
		62	5310		17.00	16.61
	802.11ac VHT80	58	5290	MCS0	17.00	16.39

Note:

- 1) The Average conducted power of WiFi 5.3G is measured with RMS detector.
- 2) The tested channels are marks in bold.

4. Conducted power measurement results of WiFi 5.6G

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune-up	Average Power(dBm)
5.6G	802.11a	100	5500	6	14.50	14.42
		104	5520		14.50	14.10
		108	5540		14.50	14.16
		112	5560		14.50	14.32
		116	5580		14.50	14.38
		132	5660		14.50	14.28
		136	5680		14.50	14.12
		140	5700		14.50	14.38
	802.11n HT20	100	5500	MCS0	14.50	14.38
		104	5520		14.50	14.35
		108	5540		14.50	14.46
		112	5560		14.50	14.21
		116	5580		14.50	14.24
		132	5660		14.50	14.17
		136	5680		14.50	14.41
		140	5700		14.50	14.19
	802.11n HT40	102	5510	MCS0	14.00	13.72
		110	5550		14.00	13.59
		118	5590		14.00	13.61
		126	5630		14.00	13.51
		134	5670		14.00	13.77
	802.11ac VHT20	100	5500	MCS0	14.50	14.35
		104	5520		14.50	14.40
		108	5540		14.50	14.37
		112	5560		14.50	14.23
		116	5580		14.50	14.21
		132	5660		14.50	14.12
		136	5680		14.50	14.42
		140	5700		14.50	14.20
	802.11ac VHT40	102	5510	MCS0	14.00	13.71
		110	5550		14.00	13.78
		118	5590		14.00	13.54
		126	5630		14.00	13.86
		134	5670		14.00	13.72
	802.11ac VHT80	106	5530	MCS0	12.00	11.47
		122	5610		14.00	13.82

Note:

- 1) The Average conducted power of WiFi 5.6G is measured with RMS detector.
- 2) The tested channels are marks in bold.

5. Conducted power measurement results of WiFi 5.8G

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune-up	Average Power(dBm)
5.8G	802.11a	149	5745	6	15.00	14.97
		153	5765		15.00	14.71
		157	5785		15.00	14.66
		161	5805		15.00	14.56
		165	5825		15.00	14.60
	802.11n HT20	149	5745	MCS0	15.00	14.81
		153	5765		15.00	14.59
		157	5785		15.00	14.50
		161	5805		15.00	14.93
		165	5825		15.00	14.87
	802.11n HT40	151	5755	MCS0	14.50	14.03
		159	5795		14.50	14.28
	802.11ac VHT20	149	5745	MCS0	15.00	14.88
		153	5765		15.00	14.58
		157	5785		15.00	14.43
		161	5805		15.00	14.90
		165	5825		15.00	14.85
	802.11ac VHT40	151	5755	MCS0	14.50	13.92
		159	5795		14.50	14.21
	802.11ac VHT80	155	5775	MCS0	14.50	13.96

Note:

- 1) The Average conducted power of WiFi 5.8G is measured with RMS detector.
- 2) The tested channels are marks in bold.

7.2 SAR TEST RESULTS

General Notes:

- 1) Per KDB447498 D01, all measurement SAR results are scaled to the maximum tune-up tolerance limit to demonstrate compliant.
- 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: ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz. When the maximum output power variation across the required test channels is $> \frac{1}{2}$ 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 ≥ 0.8 W/kg; if the deviation among the repeated measurement is $\leq 20\%$, and the measured SAR < 1.45 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 ≤ 1.2 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 W/kg, or > 7.0 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.

GSM Notes:

- 1) Per KDB648474 D04, body-worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR.
- 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.

UMTS Notes:

Per KDB941225 D01, 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 ≤ 1.2 W/kg, SAR measurement is not required for the secondary 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 7.1.3.
- 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)

WLAN Notes:

1. For exposure conditions with multiple test positions, such as handset operating next to the ear, devices with hotspot mode, procedures for initial test position can be applied. Using the transmission mode determined by the DSSS procedure or initial test configuration, area scans are measured for all positions in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other (remaining) test positions. Otherwise, SAR is evaluated at the subsequent highest peak SAR position until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured.
2. Justification for test configurations for WLAN per KDB Publication 248227 for 2.4GHz WIFI single transmission chain operations, the highest measured maximum output power Channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4GHz 802.11g/n) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 7.1.5 for more information.
3. Justification for test configurations for WLAN per KDB Publication 248227 for 5GHz WIFI single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed power. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2W/kg. See Section 7.1.5 for more information.

7.2.1 SAR MEASUREMENT RESULT OF HEAD

1. Head SAR test results of GSM

Test No.	Band	Mode	Channel	Test Position	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T01	GSM 850	GSM	190	Right Cheek	Main	1	1	34	32.76	-0.02	0.115	0.009	0.153
T02	GSM 850	GSM	190	Right Tilted	Main	1	1	34	32.76	-0.05	0.058	0.046	0.077
T03	GSM 850	GSM	190	Left Cheek	Main	1	1	34	32.76	0.08	0.135	0.103	0.180
T04	GSM 850	GSM	190	Left Tilted	Main	1	1	34	32.76	-0.09	0.062	0.049	0.083
T05	GSM 850	GSM	190	Left Cheek	Main	1	2	34	32.76	0.09	0.137	0.106	0.182
T06	GSM 850	GSM	190	Left Cheek	Main	1	3	34	32.76	0.1	0.136	0.105	0.181
T07	GSM 850	GSM	190	Left Cheek	Main	1	4	34	32.76	0.06	0.142	0.109	0.189
T08	GSM 850	GSM	190	Left Cheek	Main	1	5	34	32.76	0.16	0.154	0.118	0.205
T10	GSM 850	GSM	190	Right Cheek	Second	1	1	32.5	31.68	0.02	0.701	0.426	0.847
T11	GSM 850	GSM	190	Right Tilted	Second	1	1	32.5	31.68	-0.01	0.817	0.398	0.987
T12	GSM 850	GSM	190	Left Cheek	Second	1	1	32.5	31.68	-0.06	0.535	0.356	0.646
T13	GSM 850	GSM	190	Left Tilted	Second	1	1	32.5	31.68	0.1	0.491	0.303	0.593
T14	GSM 850	GSM	128	Right Tilted	Second	1	1	32.5	32.13	0.04	0.701	0.339	0.763
T15	GSM 850	GSM	251	Right Tilted	Second	1	1	32.5	31.93	0.02	0.794	0.392	0.905
T1060	GSM 850	GSM	128	Right Cheek	Second	1	1	32.5	32.13	0.09	0.654	0.372	0.712
T1061	GSM 850	GSM	251	Right Cheek	Second	1	1	32.5	31.93	0.07	0.682	0.388	0.778
T16	GSM 850	GSM	190	Right Tilted	Second	1	2	32.5	31.68	0.07	0.765	0.385	0.924
T17	GSM 850	GSM	190	Right Tilted	Second	1	3	32.5	31.68	0.04	0.652	0.334	0.787
T18	GSM 850	GSM	190	Right Tilted	Second	1	4	32.5	31.68	0.03	0.651	0.335	0.786
T19	GSM 850	GSM	190	Right Tilted	Second	1	5	32.5	31.68	0.04	0.745	0.380	0.900
T20	GSM 850	GSM	190	Right Tilted	Second	1	1	32.5	31.68	-0.01	0.811	0.394	0.980
T29	GSM 850	GSM	190	Right Tilted (Repeated)	Second	1	1	32.5	31.68	0.05	0.802	0.394	0.969
T21	GSM 1900	GSM	661	Right Cheek	Main	1	1	31	30.14	0.02	0.068	0.044	0.083
T22	GSM 1900	GSM	661	Right Tilted	Main	1	1	31	30.14	0.18	0.058	0.036	0.071
T23	GSM 1900	GSM	661	Left Cheek	Main	1	1	31	30.14	-0.09	0.097	0.057	0.119
T24	GSM 1900	GSM	661	Left Tilted	Main	1	1	31	30.14	-0.07	0.054	0.032	0.066
T25	GSM 1900	GSM	661	Left Cheek	Main	1	2	31	30.14	0.07	0.084	0.049	0.102
T26	GSM 1900	GSM	661	Left Cheek	Main	1	3	31	30.14	0.02	0.091	0.053	0.111
T27	GSM 1900	GSM	661	Left Cheek	Main	1	4	31	30.14	0.09	0.072	0.042	0.088
T28	GSM 1900	GSM	661	Left Cheek	Main	1	5	31	30.14	0.01	0.088	0.050	0.107
T30	GSM 1900	GSM	661	Right Cheek	Second	1	1	26	25.74	0.08	0.501	0.247	0.532
T31	GSM 1900	GSM	661	Right Tilted	Second	1	1	26	25.74	0.01	0.599	0.271	0.636
T32	GSM 1900	GSM	661	Left Cheek	Second	1	1	26	25.74	0.05	0.331	0.181	0.351
T33	GSM 1900	GSM	661	Left Tilted	Second	1	1	26	25.74	-0.02	0.412	0.217	0.437
T34	GSM 1900	GSM	661	Right Tilted	Second	1	2	26	25.74	0.03	0.675	0.302	0.717
T35	GSM 1900	GSM	661	Right Tilted	Second	1	3	26	25.74	0.06	0.725	0.325	0.770
T36	GSM 1900	GSM	661	Right Tilted	Second	1	4	26	25.74	-0.02	0.659	0.322	0.700
T37	GSM 1900	GSM	661	Right Tilted	Second	1	5	26	25.74	-0.08	0.687	0.324	0.729

Note: The value with boldface is the maximum SAR Value of each test band.

2. Head SAR test results of UMTS

Test No.	Band	Mode	Channel	Test Position	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T39	UMTS B2	RMC12.2K	9400	Right Cheek	Main	1	1	23	21.49	0.04	0.068	0.043	0.096
T40	UMTS B2	RMC12.2K	9400	Right Tilted	Main	1	1	23	21.49	0.08	0.058	0.037	0.082
T41	UMTS B2	RMC12.2K	9400	Left Cheek	Main	1	1	23	21.49	0.05	0.097	0.058	0.137
T42	UMTS B2	RMC12.2K	9400	Left Tilted	Main	1	1	23	21.49	-0.01	0.048	0.028	0.068
T43	UMTS B2	RMC12.2K	9400	Left Cheek	Main	1	2	23	21.49	0.09	0.087	0.054	0.123
T44	UMTS B2	RMC12.2K	9400	Left Cheek	Main	1	3	23	21.49	-0.15	0.113	0.070	0.160
T45	UMTS B2	RMC12.2K	9400	Left Cheek	Main	1	4	23	21.49	0.1	0.107	0.068	0.151
T46	UMTS B2	RMC12.2K	9400	Left Cheek	Main	1	5	23	21.49	0.17	0.108	0.067	0.153
T48	UMTS B2	RMC12.2K	9400	Right Cheek	Second	1	1	17.5	17.1	0.02	0.757	0.375	0.830
T49	UMTS B2	RMC12.2K	9400	Right Tilted	Second	1	1	17.5	17.1	0.05	0.927	0.421	1.016
T50	UMTS B2	RMC12.2K	9400	Left Cheek	Second	1	1	17.5	17.1	0.08	0.493	0.268	0.541
T51	UMTS B2	RMC12.2K	9400	Left Tilted	Second	1	1	17.5	17.1	-0.01	0.629	0.330	0.690
T52	UMTS B2	RMC12.2K	9262	Right Tilted	Second	1	1	17.5	17.08	0.05	0.822	0.374	0.905
T53	UMTS B2	RMC12.2K	9538	Right Tilted	Second	1	1	17.5	17.09	0.17	0.960	0.433	1.055
T1062	UMTS B2	RMC12.2K	9262	Right Cheek	Second	1	1	17.5	17.08	0.02	0.618	0.374	0.681
T1063	UMTS B2	RMC12.2K	9538	Right Cheek	Second	1	1	17.5	17.09	0.07	0.772	0.383	0.848
T54	UMTS B2	RMC12.2K	9538	Right Tilted	Second	1	2	17.5	17.09	0.08	0.899	0.404	0.988
T55	UMTS B2	RMC12.2K	9538	Right Tilted	Second	1	3	17.5	17.09	0.08	0.970	0.440	1.066
T56	UMTS B2	RMC12.2K	9538	Right Tilted	Second	1	4	17.5	17.09	0.01	0.957	0.451	1.052
T57	UMTS B2	RMC12.2K	9538	Right Tilted	Second	1	5	17.5	17.09	-0.07	0.936	0.449	1.029
T58	UMTS B2	RMC12.2K	9538	Right Tilted (Repeated)	Second	1	3	17.5	17.09	0.08	0.953	0.429	1.047
T59	UMTS B4	RMC12.2K	1413	Right Cheek	Main	1	1	25	24.43	0.03	0.109	0.070	0.124
T60	UMTS B4	RMC12.2K	1413	Right Tilted	Main	1	1	25	24.43	0.04	0.076	0.044	0.087
T61	UMTS B4	RMC12.2K	1413	Left Cheek	Main	1	1	25	24.43	-0.19	0.192	0.119	0.219
T62	UMTS B4	RMC12.2K	1413	Left Tilted	Main	1	1	25	24.43	-0.17	0.063	0.036	0.071
T63	UMTS B4	RMC12.2K	1413	Left Cheek	Main	1	2	25	24.43	-0.09	0.144	0.091	0.164
T64	UMTS B4	RMC12.2K	1413	Left Cheek	Main	1	3	25	24.43	0.19	0.212	0.134	0.242
T65	UMTS B4	RMC12.2K	1413	Left Cheek	Main	1	4	25	24.43	-0.06	0.192	0.122	0.219
T66	UMTS B4	RMC12.2K	1413	Left Cheek	Main	1	5	25	24.43	-0.04	0.149	0.095	0.170
T68	UMTS B4	RMC12.2K	1413	Right Cheek	Second	1	1	19.5	19.19	-0.16	0.877	0.454	0.942
T69	UMTS B4	RMC12.2K	1413	Right Tilted	Second	1	1	19.5	19.19	0.03	0.975	0.462	1.047
T70	UMTS B4	RMC12.2K	1413	Left Cheek	Second	1	1	19.5	19.19	0.02	0.578	0.337	0.621
T71	UMTS B4	RMC12.2K	1413	Left Tilted	Second	1	1	19.5	19.19	0.08	0.697	0.389	0.749
T72	UMTS B4	RMC12.2K	1312	Right Tilted	Second	1	1	19.5	19	0.03	0.921	0.450	1.033
T73	UMTS B4	RMC12.2K	1513	Right Tilted	Second	1	1	19.5	18.99	0.01	0.930	0.445	1.046
T1064	UMTS B4	RMC12.2K	1312	Right Cheek	Second	1	1	19.5	19	0.01	0.823	0.412	0.923
T1065	UMTS B4	RMC12.2K	1513	Right Cheek	Second	1	1	19.5	18.99	0.13	0.855	0.438	0.962
T74	UMTS B4	RMC12.2K	1413	Right Tilted	Second	1	2	19.5	19.19	0.08	0.999	0.469	1.073
T75	UMTS B4	RMC12.2K	1413	Right Tilted	Second	1	3	19.5	19.19	0.02	0.970	0.474	1.042
T76	UMTS B4	RMC12.2K	1413	Right Tilted	Second	1	4	19.5	19.19	0.02	0.977	0.459	1.049
T77	UMTS B4	RMC12.2K	1413	Right Tilted	Second	1	5	19.5	19.19	0.04	0.980	0.461	1.053
T78	UMTS B4	RMC12.2K	1413	Right Tilted (Repeated)	Second	1	2	19.5	19.19	0.03	0.982	0.460	1.055

Test No.	Band	Mode	Channel	Test Position	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T79	UMTS B5	RMC12.2K	4182	Right Cheek	Main	1	1	23	21.37	-0.02	0.096	0.075	0.140
T80	UMTS B5	RMC12.2K	4182	Right Tilted	Main	1	1	23	21.37	-0.01	0.049	0.039	0.072
T81	UMTS B5	RMC12.2K	4182	Left Cheek	Main	1	1	23	21.37	0.09	0.102	0.080	0.148
T82	UMTS B5	RMC12.2K	4182	Left Tilted	Main	1	1	23	21.37	-0.01	0.050	0.040	0.073
T83	UMTS B5	RMC12.2K	4182	Left Cheek	Main	1	2	23	21.37	-0.05	0.108	0.084	0.157
T84	UMTS B5	RMC12.2K	4182	Left Cheek	Main	1	3	23	21.37	-0.03	0.108	0.085	0.157
T85	UMTS B5	RMC12.2K	4182	Left Cheek	Main	1	4	23	21.37	0.09	0.110	0.082	0.160
T86	UMTS B5	RMC12.2K	4182	Left Cheek	Main	1	5	23	21.37	-0.11	0.109	0.085	0.159
T88	UMTS B5	RMC12.2K	4182	Right Cheek	Second	1	1	22	21.54	0.07	0.240	0.147	0.267
T89	UMTS B5	RMC12.2K	4182	Right Tilted	Second	1	1	22	21.54	-0.01	0.257	0.138	0.286
T90	UMTS B5	RMC12.2K	4182	Left Cheek	Second	1	1	22	21.54	-0.03	0.158	0.108	0.176
T91	UMTS B5	RMC12.2K	4182	Left Tilted	Second	1	1	22	21.54	0.05	0.218	0.135	0.242
T92	UMTS B5	RMC12.2K	4182	Right Tilted	Second	1	2	22	21.54	0.01	0.255	0.134	0.283
T93	UMTS B5	RMC12.2K	4182	Right Tilted	Second	1	3	22	21.54	0.04	0.262	0.137	0.291
T94	UMTS B5	RMC12.2K	4182	Right Tilted	Second	1	4	22	21.54	0.06	0.275	0.143	0.306
T95	UMTS B5	RMC12.2K	4182	Right Tilted	Second	1	5	22	21.54	0.01	0.230	0.123	0.256

Note: The value with boldface is the maximum SAR Value of each test band.

3. Head SAR test results of LTE

Test No.	Band	Mode	Channel	RB	offset	Test Position	ANT	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T96	LTE B2	QPSK20M	19100	1	0	Right Cheek	Main	1	1	25	24.08	0.01	0.154	0.099	0.190
T97	LTE B2	QPSK20M	19100	1	0	Right Tilted	Main	1	1	25	24.08	0.14	0.122	0.078	0.151
T98	LTE B2	QPSK20M	19100	1	0	Left Cheek	Main	1	1	25	24.08	-0.05	0.172	0.105	0.213
T99	LTE B2	QPSK20M	19100	1	0	Left Tilted	Main	1	1	25	24.08	-0.01	0.112	0.066	0.138
T100	LTE B2	QPSK20M	19100	50	0	Right Cheek	Main	1	1	24	23.25	0.01	0.126	0.081	0.150
T101	LTE B2	QPSK20M	19100	50	0	Right Tilted	Main	1	1	24	23.25	0.07	0.101	0.064	0.120
T102	LTE B2	QPSK20M	19100	50	0	Left Cheek	Main	1	1	24	23.25	0.16	0.193	0.118	0.229
T103	LTE B2	QPSK20M	19100	50	0	Left Tilted	Main	1	1	24	23.25	-0.08	0.095	0.056	0.113
T104	LTE B2	QPSK20M	19100	50	0	Left Cheek	Main	1	2	24	23.25	0.07	0.193	0.120	0.229
T105	LTE B2	QPSK20M	19100	50	0	Left Cheek	Main	1	3	24	23.25	0.05	0.163	0.100	0.194
T106	LTE B2	QPSK20M	19100	50	0	Left Cheek	Main	1	4	24	23.25	0.01	0.184	0.101	0.219
T107	LTE B2	QPSK20M	19100	50	0	Left Cheek	Main	1	5	24	23.25	0.05	0.188	0.117	0.223
T109	LTE B2	QPSK20M	18900	1	0	Right Cheek	Second	1	1	17.5	17.02	0.02	0.576	0.283	0.643
T110	LTE B2	QPSK20M	18900	1	0	Right Tilted	Second	1	1	17.5	17.02	0	0.717	0.324	0.801
T111	LTE B2	QPSK20M	18900	1	0	Left Cheek	Second	1	1	17.5	17.02	0.06	0.363	0.202	0.405
T112	LTE B2	QPSK20M	18900	1	0	Left Tilted	Second	1	1	17.5	17.02	0.01	0.462	0.245	0.516
T113	LTE B2	QPSK20M	18900	50	0	Right Cheek	Second	1	1	17.5	17	-0.01	0.589	0.288	0.661
T114	LTE B2	QPSK20M	18900	50	0	Right Tilted	Second	1	1	17.5	17	0.14	0.734	0.331	0.824
T115	LTE B2	QPSK20M	18900	50	0	Left Cheek	Second	1	1	17.5	17	-0.02	0.368	0.205	0.413
T116	LTE B2	QPSK20M	18900	50	0	Left Tilted	Second	1	1	17.5	17	0.04	0.470	0.248	0.527
T119	LTE B2	QPSK20M	18700	1	0	Right Tilted	Second	1	1	17.5	16.95	0.03	0.638	0.291	0.724
T120	LTE B2	QPSK20M	19100	1	0	Right Tilted	Second	1	1	17.5	16.9	0.06	0.769	0.345	0.883
T121	LTE B2	QPSK20M	18700	50	0	Right Tilted	Second	1	1	17.5	16.92	0.02	0.731	0.327	0.835
T122	LTE B2	QPSK20M	19100	50	0	Right Tilted	Second	1	1	17.5	16.85	0.02	0.760	0.339	0.883
T123	LTE B2	QPSK20M	18900	100	0	Right Tilted	Second	1	1	17.5	16.93	0.04	0.712	0.346	0.812
T124	LTE B2	QPSK20M	19100	1	0	Right Tilted	Second	1	2	17.5	16.9	0.01	0.800	0.359	0.919
T125	LTE B2	QPSK20M	19100	1	0	Right Tilted	Second	1	3	17.5	16.9	0.07	0.856	0.378	0.983
T126	LTE B2	QPSK20M	19100	1	0	Right Tilted	Second	1	4	17.5	16.9	-0.05	0.788	0.365	0.905
T127	LTE B2	QPSK20M	19100	1	0	Right Tilted	Second	1	5	17.5	16.9	-0.1	0.790	0.368	0.907
T128	LTE B2	QPSK20M	19100	1	0	Right Tilted (Repeated)	Second	1	3	17.5	16.9	0.02	0.842	0.366	0.967
T129	LTE B4	QPSK20M	20175	1	0	Right Cheek	Main	1	1	25	24.09	0.07	0.092	0.060	0.113
T130	LTE B4	QPSK20M	20175	1	0	Right Tilted	Main	1	1	25	24.09	0.02	0.068	0.040	0.084
T131	LTE B4	QPSK20M	20175	1	0	Left Cheek	Main	1	1	25	24.09	0.01	0.177	0.111	0.218
T132	LTE B4	QPSK20M	20175	1	0	Left Tilted	Main	1	1	25	24.09	-0.08	0.061	0.035	0.075
T133	LTE B4	QPSK20M	20175	50	0	Right Cheek	Main	1	1	24	23.3	0.06	0.073	0.048	0.086
T134	LTE B4	QPSK20M	20175	50	0	Right Tilted	Main	1	1	24	23.3	0.01	0.060	0.034	0.070
T135	LTE B4	QPSK20M	20175	50	0	Left Cheek	Main	1	1	24	23.3	-0.05	0.137	0.086	0.161
T136	LTE B4	QPSK20M	20175	50	0	Left Tilted	Main	1	1	24	23.3	-0.14	0.052	0.030	0.061
T137	LTE B4	QPSK20M	20175	1	0	Left Cheek	Main	1	2	25	24.09	0.12	0.128	0.082	0.158
T138	LTE B4	QPSK20M	20175	1	0	Left Cheek	Main	1	3	25	24.09	0.09	0.182	0.115	0.224
T139	LTE B4	QPSK20M	20175	1	0	Left Cheek	Main	1	4	25	24.09	0.04	0.163	0.104	0.201
T140	LTE B4	QPSK20M	20175	1	0	Left Cheek	Main	1	5	25	24.09	0.05	0.158	0.101	0.195

Test No.	Band	Mode	Channel	RB	offset	Test Position	ANT	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T142	LTE B4	QPSK20M	20050	1	0	Right Cheek	Second	1	1	19.5	19.36	0	0.678	0.356	0.700
T143	LTE B4	QPSK20M	20050	1	0	Right Tilted	Second	1	1	19.5	19.36	0.02	0.929	0.430	0.959
T144	LTE B4	QPSK20M	20050	1	0	Left Cheek	Second	1	1	19.5	19.36	0.03	0.456	0.273	0.471
T145	LTE B4	QPSK20M	20050	1	0	Left Tilted	Second	1	1	19.5	19.36	-0.02	0.596	0.327	0.616
T146	LTE B4	QPSK20M	20050	50	0	Right Cheek	Second	1	1	19.5	19.25	0.01	0.780	0.401	0.826
T147	LTE B4	QPSK20M	20050	50	0	Right Tilted	Second	1	1	19.5	19.25	-0.01	0.947	0.437	1.003
T148	LTE B4	QPSK20M	20050	50	0	Left Cheek	Second	1	1	19.5	19.25	0.2	0.480	0.281	0.508
T149	LTE B4	QPSK20M	20050	50	0	Left Tilted	Second	1	1	19.5	19.25	0.02	0.610	0.335	0.646
T152	LTE B4	QPSK20M	20175	1	0	Right Tilted	Second	1	1	19.5	19.34	-0.01	0.820	0.392	0.851
T153	LTE B4	QPSK20M	20300	1	0	Right Tilted	Second	1	1	19.5	19.31	0	0.821	0.390	0.858
T154	LTE B4	QPSK20M	20175	50	0	Right Tilted	Second	1	1	19.5	19.21	0.08	0.825	0.391	0.882
T155	LTE B4	QPSK20M	20300	50	0	Right Tilted	Second	1	1	19.5	19.17	-0.01	0.817	0.387	0.881
T156	LTE B4	QPSK20M	20175	100	0	Right Tilted	Second	1	1	19.5	19.18	0.05	0.793	0.374	0.854
T157	LTE B4	QPSK20M	20050	50	0	Right Tilted	Second	1	2	19.5	19.25	0.05	0.873	0.409	0.925
T158	LTE B4	QPSK20M	20050	50	0	Right Tilted	Second	1	3	19.5	19.25	0	1.000	0.465	1.059
T159	LTE B4	QPSK20M	20050	50	0	Right Tilted	Second	1	4	19.5	19.25	0.06	0.861	0.401	0.912
T160	LTE B4	QPSK20M	20050	50	0	Right Tilted	Second	1	5	19.5	19.25	0.14	0.896	0.423	0.949
T161	LTE B4	QPSK20M	20050	50	0	Right Tilted (Repeated)	Second	1	3	19.5	19.25	0.06	0.989	0.452	1.048
T162	LTE B5	QPSK10M	20450	1	0	Right Cheek	Main	1	1	25	24.36	-0.09	0.120	0.095	0.139
T163	LTE B5	QPSK10M	20450	1	0	Right Tilted	Main	1	1	25	24.36	0.08	0.060	0.047	0.069
T164	LTE B5	QPSK10M	20450	1	0	Left Cheek	Main	1	1	25	24.36	-0.01	0.145	0.114	0.168
T165	LTE B5	QPSK10M	20450	1	0	Left Tilted	Main	1	1	25	24.36	0.03	0.064	0.051	0.075
T166	LTE B5	QPSK10M	20450	25	0	Right Cheek	Main	1	1	24	23.44	0.03	0.104	0.082	0.118
T167	LTE B5	QPSK10M	20450	25	0	Right Tilted	Main	1	1	24	23.44	0.1	0.051	0.040	0.058
T168	LTE B5	QPSK10M	20450	25	0	Left Cheek	Main	1	1	24	23.44	-0.03	0.125	0.098	0.142
T169	LTE B5	QPSK10M	20450	25	0	Left Tilted	Main	1	1	24	23.44	0.01	0.055	0.044	0.063
T170	LTE B5	QPSK10M	20450	1	0	Left Cheek	Main	1	2	25	24.36	0.08	0.157	0.120	0.182
T171	LTE B5	QPSK10M	20450	1	0	Left Cheek	Main	1	3	25	24.36	0.07	0.166	0.128	0.192
T172	LTE B5	QPSK10M	20450	1	0	Left Cheek	Main	1	4	25	24.36	0.09	0.164	0.127	0.190
T173	LTE B5	QPSK10M	20450	1	0	Left Cheek	Main	1	5	25	24.36	0.03	0.160	0.124	0.185
T175	LTE B5	QPSK10M	20525	1	0	Right Cheek	Second	1	1	24.5	23.77	0.01	0.396	0.250	0.468
T176	LTE B5	QPSK10M	20525	1	0	Right Tilted	Second	1	1	24.5	23.77	0.02	0.363	0.210	0.429
T177	LTE B5	QPSK10M	20525	1	0	Left Cheek	Second	1	1	24.5	23.77	-0.06	0.303	0.207	0.358
T178	LTE B5	QPSK10M	20525	1	0	Left Tilted	Second	1	1	24.5	23.77	0.01	0.265	0.171	0.314
T179	LTE B5	QPSK10M	20525	25	0	Right Cheek	Second	1	1	23.5	23.29	0.02	0.406	0.253	0.426
T180	LTE B5	QPSK10M	20525	25	0	Right Tilted	Second	1	1	23.5	23.29	0	0.368	0.213	0.386
T181	LTE B5	QPSK10M	20525	25	0	Left Cheek	Second	1	1	23.5	23.29	0.01	0.307	0.209	0.322
T182	LTE B5	QPSK10M	20525	25	0	Left Tilted	Second	1	1	23.5	23.29	0.01	0.262	0.169	0.275
T183	LTE B5	QPSK10M	20525	1	0	Right Cheek	Second	1	2	24.5	23.77	-0.01	0.381	0.235	0.451
T184	LTE B5	QPSK10M	20525	1	0	Right Cheek	Second	1	3	24.5	23.77	0.02	0.565	0.323	0.668
T185	LTE B5	QPSK10M	20525	1	0	Right Cheek	Second	1	4	24.5	23.77	-0.06	0.588	0.335	0.696
T186	LTE B5	QPSK10M	20525	1	0	Right Cheek	Second	1	5	24.5	23.77	0.04	0.496	0.287	0.587

Test No.	Band	Mode	Channel	RB	offset	Test Position	ANT	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T188	LTE B7	QPSK20M	21100	1	0	Right Cheek	Main	1	1	25	24.18	0.05	0.221	0.113	0.267
T189	LTE B7	QPSK20M	21100	1	0	Right Tilted	Main	1	1	25	24.18	-0.02	0.291	0.154	0.351
T190	LTE B7	QPSK20M	21100	1	0	Left Cheek	Main	1	1	25	24.18	-0.09	0.270	0.149	0.326
T191	LTE B7	QPSK20M	21100	1	0	Left Tilted	Main	1	1	25	24.18	0.02	0.152	0.084	0.184
T192	LTE B7	QPSK20M	21100	50	0	Right Cheek	Main	1	1	24	23.26	0.03	0.198	0.110	0.235
T193	LTE B7	QPSK20M	21100	50	0	Right Tilted	Main	1	1	24	23.26	0.06	0.242	0.128	0.287
T194	LTE B7	QPSK20M	21100	50	0	Left Cheek	Main	1	1	24	23.26	0.02	0.227	0.125	0.269
T195	LTE B7	QPSK20M	21100	50	0	Left Tilted	Main	1	1	24	23.26	0.07	0.133	0.072	0.158
T196	LTE B7	QPSK20M	21100	1	0	Right Tilted	Main	1	2	25	24.18	0.02	0.363	0.189	0.438
T197	LTE B7	QPSK20M	21100	1	0	Right Tilted	Main	1	3	25	24.18	0.02	0.289	0.149	0.349
T198	LTE B7	QPSK20M	21100	1	0	Right Tilted	Main	1	4	25	24.18	0.13	0.314	0.164	0.379
T199	LTE B7	QPSK20M	21100	1	0	Right Tilted	Main	1	5	25	24.18	0.09	0.349	0.181	0.422
T201	LTE B7	QPSK20M	20850	1	0	Right Cheek	Second	1	1	15.5	15.46	0.03	0.641	0.264	0.647
T202	LTE B7	QPSK20M	20850	1	0	Right Tilted	Second	1	1	15.5	15.46	0.03	0.900	0.342	0.908
T203	LTE B7	QPSK20M	20850	1	0	Left Cheek	Second	1	1	15.5	15.46	0.08	0.293	0.128	0.296
T204	LTE B7	QPSK20M	20850	1	0	Left Tilted	Second	1	1	15.5	15.46	0.09	0.401	0.172	0.405
T205	LTE B7	QPSK20M	20850	50	0	Right Cheek	Second	1	1	15.5	15.34	0.04	0.645	0.266	0.669
T206	LTE B7	QPSK20M	20850	50	0	Right Tilted	Second	1	1	15.5	15.34	0.01	0.924	0.352	0.959
T207	LTE B7	QPSK20M	20850	50	0	Left Cheek	Second	1	1	15.5	15.34	0.04	0.300	0.131	0.311
T208	LTE B7	QPSK20M	20850	50	0	Left Tilted	Second	1	1	15.5	15.34	0.05	0.412	0.177	0.427
T211	LTE B7	QPSK20M	21100	1	0	Right Tilted	Second	1	1	15.5	15.39	0.09	0.861	0.334	0.883
T212	LTE B7	QPSK20M	21350	1	0	Right Tilted	Second	1	1	15.5	15.43	0.04	0.802	0.311	0.815
T213	LTE B7	QPSK20M	21100	50	0	Right Tilted	Second	1	1	15.5	15.33	0.05	0.875	0.340	0.910
T214	LTE B7	QPSK20M	21350	50	0	Right Tilted	Second	1	1	15.5	15.28	0.03	0.794	0.308	0.835
T215	LTE B7	QPSK20M	21100	100	0	Right Tilted	Second	1	1	15.5	15.29	0.02	0.856	0.332	0.898
T216	LTE B7	QPSK20M	20850	50	0	Right Tilted	Second	1	2	15.5	15.34	0.04	0.879	0.333	0.912
T217	LTE B7	QPSK20M	20850	50	0	Right Tilted	Second	1	3	15.5	15.34	0.09	0.893	0.346	0.927
T218	LTE B7	QPSK20M	20850	50	0	Right Tilted	Second	1	4	15.5	15.34	0.07	0.872	0.326	0.905
T219	LTE B7	QPSK20M	20850	50	0	Right Tilted	Second	1	5	15.5	15.34	0.03	0.869	0.329	0.902
T220	LTE B7	QPSK20M	20850	50	0	Right Tilted (Repeated)	Second	1	1	15.5	15.34	0.04	0.908	0.343	0.942
T221	LTE B26	QPSK15M	26765	1	0	Right Cheek	Main	1	1	25	24.08	0.06	0.096	0.068	0.119
T222	LTE B26	QPSK15M	26765	1	0	Right Tilted	Main	1	1	25	24.08	0.02	0.058	0.041	0.072
T223	LTE B26	QPSK15M	26765	1	0	Left Cheek	Main	1	1	25	24.08	-0.04	0.113	0.095	0.140
T224	LTE B26	QPSK15M	26765	1	0	Left Tilted	Main	1	1	25	24.08	0.03	0.068	0.051	0.084
T225	LTE B26	QPSK15M	26765	36	0	Right Cheek	Main	1	1	24	23.12	0.07	0.088	0.062	0.108
T226	LTE B26	QPSK15M	26765	36	0	Right Tilted	Main	1	1	24	23.12	0.09	0.053	0.038	0.065
T227	LTE B26	QPSK15M	26765	36	0	Left Cheek	Main	1	1	24	23.12	0.14	0.117	0.089	0.143
T228	LTE B26	QPSK15M	26765	36	0	Left Tilted	Main	1	1	24	23.12	0.03	0.063	0.047	0.077
T229	LTE B26	QPSK15M	26765	36	0	Left Cheek	Main	1	2	24	23.12	0.01	0.118	0.087	0.145
T230	LTE B26	QPSK15M	26765	36	0	Left Cheek	Main	1	3	24	23.12	-0.12	0.125	0.094	0.153
T231	LTE B26	QPSK15M	26765	36	0	Left Cheek	Main	1	4	24	23.12	0	0.112	0.083	0.137
T232	LTE B26	QPSK15M	26765	36	0	Left Cheek	Main	1	5	24	23.12	0.06	0.120	0.090	0.147

Test No.	Band	Mode	Channel	RB	offset	Test Position	ANT	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T234	LTE B26	QPSK15M	26765	1	37	Right Cheek	Second	1	1	25	24.39	0.07	0.260	0.171	0.299
T235	LTE B26	QPSK15M	26765	1	37	Right Tilted	Second	1	1	25	24.39	0.02	0.234	0.147	0.269
T236	LTE B26	QPSK15M	26765	1	37	Left Cheek	Second	1	1	25	24.39	0.11	0.207	0.139	0.238
T237	LTE B26	QPSK15M	26765	1	37	Left Tilted	Second	1	1	25	24.39	0.06	0.209	0.134	0.241
T238	LTE B26	QPSK15M	26765	36	0	Right Cheek	Second	1	1	24	23.65	-0.04	0.198	0.130	0.215
T239	LTE B26	QPSK15M	26765	36	0	Right Tilted	Second	1	1	24	23.65	-0.01	0.178	0.112	0.193
T240	LTE B26	QPSK15M	26765	36	0	Left Cheek	Second	1	1	24	23.65	0.06	0.161	0.108	0.175
T241	LTE B26	QPSK15M	26765	36	0	Left Tilted	Second	1	1	24	23.65	0.19	0.162	0.104	0.176
T242	LTE B26	QPSK15M	26765	1	37	Right Cheek	Second	1	2	25	24.39	0.04	0.273	0.182	0.314
T243	LTE B26	QPSK15M	26765	1	37	Right Cheek	Second	1	3	25	24.39	0.04	0.357	0.220	0.411
T244	LTE B26	QPSK15M	26765	1	37	Right Cheek	Second	1	4	25	24.39	0.05	0.284	0.188	0.327
T245	LTE B26	QPSK15M	26765	1	37	Right Cheek	Second	1	5	25	24.39	-0.07	0.279	0.184	0.321
T247	LTE B38	QPSK20M	37850	1	0	Right Cheek	Main	1	1	25	23.92	0.01	0.109	0.057	0.140
T248	LTE B38	QPSK20M	37850	1	0	Right Tilted	Main	1	1	25	23.92	0.05	0.094	0.049	0.120
T249	LTE B38	QPSK20M	37850	1	0	Left Cheek	Main	1	1	25	23.92	0.04	0.100	0.051	0.128
T250	LTE B38	QPSK20M	37850	1	0	Left Tilted	Main	1	1	25	23.92	0.04	0.056	0.029	0.072
T251	LTE B38	QPSK20M	37850	50	0	Right Cheek	Main	1	1	24	23.11	0.05	0.087	0.045	0.107
T252	LTE B38	QPSK20M	37850	50	0	Right Tilted	Main	1	1	24	23.11	0.07	0.072	0.037	0.088
T253	LTE B38	QPSK20M	37850	50	0	Left Cheek	Main	1	1	24	23.11	-0.01	0.084	0.042	0.103
T254	LTE B38	QPSK20M	37850	50	0	Left Tilted	Main	1	1	24	23.11	0.07	0.043	0.022	0.053
T255	LTE B38	QPSK20M	37850	1	0	Right Cheek	Main	1	2	25	23.92	0.06	0.133	0.068	0.171
T256	LTE B38	QPSK20M	37850	1	0	Right Cheek	Main	1	3	25	23.92	0.08	0.217	0.112	0.278
T257	LTE B38	QPSK20M	37850	1	0	Right Cheek	Main	1	4	25	23.92	0.17	0.143	0.076	0.183
T258	LTE B38	QPSK20M	37850	1	0	Right Cheek	Main	1	5	25	23.92	0.06	0.211	0.109	0.271
T260	LTE B38	QPSK20M	37850	1	0	Right Cheek	Second	1	1	17.5	17.22	0.03	0.593	0.254	0.632
T261	LTE B38	QPSK20M	37850	1	0	Right Tilted	Second	1	1	17.5	17.22	0.17	0.835	0.320	0.891
T262	LTE B38	QPSK20M	37850	1	0	Left Cheek	Second	1	1	17.5	17.22	0.08	0.236	0.104	0.252
T263	LTE B38	QPSK20M	37850	1	0	Left Tilted	Second	1	1	17.5	17.22	0.03	0.349	0.149	0.372
T264	LTE B38	QPSK20M	37850	50	0	Right Cheek	Second	1	1	17.5	17.12	0.03	0.579	0.249	0.632
T265	LTE B38	QPSK20M	37850	50	0	Right Tilted	Second	1	1	17.5	17.12	0.02	0.808	0.311	0.882
T266	LTE B38	QPSK20M	37850	50	0	Left Cheek	Second	1	1	17.5	17.12	0.04	0.231	0.102	0.252
T267	LTE B38	QPSK20M	37850	50	0	Left Tilted	Second	1	1	17.5	17.12	0.17	0.336	0.143	0.367
T270	LTE B38	QPSK20M	38000	1	0	Right Tilted	Second	1	1	17.5	17.2	0.04	0.790	0.302	0.847
T271	LTE B38	QPSK20M	38150	1	0	Right Tilted	Second	1	1	17.5	17.19	0.06	0.729	0.283	0.783
T272	LTE B38	QPSK20M	38000	50	0	Right Tilted	Second	1	1	17.5	17.1	0.09	0.773	0.295	0.848
T273	LTE B38	QPSK20M	38150	50	0	Right Tilted	Second	1	1	17.5	17.09	0.08	0.702	0.271	0.772
T274	LTE B38	QPSK20M	37850	100	0	Right Tilted	Second	1	1	17.5	17.16	0.07	0.799	0.306	0.864
T275	LTE B38	QPSK20M	37850	1	0	Right Tilted	Second	1	2	17.5	17.22	0.09	0.825	0.317	0.880
T276	LTE B38	QPSK20M	37850	1	0	Right Tilted	Second	1	3	17.5	17.22	0.13	0.822	0.317	0.877
T277	LTE B38	QPSK20M	37850	1	0	Right Tilted	Second	1	4	17.5	17.22	0.02	0.825	0.319	0.880
T278	LTE B38	QPSK20M	37850	1	0	Right Tilted	Second	1	5	17.5	17.22	0.04	0.802	0.307	0.855
T279	LTE B38	QPSK20M	37850	1	0	Right Tilted (Repeated)	Second	1	1	17.5	17.22	0.17	0.823	0.312	0.878

Test No.	Band	Mode	Channel	RB	offset	Test Position	ANT	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T280	LTE B41	QPSK20M	39750	1	0	Right Cheek	Main	1	1	25	24.05	-0.07	0.102	0.053	0.127
T281	LTE B41	QPSK20M	39750	1	0	Right Tilted	Main	1	1	25	24.05	0.07	0.086	0.044	0.107
T282	LTE B41	QPSK20M	39750	1	0	Left Cheek	Main	1	1	25	24.05	-0.01	0.083	0.039	0.103
T283	LTE B41	QPSK20M	39750	1	0	Left Tilted	Main	1	1	25	24.05	0.02	0.066	0.035	0.082
T284	LTE B41	QPSK20M	39750	50	0	Right Cheek	Main	1	1	24	23.14	0.01	0.082	0.042	0.100
T285	LTE B41	QPSK20M	39750	50	0	Right Tilted	Main	1	1	24	23.14	0.07	0.065	0.034	0.079
T286	LTE B41	QPSK20M	39750	50	0	Left Cheek	Main	1	1	24	23.14	0.09	0.061	0.029	0.074
T287	LTE B41	QPSK20M	39750	50	0	Left Tilted	Main	1	1	24	23.14	0.03	0.048	0.025	0.059
T288	LTE B41	QPSK20M	39750	1	0	Right Cheek	Main	1	2	25	24.05	0.01	0.161	0.087	0.200
T289	LTE B41	QPSK20M	39750	1	0	Right Cheek	Main	1	3	25	24.05	0.05	0.177	0.092	0.220
T290	LTE B41	QPSK20M	39750	1	0	Right Cheek	Main	1	4	25	24.05	-0.07	0.174	0.093	0.217
T291	LTE B41	QPSK20M	39750	1	0	Right Cheek	Main	1	5	25	24.05	-0.1	0.165	0.085	0.205
T293	LTE B41	QPSK20M	41490	1	0	Right Cheek	Second	1	1	17	16.85	-0.05	0.547	0.261	0.566
T294	LTE B41	QPSK20M	41490	1	0	Right Tilted	Second	1	1	17	16.85	0.03	0.591	0.257	0.612
T295	LTE B41	QPSK20M	41490	1	0	Left Cheek	Second	1	1	17	16.85	-0.03	0.157	0.093	0.163
T296	LTE B41	QPSK20M	41490	1	0	Left Tilted	Second	1	1	17	16.85	0.08	0.185	0.109	0.192
T297	LTE B41	QPSK20M	41490	50	0	Right Cheek	Second	1	1	17	16.76	0.1	0.542	0.257	0.573
T298	LTE B41	QPSK20M	41490	50	0	Right Tilted	Second	1	1	17	16.76	0.06	0.578	0.252	0.611
T299	LTE B41	QPSK20M	41490	50	0	Left Cheek	Second	1	1	17	16.76	0.1	0.142	0.091	0.150
T300	LTE B41	QPSK20M	41490	50	0	Left Tilted	Second	1	1	17	16.76	0.04	0.180	0.107	0.190
T1066	LTE B41	QPSK20M	39750	1	0	Right Tilted	Second	1	1	17	16.84	0.02	0.691	0.266	0.717
T1067	LTE B41	QPSK20M	40185	1	0	Right Tilted	Second	1	1	17	16.66	0.07	0.685	0.280	0.741
T1068	LTE B41	QPSK20M	40620	1	0	Right Tilted	Second	1	1	17	16.75	0.16	0.666	0.261	0.705
T1069	LTE B41	QPSK20M	41055	1	0	Right Tilted	Second	1	1	17	16.63	0.09	0.542	0.217	0.590
T1070	LTE B41	QPSK20M	39750	50	0	Right Tilted	Second	1	1	17	16.73	0.04	0.689	0.265	0.733
T1071	LTE B41	QPSK20M	40185	50	0	Right Tilted	Second	1	1	17	16.62	0.02	0.636	0.278	0.694
T1072	LTE B41	QPSK20M	40620	50	0	Right Tilted	Second	1	1	17	16.56	0.08	0.640	0.252	0.708
T1073	LTE B41	QPSK20M	41055	50	25	Right Tilted	Second	1	1	17	16.58	0.01	0.599	0.223	0.660
T303	LTE B41	QPSK20M	40185	1	0	Right Tilted	Second	1	2	17	16.66	0.06	0.736	0.278	0.796
T304	LTE B41	QPSK20M	40185	1	0	Right Tilted	Second	1	3	17	16.66	0.09	0.758	0.286	0.820
T305	LTE B41	QPSK20M	40185	1	0	Right Tilted	Second	1	4	17	16.66	0.07	0.708	0.272	0.766
T306	LTE B41	QPSK20M	40185	1	0	Right Tilted	Second	1	5	17	16.66	0.02	0.659	0.266	0.713

Note: The value with boldface is the maximum SAR Value of each test band.

4. Head SAR test results of CA

Test No.	PCC					SCC					Tune-up For LTE CA TX Power	LTE CA TX Power	Test Position	Ant	Battery	Power Drift	SAR 1g	SAR 10g	Reported 10g SAR
	Band	Band width [MHZ]	Modulation	Chan Nel (UL)	RB Size/ Offset	Band	Band width [MHZ]	Modulation	Chan Nel (UL)	RB Size/ Offset									
T953	LTE B7	20	QPSK	21100	1/0	LTE B7	20	QPSK	20902	1/99	25	24.02	Right Tilted	Main	1	0.03	0.275	0.141	0.345
T954	LTE B7	20	QPSK	21100	1/0	LTE B7	20	QPSK	20902	1/99	25	24.02	Right Tilted	Main	2	0.09	0.252	0.129	0.316
T955	LTE B7	20	QPSK	21100	1/0	LTE B7	20	QPSK	20902	1/99	25	24.02	Right Tilted	Main	3	0.02	0.296	0.152	0.371
T956	LTE B7	20	QPSK	21100	1/0	LTE B7	20	QPSK	20902	1/99	25	24.02	Right Tilted	Main	4	0.01	0.262	0.136	0.328
T957	LTE B7	20	QPSK	21100	1/0	LTE B7	20	QPSK	20902	1/99	25	24.02	Right Tilted	Main	5	0.13	0.282	0.144	0.353
T959	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	15.5	15.19	Right Tilted	Second	1	-0.05	0.777	0.282	0.834
T960	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	15.5	15.19	Right Tilted	Second	2	0.07	0.770	0.292	0.827
T961	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	15.5	15.19	Right Tilted	Second	3	0.05	0.816	0.313	0.876
T962	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	15.5	15.19	Right Tilted	Second	4	0.06	0.787	0.308	0.845
T963	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	15.5	15.19	Right Tilted	Second	5	0.1	0.800	0.310	0.859
T964	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	15.5	15.19	Right Tilted (Repeated)	Second	3	0.03	0.810	0.308	0.870
T965	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	25	23.95	Right Tilted	Main	1	0.09	0.144	0.073	0.183
T966	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	25	23.95	Right Tilted	Main	2	0.04	0.136	0.071	0.173
T967	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	25	23.95	Right Tilted	Main	3	0.05	0.149	0.077	0.190
T968	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	25	23.95	Right Tilted	Main	4	0.06	0.132	0.065	0.168
T969	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	25	23.95	Right Tilted	Main	5	-0.02	0.128	0.059	0.163
T971	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	17.5	17.25	Right Tilted	Second	1	0.04	0.573	0.223	0.607
T972	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	17.5	17.25	Right Tilted	Second	2	0.01	0.582	0.242	0.616
T973	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	17.5	17.25	Right Tilted	Second	3	0.06	0.613	0.239	0.649
T974	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	17.5	17.25	Right Tilted	Second	4	0.07	0.607	0.226	0.643
T975	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	17.5	17.25	Right Tilted	Second	5	0.02	0.591	0.213	0.626
T977	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	25	23.54	Right Cheek	Main	1	0.08	0.153	0.073	0.214
T978	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	25	23.54	Right Cheek	Main	2	0.01	0.143	0.069	0.200
T979	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	25	23.54	Right Cheek	Main	3	0.03	0.233	0.115	0.326
T980	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	25	23.54	Right Cheek	Main	4	0.13	0.184	0.089	0.258
T981	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	25	23.54	Right Cheek	Main	5	0.04	0.202	0.097	0.283
T983	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	17	16.67	Right Tilted	Second	1	0.07	0.342	0.135	0.369
T984	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	17	16.67	Right Tilted	Second	2	0.11	0.350	0.150	0.378
T985	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	17	16.67	Right Tilted	Second	3	0.08	0.373	0.149	0.402
T986	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	17	16.67	Right Tilted	Second	4	0.02	0.334	0.126	0.360
T987	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	17	16.67	Right Tilted	Second	5	-0.06	0.347	0.137	0.374

Note: The value with boldface is the maximum SAR Value of each test band.

5. Head SAR test results of BT

Test No.	Band	Channel	Test Position	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Duty cycle	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T316	BT DH5	78	Right Cheek	1	1	12	11.22	77%	-0.11	0.067	0.036	0.105
T317	BT DH5	78	Right Tilted	1	1	12	11.22	77%	-0.06	0.086	0.039	0.133
T318	BT DH5	78	Left Cheek	1	1	12	11.22	77%	-0.02	0.154	0.071	0.240
T319	BT DH5	78	Left Tilted	1	1	12	11.22	77%	0.01	0.124	0.055	0.193
T320	BT DH5	78	Left Cheek	2	1	12	11.22	77%	0.07	0.132	0.062	0.206
T321	BT DH5	78	Left Cheek	3	1	12	11.22	77%	0.03	0.146	0.068	0.228
T322	BT DH5	78	Left Cheek	4	1	12	11.22	77%	-0.05	0.139	0.065	0.217
T323	BT DH5	78	Left Cheek	5	1	12	11.22	77%	0.08	0.118	0.058	0.184

Note: The value with boldface is the maximum SAR Value of each test band.

6. Head SAR test results of WIFI

Test No.	Band	Channel	Test Position	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T307	802.11b	11	Right Cheek	1	1	19	18.97	0.12	0.330	0.170	0.332
T308	802.11b	11	Right Tilted	1	1	19	18.97	0.08	0.372	0.175	0.375
T309	802.11b	11	Left Cheek	1	1	19	18.97	-0.07	0.766	0.351	0.771
T310	802.11b	11	Left Tilted	1	1	19	18.97	0.09	0.577	0.256	0.581
T311	802.11b	11	Left Cheek	2	1	19	18.97	0.03	0.723	0.332	0.728
T312	802.11b	11	Left Cheek	3	1	19	18.97	0.07	0.714	0.324	0.719
T313	802.11b	11	Left Cheek	4	1	19	18.97	0.15	0.741	0.342	0.746
T314	802.11b	11	Left Cheek	5	1	19	18.97	0.02	0.728	0.336	0.733
T325	802.11a	60	Right Cheek	1	6	18	17.98	0.07	0.136	0.043	0.137
T326	802.11a	60	Right Tilted	1	6	18	17.98	-0.04	0.156	0.051	0.157
T327	802.11a	60	Left Cheek	1	6	18	17.98	0.01	0.383	0.118	0.385
T328	802.11a	60	Left Tilted	1	6	18	17.98	0.09	0.476	0.135	0.478
T329	802.11a	60	Left Tilted	2	6	18	17.98	0.02	0.391	0.127	0.393
T330	802.11a	60	Left Tilted	3	6	18	17.98	-0.05	0.387	0.131	0.389
T331	802.11a	60	Left Tilted	4	6	18	17.98	0.03	0.634	0.173	0.637
T332	802.11a	60	Left Tilted	5	6	18	17.98	0.02	0.519	0.120	0.521
T334	802.11a	100	Right Cheek	1	6	14.5	14.42	-0.07	0.203	0.063	0.207
T335	802.11a	100	Right Tilted	1	6	14.5	14.42	0.05	0.207	0.064	0.211
T336	802.11a	100	Left Cheek	1	6	14.5	14.42	0.02	0.626	0.177	0.638
T337	802.11a	100	Left Tilted	1	6	14.5	14.42	0.03	0.608	0.170	0.619
T1074	802.11a	116	Left Cheek	1	14.5	14.38	-	0.01	0.597	0.165	0.614
T1075	802.11a	140	Left Cheek	1	14.5	14.38	-	0.08	0.552	0.143	0.567
T1076	802.11a	116	Left Tilted	1	14.5	14.38	-	0.16	0.574	0.156	0.590
T1077	802.11a	140	Left Tilted	1	14.5	14.38	-	0.09	0.537	0.137	0.552
T338	802.11a	100	Left Cheek	2	6	14.5	14.42	-0.12	0.601	0.164	0.612
T339	802.11a	100	Left Cheek	3	6	14.5	14.42	-0.09	0.597	0.151	0.608
T340	802.11a	100	Left Cheek	4	6	14.5	14.42	0.09	0.506	0.135	0.515
T341	802.11a	100	Left Cheek	5	6	14.5	14.42	0.09	0.551	0.146	0.561
T343	802.11a	149	Right Cheek	1	6	15	14.97	-0.03	0.181	0.055	0.182
T344	802.11a	149	Right Tilted	1	6	15	14.97	0.08	0.182	0.055	0.183
T345	802.11a	149	Left Cheek	1	6	15	14.97	0.09	0.573	0.148	0.577
T346	802.11a	149	Left Tilted	1	6	15	14.97	0.19	0.498	0.131	0.501
T347	802.11a	149	Left Cheek	2	6	15	14.97	-0.01	0.512	0.138	0.516
T348	802.11a	149	Left Cheek	3	6	15	14.97	0	0.526	0.143	0.530
T349	802.11a	149	Left Cheek	4	6	15	14.97	0	0.324	0.088	0.326
T350	802.11a	149	Left Cheek	5	6	15	14.97	0	0.500	0.131	0.503

Note: The value with boldface is the maximum SAR Value of each test band.

7.2.2 SAR MEASUREMENT RESULT OF BODY-WORN

1. Body-worn SAR test results of GSM

Test No.	Band	Mode	Channel	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T351	GSM 850	GSM	190	Front Face	1.5	Main	1	1	32	31.31	-0.1	0.074	0.057	0.087
T352	GSM 850	GSM	190	Rear Face	1.5	Main	1	1	32	31.31	0.06	0.092	0.070	0.107
T353	GSM 850	GSM	190	Rear Face	1.5	Main	1	2	32	31.31	-0.06	0.095	0.072	0.111
T354	GSM 850	GSM	190	Rear Face	1.5	Main	1	3	32	31.31	-0.04	0.102	0.077	0.120
T355	GSM 850	GSM	190	Rear Face	1.5	Main	1	4	32	31.31	0.04	0.098	0.075	0.115
T356	GSM 850	GSM	190	Rear Face	1.5	Main	1	5	32	31.31	0.06	0.095	0.073	0.111
T368	GSM 850	GSM	190	Front Face	1.5	Second	1	1	33	32.77	0.03	0.096	0.074	0.102
T369	GSM 850	GSM	190	Rear Face	1.5	Second	1	1	33	32.77	0.07	0.108	0.083	0.114
T370	GSM 850	GSM	190	Rear Face	1.5	Second	1	2	33	32.77	0.11	0.118	0.090	0.124
T371	GSM 850	GSM	190	Rear Face	1.5	Second	1	3	33	32.77	0.04	0.111	0.085	0.117
T372	GSM 850	GSM	190	Rear Face	1.5	Second	1	4	33	32.77	0.05	0.106	0.081	0.112
T373	GSM 850	GSM	190	Rear Face	1.5	Second	1	5	33	32.77	0.06	0.108	0.082	0.114
T384	GSM 1900	GSM	661	Front Face	1.5	Main	1	1	28	27.57	0.15	0.111	0.069	0.123
T385	GSM 1900	GSM	661	Rear Face	1.5	Main	1	1	28	27.57	0.03	0.190	0.118	0.210
T386	GSM 1900	GSM	661	Rear Face	1.5	Main	1	2	28	27.57	0.04	0.184	0.115	0.203
T387	GSM 1900	GSM	661	Rear Face	1.5	Main	1	3	28	27.57	0.03	0.172	0.105	0.190
T388	GSM 1900	GSM	661	Rear Face	1.5	Main	1	4	28	27.57	0.15	0.157	0.097	0.173
T389	GSM 1900	GSM	661	Rear Face	1.5	Main	1	5	28	27.57	0.14	0.185	0.115	0.204
T401	GSM 1900	GSM	661	Front Face	1.5	Second	1	1	29	28.82	0.08	0.136	0.080	0.142
T402	GSM 1900	GSM	661	Rear Face	1.5	Second	1	1	29	28.82	0.16	0.120	0.075	0.125
T403	GSM 1900	GSM	661	Front Face	1.5	Second	1	2	29	28.82	0.14	0.115	0.069	0.120
T404	GSM 1900	GSM	661	Front Face	1.5	Second	1	3	29	28.82	0.04	0.134	0.078	0.140
T405	GSM 1900	GSM	661	Front Face	1.5	Second	1	4	29	28.82	0.08	0.134	0.080	0.140
T406	GSM 1900	GSM	661	Front Face	1.5	Second	1	5	29	28.82	0.02	0.138	0.082	0.144

Note: The value with boldface is the maximum SAR Value of each test band.

2. Body-worn SAR test results of UMTS

Test No.	Band	Mode	Channel	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T417	UMTS B2	RMC12.2K	9400	Front Face	1.5	Main	1	1	21	20.54	0.12	0.163	0.103	0.181
T418	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Main	1	1	21	20.54	0.03	0.276	0.172	0.307
T419	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Main	1	2	21	20.54	-0.02	0.258	0.159	0.287
T420	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Main	1	3	21	20.54	0	0.282	0.173	0.314
T421	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Main	1	4	21	20.54	-0.04	0.268	0.164	0.298
T422	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Main	1	5	21	20.54	-0.1	0.276	0.171	0.307
T436	UMTS B2	RMC12.2K	9400	Front Face	1.5	Second	1	1	21	20.93	0.04	0.233	0.138	0.237
T437	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Second	1	1	21	20.93	-0.04	0.210	0.131	0.213
T438	UMTS B2	RMC12.2K	9400	Front Face	1.5	Second	1	2	21	20.93	0.03	0.212	0.126	0.215
T439	UMTS B2	RMC12.2K	9400	Front Face	1.5	Second	1	3	21	20.93	0.14	0.203	0.122	0.206
T440	UMTS B2	RMC12.2K	9400	Front Face	1.5	Second	1	4	21	20.93	-0.01	0.204	0.122	0.207
T441	UMTS B2	RMC12.2K	9400	Front Face	1.5	Second	1	5	21	20.93	0.05	0.212	0.127	0.215
T452	UMTS B4	RMC12.2K	1413	Front Face	1.5	Main	1	1	21.5	21.28	0.09	0.167	0.106	0.176
T453	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Main	1	1	21.5	21.28	-0.01	0.291	0.183	0.306
T454	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Main	1	2	21.5	21.28	0.06	0.278	0.169	0.292
T455	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Main	1	3	21.5	21.28	0.02	0.284	0.173	0.299
T456	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Main	1	4	21.5	21.28	0.14	0.251	0.161	0.264
T457	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Main	1	5	21.5	21.28	0.02	0.266	0.167	0.280
T471	UMTS B4	RMC12.2K	1413	Front Face	1.5	Second	1	1	22	21.59	0.06	0.162	0.100	0.178
T472	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Second	1	1	22	21.59	0.06	0.179	0.109	0.197
T473	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Second	1	2	22	21.59	0.02	0.152	0.092	0.167
T474	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Second	1	3	22	21.59	0.07	0.165	0.100	0.181
T475	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Second	1	4	22	21.59	0.01	0.173	0.105	0.190
T476	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Second	1	5	22	21.59	0.05	0.168	0.102	0.185
T487	UMTS B5	RMC12.2K	4182	Front Face	1.5	Main	1	1	23	21.37	0.01	0.071	0.055	0.103
T488	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Main	1	1	23	21.37	-0.02	0.087	0.066	0.127
T489	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Main	1	2	23	21.37	0	0.096	0.072	0.139
T490	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Main	1	3	23	21.37	0.03	0.100	0.075	0.146
T491	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Main	1	4	23	21.37	0.02	0.094	0.071	0.137
T492	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Main	1	5	23	21.37	-0.01	0.098	0.074	0.142
T504	UMTS B5	RMC12.2K	4182	Front Face	1.5	Second	1	1	22	21.54	0.03	0.025	0.019	0.027
T505	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Second	1	1	22	21.54	-0.05	0.029	0.021	0.032
T506	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Second	1	2	22	21.54	-0.03	0.027	0.020	0.030
T507	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Second	1	3	22	21.54	-0.05	0.030	0.023	0.033
T508	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Second	1	4	22	21.54	0.15	0.032	0.023	0.036
T509	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Second	1	5	22	21.54	0.02	0.030	0.022	0.034

Note: The value with boldface is the maximum SAR Value of each test band.

3. Body-worn SAR test results of LTE

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T520	LTE B2	QPSK20M	18900	1	0	Front Face	1.5	Main	1	1	20.5	20.21	-0.05	0.173	0.110	0.185
T521	LTE B2	QPSK20M	18900	1	0	Rear Face	1.5	Main	1	1	20.5	20.21	-0.16	0.293	0.184	0.313
T522	LTE B2	QPSK20M	18900	50	25	Front Face	1.5	Main	1	1	20.5	20.13	0.05	0.169	0.108	0.184
T523	LTE B2	QPSK20M	18900	50	25	Rear Face	1.5	Main	1	1	20.5	20.13	0.03	0.297	0.186	0.323
T526	LTE B2	QPSK20M	18900	50	25	Rear Face	1.5	Main	1	2	20.5	20.13	0.03	0.242	0.150	0.264
T527	LTE B2	QPSK20M	18900	50	25	Rear Face	1.5	Main	1	3	20.5	20.13	0.02	0.249	0.155	0.271
T528	LTE B2	QPSK20M	18900	50	25	Rear Face	1.5	Main	1	4	20.5	20.13	0.04	0.245	0.151	0.267
T529	LTE B2	QPSK20M	18900	50	25	Rear Face	1.5	Main	1	5	20.5	20.13	0	0.261	0.162	0.284
T548	LTE B2	QPSK20M	18900	1	0	Front Face	1.5	Second	1	1	21	20.67	0.06	0.184	0.112	0.199
T549	LTE B2	QPSK20M	18900	1	0	Rear Face	1.5	Second	1	1	21	20.67	0.08	0.179	0.110	0.193
T550	LTE B2	QPSK20M	18900	50	0	Front Face	1.5	Second	1	1	21	20.63	0.09	0.197	0.119	0.215
T551	LTE B2	QPSK20M	18900	50	0	Rear Face	1.5	Second	1	1	21	20.63	0.08	0.179	0.111	0.195
T554	LTE B2	QPSK20M	18900	50	0	Front Face	1.5	Second	1	2	21	20.63	0.11	0.209	0.126	0.228
T555	LTE B2	QPSK20M	18900	50	0	Front Face	1.5	Second	1	3	21	20.63	0.14	0.228	0.136	0.248
T556	LTE B2	QPSK20M	18900	50	0	Front Face	1.5	Second	1	4	21	20.63	0.1	0.229	0.137	0.249
T557	LTE B2	QPSK20M	18900	50	0	Front Face	1.5	Second	1	5	21	20.63	0.12	0.234	0.141	0.255
T574	LTE B4	QPSK20M	20050	1	0	Front Face	1.5	Main	1	1	21.5	21.25	0.09	0.186	0.119	0.197
T575	LTE B4	QPSK20M	20050	1	0	Rear Face	1.5	Main	1	1	21.5	21.25	0.14	0.321	0.202	0.340
T576	LTE B4	QPSK20M	20050	50	0	Front Face	1.5	Main	1	1	21.5	21.15	0.1	0.185	0.117	0.201
T577	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Main	1	1	21.5	21.15	0.11	0.319	0.201	0.346
T580	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Main	1	2	21.5	21.15	0.03	0.322	0.208	0.349
T581	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Main	1	3	21.5	21.15	0.13	0.333	0.216	0.361
T582	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Main	1	4	21.5	21.15	0.09	0.312	0.201	0.338
T583	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Main	1	5	21.5	21.15	0.12	0.308	0.203	0.334
T607	LTE B4	QPSK20M	20050	1	0	Front Face	1.5	Second	1	1	22.5	22.48	0.02	0.216	0.132	0.217
T608	LTE B4	QPSK20M	20050	1	0	Rear Face	1.5	Second	1	1	22.5	22.48	0.04	0.243	0.147	0.244
T609	LTE B4	QPSK20M	20050	50	0	Front Face	1.5	Second	1	1	22.5	22.35	0.06	0.215	0.132	0.223
T610	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Second	1	1	22.5	22.35	0.05	0.243	0.147	0.252
T613	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Second	1	2	22.5	22.35	0.01	0.243	0.146	0.252
T614	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Second	1	3	22.5	22.35	0.07	0.251	0.153	0.260
T615	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Second	1	4	22.5	22.35	0.09	0.237	0.140	0.245
T616	LTE B4	QPSK20M	20050	50	0	Rear Face	1.5	Second	1	5	22.5	22.35	0.03	0.221	0.136	0.229

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T633	LTE B5	QPSK10M	20600	1	49	Front Face	1.5	Main	1	1	24.5	23.41	-0.04	0.131	0.101	0.168
T634	LTE B5	QPSK10M	20600	1	49	Rear Face	1.5	Main	1	1	24.5	23.41	0.01	0.161	0.123	0.207
T635	LTE B5	QPSK10M	20525	25	0	Front Face	1.5	Main	1	1	23.5	22.98	0.05	0.106	0.082	0.119
T636	LTE B5	QPSK10M	20525	25	0	Rear Face	1.5	Main	1	1	23.5	22.98	0.02	0.132	0.101	0.149
T637	LTE B5	QPSK10M	20600	1	49	Rear Face	1.5	Main	1	2	24.5	23.41	0	0.168	0.129	0.216
T638	LTE B5	QPSK10M	20600	1	49	Rear Face	1.5	Main	1	3	24.5	23.41	-0.04	0.191	0.146	0.245
T639	LTE B5	QPSK10M	20600	1	49	Rear Face	1.5	Main	1	4	24.5	23.41	0.03	0.172	0.134	0.221
T640	LTE B5	QPSK10M	20600	1	49	Rear Face	1.5	Main	1	5	24.5	23.41	0.01	0.184	0.139	0.236
T657	LTE B5	QPSK10M	20525	1	0	Front Face	1.5	Second	1	1	25	24.16	-0.01	0.048	0.033	0.058
T658	LTE B5	QPSK10M	20525	1	0	Rear Face	1.5	Second	1	1	25	24.16	0.07	0.050	0.035	0.061
T659	LTE B5	QPSK10M	20525	25	12	Front Face	1.5	Second	1	1	24	23.31	0.03	0.044	0.031	0.051
T660	LTE B5	QPSK10M	20525	25	12	Rear Face	1.5	Second	1	1	24	23.31	0.03	0.045	0.033	0.053
T661	LTE B5	QPSK10M	20525	1	0	Rear Face	1.5	Second	1	2	25	24.16	0.01	0.043	0.032	0.053
T662	LTE B5	QPSK10M	20525	1	0	Rear Face	1.5	Second	1	3	25	24.16	0.01	0.053	0.037	0.064
T663	LTE B5	QPSK10M	20525	1	0	Rear Face	1.5	Second	1	4	25	24.16	0.04	0.056	0.039	0.068
T664	LTE B5	QPSK10M	20525	1	0	Rear Face	1.5	Second	1	5	25	24.16	0.07	0.053	0.037	0.065
T679	LTE B7	QPSK20M	21100	1	0	Front Face	1.5	Main	1	1	21.5	20.99	0.13	0.195	0.111	0.219
T680	LTE B7	QPSK20M	21100	1	0	Rear Face	1.5	Main	1	1	21.5	20.99	0.07	0.219	0.121	0.246
T681	LTE B7	QPSK20M	21100	50	0	Front Face	1.5	Main	1	1	21.5	20.91	0.17	0.199	0.113	0.228
T682	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Main	1	1	21.5	20.91	0.16	0.223	0.123	0.255
T685	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Main	1	2	21.5	20.91	0.04	0.213	0.117	0.244
T686	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Main	1	3	21.5	20.91	0.03	0.247	0.135	0.283
T687	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Main	1	4	21.5	20.91	0.04	0.247	0.133	0.283
T688	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Main	1	5	21.5	20.91	0.09	0.264	0.142	0.302
T707	LTE B7	QPSK20M	21100	1	0	Front Face	1.5	Second	1	1	17	16.95	0.17	0.141	0.070	0.143
T708	LTE B7	QPSK20M	21100	1	0	Rear Face	1.5	Second	1	1	17	16.95	-0.1	0.180	0.086	0.182
T709	LTE B7	QPSK20M	21100	50	0	Front Face	1.5	Second	1	1	17	16.94	0.09	0.151	0.075	0.153
T710	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Second	1	1	17	16.94	-0.03	0.190	0.091	0.193
T713	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Second	1	2	17	16.94	-0.07	0.270	0.134	0.274
T714	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Second	1	3	17	16.94	0.07	0.297	0.148	0.301
T715	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Second	1	4	17	16.94	-0.18	0.248	0.125	0.251
T716	LTE B7	QPSK20M	21100	50	0	Rear Face	1.5	Second	1	5	17	16.94	-0.01	0.269	0.131	0.273

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T733	LTE B26	QPSK15M	26765	1	0	Front Face	1.5	Main	1	1	25	24.08	-0.04	0.093	0.071	0.115
T734	LTE B26	QPSK15M	26765	1	0	Rear Face	1.5	Main	1	1	25	24.08	0.03	0.117	0.082	0.145
T735	LTE B26	QPSK15M	26765	36	0	Front Face	1.5	Main	1	1	24	23.12	0.09	0.092	0.070	0.113
T736	LTE B26	QPSK15M	26765	36	0	Rear Face	1.5	Main	1	1	24	23.12	-0.02	0.115	0.082	0.141
T737	LTE B26	QPSK15M	26765	36	0	Rear Face	1.5	Main	1	2	24	23.12	0.16	0.122	0.088	0.149
T738	LTE B26	QPSK15M	26765	36	0	Rear Face	1.5	Main	1	3	24	23.12	-0.01	0.135	0.102	0.165
T739	LTE B26	QPSK15M	26765	36	0	Rear Face	1.5	Main	1	4	24	23.12	0.04	0.102	0.073	0.125
T740	LTE B26	QPSK15M	26765	36	0	Rear Face	1.5	Main	1	5	24	23.12	0.07	0.125	0.088	0.153
T757	LTE B26	QPSK15M	26765	1	37	Front Face	1.5	Second	1	1	25	24.39	0	0.032	0.024	0.037
T758	LTE B26	QPSK15M	26765	1	37	Rear Face	1.5	Second	1	1	25	24.39	0.05	0.037	0.026	0.042
T759	LTE B26	QPSK15M	26765	36	0	Front Face	1.5	Second	1	1	24	23.65	0.01	0.024	0.017	0.026
T760	LTE B26	QPSK15M	26765	36	0	Rear Face	1.5	Second	1	1	24	23.65	0.07	0.027	0.019	0.029
T761	LTE B26	QPSK15M	26765	1	37	Rear Face	1.5	Second	1	2	25	24.39	-0.12	0.031	0.023	0.036
T762	LTE B26	QPSK15M	26765	1	37	Rear Face	1.5	Second	1	3	25	24.39	-0.03	0.034	0.025	0.039
T763	LTE B26	QPSK15M	26765	1	37	Rear Face	1.5	Second	1	4	25	24.39	0.1	0.029	0.020	0.033
T764	LTE B26	QPSK15M	26765	1	37	Rear Face	1.5	Second	1	5	25	24.39	-0.09	0.035	0.025	0.040
T779	LTE B38	QPSK20M	37850	1	0	Front Face	1.5	Main	1	1	23	22.66	-0.11	0.150	0.084	0.162
T780	LTE B38	QPSK20M	37850	1	0	Rear Face	1.5	Main	1	1	23	22.66	0.03	0.209	0.112	0.226
T781	LTE B38	QPSK20M	37850	50	0	Front Face	1.5	Main	1	1	23	22.47	0.03	0.145	0.082	0.164
T782	LTE B38	QPSK20M	37850	50	0	Rear Face	1.5	Main	1	1	23	22.47	0.09	0.200	0.109	0.226
T783	LTE B38	QPSK20M	37850	1	0	Rear Face	1.5	Main	1	2	23	22.66	0.09	0.199	0.105	0.215
T784	LTE B38	QPSK20M	37850	1	0	Rear Face	1.5	Main	1	3	23	22.66	-0.09	0.264	0.127	0.285
T785	LTE B38	QPSK20M	37850	1	0	Rear Face	1.5	Main	1	4	23	22.66	0.05	0.202	0.109	0.218
T786	LTE B38	QPSK20M	37850	1	0	Rear Face	1.5	Main	1	5	23	22.66	0.19	0.232	0.125	0.251
T803	LTE B38	QPSK20M	38150	1	0	Front Face	1.5	Second	1	1	19.5	19.21	0.19	0.109	0.055	0.117
T804	LTE B38	QPSK20M	38150	1	0	Rear Face	1.5	Second	1	1	19.5	19.21	-0.11	0.153	0.075	0.164
T805	LTE B38	QPSK20M	38150	50	25	Front Face	1.5	Second	1	1	19.5	18.93	0.16	0.074	0.037	0.084
T806	LTE B38	QPSK20M	38150	50	25	Rear Face	1.5	Second	1	1	19.5	18.93	-0.01	0.149	0.073	0.170
T807	LTE B38	QPSK20M	38150	50	25	Rear Face	1.5	Second	1	2	19.5	18.93	0.14	0.153	0.074	0.174
T808	LTE B38	QPSK20M	38150	50	25	Rear Face	1.5	Second	1	3	19.5	18.93	0.16	0.171	0.083	0.195
T809	LTE B38	QPSK20M	38150	50	25	Rear Face	1.5	Second	1	4	19.5	18.93	-0.03	0.135	0.065	0.154
T810	LTE B38	QPSK20M	38150	50	25	Rear Face	1.5	Second	1	5	19.5	18.93	-0.17	0.133	0.063	0.151

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T825	LTE B41	QPSK20M	40620	1	0	Front Face	1.5	Main	1	1	23	22.69	0.12	0.152	0.082	0.163
T826	LTE B41	QPSK20M	40620	1	0	Rear Face	1.5	Main	1	1	23	22.69	0.01	0.231	0.122	0.248
T827	LTE B41	QPSK20M	40620	50	0	Front Face	1.5	Main	1	1	23	22.46	0.05	0.145	0.087	0.164
T828	LTE B41	QPSK20M	40620	50	0	Rear Face	1.5	Main	1	1	23	22.46	0.07	0.218	0.119	0.247
T829	LTE B41	QPSK20M	40620	1	0	Rear Face	1.5	Main	1	2	23	22.69	-0.05	0.224	0.120	0.241
T830	LTE B41	QPSK20M	40620	1	0	Rear Face	1.5	Main	1	3	23	22.69	0.08	0.221	0.117	0.237
T831	LTE B41	QPSK20M	40620	1	0	Rear Face	1.5	Main	1	4	23	22.69	-0.01	0.223	0.120	0.239
T832	LTE B41	QPSK20M	40620	1	0	Rear Face	1.5	Main	1	5	23	22.69	0.04	0.217	0.119	0.233
T849	LTE B41	QPSK20M	41490	1	0	Front Face	1.5	Second	1	1	21	20.63	0.05	0.140	0.075	0.152
T850	LTE B41	QPSK20M	41490	1	0	Rear Face	1.5	Second	1	1	21	20.63	0.01	0.188	0.090	0.205
T851	LTE B41	QPSK20M	41490	50	0	Front Face	1.5	Second	1	1	21	20.49	0.07	0.135	0.083	0.152
T852	LTE B41	QPSK20M	41490	50	0	Rear Face	1.5	Second	1	1	21	20.49	0.02	0.181	0.087	0.204
T855	LTE B41	QPSK20M	41490	1	0	Rear Face	1.5	Second	1	2	21	20.63	0.01	0.205	0.094	0.223
T856	LTE B41	QPSK20M	41490	1	0	Rear Face	1.5	Second	1	3	21	20.63	0.08	0.208	0.097	0.226
T857	LTE B41	QPSK20M	41490	1	0	Rear Face	1.5	Second	1	4	21	20.63	0.14	0.211	0.100	0.230
T858	LTE B41	QPSK20M	41490	1	0	Rear Face	1.5	Second	1	5	21	20.63	-0.05	0.210	0.102	0.229

Note: The value with boldface is the maximum SAR Value of each test band.

4. Body-worn SAR test results of CA

Test No.	PCC					SCC					Tune-up For LTE CA TX Power	LTE CA TX Power	Test Position	Separation Distance (cm)	Ant	Battery	Power Drift	SAR 1g	SAR 10g	Reported 10g SAR
	Band	Band width [MHZ]	Modulation	Channel (UL)	RB Size/Offset	Band	Band width [MHZ]	Modulation	Channel (UL)	RB Size/Offset										
T988	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1.5	Main	1	0.02	0.181	0.100	0.181
T989	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1.5	Main	2	0.09	0.188	0.103	0.188
T990	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1.5	Main	3	0.17	0.197	0.105	0.197
T991	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1.5	Main	4	-0.05	0.176	0.096	0.176
T992	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1.5	Main	5	0.02	0.192	0.102	0.192
T1000	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Rear Face	1.5	Second	1	0.06	0.160	0.078	0.173
T1001	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Rear Face	1.5	Second	2	0.07	0.151	0.074	0.163
T1002	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Rear Face	1.5	Second	3	0.01	0.110	0.055	0.119
T1003	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Rear Face	1.5	Second	4	-0.12	0.144	0.082	0.156
T1004	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Rear Face	1.5	Second	5	0.05	0.127	0.067	0.137
T1012	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1.5	Main	1	0.06	0.152	0.078	0.167
T1013	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1.5	Main	2	0.09	0.179	0.093	0.197
T1014	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1.5	Main	3	0.05	0.139	0.071	0.153
T1015	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1.5	Main	4	-0.03	0.126	0.060	0.138
T1016	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1.5	Main	5	0.1	0.160	0.081	0.176
T1024	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Rear Face	1.5	Second	1	0.02	0.128	0.061	0.136
T1025	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Rear Face	1.5	Second	2	0.07	0.113	0.058	0.120
T1026	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Rear Face	1.5	Second	3	-0.06	0.119	0.060	0.126
T1027	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Rear Face	1.5	Second	4	0.03	0.101	0.052	0.107
T1028	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Rear Face	1.5	Second	5	0.01	0.107	0.057	0.113
T1036	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1.5	Main	1	0.09	0.154	0.082	0.172
T1037	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1.5	Main	2	0.03	0.145	0.079	0.162
T1038	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1.5	Main	3	0.04	0.138	0.075	0.154
T1039	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1.5	Main	4	0.16	0.148	0.077	0.166
T1040	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1.5	Main	5	0.07	0.115	0.064	0.129
T1048	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Rear Face	1.5	Second	1	0.03	0.101	0.052	0.110
T1049	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Rear Face	1.5	Second	2	0.11	0.085	0.045	0.093
T1050	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Rear Face	1.5	Second	3	0.08	0.107	0.051	0.117
T1051	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Rear Face	1.5	Second	4	0.03	0.091	0.049	0.099
T1052	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Rear Face	1.5	Second	5	0.05	0.097	0.052	0.106

Note: The value with boldface is the maximum SAR Value of each test band.

5. Body-worn SAR test results of BT

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Duty cycle	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T890	BT DH5	78	Front Face	1.5	1	1	12	11.22	77%	0.02	0.020	0.010	0.031
T891	BT DH5	78	Rear Face	1.5	1	1	12	11.22	77%	0.03	0.022	0.010	0.034
T892	BT DH5	78	Rear Face	1.5	2	1	12	11.22	77%	0.15	0.019	0.009	0.029
T893	BT DH5	78	Rear Face	1.5	3	1	12	11.22	77%	0.03	0.019	0.010	0.030
T894	BT DH5	78	Rear Face	1.5	4	1	12	11.22	77%	0.07	0.021	0.010	0.032
T895	BT DH5	78	Rear Face	1.5	5	1	12	11.22	77%	-0.01	0.018	0.009	0.029

Note: The value with boldface is the maximum SAR Value of each test band.

6. Body-worn SAR test results of WIFI

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Duty cycle	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T874	802.11b	11	Front Face	1.5	1	19	18.97	-	0.02	0.090	0.047	0.090
T875	802.11b	11	Rear Face	1.5	1	19	18.97	-	0.08	0.097	0.047	0.098
T876	802.11b	11	Rear Face	1.5	2	19	18.97	-	0.03	0.087	0.043	0.088
T877	802.11b	11	Rear Face	1.5	3	19	18.97	-	0.07	0.091	0.045	0.092
T878	802.11b	11	Rear Face	1.5	4	19	18.97	-	-0.09	0.093	0.046	0.094
T879	802.11b	11	Rear Face	1.5	5	19	18.97	-	0.1	0.082	0.040	0.083
T906	802.11a	60	Front Face	1.5	1	18	17.98	-	0.04	0.092	0.036	0.092
T907	802.11a	60	Rear Face	1.5	1	18	17.98	-	0.01	0.103	0.040	0.103
T908	802.11a	60	Rear Face	1.5	2	18	17.98	-	-0.02	0.128	0.049	0.129
T909	802.11a	60	Rear Face	1.5	3	18	17.98	-	0.03	0.136	0.053	0.137
T910	802.11a	60	Rear Face	1.5	4	18	17.98	-	-0.05	0.124	0.046	0.125
T911	802.11a	60	Rear Face	1.5	5	18	17.98	-	0.12	0.117	0.043	0.118
T922	802.11a	100	Front Face	1.5	1	14.5	14.42	-	0.06	0.057	0.022	0.058
T923	802.11a	100	Rear Face	1.5	1	14.5	14.42	-	0.09	0.112	0.042	0.114
T924	802.11a	100	Rear Face	1.5	2	14.5	14.42	-	-0.04	0.124	0.047	0.126
T925	802.11a	100	Rear Face	1.5	3	14.5	14.42	-	0.09	0.139	0.053	0.142
T926	802.11a	100	Rear Face	1.5	4	14.5	14.42	-	-0.04	0.151	0.054	0.154
T927	802.11a	100	Rear Face	1.5	5	14.5	14.42	-	-0.05	0.161	0.061	0.164
T938	802.11a	149	Front Face	1.5	1	15	14.97	-	0.06	0.064	0.026	0.064
T939	802.11a	149	Rear Face	1.5	1	15	14.97	-	0.13	0.189	0.071	0.190
T940	802.11a	149	Rear Face	1.5	2	15	14.97	-	-0.04	0.132	0.050	0.133
T941	802.11a	149	Rear Face	1.5	3	15	14.97	-	0.09	0.183	0.067	0.184
T942	802.11a	149	Rear Face	1.5	4	15	14.97	-	-0.08	0.171	0.066	0.172
T943	802.11a	149	Rear Face	1.5	5	15	14.97	-	-0.08	0.197	0.074	0.198

Note: The value with boldface is the maximum SAR Value of each test band.

7.2.3 SAR MEASUREMENT RESULT OF HOTSPOT

1. Hotspot SAR test results of GSM

Test No.	Band	Mode	Channel	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T358	GSM 850	GPRS3TX	190	Front Face	1	Main	1	1	28	26.62	0.11	0.075	0.058	0.103
T359	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	1	28	26.62	0.18	0.150	0.088	0.206
T360	GSM 850	GPRS3TX	190	Left Side	1	Main	1	1	28	26.62	0.03	0.113	0.079	0.155
T361	GSM 850	GPRS3TX	190	Right Side	1	Main	1	1	28	26.62	-0.02	0.072	0.047	0.099
T362	GSM 850	GPRS3TX	190	Bottom Side	1	Main	1	1	28	26.62	-0.14	0.086	0.049	0.118
T363	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	2	28	26.62	0.13	0.163	0.095	0.224
T364	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	3	28	26.62	0.18	0.175	0.101	0.240
T365	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	4	28	26.62	-0.02	0.155	0.092	0.213
T366	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	5	28	26.62	-0.01	0.168	0.099	0.231
T375	GSM 850	GPRS2TX	190	Front Face	1	Second	1	1	30.5	29.6	0.01	0.186	0.125	0.229
T376	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	1	30.5	29.6	0.02	0.192	0.129	0.236
T377	GSM 850	GPRS2TX	190	Left Side	1	Second	1	1	30.5	29.6	0.03	0.119	0.080	0.146
T378	GSM 850	GPRS2TX	190	Top Side	1	Second	1	1	30.5	29.6	0.03	0.191	0.119	0.235
T379	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	2	30.5	29.6	-0.17	0.197	0.133	0.242
T380	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	3	30.5	29.6	-0.03	0.209	0.139	0.257
T381	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	4	30.5	29.6	-0.1	0.208	0.139	0.256
T382	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	5	30.5	29.6	-0.12	0.206	0.137	0.253
T391	GSM 1900	GPRS3TX	661	Front Face	1	Main	1	1	24	23.39	-0.05	0.215	0.132	0.247
T392	GSM 1900	GPRS3TX	661	Rear Face	1	Main	1	1	24	23.39	0.01	0.402	0.240	0.463
T393	GSM 1900	GPRS3TX	661	Left Side	1	Main	1	1	24	23.39	0.02	0.056	0.034	0.065
T394	GSM 1900	GPRS3TX	661	Right Side	1	Main	1	1	24	23.39	0.16	0.103	0.057	0.119
T395	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	1	24	23.39	0.02	0.542	0.311	0.624
T396	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	2	24	23.39	-0.17	0.471	0.272	0.542
T397	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	3	24	23.39	0.06	0.461	0.265	0.531
T398	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	4	24	23.39	-0.16	0.459	0.249	0.528
T399	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	5	24	23.39	0.07	0.510	0.295	0.587
T408	GSM 1900	GPRS3TX	661	Front Face	1	Second	1	1	25	24.5	0.08	0.279	0.147	0.313
T409	GSM 1900	GPRS3TX	661	Rear Face	1	Second	1	1	25	24.5	0.01	0.237	0.143	0.266
T410	GSM 1900	GPRS3TX	661	Left Side	1	Second	1	1	25	24.5	0.01	0.074	0.043	0.083
T411	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	1	25	24.5	0.09	0.462	0.236	0.518
T412	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	2	25	24.5	0.01	0.424	0.217	0.476
T413	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	3	25	24.5	-0.08	0.455	0.210	0.511
T414	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	4	25	24.5	0.01	0.485	0.250	0.544
T415	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	5	25	24.5	-0.01	0.489	0.248	0.549

Note: The value with boldface is the maximum SAR Value of each test band.

2. Hotspot SAR test results of UMTS

Test No.	Band	Mode	Channel	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T424	UMTS B2	RMC12.2K	9400	Front Face	1	Main	1	1	21	20.54	0.1	0.283	0.175	0.315
T425	UMTS B2	RMC12.2K	9400	Rear Face	1	Main	1	1	21	20.54	0.02	0.535	0.322	0.595
T426	UMTS B2	RMC12.2K	9400	Left Side	1	Main	1	1	21	20.54	0.16	0.079	0.049	0.088
T427	UMTS B2	RMC12.2K	9400	Right Side	1	Main	1	1	21	20.54	-0.04	0.128	0.072	0.142
T428	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	1	21	20.54	0.07	0.722	0.415	0.803
T429	UMTS B2	RMC12.2K	9262	Bottom Side	1	Main	1	1	21	20.44	0.04	0.616	0.359	0.701
T430	UMTS B2	RMC12.2K	9538	Bottom Side	1	Main	1	1	21	20.49	0.06	0.549	0.317	0.617
T431	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	2	21	20.54	0.04	0.627	0.364	0.697
T432	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	3	21	20.54	0.07	0.681	0.394	0.757
T433	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	4	21	20.54	0.02	0.637	0.368	0.708
T434	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	5	21	20.54	0.04	0.699	0.403	0.777
T443	UMTS B2	RMC12.2K	9400	Front Face	1	Second	1	1	21	20.93	0.01	0.428	0.239	0.435
T444	UMTS B2	RMC12.2K	9400	Rear Face	1	Second	1	1	21	20.93	-0.07	0.360	0.210	0.366
T445	UMTS B2	RMC12.2K	9400	Left Side	1	Second	1	1	21	20.93	-0.02	0.105	0.061	0.107
T446	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	1	21	20.93	-0.06	0.714	0.363	0.726
T447	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	2	21	20.93	0.12	0.610	0.314	0.620
T448	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	3	21	20.93	0	0.657	0.338	0.668
T449	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	4	21	20.93	-0.16	0.683	0.351	0.694
T450	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	5	21	20.93	0	0.691	0.355	0.702
T459	UMTS B4	RMC12.2K	1413	Front Face	1	Main	1	1	21.5	21.28	0	0.298	0.185	0.313
T460	UMTS B4	RMC12.2K	1413	Rear Face	1	Main	1	1	21.5	21.28	0.04	0.550	0.334	0.579
T461	UMTS B4	RMC12.2K	1413	Left Side	1	Main	1	1	21.5	21.28	0.11	0.073	0.044	0.076
T462	UMTS B4	RMC12.2K	1413	Right Side	1	Main	1	1	21.5	21.28	-0.04	0.141	0.080	0.148
T463	UMTS B4	RMC12.2K	1413	Bottom Side	1	Main	1	1	21.5	21.28	0.01	0.811	0.460	0.853
T464	UMTS B4	RMC12.2K	1312	Bottom Side	1	Main	1	1	21.5	21.23	0.03	0.774	0.438	0.824
T465	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	1	21.5	21.04	0.02	0.826	0.469	0.918
T466	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	2	21.5	21.04	0.05	0.798	0.447	0.887
T467	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	3	21.5	21.04	0.14	0.805	0.452	0.895
T468	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	4	21.5	21.04	-0.03	0.819	0.463	0.911
T469	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	5	21.5	21.04	0.08	0.810	0.456	0.901
T470	UMTS B4	RMC12.2K	1513	Bottom Side (Repeated)	1	Main	1	1	21.5	21.04	0.09	0.816	0.563	0.907
T478	UMTS B4	RMC12.2K	1413	Front Face	1	Second	1	1	22	21.59	0.07	0.315	0.184	0.346
T479	UMTS B4	RMC12.2K	1413	Rear Face	1	Second	1	1	22	21.59	0.07	0.340	0.202	0.374
T480	UMTS B4	RMC12.2K	1413	Left Side	1	Second	1	1	22	21.59	0.14	0.141	0.085	0.155
T481	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	1	22	21.59	-0.03	0.552	0.300	0.607
T482	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	2	22	21.59	0.09	0.529	0.276	0.581
T483	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	3	22	21.59	0.05	0.536	0.283	0.589
T484	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	4	22	21.59	-0.12	0.538	0.284	0.591
T485	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	5	22	21.59	0.03	0.527	0.273	0.579

Test No.	Band	Mode	Channel	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T494	UMTS B5	RMC12.2K	4182	Front Face	1	Main	1	1	23	21.37	0	0.080	0.061	0.116
T495	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	1	23	21.37	0.02	0.141	0.082	0.205
T496	UMTS B5	RMC12.2K	4182	Left Side	1	Main	1	1	23	21.37	-0.04	0.114	0.078	0.166
T497	UMTS B5	RMC12.2K	4182	Right Side	1	Main	1	1	23	21.37	-0.02	0.074	0.050	0.108
T498	UMTS B5	RMC12.2K	4182	Bottom Side	1	Main	1	1	23	21.37	-0.02	0.086	0.049	0.125
T499	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	2	23	21.37	0.01	0.150	0.087	0.218
T500	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	3	23	21.37	-0.01	0.165	0.094	0.240
T501	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	4	23	21.37	0.02	0.144	0.085	0.210
T502	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	5	23	21.37	0	0.154	0.090	0.224
T511	UMTS B5	RMC12.2K	4182	Front Face	1	Second	1	1	22	21.54	0	0.037	0.024	0.041
T512	UMTS B5	RMC12.2K	4182	Rear Face	1	Second	1	1	22	21.54	0	0.040	0.026	0.044
T513	UMTS B5	RMC12.2K	4182	Left Side	1	Second	1	1	22	21.54	0.02	0.019	0.013	0.021
T514	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	1	22	21.54	0.03	0.057	0.033	0.064
T515	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	2	22	21.54	-0.04	0.049	0.029	0.054
T516	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	3	22	21.54	-0.06	0.059	0.034	0.065
T517	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	4	22	21.54	0.01	0.066	0.038	0.073
T518	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	5	22	21.54	-0.03	0.057	0.033	0.063

Note: The value with boldface is the maximum SAR Value of each test band.

3. Hotspot SAR test results of LTE

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T531	LTE B2	QPSK20M	18900	1	0	Front Face	1	Main	1	1	20.5	20.21	0.05	0.282	0.177	0.301
T532	LTE B2	QPSK20M	18900	1	0	Rear Face	1	Main	1	1	20.5	20.21	-0.04	0.449	0.275	0.480
T533	LTE B2	QPSK20M	18900	1	0	Left Side	1	Main	1	1	20.5	20.21	0.12	0.074	0.045	0.079
T534	LTE B2	QPSK20M	18900	1	0	Right Side	1	Main	1	1	20.5	20.21	0.02	0.139	0.078	0.149
T535	LTE B2	QPSK20M	18900	1	0	Bottom Side	1	Main	1	1	20.5	20.21	0.06	0.699	0.405	0.747
T536	LTE B2	QPSK20M	18900	50	0	Front Face	1	Main	1	1	20.5	20.13	0.13	0.283	0.177	0.308
T537	LTE B2	QPSK20M	18900	50	0	Rear Face	1	Main	1	1	20.5	20.13	-0.04	0.456	0.279	0.497
T538	LTE B2	QPSK20M	18900	50	0	Left Side	1	Main	1	1	20.5	20.13	-0.01	0.076	0.047	0.083
T539	LTE B2	QPSK20M	18900	50	0	Right Side	1	Main	1	1	20.5	20.13	-0.01	0.140	0.079	0.152
T540	LTE B2	QPSK20M	18900	50	0	Bottom Side	1	Main	1	1	20.5	20.13	0.12	0.703	0.407	0.766
T543	LTE B2	QPSK20M	18900	50	0	Bottom Side	1	Main	1	2	20.5	20.13	0.02	0.726	0.420	0.791
T544	LTE B2	QPSK20M	18900	50	0	Bottom Side	1	Main	1	3	20.5	20.13	-0.12	0.759	0.441	0.826
T545	LTE B2	QPSK20M	18900	50	0	Bottom Side	1	Main	1	4	20.5	20.13	0.07	0.693	0.403	0.755
T546	LTE B2	QPSK20M	18900	50	0	Bottom Side	1	Main	1	5	20.5	20.13	0.07	0.698	0.406	0.760
T559	LTE B2	QPSK20M	18900	1	0	Front Face	1	Second	1	1	21	20.67	0.01	0.354	0.200	0.382
T560	LTE B2	QPSK20M	18900	1	0	Rear Face	1	Second	1	1	21	20.67	0.04	0.344	0.202	0.371
T561	LTE B2	QPSK20M	18900	1	0	Left Side	1	Second	1	1	21	20.67	0.02	0.108	0.065	0.117
T562	LTE B2	QPSK20M	18900	1	0	Top Side	1	Second	1	1	21	20.67	-0.04	0.667	0.341	0.720
T563	LTE B2	QPSK20M	18900	50	0	Front Face	1	Second	1	1	21	20.63	0.11	0.364	0.205	0.396
T564	LTE B2	QPSK20M	18900	50	0	Rear Face	1	Second	1	1	21	20.63	0.05	0.341	0.202	0.371
T565	LTE B2	QPSK20M	18900	50	0	Left Side	1	Second	1	1	21	20.63	0.02	0.109	0.066	0.119
T566	LTE B2	QPSK20M	18900	50	0	Top Side	1	Second	1	1	21	20.63	-0.08	0.683	0.347	0.744
T569	LTE B2	QPSK20M	18900	50	0	Top Side	1	Second	1	2	21	20.63	-0.06	0.655	0.337	0.713
T570	LTE B2	QPSK20M	18900	50	0	Top Side	1	Second	1	3	21	20.63	-0.03	0.750	0.386	0.817
T571	LTE B2	QPSK20M	18900	50	0	Top Side	1	Second	1	4	21	20.63	-0.1	0.731	0.377	0.796
T572	LTE B2	QPSK20M	18900	50	0	Top Side	1	Second	1	5	21	20.63	0.03	0.777	0.400	0.846

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T585	LTE B4	QPSK20M	20050	1	0	Front Face	1	Main	1	1	21.5	21.25	0.1	0.317	0.195	0.336
T586	LTE B4	QPSK20M	20050	1	0	Rear Face	1	Main	1	1	21.5	21.25	0.1	0.578	0.350	0.612
T587	LTE B4	QPSK20M	20050	1	0	Left Side	1	Main	1	1	21.5	21.25	0.05	0.090	0.055	0.095
T588	LTE B4	QPSK20M	20050	1	0	Right Side	1	Main	1	1	21.5	21.25	0.15	0.133	0.077	0.141
T589	LTE B4	QPSK20M	20050	1	0	Bottom Side	1	Main	1	1	21.5	21.25	0.19	0.741	0.420	0.785
T590	LTE B4	QPSK20M	20050	50	0	Front Face	1	Main	1	1	21.5	21.15	0.16	0.315	0.194	0.341
T591	LTE B4	QPSK20M	20050	50	0	Rear Face	1	Main	1	1	21.5	21.15	0.04	0.574	0.347	0.622
T592	LTE B4	QPSK20M	20050	50	0	Left Side	1	Main	1	1	21.5	21.15	0.17	0.090	0.055	0.097
T593	LTE B4	QPSK20M	20050	50	0	Right Side	1	Main	1	1	21.5	21.15	0.11	0.135	0.078	0.146
T594	LTE B4	QPSK20M	20050	50	0	Bottom Side	1	Main	1	1	21.5	21.15	0.03	0.735	0.416	0.797
T597	LTE B4	QPSK20M	20175	1	0	Bottom Side	1	Main	1	1	21.5	21.23	0.04	0.785	0.443	0.835
T598	LTE B4	QPSK20M	20300	1	0	Bottom Side	1	Main	1	1	21.5	21.15	0.04	0.801	0.453	0.868
T599	LTE B4	QPSK20M	20175	50	0	Bottom Side	1	Main	1	1	21.5	21.1	0.05	0.789	0.445	0.865
T600	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	1	21.5	21.04	0.02	0.798	0.450	0.887
T601	LTE B4	QPSK20M	20050	100	0	Bottom Side	1	Main	1	1	21.5	21.78	0.07	0.762	0.427	0.714
T602	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	2	21.5	21.04	0.01	0.806	0.456	0.896
T603	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	3	21.5	21.04	0.02	0.810	0.459	0.901
T604	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	4	21.5	21.04	0.03	0.815	0.466	0.906
T605	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	5	21.5	21.04	0.07	0.825	0.467	0.917
T606	LTE B4	QPSK20M	20300	50	0	Bottom Side (repeated)	1	Main	1	5	21.5	21.04	0.02	0.806	0.458	0.896
T618	LTE B4	QPSK20M	20050	1	0	Front Face	1	Second	1	1	22.5	22.48	0.02	0.403	0.236	0.405
T619	LTE B4	QPSK20M	20050	1	0	Rear Face	1	Second	1	1	22.5	22.48	0.07	0.454	0.267	0.456
T620	LTE B4	QPSK20M	20050	1	0	Left Side	1	Second	1	1	22.5	22.48	0.13	0.183	0.110	0.184
T621	LTE B4	QPSK20M	20050	1	0	Top Side	1	Second	1	1	22.5	22.48	-0.15	0.671	0.366	0.674
T622	LTE B4	QPSK20M	20050	50	0	Front Face	1	Second	1	1	22.5	22.35	0.07	0.403	0.235	0.417
T623	LTE B4	QPSK20M	20050	50	0	Rear Face	1	Second	1	1	22.5	22.35	0.04	0.454	0.267	0.470
T624	LTE B4	QPSK20M	20050	50	0	Left Side	1	Second	1	1	22.5	22.35	0.08	0.183	0.110	0.189
T625	LTE B4	QPSK20M	20050	50	0	Top Side	1	Second	1	1	22.5	22.35	-0.13	0.687	0.372	0.711
T628	LTE B4	QPSK20M	20050	50	0	Top Side	1	Second	1	2	22.5	22.35	0.07	0.684	0.369	0.708
T629	LTE B4	QPSK20M	20050	50	0	Top Side	1	Second	1	3	22.5	22.35	0.09	0.699	0.376	0.724
T630	LTE B4	QPSK20M	20050	50	0	Top Side	1	Second	1	4	22.5	22.35	-0.04	0.704	0.380	0.729
T631	LTE B4	QPSK20M	20050	50	0	Top Side	1	Second	1	5	22.5	22.35	-0.04	0.688	0.372	0.712

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T642	LTE B5	QPSK10M	20600	1	49	Front Face	1	Main	1	1	24.5	23.41	-0.01	0.151	0.096	0.194
T643	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	1	24.5	23.41	0.05	0.317	0.186	0.407
T644	LTE B5	QPSK10M	20600	1	49	Left Side	1	Main	1	1	24.5	23.41	-0.06	0.214	0.149	0.275
T645	LTE B5	QPSK10M	20600	1	49	Right Side	1	Main	1	1	24.5	23.41	0.01	0.129	0.089	0.166
T646	LTE B5	QPSK10M	20600	1	49	Bottom Side	1	Main	1	1	24.5	23.41	-0.01	0.197	0.112	0.253
T647	LTE B5	QPSK10M	20525	25	0	Front Face	1	Main	1	1	23.5	22.98	0.03	0.114	0.073	0.129
T648	LTE B5	QPSK10M	20525	25	0	Rear Face	1	Main	1	1	23.5	22.98	-0.02	0.231	0.137	0.260
T649	LTE B5	QPSK10M	20525	25	0	Left Side	1	Main	1	1	23.5	22.98	-0.06	0.175	0.122	0.197
T650	LTE B5	QPSK10M	20525	25	0	Right Side	1	Main	1	1	23.5	22.98	-0.03	0.105	0.073	0.118
T651	LTE B5	QPSK10M	20525	25	0	Bottom Side	1	Main	1	1	23.5	22.98	0.05	0.135	0.077	0.152
T652	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	2	24.5	23.41	-0.03	0.341	0.199	0.438
T653	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	3	24.5	23.41	0.02	0.373	0.217	0.479
T654	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	4	24.5	23.41	0.07	0.338	0.193	0.434
T655	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	5	24.5	23.41	0.02	0.357	0.206	0.459
T666	LTE B5	QPSK10M	20525	1	0	Front Face	1	Second	1	1	25	24.16	0.02	0.086	0.057	0.104
T667	LTE B5	QPSK10M	20525	1	0	Rear Face	1	Second	1	1	25	24.16	0.06	0.093	0.061	0.112
T668	LTE B5	QPSK10M	20525	1	0	Left Side	1	Second	1	1	25	24.16	0.05	0.033	0.023	0.041
T669	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	1	25	24.16	-0.07	0.096	0.060	0.117
T670	LTE B5	QPSK10M	20525	25	12	Front Face	1	Second	1	1	24	23.31	0.08	0.080	0.054	0.093
T671	LTE B5	QPSK10M	20525	25	12	Rear Face	1	Second	1	1	24	23.31	0.07	0.085	0.057	0.100
T672	LTE B5	QPSK10M	20525	25	12	Left Side	1	Second	1	1	24	23.31	0.06	0.027	0.020	0.031
T673	LTE B5	QPSK10M	20525	25	12	Top Side	1	Second	1	1	24	23.31	0.04	0.088	0.057	0.104
T674	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	2	25	24.16	-0.07	0.091	0.057	0.111
T675	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	3	25	24.16	0.03	0.134	0.080	0.163
T676	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	4	25	24.16	-0.03	0.140	0.082	0.170
T677	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	5	25	24.16	0.05	0.114	0.066	0.138

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T690	LTE B7	QPSK20M	21100	1	0	Front Face	1	Main	1	1	21.5	20.99	0.07	0.320	0.185	0.360
T691	LTE B7	QPSK20M	21100	1	0	Rear Face	1	Main	1	1	21.5	20.99	0.15	0.443	0.240	0.498
T692	LTE B7	QPSK20M	21100	1	0	Left Side	1	Main	1	1	21.5	20.99	0.05	0.071	0.037	0.080
T693	LTE B7	QPSK20M	21100	1	0	Right Side	1	Main	1	1	21.5	20.99	-0.03	0.236	0.127	0.265
T694	LTE B7	QPSK20M	21100	1	0	Bottom Side	1	Main	1	1	21.5	20.99	0.02	0.266	0.135	0.299
T695	LTE B7	QPSK20M	21100	50	0	Front Face	1	Main	1	1	21.5	20.91	0.02	0.327	0.190	0.375
T696	LTE B7	QPSK20M	21100	50	0	Rear Face	1	Main	1	1	21.5	20.91	0.16	0.455	0.245	0.521
T697	LTE B7	QPSK20M	21100	50	0	Left Side	1	Main	1	1	21.5	20.91	-0.09	0.072	0.037	0.082
T698	LTE B7	QPSK20M	21100	50	0	Right Side	1	Main	1	1	21.5	20.91	-0.03	0.240	0.129	0.275
T699	LTE B7	QPSK20M	21100	50	0	Bottom Side	1	Main	1	1	21.5	20.91	-0.01	0.277	0.142	0.317
T702	LTE B7	QPSK20M	21100	50	0	Rear Face	1	Main	1	2	21.5	20.91	0.01	0.422	0.225	0.483
T703	LTE B7	QPSK20M	21100	50	0	Rear Face	1	Main	1	3	21.5	20.91	0.13	0.506	0.270	0.580
T704	LTE B7	QPSK20M	21100	50	0	Rear Face	1	Main	1	4	21.5	20.91	0.07	0.423	0.226	0.485
T705	LTE B7	QPSK20M	21100	50	0	Rear Face	1	Main	1	5	21.5	20.91	0.07	0.555	0.293	0.636
T718	LTE B7	QPSK20M	21100	1	0	Front Face	1	Second	1	1	17	16.95	0.06	0.209	0.095	0.211
T719	LTE B7	QPSK20M	21100	1	0	Rear Face	1	Second	1	1	17	16.95	0.02	0.263	0.115	0.266
T720	LTE B7	QPSK20M	21100	1	0	Left Side	1	Second	1	1	17	16.95	0.17	0.115	0.058	0.116
T721	LTE B7	QPSK20M	21100	1	0	Top Side	1	Second	1	1	17	16.95	-0.1	0.582	0.231	0.589
T722	LTE B7	QPSK20M	21100	50	0	Front Face	1	Second	1	1	17	16.94	0.04	0.218	0.099	0.221
T723	LTE B7	QPSK20M	21100	50	0	Rear Face	1	Second	1	1	17	16.94	-0.02	0.280	0.123	0.284
T724	LTE B7	QPSK20M	21100	50	0	Left Side	1	Second	1	1	17	16.94	0.11	0.123	0.062	0.125
T725	LTE B7	QPSK20M	21100	50	0	Top Side	1	Second	1	1	17	16.94	-0.03	0.606	0.240	0.614
T728	LTE B7	QPSK20M	21100	50	0	Top Side	1	Second	1	2	17	16.94	-0.16	0.758	0.313	0.769
T729	LTE B7	QPSK20M	21100	50	0	Top Side	1	Second	1	3	17	16.94	0.07	0.811	0.336	0.822
T730	LTE B7	QPSK20M	21100	50	0	Top Side	1	Second	1	4	17	16.94	-0.05	0.719	0.296	0.729
T731	LTE B7	QPSK20M	21100	50	0	Top Side	1	Second	1	5	17	16.94	0.05	0.610	0.245	0.618
T732	LTE B7	QPSK20M	21100	50	0	Top Side (Repeated)	1	Second	1	3	17	16.94	0.03	0.802	0.331	0.813

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T742	LTE B26	QPSK15M	26765	1	0	Front Face	1	Main	1	1	25	24.08	0	0.107	0.081	0.132
T743	LTE B26	QPSK15M	26765	1	0	Rear Face	1	Main	1	1	25	24.08	0.02	0.164	0.097	0.203
T744	LTE B26	QPSK15M	26765	1	0	Left Side	1	Main	1	1	25	24.08	0.06	0.143	0.093	0.177
T745	LTE B26	QPSK15M	26765	1	0	Right Side	1	Main	1	1	25	24.08	0.14	0.072	0.047	0.089
T746	LTE B26	QPSK15M	26765	1	0	Bottom Side	1	Main	1	1	25	24.08	0.05	0.103	0.055	0.127
T747	LTE B26	QPSK15M	26765	36	0	Front Face	1	Main	1	1	24	23.12	0.09	0.105	0.080	0.129
T748	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	1	24	23.12	0.07	0.167	0.098	0.205
T749	LTE B26	QPSK15M	26765	36	0	Left Side	1	Main	1	1	24	23.12	-0.02	0.146	0.096	0.179
T750	LTE B26	QPSK15M	26765	36	0	Right Side	1	Main	1	1	24	23.12	0.06	0.074	0.049	0.091
T751	LTE B26	QPSK15M	26765	36	0	Bottom Side	1	Main	1	1	24	23.12	-0.05	0.110	0.058	0.135
T752	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	2	24	23.12	0.07	0.161	0.092	0.197
T753	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	3	24	23.12	0.02	0.178	0.105	0.218
T754	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	4	24	23.12	0.11	0.143	0.083	0.175
T755	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	5	24	23.12	0.03	0.163	0.096	0.200
T766	LTE B26	QPSK15M	26765	1	37	Front Face	1	Second	1	1	25	24.39	0.09	0.062	0.039	0.071
T767	LTE B26	QPSK15M	26765	1	37	Rear Face	1	Second	1	1	25	24.39	0.04	0.065	0.043	0.075
T768	LTE B26	QPSK15M	26765	1	37	Left Side	1	Second	1	1	25	24.39	-0.11	0.027	0.018	0.030
T769	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	1	25	24.39	0.07	0.067	0.041	0.077
T770	LTE B26	QPSK15M	26765	36	0	Front Face	1	Second	1	1	24	23.65	-0.02	0.046	0.030	0.050
T771	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Second	1	1	24	23.65	0.06	0.048	0.031	0.052
T772	LTE B26	QPSK15M	26765	36	0	Left Side	1	Second	1	1	24	23.65	0.06	0.021	0.014	0.023
T773	LTE B26	QPSK15M	26765	36	0	Top Side	1	Second	1	1	24	23.65	0.07	0.049	0.028	0.053
T774	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	2	25	24.39	-0.08	0.061	0.037	0.070
T775	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	3	25	24.39	0.17	0.063	0.039	0.073
T776	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	4	25	24.39	0.05	0.072	0.046	0.083
T777	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	5	25	24.39	-0.17	0.076	0.046	0.087

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T788	LTE B38	QPSK20M	37850	1	0	Front Face	1	Main	1	1	23	22.66	-0.05	0.250	0.135	0.270
T789	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	1	23	22.66	0.02	0.422	0.222	0.456
T790	LTE B38	QPSK20M	37850	1	0	Left Side	1	Main	1	1	23	22.66	0.02	0.055	0.028	0.059
T791	LTE B38	QPSK20M	37850	1	0	Right Side	1	Main	1	1	23	22.66	-0.09	0.212	0.111	0.229
T792	LTE B38	QPSK20M	37850	1	0	Bottom Side	1	Main	1	1	23	22.66	-0.12	0.229	0.118	0.248
T793	LTE B38	QPSK20M	37850	50	0	Front Face	1	Main	1	1	23	22.47	0.03	0.247	0.133	0.279
T794	LTE B38	QPSK20M	37850	50	0	Rear Face	1	Main	1	1	23	22.47	0.03	0.402	0.216	0.454
T795	LTE B38	QPSK20M	37850	50	0	Left Side	1	Main	1	1	23	22.47	0.07	0.050	0.025	0.057
T796	LTE B38	QPSK20M	37850	50	0	Right Side	1	Main	1	1	23	22.47	-0.02	0.207	0.109	0.234
T797	LTE B38	QPSK20M	37850	50	0	Bottom Side	1	Main	1	1	23	22.47	-0.13	0.224	0.116	0.253
T798	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	2	23	22.66	0.17	0.391	0.205	0.423
T799	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	3	23	22.66	0.06	0.418	0.220	0.452
T800	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	4	23	22.66	0.01	0.413	0.216	0.447
T801	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	5	23	22.66	0.17	0.482	0.252	0.521
T812	LTE B38	QPSK20M	38150	1	0	Front Face	1	Second	1	1	19.5	19.21	0.11	0.241	0.120	0.258
T813	LTE B38	QPSK20M	38150	1	0	Rear Face	1	Second	1	1	19.5	19.21	-0.04	0.380	0.178	0.406
T814	LTE B38	QPSK20M	38150	1	0	Left Side	1	Second	1	1	19.5	19.21	-0.07	0.182	0.096	0.195
T815	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	1	19.5	19.21	0.09	0.627	0.256	0.670
T816	LTE B38	QPSK20M	38150	50	25	Front Face	1	Second	1	1	19.5	18.93	0.1	0.162	0.079	0.185
T817	LTE B38	QPSK20M	38150	50	25	Rear Face	1	Second	1	1	19.5	18.93	-0.07	0.353	0.166	0.403
T818	LTE B38	QPSK20M	38150	50	25	Left Side	1	Second	1	1	19.5	18.93	-0.08	0.174	0.091	0.198
T819	LTE B38	QPSK20M	38150	50	25	Top Side	1	Second	1	1	19.5	18.93	0.08	0.586	0.239	0.668
T820	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	2	19.5	19.21	0.03	0.673	0.268	0.719
T821	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	3	19.5	19.21	-0.13	0.663	0.272	0.709
T822	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	4	19.5	19.21	0.08	0.696	0.287	0.744
T823	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	5	19.5	19.21	-0.01	0.649	0.249	0.694

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T834	LTE B41	QPSK20M	40620	1	0	Front Face	1	Main	1	1	23	22.69	0.11	0.288	0.152	0.309
T835	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	1	23	22.69	0.11	0.411	0.214	0.441
T836	LTE B41	QPSK20M	40620	1	0	Left Side	1	Main	1	1	23	22.69	-0.05	0.053	0.028	0.056
T837	LTE B41	QPSK20M	40620	1	0	Right Side	1	Main	1	1	23	22.69	-0.01	0.206	0.108	0.221
T838	LTE B41	QPSK20M	40620	1	0	Bottom Side	1	Main	1	1	23	22.69	0	0.236	0.119	0.253
T839	LTE B41	QPSK20M	40620	50	0	Front Face	1	Main	1	1	23	22.46	0.14	0.287	0.152	0.325
T840	LTE B41	QPSK20M	40620	50	0	Rear Face	1	Main	1	1	23	22.46	0.09	0.388	0.210	0.439
T841	LTE B41	QPSK20M	40620	50	0	Left Side	1	Main	1	1	23	22.46	0.01	0.051	0.027	0.057
T842	LTE B41	QPSK20M	40620	50	0	Right Side	1	Main	1	1	23	22.46	0.09	0.199	0.104	0.225
T843	LTE B41	QPSK20M	40620	50	0	Bottom Side	1	Main	1	1	23	22.46	0.03	0.230	0.116	0.260
T844	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	2	23	22.69	-0.05	0.404	0.211	0.434
T845	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	3	23	22.69	-0.08	0.392	0.201	0.421
T846	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	4	23	22.69	0.01	0.402	0.208	0.432
T847	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	5	23	22.69	0.06	0.383	0.206	0.411
T860	LTE B41	QPSK20M	41490	1	0	Front Face	1	Second	1	1	21	20.63	0.01	0.263	0.138	0.286
T861	LTE B41	QPSK20M	41490	1	0	Rear Face	1	Second	1	1	21	20.63	0.11	0.468	0.206	0.510
T862	LTE B41	QPSK20M	41490	1	0	Left Side	1	Second	1	1	21	20.63	-0.14	0.335	0.168	0.365
T863	LTE B41	QPSK20M	41490	1	0	Top Side	1	Second	1	1	21	20.63	0.08	0.581	0.225	0.633
T864	LTE B41	QPSK20M	41490	50	0	Front Face	1	Second	1	1	21	20.49	0.19	0.256	0.134	0.288
T865	LTE B41	QPSK20M	41490	50	0	Rear Face	1	Second	1	1	21	20.49	0.04	0.454	0.200	0.511
T866	LTE B41	QPSK20M	41490	50	0	Left Side	1	Second	1	1	21	20.49	-0.15	0.327	0.164	0.368
T867	LTE B41	QPSK20M	41490	50	0	Top Side	1	Second	1	1	21	20.49	-0.06	0.543	0.211	0.611
T1078	LTE B41	QPSK20M	39750	1	0	Top Side	1	Second	1	1	21	20.46	0.03	0.557	0.267	0.631
T1079	LTE B41	QPSK20M	40185	1	0	Top Side	1	Second	1	1	21	20.22	0.07	0.521	0.322	0.624
T1080	LTE B41	QPSK20M	40620	1	0	Top Side	1	Second	1	1	21	20.55	0.05	0.568	0.277	0.630
T1081	LTE B41	QPSK20M	41055	1	0	Top Side	1	Second	1	1	21	20.13	0.03	0.506	0.214	0.618
T1082	LTE B41	QPSK20M	39750	50	0	Top Side	1	Second	1	1	21	20.32	0.14	0.502	0.278	0.587
T1083	LTE B41	QPSK20M	40185	50	0	Top Side	1	Second	1	1	21	20.18	0.06	0.513	0.331	0.620
T1084	LTE B41	QPSK20M	40620	50	0	Top Side	1	Second	1	1	21	20.45	0.09	0.559	0.272	0.634
T1085	LTE B41	QPSK20M	41055	50	0	Top Side	1	Second	1	1	21	20.11	-0.01	0.476	0.200	0.584
T870	LTE B41	QPSK20M	40620	50	0	Top Side	1	Second	1	2	21	20.45	0.12	0.565	0.211	0.641
T871	LTE B41	QPSK20M	40620	50	0	Top Side	1	Second	1	3	21	20.45	0.01	0.571	0.218	0.648
T872	LTE B41	QPSK20M	40620	50	0	Top Side	1	Second	1	4	21	20.45	-0.05	0.562	0.207	0.638
T873	LTE B41	QPSK20M	40620	50	0	Top Side	1	Second	1	5	21	20.45	-0.07	0.578	0.221	0.656

Note: The value with boldface is the maximum SAR Value of each test band.

4. Hotspot SAR test results of CA

Test No.	PCC					SCC					Tune-up For LTE CA TX Power	LTE CA TX Power	Test Position	Separation Distance (cm)	Ant	Battery	Power Drift	SAR 1g	SAR 10g	Reported 10g SAR
	Band	Band width [MHZ]	Modulation	Channel (UL)	RB Size/ Offset	Band	Band width [MHZ]	Modulation	Channel (UL)	RB Size/ Offset										
T994	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	1	0.06	0.392	0.210	0.393
T995	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	2	0.09	0.364	0.189	0.365
T996	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	3	0.03	0.381	0.203	0.382
T997	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	4	0.04	0.354	0.192	0.355
T998	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	5	0.02	0.375	0.202	0.376
T1006	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	1	0.09	0.720	0.302	0.779
T1007	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	2	0.03	0.669	0.284	0.723
T1008	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	3	0.02	0.584	0.227	0.632
T1009	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	4	0.15	0.621	0.255	0.672
T1010	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	5	0.04	0.686	0.275	0.742
T1018	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	1	0.07	0.317	0.172	0.348
T1019	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	2	0.09	0.385	0.196	0.423
T1020	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	3	0	0.308	0.168	0.338
T1021	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	4	0.06	0.337	0.187	0.370
T1022	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	5	0.01	0.353	0.194	0.388
T1030	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	1	0.08	0.519	0.211	0.550
T1031	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	2	0.12	0.471	0.189	0.499
T1032	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	3	0.02	0.486	0.197	0.515
T1033	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	4	0	0.483	0.196	0.512
T1034	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	5	0.04	0.510	0.208	0.540
T1042	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	1	0.09	0.296	0.168	0.331
T1043	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	2	-0.12	0.315	0.171	0.353
T1044	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	3	0.08	0.329	0.172	0.368
T1045	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	4	0.03	0.290	0.148	0.325
T1046	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	5	0.04	0.269	0.133	0.301
T1054	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	1	0.02	0.393	0.155	0.428
T1055	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	2	-0.06	0.236	0.105	0.257
T1056	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	3	0.01	0.374	0.146	0.407
T1057	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	4	0.09	0.347	0.133	0.378
T1058	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	5	0.02	0.316	0.127	0.344

Note: The value with boldface is the maximum SAR Value of each test band.

5. Hotspot SAR test results of WIFI

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Duty cycle	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T881	802.11b	11	Front Face	1	1	19	18.97	-	0.03	0.154	0.079	0.155
T882	802.11b	11	Rear Face	1	1	19	18.97	-	0.01	0.202	0.094	0.203
T883	802.11b	11	Right Side	1	1	19	18.97	-	0.06	0.062	0.032	0.062
T884	802.11b	11	Top Side	1	1	19	18.97	-	-0.06	0.260	0.125	0.262
T885	802.11b	11	Top Side	1	2	19	18.97	-	0.05	0.243	0.103	0.245
T886	802.11b	11	Top Side	1	3	19	18.97	-	0.01	0.250	0.110	0.252
T887	802.11b	11	Top Side	1	4	19	18.97	-	0.06	0.256	0.119	0.258
T888	802.11b	11	Top Side	1	5	19	18.97	-	0.02	0.233	0.096	0.235
T896	802.11a	36	Front Face	1	1	18	17.89	-	0.09	0.078	0.024	0.080
T897	802.11a	36	Rear Face	1	1	18	17.89	-	0.04	0.143	0.062	0.147
T898	802.11a	36	Right Side	1	1	18	17.89	-	0.02	0.172	0.063	0.176
T899	802.11a	36	Top Side	1	1	18	17.89	-	0.03	0.157	0.062	0.161
T900	802.11a	36	Right Side	1	2	18	17.89	-	0.01	0.153	0.060	0.157
T901	802.11a	36	Right Side	1	3	18	17.89	-	0.07	0.166	0.062	0.170
T902	802.11a	36	Right Side	1	4	18	17.89	-	0.03	0.169	0.063	0.173
T903	802.11a	36	Right Side	1	5	18	17.89	-	0.09	0.158	0.061	0.162
T945	802.11a	149	Front Face	1	1	15	14.97	-	-0.08	0.100	0.037	0.100
T946	802.11a	149	Rear Face	1	1	15	14.97	-	0.03	0.215	0.076	0.216
T947	802.11a	149	Right Side	1	1	15	14.97	-	-0.03	0.410	0.144	0.413
T948	802.11a	149	Top Side	1	1	15	14.97	-	-0.17	0.149	0.059	0.150
T949	802.11a	149	Right Side	1	2	15	14.97	-	0.07	0.248	0.088	0.250
T950	802.11a	149	Right Side	1	3	15	14.97	-	0.01	0.259	0.093	0.261
T951	802.11a	149	Right Side	1	4	15	14.97	-	0.05	0.278	0.100	0.280
T952	802.11a	149	Right Side	1	5	15	14.97	-	-0.07	0.321	0.114	0.323

Note: The value with boldface is the maximum SAR Value of each test band.

Note: Per KDB248227 D01, 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.

7.2.4 SAR MEASUREMENT RESULT OF PRODUCT SPECIFIC 10-G SAR

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 No.	Band	Mode	Channel	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T358	GSM 850	GPRS3TX	190	Front Face	1	Main	1	1	28	26.62	0.11	0.075	0.058	YES
T359	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	1	28	26.62	0.18	0.150	0.088	YES
T360	GSM 850	GPRS3TX	190	Left Side	1	Main	1	1	28	26.62	0.03	0.113	0.079	YES
T361	GSM 850	GPRS3TX	190	Right Side	1	Main	1	1	28	26.62	-0.02	0.072	0.047	YES
T362	GSM 850	GPRS3TX	190	Bottom Side	1	Main	1	1	28	26.62	-0.14	0.086	0.049	YES
T363	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	2	28	26.62	0.13	0.163	0.095	YES
T364	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	3	28	26.62	0.18	0.175	0.101	YES
T365	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	4	28	26.62	-0.02	0.155	0.092	YES
T366	GSM 850	GPRS3TX	190	Rear Face	1	Main	1	5	28	26.62	-0.01	0.168	0.099	YES
T375	GSM 850	GPRS2TX	190	Front Face	1	Second	1	1	30.5	29.6	0.01	0.186	0.125	YES
T376	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	1	30.5	29.6	0.02	0.192	0.129	YES
T377	GSM 850	GPRS2TX	190	Left Side	1	Second	1	1	30.5	29.6	0.03	0.119	0.080	YES
T378	GSM 850	GPRS2TX	190	Top Side	1	Second	1	1	30.5	29.6	0.03	0.191	0.119	YES
T379	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	2	30.5	29.6	-0.17	0.197	0.133	YES
T380	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	3	30.5	29.6	-0.03	0.209	0.139	YES
T381	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	4	30.5	29.6	-0.1	0.208	0.139	YES
T382	GSM 850	GPRS2TX	190	Rear Face	1	Second	1	5	30.5	29.6	-0.12	0.206	0.137	YES
T391	GSM 1900	GPRS3TX	661	Front Face	1	Main	1	1	24	23.39	-0.05	0.215	0.132	YES
T392	GSM 1900	GPRS3TX	661	Rear Face	1	Main	1	1	24	23.39	0.01	0.402	0.240	YES
T393	GSM 1900	GPRS3TX	661	Left Side	1	Main	1	1	24	23.39	0.02	0.056	0.034	YES
T394	GSM 1900	GPRS3TX	661	Right Side	1	Main	1	1	24	23.39	0.16	0.103	0.057	YES
T395	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	1	24	23.39	0.02	0.542	0.311	YES
T396	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	2	24	23.39	-0.17	0.471	0.272	YES
T397	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	3	24	23.39	0.06	0.461	0.265	YES
T398	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	4	24	23.39	-0.16	0.459	0.249	YES
T399	GSM 1900	GPRS3TX	661	Bottom Side	1	Main	1	5	24	23.39	0.07	0.510	0.295	YES
T408	GSM 1900	GPRS3TX	661	Front Face	1	Second	1	1	25	24.5	0.08	0.279	0.147	YES
T409	GSM 1900	GPRS3TX	661	Rear Face	1	Second	1	1	25	24.5	0.01	0.237	0.143	YES
T410	GSM 1900	GPRS3TX	661	Left Side	1	Second	1	1	25	24.5	0.01	0.074	0.043	YES
T411	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	1	25	24.5	0.09	0.462	0.236	YES
T412	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	2	25	24.5	0.01	0.424	0.217	YES
T413	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	3	25	24.5	-0.08	0.455	0.210	YES
T414	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	4	25	24.5	0.01	0.485	0.250	YES
T415	GSM 1900	GPRS3TX	661	Top Side	1	Second	1	5	25	24.5	-0.01	0.489	0.248	YES

Test No.	Band	Mode	Channel	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T424	UMTS B2	RMC12.2K	9400	Front Face	1	Main	1	1	21	20.54	0.1	0.283	0.175	YES
T425	UMTS B2	RMC12.2K	9400	Rear Face	1	Main	1	1	21	20.54	0.02	0.535	0.322	YES
T426	UMTS B2	RMC12.2K	9400	Left Side	1	Main	1	1	21	20.54	0.16	0.079	0.049	YES
T427	UMTS B2	RMC12.2K	9400	Right Side	1	Main	1	1	21	20.54	-0.04	0.128	0.072	YES
T428	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	1	21	20.54	0.07	0.722	0.415	YES
T429	UMTS B2	RMC12.2K	9262	Bottom Side	1	Main	1	1	21	20.44	0.04	0.616	0.359	YES
T430	UMTS B2	RMC12.2K	9538	Bottom Side	1	Main	1	1	21	20.49	0.06	0.549	0.317	YES
T431	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	2	21	20.54	0.04	0.627	0.364	YES
T432	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	3	21	20.54	0.07	0.681	0.394	YES
T433	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	4	21	20.54	0.02	0.637	0.368	YES
T434	UMTS B2	RMC12.2K	9400	Bottom Side	1	Main	1	5	21	20.54	0.04	0.699	0.403	YES
T443	UMTS B2	RMC12.2K	9400	Front Face	1	Second	1	1	21	20.93	0.01	0.428	0.239	YES
T444	UMTS B2	RMC12.2K	9400	Rear Face	1	Second	1	1	21	20.93	-0.07	0.360	0.210	YES
T445	UMTS B2	RMC12.2K	9400	Left Side	1	Second	1	1	21	20.93	-0.02	0.105	0.061	YES
T446	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	1	21	20.93	-0.06	0.714	0.363	YES
T447	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	2	21	20.93	0.12	0.610	0.314	YES
T448	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	3	21	20.93	0	0.657	0.338	YES
T449	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	4	21	20.93	-0.16	0.683	0.351	YES
T450	UMTS B2	RMC12.2K	9400	Top Side	1	Second	1	5	21	20.93	0	0.691	0.355	YES
T459	UMTS B4	RMC12.2K	1413	Front Face	1	Main	1	1	21.5	21.28	0	0.298	0.185	YES
T460	UMTS B4	RMC12.2K	1413	Rear Face	1	Main	1	1	21.5	21.28	0.04	0.550	0.334	YES
T461	UMTS B4	RMC12.2K	1413	Left Side	1	Main	1	1	21.5	21.28	0.11	0.073	0.044	YES
T462	UMTS B4	RMC12.2K	1413	Right Side	1	Main	1	1	21.5	21.28	-0.04	0.141	0.080	YES
T463	UMTS B4	RMC12.2K	1413	Bottom Side	1	Main	1	1	21.5	21.28	0.01	0.811	0.460	YES
T464	UMTS B4	RMC12.2K	1312	Bottom Side	1	Main	1	1	21.5	21.23	0.03	0.774	0.438	YES
T465	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	1	21.5	21.04	0.02	0.826	0.469	YES
T466	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	2	21.5	21.04	0.05	0.798	0.447	YES
T467	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	3	21.5	21.04	0.14	0.805	0.452	YES
T468	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	4	21.5	21.04	-0.03	0.819	0.463	YES
T469	UMTS B4	RMC12.2K	1513	Bottom Side	1	Main	1	5	21.5	21.04	0.08	0.810	0.456	YES
T470	UMTS B4	RMC12.2K	1513	Bottom Side (Repeated)	1	Main	1	1	21.5	21.04	0.09	0.816	0.563	YES
T478	UMTS B4	RMC12.2K	1413	Front Face	1	Second	1	1	22	21.59	0.07	0.315	0.184	YES
T479	UMTS B4	RMC12.2K	1413	Rear Face	1	Second	1	1	22	21.59	0.07	0.340	0.202	YES
T480	UMTS B4	RMC12.2K	1413	Left Side	1	Second	1	1	22	21.59	0.14	0.141	0.085	YES
T481	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	1	22	21.59	-0.03	0.552	0.300	YES
T482	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	2	22	21.59	0.09	0.529	0.276	YES
T483	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	3	22	21.59	0.05	0.536	0.283	YES
T484	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	4	22	21.59	-0.12	0.538	0.284	YES
T485	UMTS B4	RMC12.2K	1413	Top Side	1	Second	1	5	22	21.59	0.03	0.527	0.273	YES

Test No.	Band	Mode	Channel	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T494	UMTS B5	RMC12.2K	4182	Front Face	1	Main	1	1	23	21.37	0	0.080	0.061	YES
T495	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	1	23	21.37	0.02	0.141	0.082	YES
T496	UMTS B5	RMC12.2K	4182	Left Side	1	Main	1	1	23	21.37	-0.04	0.114	0.078	YES
T497	UMTS B5	RMC12.2K	4182	Right Side	1	Main	1	1	23	21.37	-0.02	0.074	0.050	YES
T498	UMTS B5	RMC12.2K	4182	Bottom Side	1	Main	1	1	23	21.37	-0.02	0.086	0.049	YES
T499	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	2	23	21.37	0.01	0.150	0.087	YES
T500	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	3	23	21.37	-0.01	0.165	0.094	YES
T501	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	4	23	21.37	0.02	0.144	0.085	YES
T502	UMTS B5	RMC12.2K	4182	Rear Face	1	Main	1	5	23	21.37	0	0.154	0.090	YES
T511	UMTS B5	RMC12.2K	4182	Front Face	1	Second	1	1	22	21.54	0	0.037	0.024	YES
T512	UMTS B5	RMC12.2K	4182	Rear Face	1	Second	1	1	22	21.54	0	0.040	0.026	YES
T513	UMTS B5	RMC12.2K	4182	Left Side	1	Second	1	1	22	21.54	0.02	0.019	0.013	YES
T514	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	1	22	21.54	0.03	0.057	0.033	YES
T515	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	2	22	21.54	-0.04	0.049	0.029	YES
T516	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	3	22	21.54	-0.06	0.059	0.034	YES
T517	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	4	22	21.54	0.01	0.066	0.038	YES
T518	UMTS B5	RMC12.2K	4182	Top Side	1	Second	1	5	22	21.54	-0.03	0.057	0.033	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T531	LTE B2	QPSK20M	18900	1	0	Front Face	1	Main	1	1	20.5	20.21	0.05	0.282	0.177	YES
T532	LTE B2	QPSK20M	18900	1	0	Rear Face	1	Main	1	1	20.5	20.21	-0.04	0.449	0.275	YES
T533	LTE B2	QPSK20M	18900	1	0	Left Side	1	Main	1	1	20.5	20.21	0.12	0.074	0.045	YES
T534	LTE B2	QPSK20M	18900	1	0	Right Side	1	Main	1	1	20.5	20.21	0.02	0.139	0.078	YES
T535	LTE B2	QPSK20M	18900	1	0	Bottom Side	1	Main	1	1	20.5	20.21	0.06	0.699	0.405	YES
T536	LTE B2	QPSK20M	18900	50	0	Front Face	1	Main	1	1	20.5	20.13	0.13	0.283	0.177	YES
T537	LTE B2	QPSK20M	18900	50	0	Rear Face	1	Main	1	1	20.5	20.13	-0.04	0.456	0.279	YES
T538	LTE B2	QPSK20M	18900	50	0	Left Side	1	Main	1	1	20.5	20.13	-0.01	0.076	0.047	YES
T539	LTE B2	QPSK20M	18900	50	0	Right Side	1	Main	1	1	20.5	20.13	-0.01	0.140	0.079	YES
T540	LTE B2	QPSK20M	18900	50	0	Bottom Side	1	Main	1	1	20.5	20.13	0.12	0.703	0.407	YES
T541	LTE B2	16QAM20M	18900	1	0	Bottom Side	1	Main	1	1	21	20.74	0.1	0.735	0.427	YES
T542	LTE B2	64QAM20M	18900	1	0	Bottom Side	1	Main	1	1	21	20.69	0.15	0.722	0.419	YES
T543	LTE B2	16QAM20M	18900	1	0	Bottom Side	1	Main	1	2	21	20.74	0.02	0.726	0.420	YES
T544	LTE B2	16QAM20M	18900	1	0	Bottom Side	1	Main	1	3	21	20.74	-0.12	0.759	0.441	YES
T545	LTE B2	16QAM20M	18900	1	0	Bottom Side	1	Main	1	4	21	20.74	0.07	0.693	0.403	YES
T546	LTE B2	16QAM20M	18900	1	0	Bottom Side	1	Main	1	5	21	20.74	0.07	0.698	0.406	YES
T559	LTE B2	QPSK20M	18900	1	0	Front Face	1	Second	1	1	21	20.67	0.01	0.354	0.200	YES
T560	LTE B2	QPSK20M	18900	1	0	Rear Face	1	Second	1	1	21	20.67	0.04	0.344	0.202	YES
T561	LTE B2	QPSK20M	18900	1	0	Left Side	1	Second	1	1	21	20.67	0.02	0.108	0.065	YES
T562	LTE B2	QPSK20M	18900	1	0	Top Side	1	Second	1	1	21	20.67	-0.04	0.667	0.341	YES
T563	LTE B2	QPSK20M	18900	50	0	Front Face	1	Second	1	1	21	20.63	0.11	0.364	0.205	YES
T564	LTE B2	QPSK20M	18900	50	0	Rear Face	1	Second	1	1	21	20.63	0.05	0.341	0.202	YES
T565	LTE B2	QPSK20M	18900	50	0	Left Side	1	Second	1	1	21	20.63	0.02	0.109	0.066	YES
T566	LTE B2	QPSK20M	18900	50	0	Top Side	1	Second	1	1	21	20.63	-0.08	0.683	0.347	YES
T567	LTE B2	16QAM20M	18900	1	0	Top Side	1	Second	1	1	21.5	21.25	0	0.725	0.371	YES
T568	LTE B2	64QAM20M	19100	1	0	Top Side	1	Second	1	1	21.5	21.23	-0.03	0.760	0.386	YES
T569	LTE B2	64QAM20M	19100	1	0	Top Side	1	Second	1	2	21.5	21.23	-0.06	0.655	0.337	YES
T570	LTE B2	64QAM20M	19100	1	0	Top Side	1	Second	1	3	21.5	21.23	-0.03	0.750	0.386	YES
T571	LTE B2	64QAM20M	19100	1	0	Top Side	1	Second	1	4	21.5	21.23	-0.1	0.731	0.377	YES
T572	LTE B2	64QAM20M	19100	1	0	Top Side	1	Second	1	5	21.5	21.23	0.03	0.777	0.400	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T585	LTE B4	QPSK20M	20050	1	0	Front Face	1	Main	1	1	21.5	21.25	0.1	0.317	0.195	YES
T586	LTE B4	QPSK20M	20050	1	0	Rear Face	1	Main	1	1	21.5	21.25	0.1	0.578	0.350	YES
T587	LTE B4	QPSK20M	20050	1	0	Left Side	1	Main	1	1	21.5	21.25	0.05	0.090	0.055	YES
T588	LTE B4	QPSK20M	20050	1	0	Right Side	1	Main	1	1	21.5	21.25	0.15	0.133	0.077	YES
T589	LTE B4	QPSK20M	20050	1	0	Bottom Side	1	Main	1	1	21.5	21.25	0.19	0.741	0.420	YES
T590	LTE B4	QPSK20M	20050	50	0	Front Face	1	Main	1	1	21.5	21.15	0.16	0.315	0.194	YES
T591	LTE B4	QPSK20M	20050	50	0	Rear Face	1	Main	1	1	21.5	21.15	0.04	0.574	0.347	YES
T592	LTE B4	QPSK20M	20050	50	0	Left Side	1	Main	1	1	21.5	21.15	0.17	0.090	0.055	YES
T593	LTE B4	QPSK20M	20050	50	0	Right Side	1	Main	1	1	21.5	21.15	0.11	0.135	0.078	YES
T594	LTE B4	QPSK20M	20050	50	0	Bottom Side	1	Main	1	1	21.5	21.15	0.03	0.735	0.416	YES
T595	LTE B4	16QAM20M	20050	1	0	Bottom Side	1	Main	1	1	22	21.78	0.06	0.782	0.444	YES
T596	LTE B4	64QAM20M	20300	1	0	Bottom Side	1	Main	1	1	22	21.75	0.02	0.774	0.439	YES
T597	LTE B4	QPSK20M	20175	1	0	Bottom Side	1	Main	1	1	21.5	21.23	0.04	0.785	0.443	YES
T598	LTE B4	QPSK20M	20300	1	0	Bottom Side	1	Main	1	1	21.5	21.15	0.04	0.801	0.453	YES
T599	LTE B4	QPSK20M	20175	50	0	Bottom Side	1	Main	1	1	21.5	21.1	0.05	0.789	0.445	YES
T600	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	1	21.5	21.04	0.02	0.798	0.450	YES
T601	LTE B4	QPSK20M	20050	100	0	Bottom Side	1	Main	1	1	21.5	21.78	0.07	0.762	0.427	YES
T602	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	2	21.5	21.04	0.01	0.806	0.456	YES
T603	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	3	21.5	21.04	0.02	0.810	0.459	YES
T604	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	4	21.5	21.04	0.03	0.815	0.466	YES
T605	LTE B4	QPSK20M	20300	50	0	Bottom Side	1	Main	1	5	21.5	21.04	0.07	0.825	0.467	YES
T606	LTE B4	QPSK20M	20300	50	0	Bottom Side (repeated)	1	Main	1	5	21.5	21.04	0.02	0.806	0.458	YES
T618	LTE B4	QPSK20M	20050	1	0	Front Face	1	Second	1	1	22.5	22.48	0.02	0.403	0.236	YES
T619	LTE B4	QPSK20M	20050	1	0	Rear Face	1	Second	1	1	22.5	22.48	0.07	0.454	0.267	YES
T620	LTE B4	QPSK20M	20050	1	0	Left Side	1	Second	1	1	22.5	22.48	0.13	0.183	0.110	YES
T621	LTE B4	QPSK20M	20050	1	0	Top Side	1	Second	1	1	22.5	22.48	-0.15	0.671	0.366	YES
T622	LTE B4	QPSK20M	20050	50	0	Front Face	1	Second	1	1	22.5	22.35	0.07	0.403	0.235	YES
T623	LTE B4	QPSK20M	20050	50	0	Rear Face	1	Second	1	1	22.5	22.35	0.04	0.454	0.267	YES
T624	LTE B4	QPSK20M	20050	50	0	Left Side	1	Second	1	1	22.5	22.35	0.08	0.183	0.110	YES
T625	LTE B4	QPSK20M	20050	50	0	Top Side	1	Second	1	1	22.5	22.35	-0.13	0.687	0.372	YES
T626	LTE B4	16QAM20M	20300	1	0	Top Side	1	Second	1	1	23	22.91	-0.04	0.719	0.390	YES
T627	LTE B4	64QAM20M	20300	1	50	Top Side	1	Second	1	1	23	22.71	0	0.636	0.344	YES
T628	LTE B4	16QAM20M	20300	1	0	Top Side	1	Second	1	2	23	22.91	0.07	0.684	0.369	YES
T629	LTE B4	16QAM20M	20300	1	0	Top Side	1	Second	1	3	23	22.91	0.09	0.699	0.376	YES
T630	LTE B4	16QAM20M	20300	1	0	Top Side	1	Second	1	4	23	22.91	0.02	0.704	0.380	YES
T631	LTE B4	16QAM20M	20300	1	0	Top Side	1	Second	1	5	23	22.91	-0.4	0.688	0.372	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T642	LTE B5	QPSK10M	20600	1	49	Front Face	1	Main	1	1	24	23.41	-0.01	0.151	0.096	YES
T643	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	1	24	23.41	0.05	0.317	0.186	YES
T644	LTE B5	QPSK10M	20600	1	49	Left Side	1	Main	1	1	24	23.41	-0.06	0.214	0.149	YES
T645	LTE B5	QPSK10M	20600	1	49	Right Side	1	Main	1	1	24	23.41	0.01	0.129	0.089	YES
T646	LTE B5	QPSK10M	20600	1	49	Bottom Side	1	Main	1	1	24	23.41	-0.01	0.197	0.112	YES
T647	LTE B5	QPSK10M	20525	25	0	Front Face	1	Main	1	1	23.5	22.98	0.03	0.114	0.073	YES
T648	LTE B5	QPSK10M	20525	25	0	Rear Face	1	Main	1	1	23.5	22.98	-0.02	0.231	0.137	YES
T649	LTE B5	QPSK10M	20525	25	0	Left Side	1	Main	1	1	23.5	22.98	-0.06	0.175	0.122	YES
T650	LTE B5	QPSK10M	20525	25	0	Right Side	1	Main	1	1	23.5	22.98	-0.03	0.105	0.073	YES
T651	LTE B5	QPSK10M	20525	25	0	Bottom Side	1	Main	1	1	23.5	22.98	0.05	0.135	0.077	YES
T652	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	2	24	23.41	-0.03	0.341	0.199	YES
T653	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	3	24	23.41	0.02	0.373	0.217	YES
T654	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	4	24	23.41	0.07	0.338	0.193	YES
T655	LTE B5	QPSK10M	20600	1	49	Rear Face	1	Main	1	5	24	23.41	0.02	0.357	0.206	YES
T666	LTE B5	QPSK10M	20525	1	0	Front Face	1	Second	1	1	24.5	24.16	0.02	0.086	0.057	YES
T667	LTE B5	QPSK10M	20525	1	0	Rear Face	1	Second	1	1	24.5	24.16	0.06	0.093	0.061	YES
T668	LTE B5	QPSK10M	20525	1	0	Left Side	1	Second	1	1	24.5	24.16	0.05	0.033	0.023	YES
T669	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	1	24.5	24.16	-0.07	0.096	0.060	YES
T670	LTE B5	QPSK10M	20525	25	12	Front Face	1	Second	1	1	24	23.31	0.08	0.080	0.054	YES
T671	LTE B5	QPSK10M	20525	25	12	Rear Face	1	Second	1	1	24	23.31	0.07	0.085	0.057	YES
T672	LTE B5	QPSK10M	20525	25	12	Left Side	1	Second	1	1	24	23.31	0.06	0.027	0.020	YES
T673	LTE B5	QPSK10M	20525	25	12	Top Side	1	Second	1	1	24	23.31	0.04	0.088	0.057	YES
T674	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	2	24.5	24.16	-0.07	0.091	0.057	YES
T675	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	3	24.5	24.16	0.03	0.134	0.080	YES
T676	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	4	24.5	24.16	-0.03	0.140	0.082	YES
T677	LTE B5	QPSK10M	20525	1	0	Top Side	1	Second	1	5	24.5	24.16	0.05	0.114	0.066	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T690	LTE B7	QPSK20M	21100	1	0	Front Face	1	Main	1	1	21.5	20.99	0.07	0.320	0.185	YES
T691	LTE B7	QPSK20M	21100	1	0	Rear Face	1	Main	1	1	21.5	20.99	0.15	0.443	0.240	YES
T692	LTE B7	QPSK20M	21100	1	0	Left Side	1	Main	1	1	21.5	20.99	0.05	0.071	0.037	YES
T693	LTE B7	QPSK20M	21100	1	0	Right Side	1	Main	1	1	21.5	20.99	-0.03	0.236	0.127	YES
T694	LTE B7	QPSK20M	21100	1	0	Bottom Side	1	Main	1	1	21.5	20.99	0.02	0.266	0.135	YES
T695	LTE B7	QPSK20M	21100	50	0	Front Face	1	Main	1	1	21.5	20.91	0.02	0.327	0.190	YES
T696	LTE B7	QPSK20M	21100	50	0	Rear Face	1	Main	1	1	21.5	20.91	0.16	0.455	0.245	YES
T697	LTE B7	QPSK20M	21100	50	0	Left Side	1	Main	1	1	21.5	20.91	-0.09	0.072	0.037	YES
T698	LTE B7	QPSK20M	21100	50	0	Right Side	1	Main	1	1	21.5	20.91	-0.03	0.240	0.129	YES
T699	LTE B7	QPSK20M	21100	50	0	Bottom Side	1	Main	1	1	21.5	20.91	-0.01	0.277	0.142	YES
T700	LTE B7	16QAM20M	21350	1	0	Rear Face	1	Main	1	1	22	21.5	0.04	0.544	0.285	YES
T701	LTE B7	64QAM20M	21100	1	0	Rear Face	1	Main	1	1	22	21.46	0.03	0.513	0.278	YES
T702	LTE B7	16QAM20M	21350	1	0	Rear Face	1	Main	1	2	22	21.5	0.01	0.422	0.225	YES
T703	LTE B7	16QAM20M	21350	1	0	Rear Face	1	Main	1	3	22	21.5	0.13	0.506	0.270	YES
T704	LTE B7	16QAM20M	21350	1	0	Rear Face	1	Main	1	4	22	21.5	0.07	0.423	0.226	YES
T705	LTE B7	16QAM20M	21350	1	0	Rear Face	1	Main	1	5	22	21.5	0.07	0.555	0.293	YES
T718	LTE B7	QPSK20M	21100	1	0	Front Face	1	Second	1	1	17	16.95	0.06	0.209	0.095	YES
T719	LTE B7	QPSK20M	21100	1	0	Rear Face	1	Second	1	1	17	16.95	0.02	0.263	0.115	YES
T720	LTE B7	QPSK20M	21100	1	0	Left Side	1	Second	1	1	17	16.95	0.17	0.115	0.058	YES
T721	LTE B7	QPSK20M	21100	1	0	Top Side	1	Second	1	1	17	16.95	-0.1	0.582	0.231	YES
T722	LTE B7	QPSK20M	21100	50	0	Front Face	1	Second	1	1	17	16.94	0.04	0.218	0.099	YES
T723	LTE B7	QPSK20M	21100	50	0	Rear Face	1	Second	1	1	17	16.94	-0.02	0.280	0.123	YES
T724	LTE B7	QPSK20M	21100	50	0	Left Side	1	Second	1	1	17	16.94	0.11	0.123	0.062	YES
T725	LTE B7	QPSK20M	21100	50	0	Top Side	1	Second	1	1	17	16.94	-0.03	0.606	0.240	YES
T726	LTE B7	16QAM20M	21100	1	0	Top Side	1	Second	1	1	18	17.6	-0.05	0.629	0.250	YES
T727	LTE B7	64QAM20M	21350	1	0	Top Side	1	Second	1	1	18	17.55	-0.05	0.693	0.273	YES
T728	LTE B7	64QAM20M	21350	1	0	Top Side	1	Second	1	2	18	17.55	-0.16	0.758	0.313	YES
T729	LTE B7	64QAM20M	21350	1	0	Top Side	1	Second	1	3	18	17.55	0.07	0.811	0.336	YES
T730	LTE B7	64QAM20M	21350	1	0	Top Side	1	Second	1	4	18	17.55	-0.05	0.719	0.296	YES
T731	LTE B7	64QAM20M	21350	1	0	Top Side	1	Second	1	5	18	17.55	0.05	0.610	0.245	YES
T732	LTE B7	64QAM20M	21350	1	0	Top Side (Repeated)	1	Second	1	3	18	17.55	0.03	0.802	0.331	YES
T742	LTE B26	QPSK15M	26765	1	0	Front Face	1	Main	1	1	25	24.08	0	0.107	0.081	YES
T743	LTE B26	QPSK15M	26765	1	0	Rear Face	1	Main	1	1	25	24.08	0.02	0.164	0.097	YES
T744	LTE B26	QPSK15M	26765	1	0	Left Side	1	Main	1	1	25	24.08	0.06	0.143	0.093	YES
T745	LTE B26	QPSK15M	26765	1	0	Right Side	1	Main	1	1	25	24.08	0.14	0.072	0.047	YES
T746	LTE B26	QPSK15M	26765	1	0	Bottom Side	1	Main	1	1	25	24.08	0.05	0.103	0.055	YES
T747	LTE B26	QPSK15M	26765	36	0	Front Face	1	Main	1	1	24	23.12	0.09	0.105	0.080	YES
T748	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	1	24	23.12	0.07	0.167	0.098	YES
T749	LTE B26	QPSK15M	26765	36	0	Left Side	1	Main	1	1	24	23.12	-0.02	0.146	0.096	YES
T750	LTE B26	QPSK15M	26765	36	0	Right Side	1	Main	1	1	24	23.12	0.06	0.074	0.049	YES
T751	LTE B26	QPSK15M	26765	36	0	Bottom Side	1	Main	1	1	24	23.12	-0.05	0.110	0.058	YES
T752	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	2	24	23.12	0.07	0.161	0.092	YES
T753	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	3	24	23.12	0.02	0.178	0.105	YES
T754	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	4	24	23.12	0.11	0.143	0.083	YES
T755	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Main	1	5	24	23.12	0.03	0.163	0.096	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T766	LTE B26	QPSK15M	26765	1	37	Front Face	1	Second	1	1	24.5	24.39	0.09	0.062	0.039	YES
T767	LTE B26	QPSK15M	26765	1	37	Rear Face	1	Second	1	1	24.5	24.39	0.04	0.065	0.043	YES
T768	LTE B26	QPSK15M	26765	1	37	Left Side	1	Second	1	1	24.5	24.39	-0.11	0.027	0.018	YES
T769	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	1	24.5	24.39	0.07	0.067	0.041	YES
T770	LTE B26	QPSK15M	26765	36	0	Front Face	1	Second	1	1	24	23.65	-0.02	0.046	0.030	YES
T771	LTE B26	QPSK15M	26765	36	0	Rear Face	1	Second	1	1	24	23.65	0.06	0.048	0.031	YES
T772	LTE B26	QPSK15M	26765	36	0	Left Side	1	Second	1	1	24	23.65	0.06	0.021	0.014	YES
T773	LTE B26	QPSK15M	26765	36	0	Top Side	1	Second	1	1	24	23.65	0.07	0.049	0.028	YES
T774	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	2	24.5	24.39	-0.08	0.061	0.037	YES
T775	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	3	24.5	24.39	0.17	0.063	0.039	YES
T776	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	4	24.5	24.39	0.05	0.072	0.046	YES
T777	LTE B26	QPSK15M	26765	1	37	Top Side	1	Second	1	5	24.5	24.39	-0.17	0.076	0.046	YES
T788	LTE B38	QPSK20M	37850	1	0	Front Face	1	Main	1	1	23	22.66	-0.05	0.250	0.135	YES
T789	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	1	23	22.66	0.02	0.422	0.222	YES
T790	LTE B38	QPSK20M	37850	1	0	Left Side	1	Main	1	1	23	22.66	0.02	0.055	0.028	YES
T791	LTE B38	QPSK20M	37850	1	0	Right Side	1	Main	1	1	23	22.66	-0.09	0.212	0.111	YES
T792	LTE B38	QPSK20M	37850	1	0	Bottom Side	1	Main	1	1	23	22.66	-0.12	0.229	0.118	YES
T793	LTE B38	QPSK20M	37850	50	0	Front Face	1	Main	1	1	23	22.47	0.03	0.247	0.133	YES
T794	LTE B38	QPSK20M	37850	50	0	Rear Face	1	Main	1	1	23	22.47	0.03	0.402	0.216	YES
T795	LTE B38	QPSK20M	37850	50	0	Left Side	1	Main	1	1	23	22.47	0.07	0.050	0.025	YES
T796	LTE B38	QPSK20M	37850	50	0	Right Side	1	Main	1	1	23	22.47	-0.02	0.207	0.109	YES
T797	LTE B38	QPSK20M	37850	50	0	Bottom Side	1	Main	1	1	23	22.47	-0.13	0.224	0.116	YES
T798	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	2	23	22.66	0.17	0.391	0.205	YES
T799	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	3	23	22.66	0.06	0.418	0.220	YES
T800	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	4	23	22.66	0.01	0.413	0.216	YES
T801	LTE B38	QPSK20M	37850	1	0	Rear Face	1	Main	1	5	23	22.66	0.17	0.482	0.252	YES
T812	LTE B38	QPSK20M	38150	1	0	Front Face	1	Second	1	1	19.5	19.21	0.11	0.241	0.120	YES
T813	LTE B38	QPSK20M	38150	1	0	Rear Face	1	Second	1	1	19.5	19.21	-0.04	0.380	0.178	YES
T814	LTE B38	QPSK20M	38150	1	0	Left Side	1	Second	1	1	19.5	19.21	-0.07	0.182	0.096	YES
T815	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	1	19.5	19.21	0.09	0.627	0.256	YES
T816	LTE B38	QPSK20M	38150	50	25	Front Face	1	Second	1	1	19.5	18.93	0.1	0.162	0.079	YES
T817	LTE B38	QPSK20M	38150	50	25	Rear Face	1	Second	1	1	19.5	18.93	-0.07	0.353	0.166	YES
T818	LTE B38	QPSK20M	38150	50	25	Left Side	1	Second	1	1	19.5	18.93	-0.08	0.174	0.091	YES
T819	LTE B38	QPSK20M	38150	50	25	Top Side	1	Second	1	1	19.5	18.93	0.08	0.586	0.239	YES
T820	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	2	19.5	19.21	0.03	0.673	0.268	YES
T821	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	3	19.5	19.21	-0.13	0.663	0.272	YES
T822	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	4	19.5	19.21	0.08	0.696	0.287	YES
T823	LTE B38	QPSK20M	38150	1	0	Top Side	1	Second	1	5	19.5	19.21	-0.01	0.649	0.249	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	SIM	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T834	LTE B41	QPSK20M	40620	1	0	Front Face	1	Main	1	1	23	22.69	0.11	0.288	0.152	YES
T835	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	1	23	22.69	0.11	0.411	0.214	YES
T836	LTE B41	QPSK20M	40620	1	0	Left Side	1	Main	1	1	23	22.69	-0.05	0.053	0.028	YES
T837	LTE B41	QPSK20M	40620	1	0	Right Side	1	Main	1	1	23	22.69	-0.01	0.206	0.108	YES
T838	LTE B41	QPSK20M	40620	1	0	Bottom Side	1	Main	1	1	23	22.69	0	0.236	0.119	YES
T839	LTE B41	QPSK20M	40620	50	0	Front Face	1	Main	1	1	23	22.46	0.14	0.287	0.152	YES
T840	LTE B41	QPSK20M	40620	50	0	Rear Face	1	Main	1	1	23	22.46	0.09	0.388	0.210	YES
T841	LTE B41	QPSK20M	40620	50	0	Left Side	1	Main	1	1	23	22.46	0.01	0.051	0.027	YES
T842	LTE B41	QPSK20M	40620	50	0	Right Side	1	Main	1	1	23	22.46	0.09	0.199	0.104	YES
T843	LTE B41	QPSK20M	40620	50	0	Bottom Side	1	Main	1	1	23	22.46	0.03	0.230	0.116	YES
T844	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	2	23	22.69	-0.05	0.404	0.211	YES
T845	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	3	23	22.69	-0.08	0.392	0.201	YES
T846	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	4	23	22.69	0.01	0.402	0.208	YES
T847	LTE B41	QPSK20M	40620	1	0	Rear Face	1	Main	1	5	23	22.69	0.06	0.383	0.206	YES
T860	LTE B41	QPSK20M	41490	1	0	Front Face	1	Second	1	1	21	20.63	0.01	0.263	0.138	YES
T861	LTE B41	QPSK20M	41490	1	0	Rear Face	1	Second	1	1	21	20.63	0.11	0.468	0.206	YES
T862	LTE B41	QPSK20M	41490	1	0	Left Side	1	Second	1	1	21	20.63	-0.14	0.335	0.168	YES
T863	LTE B41	QPSK20M	41490	1	0	Top Side	1	Second	1	1	21	20.63	0.08	0.581	0.225	YES
T864	LTE B41	QPSK20M	41490	50	0	Front Face	1	Second	1	1	21	20.49	0.19	0.256	0.134	YES
T865	LTE B41	QPSK20M	41490	50	0	Rear Face	1	Second	1	1	21	20.49	0.04	0.454	0.200	YES
T866	LTE B41	QPSK20M	41490	50	0	Left Side	1	Second	1	1	21	20.49	-0.15	0.327	0.164	YES
T867	LTE B41	QPSK20M	41490	50	0	Top Side	1	Second	1	1	21	20.49	-0.06	0.543	0.211	YES
T868	LTE B41	16QAM20M	41490	1	0	Top Side	1	Second	1	1	21.5	20.99	-0.07	0.565	0.223	YES
T869	LTE B41	64QAM20M	41490	1	0	Top Side	1	Second	1	1	21.5	21.13	-0.07	0.585	0.228	YES
T1078	LTE B41	QPSK20M	39750	1	0	Top Side	1	Second	1	1	21	20.46	0.03	0.557	0.267	YES
T1079	LTE B41	QPSK20M	40185	1	0	Top Side	1	Second	1	1	21	20.22	0.07	0.521	0.322	YES
T1080	LTE B41	QPSK20M	40620	1	0	Top Side	1	Second	1	1	21	20.55	0.05	0.568	0.277	YES
T1081	LTE B41	QPSK20M	41055	1	0	Top Side	1	Second	1	1	21	20.13	0.03	0.506	0.214	YES
T1082	LTE B41	QPSK20M	39750	50	0	Top Side	1	Second	1	1	21	20.32	0.14	0.502	0.278	YES
T1083	LTE B41	QPSK20M	40185	50	0	Top Side	1	Second	1	1	21	20.18	0.06	0.513	0.331	YES
T1084	LTE B41	QPSK20M	40620	50	0	Top Side	1	Second	1	1	21	20.45	0.09	0.559	0.272	YES
T1085	LTE B41	QPSK20M	41055	50	0	Top Side	1	Second	1	1	21	20.11	-0.01	0.476	0.200	YES
T870	LTE B41	64QAM20M	41490	1	0	Top Side	1	Second	1	2	21.5	21.13	0.12	0.565	0.211	YES
T871	LTE B41	64QAM20M	41490	1	0	Top Side	1	Second	1	3	21.5	21.13	0.01	0.571	0.218	YES
T872	LTE B41	64QAM20M	41490	1	0	Top Side	1	Second	1	4	21.5	21.13	-0.05	0.562	0.207	YES
T873	LTE B41	64QAM20M	41490	1	0	Top Side	1	Second	1	5	21.5	21.13	0.07	0.578	0.221	YES

Test No.	PCC					SCC					Tune-up For LTE CA TX Power	LTE CA TX Power	Test Position	Separation Distance (cm)	Ant	Battery	Power Drift	SAR 1g	SAR 10g	Reported 10g SAR	product specific 10-g SAR Exclusion
	Band	Band width [MHZ]	Modulation	Channel (UL)	RB Size/Offset	Band	Band width [MHZ]	Modulation	Channel (UL)	RB Size/Offset											
T994	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	1	0.06	0.392	0.210	0.393	YES
T995	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	2	0.09	0.364	0.189	0.365	YES
T996	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	3	0.03	0.381	0.203	0.382	YES
T997	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	4	0.04	0.354	0.192	0.355	YES
T998	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	21.5	21.49	Rear Face	1	Main	5	0.02	0.375	0.202	0.376	YES
T1006	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	1	0.09	0.720	0.302	0.779	YES
T1007	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	2	0.03	0.669	0.284	0.723	YES
T1008	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	3	0.02	0.584	0.227	0.632	YES
T1009	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	4	0.15	0.621	0.255	0.672	YES
T1010	LTE B7	20	QPSK	20850	1/99	LTE B7	20	QPSK	21048	1/0	17	16.66	Top Side	1	Second	5	0.04	0.686	0.275	0.742	YES
T1018	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	1	0.07	0.317	0.172	0.348	YES
T1019	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	2	0.09	0.385	0.196	0.423	YES
T1020	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	3	0	0.308	0.168	0.338	YES
T1021	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	4	0.06	0.337	0.187	0.370	YES
T1022	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	23	22.59	Rear Face	1	Main	5	0.01	0.353	0.194	0.388	YES
T1030	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	1	0.08	0.519	0.211	0.550	YES
T1031	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	2	0.12	0.471	0.189	0.499	YES
T1032	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	3	0.02	0.486	0.197	0.515	YES
T1033	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	4	0	0.483	0.196	0.512	YES
T1034	LTE B38	20	QPSK	37952	1/99	LTE B38	20	QPSK	38150	1/0	19	18.75	Top Side	1	Second	5	0.04	0.510	0.208	0.540	YES
T1042	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	1	0.09	0.296	0.168	0.331	YES
T1043	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	2	-0.12	0.315	0.171	0.353	YES
T1044	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	3	0.08	0.329	0.172	0.368	YES
T1045	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	4	0.03	0.290	0.148	0.325	YES
T1046	LTE B41	20	QPSK	39750	1/99	LTE B41	20	QPSK	39948	1/0	24	23.51	Rear Face	1	Main	5	0.04	0.269	0.133	0.301	YES
T1054	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	1	0.02	0.393	0.155	0.428	YES
T1055	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	2	-0.06	0.236	0.105	0.257	YES
T1056	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	3	0.01	0.374	0.146	0.407	YES
T1057	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	4	0.09	0.347	0.133	0.378	YES
T1058	LTE B41	20	QPSK	41292	1/99	LTE B41	20	QPSK	41490	1/0	20	19.63	Top Side	1	Second	5	0.02	0.316	0.127	0.344	YES

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	product specific 10-g SAR Exclusion
T881	802.11b	11	Front Face	1	1	19	18.97	0.03	0.154	0.079	YES
T882	802.11b	11	Rear Face	1	1	19	18.97	0.01	0.202	0.094	YES
T883	802.11b	11	Right Side	1	1	19	18.97	0.06	0.062	0.032	YES
T884	802.11b	11	Top Side	1	1	19	18.97	-0.06	0.260	0.125	YES
T885	802.11b	11	Top Side	1	2	19	18.97	0.05	0.243	0.103	YES
T886	802.11b	11	Top Side	1	3	19	18.97	0.01	0.250	0.110	YES
T887	802.11b	11	Top Side	1	4	19	18.97	0.06	0.256	0.119	YES
T888	802.11b	11	Top Side	1	5	19	18.97	0.02	0.233	0.096	YES
T896	802.11a	36	Front Face	1	1	18	17.89	0.09	0.078	0.024	YES
T897	802.11a	36	Rear Face	1	1	18	17.89	0.04	0.143	0.062	YES
T898	802.11a	36	Right Side	1	1	18	17.89	0.02	0.172	0.063	YES
T899	802.11a	36	Top Side	1	1	18	17.89	0.03	0.157	0.062	YES
T900	802.11a	36	Right Side	1	2	18	17.89	0.01	0.153	0.060	YES
T901	802.11a	36	Right Side	1	3	18	17.89	0.07	0.166	0.062	YES
T902	802.11a	36	Right Side	1	4	18	17.89	0.03	0.169	0.063	YES
T903	802.11a	36	Right Side	1	5	18	17.89	0.09	0.158	0.061	YES
T945	802.11a	149	Front Face	1	1	15	14.97	-0.08	0.100	0.037	YES
T946	802.11a	149	Rear Face	1	1	15	14.97	0.03	0.215	0.076	YES
T947	802.11a	149	Right Side	1	1	15	14.97	-0.03	0.410	0.144	YES
T948	802.11a	149	Top Side	1	1	15	14.97	-0.17	0.149	0.059	YES
T949	802.11a	149	Right Side	1	2	15	14.97	0.07	0.248	0.088	YES
T950	802.11a	149	Right Side	1	3	15	14.97	0.01	0.259	0.093	YES
T951	802.11a	149	Right Side	1	4	15	14.97	0.05	0.278	0.100	YES
T952	802.11a	149	Right Side	1	5	15	14.97	-0.07	0.321	0.114	YES

Product specific 10-g SAR test results of WIFI

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Duty cycle	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
T913	802.11a	60	Front Face	0	1	18	17.98	-	0.03	1.800	0.470	0.472
T914	802.11a	60	Rear Face	0	1	18	17.98	-	0.04	2.440	0.720	0.723
T915	802.11a	60	Right Side	0	1	18	17.98	-	0.13	2.750	0.763	0.767
T916	802.11a	60	Top Side	0	1	18	17.98	-	0.02	0.705	0.247	0.248
T917	802.11a	60	Right Side	0	2	18	17.98	-	-0.08	2.590	0.742	0.745
T918	802.11a	60	Right Side	0	3	18	17.98	-	0.03	2.530	0.733	0.736
T919	802.11a	60	Right Side	0	4	18	17.98	-	0.07	2.670	0.752	0.755
T920	802.11a	60	Right Side	0	5	18	17.98	-	0.11	2.460	0.711	0.714
T929	802.11a	100	Front Face	0	1	14.5	14.42	-	0.06	0.998	0.294	0.299
T930	802.11a	100	Rear Face	0	1	14.5	14.42	-	0.01	1.040	0.341	0.347
T931	802.11a	100	Right Side	0	1	14.5	14.42	-	0.03	1.620	0.422	0.430
T932	802.11a	100	Top Side	0	1	14.5	14.42	-	0.07	0.548	0.182	0.185
T933	802.11a	100	Right Side	0	2	14.5	14.42	-	0.15	1.430	0.389	0.396
T934	802.11a	100	Right Side	0	3	14.5	14.42	-	-0.02	1.600	0.415	0.423
T935	802.11a	100	Right Side	0	4	14.5	14.42	-	0.08	1.550	0.402	0.409
T936	802.11a	100	Right Side	0	5	14.5	14.42	-	0.04	1.490	0.396	0.403

Note: The value with boldface is the maximum SAR Value of each test band.

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 antenna inside EUT, please refer to Appendix E.

7.3.1 STAND-ALONE SAR TEST EXCLUSION

Per FCC KDB 447498 D01, the 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})][\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for product specific 10-g 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.

Standalone SAR test exclusion for BT

Mode	Position	P_{max} (dBm)*	P_{max} (mW)	Distance (mm)	f (GHz)	Calculation Result	SAR Exclusion threshold	SAR test exclusion
BT	product specific 10-g SAR	13	19.95	5	2.48	6.28	7.5	Yes

Note: * - 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 ≤ 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

According to KDB 447498 D01, when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR was estimated according to following formula to result in substantially conservative SAR values of $\leq 0.4 \text{ W/kg}$ to determine simultaneous transmission SAR test exclusion.

$$\text{Estimated SAR} = \frac{\text{Max. Tune up Power}_{(\text{mW})}}{\text{Min. Test Separation Distance}_{(\text{mm})}} \times \frac{\sqrt{f_{(\text{GHz})}}}{7.5}$$

Estimated SAR calculation

Mode	Position		$P_{\max}$ (dBm)*	$P_{\max}$ (mW)	Distance (mm)	f (GHz)	X	Estimated SAR (W/kg)*
BT	product specific 10-g SAR	Front Face/ Rear Face/ Right Side/ Top Side	13	19.95	5	2.48	18.75	0.335
		Left Side/ Bottom Side	13	19.95	>50mm	2.48	18.75	0.400

Note: * - maximum possible output power declared by manufacturer

7.3.2 SIMULTANEOUS TRANSMISSION CONDITIONS

Per FCC KDB 447498 D01, SAR compliance for simultaneous transmission must be considered when the maximum duration of overlapping transmissions, including network hand-offs, is greater than 30 seconds. This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis.

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Simultaneous Tx Combination	Head	Body-worn	Hotspot (10mm)	Product specific 10-g (0mm)
1	GSM/UMTS/LTE(Main Ant) + 2.4G WIFI	Yes	Yes	Yes	Yes
2	GSM/UMTS/LTE(Main Ant) + 5G WIFI	Yes	Yes	Yes	Yes
3	GSM/UMTS/LTE(Main Ant) + BT	Yes	Yes	No	Yes
4	GSM/UMTS/LTE(Second Ant) + 2.4G WIFI	Yes	Yes	Yes	Yes
5	GSM/UMTS/LTE(Second Ant) + 5G WIFI	Yes	Yes	Yes	Yes
6	GSM/UMTS/LTE(Second Ant) + BT	Yes	Yes	No	Yes

Note:

- 1) 2G&3G&4G share the same Tx antenna and can't transmit simultaneously.
- 2) WiFi and Bluetooth share the same Tx antenna and can't transmit simultaneously.
- 3) Main Ant and Second Ant can't transmit simultaneously.

7.3.3 SAR SUMMATION SCENARIO

1. About BT/WIFI and GSM/UMTS/LTE main antenna

Position	Head				Body-worn		Hotspot					
	Right Cheek	Right Tilted	Left Cheek	Left Tilted	Front Face (1.5cm)	Rear Face (1.5cm)	Front Face (1cm)	Rear Face (1cm)	Left Side (1cm)	Right Side (1cm)	Top Side (1cm)	Bottom Side (1cm)
GSM 850	0.153	0.077	0.205	0.083	0.087	0.120	0.103	0.240	0.155	0.099	/	0.118
GSM 1900	0.083	0.071	0.119	0.066	0.123	0.210	0.247	0.463	0.065	0.119	/	0.624
UMTS B2	0.096	0.082	0.160	0.068	0.181	0.314	0.315	0.595	0.088	0.142	/	0.803
UMTS B4	0.124	0.087	0.242	0.071	0.176	0.306	0.313	0.579	0.076	0.148	/	0.918
UMTS B5	0.140	0.072	0.160	0.073	0.103	0.146	0.116	0.240	0.166	0.108	/	0.125
LTE B2	0.190	0.151	0.229	0.138	0.185	0.323	0.308	0.497	0.083	0.152	/	0.826
LTE B4	0.113	0.084	0.224	0.075	0.201	0.361	0.341	0.622	0.097	0.146	/	0.917
LTE B5	0.139	0.069	0.192	0.075	0.168	0.245	0.194	0.479	0.275	0.166	/	0.253
LTE B7	0.267	0.438	0.326	0.184	0.228	0.302	0.375	0.636	0.082	0.275	/	0.317
LTE B26	0.119	0.072	0.153	0.084	0.115	0.165	0.132	0.218	0.179	0.091	/	0.135
LTE B38	0.278	0.120	0.128	0.072	0.164	0.285	0.279	0.521	0.059	0.234	/	0.253
LTE B41	0.220	0.107	0.103	0.082	0.164	0.248	0.325	0.441	0.057	0.225	/	0.260
2.4G WLAN	0.332	0.375	0.771	0.581	0.090	0.098	0.155	0.203	/	0.062	0.262	/
5.2G WLAN	/	/	/	/	/	/	0.080	0.147	/	0.176	0.161	/
5.3G WLAN	0.137	0.157	0.385	0.637	0.092	0.137	/	/	/	/	/	/
5.6G WLAN	0.207	0.211	0.638	0.619	0.058	0.164	/	/	/	/	/	/
5.8G WLAN	0.182	0.183	0.577	0.501	0.064	0.198	0.100	0.216	/	0.413	0.150	/
Bluetooth	0.105	0.133	0.240	0.193	0.031	0.034	/	/	/	/	/	/
Max. SAR Summation	0.610	0.813	1.097	0.821	0.320	0.559	0.530	0.852	0.275	0.688	0.262	0.918
Hot Spot Separation	-	-	-	-	-	-	-	-	-	-	-	-

Note: MAX. $\sum SAR_{1g} = 1.097W/Kg < 1.6W/Kg$, so the SAR to peak location separation ratio should not be considered.

2. About BT/WIFI and GSM/UMTS/LTE second antenna

Position	Head				Bodyworn		Hotspot					
	Right Cheek	Right Tilted	Left Cheek	Left Tilted	Front Face (1.5cm)	Rear Face (1.5cm)	Front Face (1cm)	Rear Face (1cm)	Left Side (1cm)	Right Side (1cm)	Top Side (1cm)	Bottom Side (1cm)
GSM 850	0.847	0.987	0.646	0.593	0.102	0.124	0.229	0.257	0.146	/	0.235	/
GSM 1900	0.532	0.770	0.351	0.437	0.144	0.125	0.313	0.266	0.083	/	0.549	/
UMTS B2	0.830	1.066	0.541	0.690	0.237	0.213	0.435	0.366	0.107	/	0.726	/
UMTS B4	0.942	1.073	0.621	0.749	0.178	0.197	0.346	0.374	0.155	/	0.607	/
UMTS B5	0.267	0.306	0.176	0.242	0.027	0.036	0.041	0.044	0.021	/	0.073	/
LTE B2	0.661	0.983	0.413	0.527	0.255	0.195	0.396	0.371	0.119	/	0.846	/
LTE B4	0.826	1.059	0.508	0.646	0.223	0.260	0.417	0.470	0.189	/	0.729	/
LTE B5	0.696	0.429	0.358	0.314	0.058	0.068	0.104	0.112	0.041	/	0.170	/
LTE B7	0.669	0.959	0.311	0.427	0.153	0.301	0.221	0.284	0.125	/	0.822	/
LTE B26	0.411	0.269	0.238	0.241	0.037	0.042	0.071	0.075	0.030	/	0.087	/
LTE B38	0.632	0.891	0.252	0.372	0.117	0.195	0.258	0.406	0.198	/	0.744	/
LTE B41	0.573	0.820	0.163	0.192	0.152	0.230	0.288	0.511	0.368	/	0.656	/
2.4G WLAN	0.332	0.375	0.771	0.581	0.090	0.098	0.155	0.203	/	0.062	0.262	/
5.2G WLAN	/	/	/	/	/	/	0.080	0.147	/	0.176	0.161	/
5.3G WLAN	0.137	0.157	0.385	0.637	0.092	0.137	/	/	/	/	/	/
5.6G WLAN	0.207	0.211	0.638	0.619	0.058	0.164	/	/	/	/	/	/
5.8G WLAN	0.182	0.183	0.577	0.501	0.064	0.198	0.100	0.216	/	0.413	0.150	/
Bluetooth	0.105	0.133	0.240	0.193	0.031	0.034	/	/	/	/	/	/
Max. SAR Summation	1.274	1.448	1.417	1.386	0.347	0.499	0.590	0.727	0.368	0.413	1.108	-
Hot Spot Separation	-	-	-	-	-	-	-	-	-	-	-	-

Note: MAX. $\sum SAR_{1g} = 1.448W/Kg < 1.6W/Kg$, so the SAR to peak location separation ratio should not be considered.

3. About product specific 10g SAR

Position	Product Specific 10g SAR					
	Front Face (0cm)	Rear Face (0cm)	Left Side (0cm)	Right Side (0cm)	Top Side (0cm)	Bottom Side (0cm)
GSM 850	/	/	/	/	/	/
GSM 1900	/	/	/	/	/	/
UMTS B2	/	/	/	/	/	/
UMTS B4	/	/	/	/	/	/
UMTS B5	/	/	/	/	/	/
LTE B2	/	/	/	/	/	/
LTE B4	/	/	/	/	/	/
LTE B5	/	/	/	/	/	/
LTE B7	/	/	/	/	/	/
LTE B26	/	/	/	/	/	/
LTE B38	/	/	/	/	/	/
LTE B41	/	/	/	/	/	/
2.4G WLAN	/	/	/	/	/	/
5.2G WLAN	/	/	/	/	/	/
5.3G WLAN	0.472	0.723	/	0.767	0.248	/
5.6G WLAN	0.299	0.347	/	0.430	0.185	/
5.8G WLAN	/	/	/	/	/	/
Bluetooth	0.335	0.335	0.400	0.335	0.335	0.400
Max. SAR Summation	0.472	0.723	0.400	0.767	0.335	0.400
Hot Spot Separation	-	-	-	-	-	-

Note: The Simultaneous SAR of product Specific 10-g SAR is 0.767W/Kg which less than 4.0W/Kg, so the Simultaneous SAR is not required to calculate.

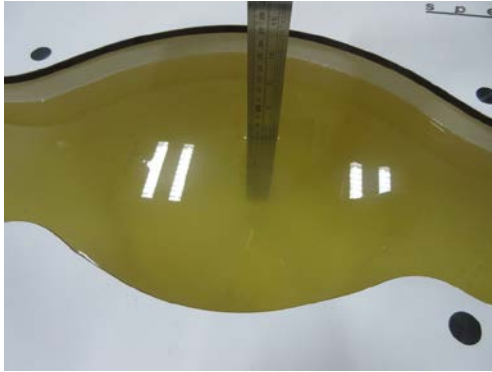
APPENDIX**1. TEST LAYOUT****Specific Absorption Rate Test Layout**

Liquid depth in the flat Phantom ($\geq 15\text{cm}$ depth)

HSL835MHz-900MHz_Head_15.7cm



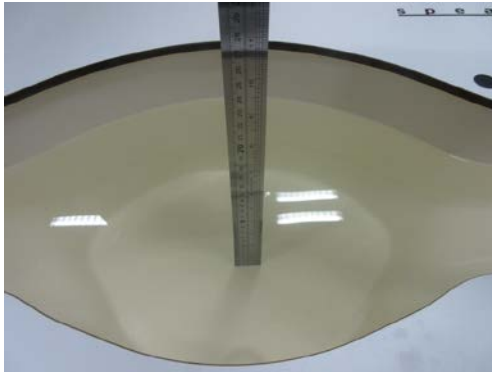
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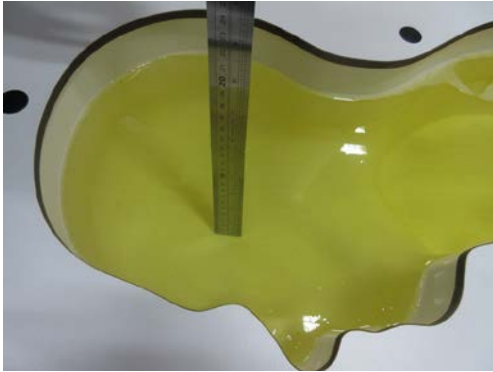
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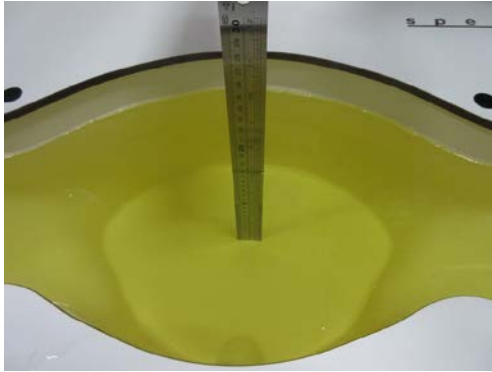
HSL1750MHz_Body_15.5cm



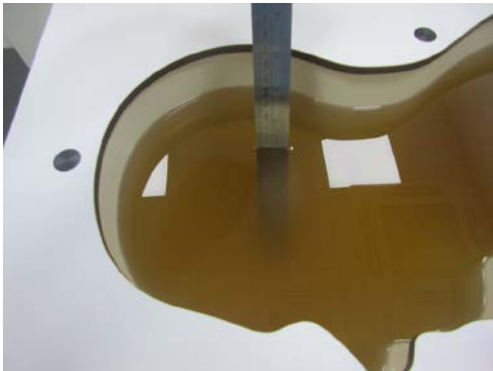
HSL1900MHz-2600MHz_Head_15.9cm



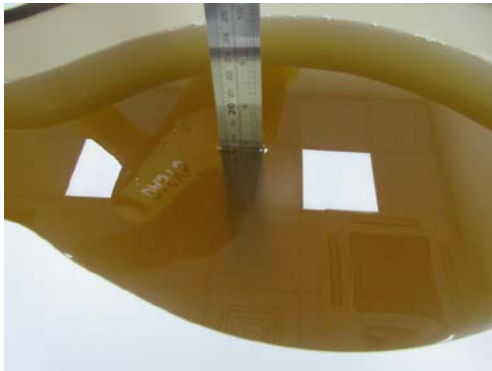
HSL1900MHz-2600MHz_Body_15.2cm



HSL5GHz_Head_15.5cm



HSL5GHz_Body_17.5cm



Appendix A. SAR Plots of System Verification

(Pls See BTL-FCC SAR-1-1909C106_Appendix A.)

Appendix B. SAR Plots of SAR Measurement

(Pls See BTL-FCC SAR-1-1909C106_Appendix B.)

Appendix C. Calibration Certificate

(Pls See BTL-FCC SAR-1-1909C106_Appendix C.)

Appendix D. Photographs of the Test Set-Up

(Pls See BTL-FCC SAR-1-1909C106_Appendix D.)

Appendix E. Antenna location

(Pls See BTL-FCC SAR-1-1909C106_Appendix E.)

End of Test Report