

FCC SAR Test Report

FCC ID: R9C-CPH2185

Project No. : 2008C120
Equipment : Mobile Phone
Brand Name : OPPO
Test Model : CPH2185
Series Model : N/A
Date of Receipt : Aug. 20, 2020
Date of Test : Sep. 02, 2020 ~ Sep. 19, 2020
Issued Date : Sep. 27, 2020
Report Version : R01
Test Sample : Engineering Sample No.: DG2020083157, DG2020083158,
DG2020083159, DG2020083160
Standard(s) : Please refer to page 2.
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The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.



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Certificate #5123.02

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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 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

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

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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.	Sep. 23, 2020
R01	Added the test data of BT.	Sep. 27, 2020

1. GENERAL INFORMATION

1.1 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)	Highest Simultaneous Transmission SAR-1g (W/kg)
GSM850	0.48	0.18	0.29	/	1.27
GSM1900	0.54	0.35	0.70	/	
UMTS B2	0.66	0.29	0.63	/	
UMTS B4	0.77	0.34	0.68	/	
UMTS B5	0.68	0.25	0.30	/	
LTE B2	0.68	0.32	0.66	/	
LTE B4	0.60	0.37	0.80	/	
LTE B5	0.78	0.21	0.30	/	
LTE B7	1.03	0.32	0.86	/	
LTE B12	0.13	0.25	0.24	/	
LTE B17	0.13	0.25	0.28	/	
LTE B26	0.65	0.26	0.28	/	
LTE B38	0.80	0.29	0.70	/	
LTE B41	0.73	0.28	0.74	/	
LTE B66	0.95	0.30	0.64	/	
2.4G WLAN	1.22	0.18	0.28	/	
5.2G WLAN	/	/	0.36	/	
5.3G WLAN	0.84	0.43	/	2.61	
5.6G WLAN	1.09	0.45	/	2.64	
5.8G WLAN	0.75	0.35	0.45	/	
Bluetooth	0.30	0.03	/	0.54	

Note:

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

1.2 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.	

1.3 GENERAL DESCRIPTION OF EUT

Equipment	Mobile Phone		
Brand Name	OPPO		
Model Name	CPH2185		
IMEI	Sample 1	866261050019836	
	Sample 2	866261050019810	
	Sample 3	866261050019794	
	Sample 4	866261050019778	
S/N	Sample 1	Z9ZSE6VO7DPNLN49	
	Sample 2	PJLRF6DQNN59L7CY	
	Sample 3	BIJ7W48P9PI7JRS4	
	Sample 4	CIR46PQ4R4W4GQYT	
Hardware Version	11		
Software Version	Color OS V7.2		
Modulation	GSM(GMSK/8PSK), UMTS(QPSK/16QAM), 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 B12	699~716	729~746
	LTE B17	704~716	734~746
	LTE B26	814~849	859~894
	LTE B66	1710~1770	2110~2170
	LTE B38	2570~2620	
	LTE B41	2535~2655	
	Bluetooth	2400~2483.5	
	2.4G WLAN	2400~2483.5	
	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	24					
HSUPA UE Category	7					
DC-HSDPA Category	24					
HSPA+ Category	7					
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 B2/4/5/7/12/17/26/38/41/66)					
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)					
	23060-23095-23130 (LTE B12 BW=10MHz)					
	23780-23790-23800 (LTE B17 BW=10MHz)					
	26765-26865-26965 (LTE B26 BW=15MHz)					
	37850-38000-38150 (LTE B38 BW=20MHz)					
	40140-40440-40840-41140 (LTE B41 BW=20MHz)					
	132072-132272-132472 (LTE B66 BW=20MHz)					
	0-39-78 (BT)					
	0-19-39 (BLE)					
	1-6-11 (2.4G WiFi 802.11b/g/n HT20)					
	5G WiFi		5.2G	5.3G	5.6G	5.8G
	802.11a/n HT20/ ac VHT20		36-40-44-48	52-56-60-64	100-104-108- 112-116-132- 136-140	149-153-157- 161-165
	802.11n HT40/ ac VHT40		38-46	54-62	102-110-134	151-159
	802.11ac VHT80		42	58	106	155

Antenna Gain	Band	Down Antenna(dBi)	Up Antenna(dBi)	WiFi antenna(dBi)
	GSM 850	0.5	0.5	/
	GSM 1900	1.1	1.1	/
	UMTS B2	1.1	1.1	/
	UMTS B4	1.1	1.1	/
	UMTS B5	0.5	0.5	/
	LTE B2	1.1	1.1	/
	LTE B4	1.1	1.1	/
	LTE B5	0.5	0.5	/
	LTE B7	1.1	1.1	/
	LTE B12	0.5	0.5	/
	LTE B17	0.5	0.5	/
	LTE B26	0.5	0.5	/
	LTE B38	1.1	1.1	/
	LTE B41	1.1	1.1	/
	LTE B66	1.1	1.1	/
	Bluetooth	/	/	-3.0
	WLAN 2.4G	/	/	-3.0
	WLAN 5G	/	/	-3.0
Other Information				
Battery	Model Name	BLP817		
	Power Rating	3.85Vdc, 4100mAh		
	Factory / Model	1# Sunwoda		
		2# Sunwoda		
		3# NVT		
		4# TWS		
With Earphone(Yes/No)	Yes			

1.4 MAIN TEST INSTRUMENTS

Item	Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. Interval
1	Data Acquisition Electronics	Speag	DAE4	1390	Oct. 29, 2019	1 Year
2	Data Acquisition Electronics	Speag	DAE3	420	Jun. 22, 2020	1 Year
3	E-field Probe	Speag	ES3DV3	3162	May 09, 2020	1 Year
4	E-field Probe	Speag	EX3DV4	7383	Jan. 03, 2020	1 Year
5	E-field Probe	Speag	EX3DV4	7544	Sep. 09, 2019	1 Year
6	System Validation Dipole	Speag	D750V3	1095	Jun. 05, 2018	3 Years
7	System Validation Dipole	Speag	D835V2	4d160	Jun. 05, 2018	3 Years
8	System Validation Dipole	Speag	D1750V2	1101	Jun. 07, 2018	3 Years
9	System Validation Dipole	Speag	D1900V2	5d179	Jun. 07, 2018	3 Years
10	System Validation Dipole	Speag	D2450V2	919	Jun. 11, 2018	3 Years
11	System Validation Dipole	Speag	D2600V2	1067	Jun. 11, 2018	3 Years
12	System Validation Dipole	Speag	D5GHzV2	1160	Jun. 20, 2018	3 Years
13	Twin Sam Phantom	Speag	Twin Sam Phantom V5.0	1469	N/A	N/A
14	Twin Sam Phantom	Speag	Twin Sam Phantom V5.0	1784	N/A	N/A
15	Twin Sam Phantom	Speag	Twin Sam Phantom V5.0	1896	N/A	N/A
16	Radio Communication Analver	Anritsu	MT8821C	6261915479	Sep. 29, 2019	1 Year
17	Radio Communication Analver	Anritsu	MT8820C	6201525877	Jul. 25, 2020	1 Year
18	Wideband Radio Communication Tester	R&S	CMW500	104462	Jul. 25, 2020	1 Year
19	Power Amplifier	Mini-Circuits	ZHL-42W+	QA1333003	Mar. 10, 2020	1 Year
20	Power Amplifier	Mini-Circuits	ZVE-8G+	520701341	Mar. 10, 2020	1 Year
21	DC Source metter	Iteck	IT6154	006104126768201001	Jul. 25, 2020	1 Year
22	Signal Analyzer	R&S	FSV7	103120	Sep. 29, 2019	1 Year
23	Vector Network Analyzer	Anritsu	MS46522B	1538101	Sep. 29, 2019	1 Year
24	Signal Generator	R&S	SMF100A	101214	Feb. 29, 2020	1 Year
25	Smart Power Sensor	R&S	NRP-Z21	102209	Mar. 07, 2020	1 Year
26	Dielectric Assessment Kit	Speag	DAK-3.5	1226	N/A	N/A
27	Directional Coupler	Woken	TS-PCC0M-05	107090019	Mar. 01, 2020	1 Year
28	Coupler	Woken	0110A05601O-10	COM5BNW1A2	Mar. 01, 2020	1 Year
29	Digital Themometer	LKM	DTM3000	3519	Jul. 02, 2020	1 Year

Remark:

1. "N/A" denotes no model name, serial No. or calibration specified.

2.

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.

2. RF EMISSIONS MEASUREMENT

2.1 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.

2.2 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.

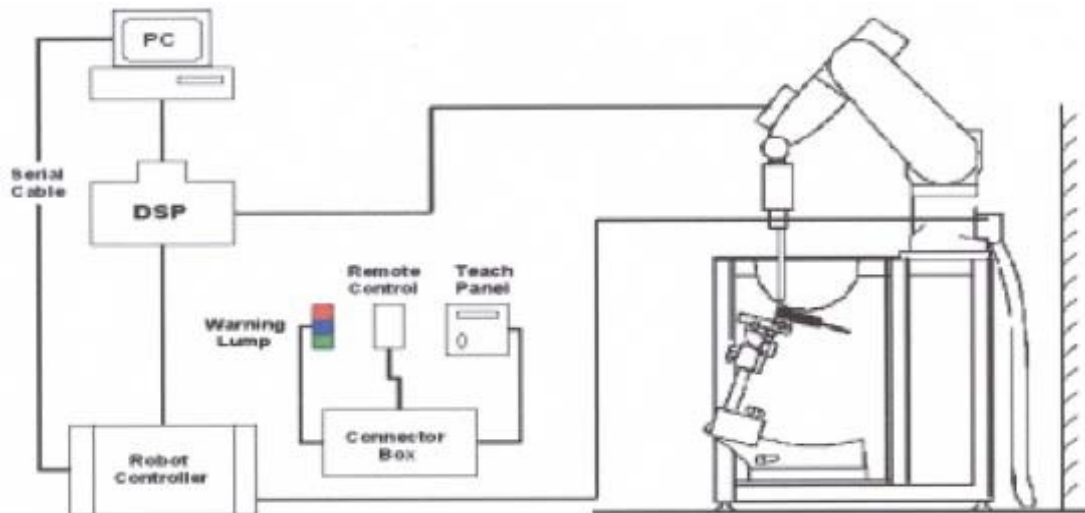
3. SAR MEASUREMENTS SYSTEM CONFIGURATION

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 DASY5 E-FIELD PROBE SYSTEM

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, ELI 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: $\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}} \leq 2\text{GHz} \rightarrow \leq 8\text{mm}$, 2-4GHz $\rightarrow \leq 5\text{mm}$ and 4-6 GHz $\rightarrow \leq 4\text{mm}$; $\Delta z_{\text{zoom}} \leq 3\text{GHz} \rightarrow \leq 5\text{mm}$, 3-4 GHz $\rightarrow \leq 4\text{mm}$ and 4-6GHz $\rightarrow \leq 2\text{mm}$ 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, Computer mathematic, 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 mathematic, 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 parameters are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within $\pm 5\%$ of the target values.

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

Tissue Type	Bactericide	DGBE	HEC	NaCl	Sucrose	Triton X-100	Water	Diethylene Glycol Mono-hexylether
Head 750	0.2	-	0.2	1.5	56.0	-	42.1	-
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	750	22.5	0.883	40.275	0.89	41.9	-0.79	-3.88	Sep. 13, 2020
Head	750	22.3	0.881	40.295	0.89	41.9	-1.01	-3.83	Sep. 14, 2020
Head	750	22.3	0.881	40.295	0.89	41.9	-1.01	-3.83	Sep. 14, 2020
Head	835	22.4	0.884	43.340	0.90	41.5	-1.78	4.43	Sep. 03, 2020
Head	835	22.5	0.884	43.341	0.90	41.5	-1.78	4.44	Sep. 04, 2020
Head	835	22.3	0.884	43.347	0.90	41.5	-1.78	4.45	Sep. 05, 2020
Head	1750	22.1	1.324	41.053	1.37	40.1	-3.36	2.38	Sep. 02, 2020
Head	1750	22.0	1.324	41.008	1.37	40.1	-3.36	2.26	Sep. 09, 2020
Head	1750	22.3	1.324	41.075	1.37	40.1	-3.36	2.43	Sep. 11, 2020
Head	1750	22.4	1.324	41.060	1.37	40.1	-3.36	2.39	Sep. 12, 2020
Head	1900	22.1	1.459	40.562	1.40	40.0	4.21	1.40	Sep. 02, 2020
Head	1900	22.2	1.459	40.572	1.40	40.0	4.21	1.43	Sep. 02, 2020
Head	1900	22.4	1.459	40.498	1.40	40.0	4.21	1.24	Sep. 10, 2020
Head	1900	22.3	1.460	40.584	1.40	40.0	4.29	1.46	Sep. 11, 2020
Head	2450	22.1	1.757	38.570	1.80	39.2	-2.39	-1.61	Sep. 12, 2020
Head	2450	22.2	1.757	38.587	1.80	39.2	-2.39	-1.56	Sep. 18, 2020
Head	2450	22.3	1.874	38.295	1.80	39.2	4.11	-2.31	Sep. 19, 2020
Head	2600	22.2	1.916	38.014	1.96	39.0	-2.24	-2.53	Sep. 06, 2020
Head	2600	22.2	1.916	38.014	1.96	39.0	-2.24	-2.53	Sep. 06, 2020
Head	2600	22.1	1.904	37.980	1.96	39.0	-2.86	-2.62	Sep. 07, 2020
Head	2600	22.2	1.908	37.962	1.96	39.0	-2.65	-2.66	Sep. 08, 2020
Head	5200	22.3	4.518	36.372	4.66	36.0	-3.05	1.03	Sep. 16, 2020
Head	5300	22.5	4.717	36.648	4.76	35.9	-0.90	2.08	Sep. 05, 2020
Head	5300	22.4	4.674	36.273	4.76	35.9	-1.81	1.04	Sep. 12, 2020
Head	5300	22.5	4.674	36.277	4.76	35.9	-1.81	1.05	Sep. 13, 2020
Head	5300	22.3	4.673	36.282	4.76	35.9	-1.83	1.06	Sep. 16, 2020
Head	5500	22.5	4.873	36.095	4.96	35.6	-1.75	1.39	Sep. 05, 2020
Head	5500	22.4	4.826	35.740	4.96	35.6	-2.70	0.39	Sep. 12, 2020
Head	5500	22.5	4.827	35.745	4.96	35.6	-2.68	0.41	Sep. 13, 2020
Head	5500	22.3	4.826	35.750	4.96	35.6	-2.70	0.42	Sep. 16, 2020
Head	5800	22.5	5.175	35.783	5.27	35.3	-1.80	1.37	Sep. 05, 2020
Head	5800	22.4	5.123	35.423	5.27	35.3	-2.79	0.35	Sep. 12, 2020
Head	5800	22.5	5.124	35.430	5.27	35.3	-2.77	0.37	Sep. 13, 2020

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.

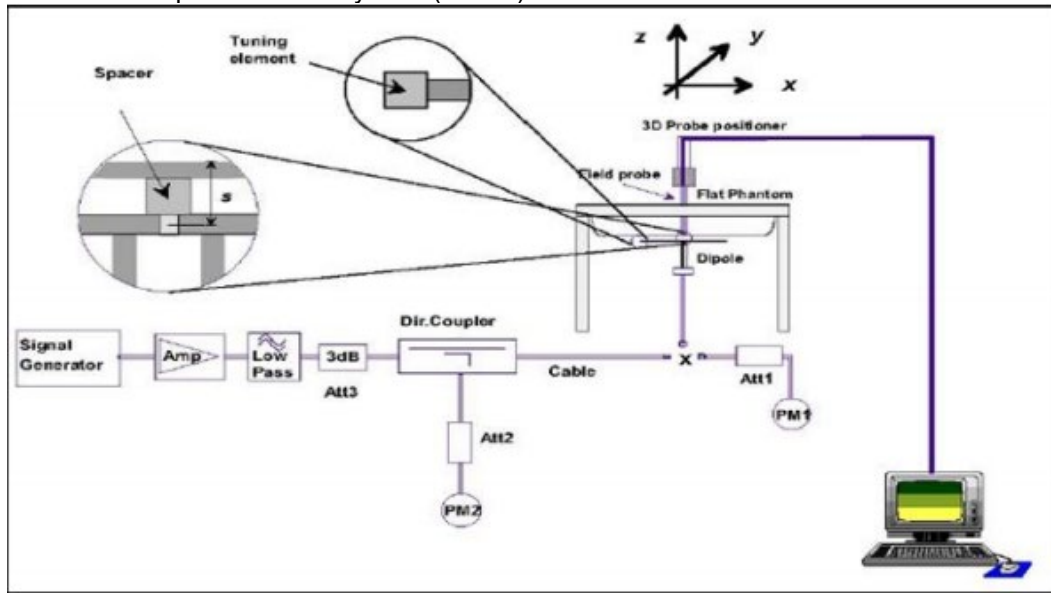
System Check	Date	Frequency (MHz)	Targeted SAR-1g (W/kg)	Measured SAR-1g (W/kg)	normalized SAR-1g (W/kg)	Deviation (%)	Dipole S/N
Head	Sep. 13, 2020	750	8.47	2.13	8.52	0.59	1095
Head	Sep. 14, 2020	750	8.47	2.07	8.28	-2.24	1095
Head	Sep. 14, 2020	750	8.47	2.12	8.48	0.12	1095
Head	Sep. 03, 2020	835	9.23	2.32	9.28	0.54	4d160
Head	Sep. 04, 2020	835	9.23	2.42	9.68	4.88	4d160
Head	Sep. 05, 2020	835	9.23	2.37	9.48	2.71	4d160
Head	Sep. 02, 2020	1750	37.00	9.16	36.64	-0.97	1101
Head	Sep. 09, 2020	1750	37.00	9.10	36.40	-1.62	1101
Head	Sep. 11, 2020	1750	37.00	9.30	37.20	0.54	1101
Head	Sep. 12, 2020	1750	37.00	9.00	36.00	-2.70	1101
Head	Sep. 02, 2020	1900	39.50	10.10	40.40	2.28	5d179
Head	Sep. 02, 2020	1900	39.50	10.16	40.64	2.89	5d179
Head	Sep. 10, 2020	1900	39.50	10.14	40.56	2.68	5d179
Head	Sep. 11, 2020	1900	39.50	10.20	40.80	3.29	5d179
Head	Sep. 12, 2020	2450	52.10	12.40	49.60	-4.80	919
Head	Sep. 18, 2020	2450	52.10	13.60	54.40	4.41	919
Head	Sep. 19, 2020	2450	52.10	12.80	51.20	-1.73	919
Head	Sep. 06, 2020	2600	56.10	13.76	55.04	-1.89	1067
Head	Sep. 06, 2020	2600	56.10	13.70	54.80	-2.32	1067
Head	Sep. 07, 2020	2600	56.10	13.81	55.24	-1.53	1067
Head	Sep. 08, 2020	2600	56.10	14.10	56.40	0.53	1067
Head	Sep. 16, 2020	5200	75.30	7.50	75.00	-0.40	1160
Head	Sep. 05, 2020	5300	76.80	7.84	78.40	2.08	1160
Head	Sep. 12, 2020	5300	76.80	7.30	73.00	-4.95	1160
Head	Sep. 13, 2020	5300	76.80	7.32	73.20	-4.69	1160
Head	Sep. 16, 2020	5300	76.80	7.62	76.20	-0.78	1160
Head	Sep. 05, 2020	5500	80.80	8.02	80.20	-0.74	1160
Head	Sep. 12, 2020	5500	80.80	7.93	79.30	-1.86	1160
Head	Sep. 13, 2020	5500	80.80	8.07	80.70	-0.12	1160
Head	Sep. 16, 2020	5500	80.80	8.04	80.40	-0.50	1160
Head	Sep. 05, 2020	5800	77.90	7.62	76.20	-2.18	1160
Head	Sep. 12, 2020	5800	77.90	7.41	74.10	-4.88	1160
Head	Sep. 13, 2020	5800	77.90	7.56	75.60	-2.95	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 ΔACK , $\Delta NACK$, $\Delta CQI = 8$. 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: ΔACK , $\Delta NACK$ and $\Delta CQI = 8$ $A_{hs} = \beta_{hs} / \beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$ ^o							
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. ^o							
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 $\beta_d = 15/15$ ^o							

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 $\leq 1/4$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is $\leq 1.2W/kg$, 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⁾ 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

HSDPA 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.

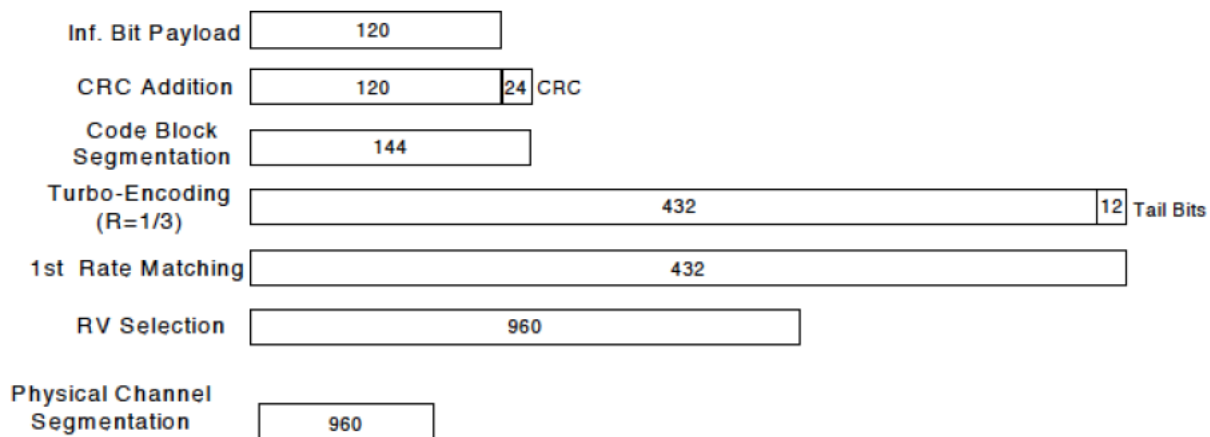


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

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	β_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.

6. HSPA+

An E-DCH call is set up according to TS 34.108 [3] 7.3.9 with the following exceptions in the RADIO BEARER SETUP messages. These exceptions allow the beta values to be set according to table C.11.1.4 and each UL physical channel to be at constant power at the start of the measurement. RF parameters are set up according to table E.5.A.1. Settings for the serving cell are defined in table 5.2E.4. Uplink SRB for DCCH mapped on E-DCH and downlink SRB for DCCH on DCH. E-DCH is configured with 2ms TTI.

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note 3)	β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105
Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0). Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default. Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value. Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signaled to use the extrapolation algorithm.											

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 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

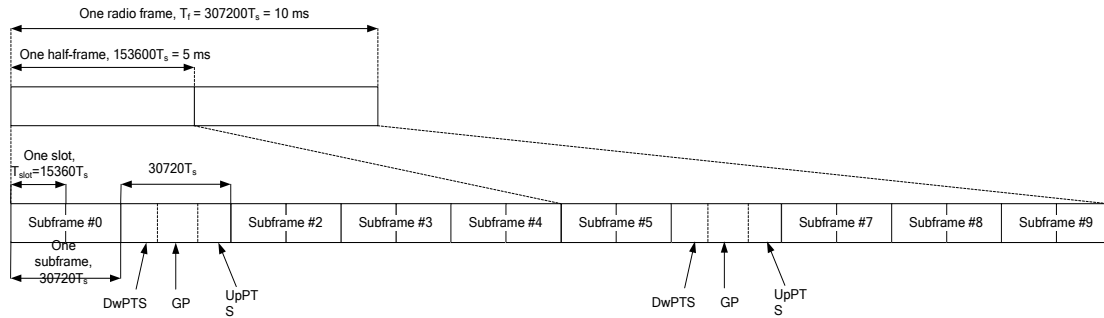


Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

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 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.

6.1.4.1 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.

6.1.4.2 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.

6.1.4.3 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 is the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

6.1.4.4 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.

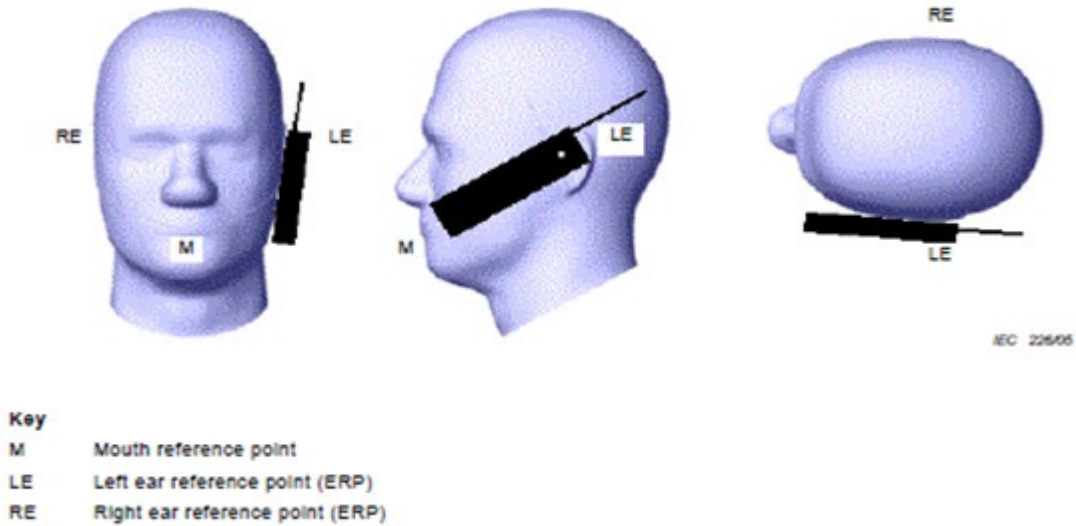


Figure 1 Cheek position of the wireless device on the left side of SAM

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

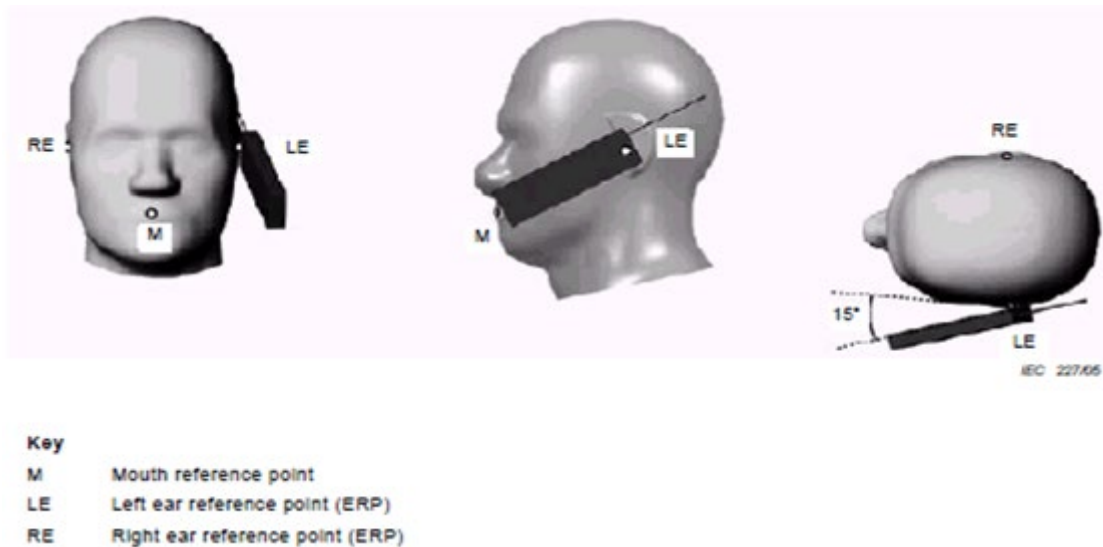


Figure 2 Tilt position of the wireless device on the left side of SAM

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.

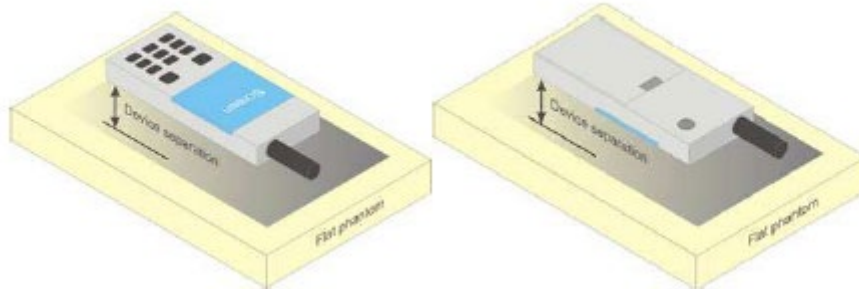


Figure 3 Test positions for body-worn device

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.

The location of the antenna inside EUT and the test position judgment of Hotspot/Specific 10g SAR, please refer to Appendix E.

6.3 GENERAL DESCRIPTION OF TEST PROCEDURES

Connection to the EUT is established via air interface with Anritsu MT8820C & Anritsu MT8821C & R&S CMW500, and the EUT is set to maximum output power by Anritsu MT8820C & Anritsu MT8821C & R&S CMW500. 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 OF 2G&3G&4G

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 & Specific 10g SAR)
2G&3G&4G Main Ant.	Power Level A1	Power Level B1
2G&3G&4G Second Ant.	Power Level A2	Power Level B2

Down Antenna Max Power (dBm)															
Power scenario	GSM 850	GSM 1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B26	LTE B38	LTE B41	LTE B66
Receiver on (Head)	33.5	30.5	24	24	24	24	24	24	24	24	24	24	23.5	23.5	24
Receiver off (Body-worn & Hotspot & Specific 10g SAR)	32.5	28.5	20.5	21	24	20.5	21	24	21.5	24	24	24	22.5	22.5	21

Up Antenna Max Power (dBm)															
Power scenario	GSM 850	GSM 1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B26	LTE B38	LTE B41	LTE B66
Receiver on (Head)	32.5	26	17	19	24	17	18	24	17	24	24	24	18.5	18.5	20
Receiver off (Body-worn & Hotspot & Specific 10g SAR)	33.5	29	20.5	21	24	20.5	22	24	18	24	24	24	20	20	21

6.4.2 GENERAL DESCRIPTION OF RECEIVER DETECTION MECHANISM OF WIFI

Users will be in full power when using WiFi alone. When WiFi+2G/3G/4G are used simultaneously, WiFi power reduction will be triggered, i.e. WiFi will be in power level B3 state.

Antenna	WiFi Power Reduction	
	WiFi only	WiFi Antenna Simultaneous with 2G&3G&4G
WiFi Ant.	Power Level A3	Power Level B3

Power scenario	2.4G			5G (5150MHz~5250MHz)				5G(Not Suport Hotspot) (5260MHz~5350MHz)			
	802.11 b	802.11 g	802.11 n20	802.11 a	802.11 n20/ ac20	802.11 n40/ ac40	802.11 ac80	802.11 a	802.11 n20/ ac20	802.11 n40/ ac40	802.11 ac80
WiFi only (Full Power & Body-worn)	19	19	19	20	20	19	19	20	20	19	19
Receiver on (Head)	18	18	18	13	13	12	12	13	13	12	12
Receiver off (Hotspot)	18	18	18	13	13	12	12	-	-	-	-
Receiver off (Specific 10g SAR)	-	-	-	-	-	-	-	19	19	18	18
WiFi Antenna Simultaneous with 2G&3G&4G receiver on (Head)	14	13	13	10	10	9	9	10	10	9	9

Power scenario	2.4G		5G (Not Suport Hotspot) (5500MHz~5700MHz)				5G (5750MHz~5850MHz)			
	BT	BLE	802.11 a	802.11 n20/ ac20	802.11 n40/ ac40	802.11 ac80	802.11 a	802.11 n20/ ac20	802.11 n40/ ac40	802.11 ac80
WiFi only (Full Power & Body-worn)	11	6	20	20	19	19	20	20	19	19
Receiver on (Head)	-	-	13	13	12	12	11	11	10	10
Receiver off (Hotspot)	-	-	-	-	-	-	11	11	10	10
Receiver off (Specific 10g SAR)	-	-	20	20	19	19	-	-	-	-
WiFi Antenna Simultaneous with 2G&3G&4G receiver on (Head)	-	-	9	9	8	8	8	8	7	7

6.4.3 MORE DETAILS INFORMATION FOLLOWINGS

For head SAR test,

- 1) Standalone Head SAR of 2G&3G&4G Down Antenna is evaluated at power level A1;
- 2) Standalone Head SAR of 2G&3G&4G Up Antenna is evaluated at power level A2;
- 3) Standalone Head SAR of WiFi Antenna receiver on is evaluated at power level A3;
- 4) Simultaneous Head SAR of WiFi Antenna with 2G&3G&4G is evaluated at power level B3;

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 & specific 10g SAR test,

- 1) Standalone body-worn & hotspot & specific 10g SAR of 2G&3G&4G Down Antenna is evaluated at power level B1;
- 2) Standalone body-worn & hotspot & specific 10g SAR of 2G&3G&4G Up Antenna is evaluated at power level B2;
- 3) Standalone body-worn & hotspot & specific 10g SAR of WiFi Antenna receiver on is evaluated at power level A3;
- 4) Simultaneous body-worn & hotspot & specific 10g SAR of WiFi Antenna with 2G&3G&4G is evaluated at power level B3;

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 & specific 10g 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. Conducted power measurements of GSM850

Down 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)		33.50	32.35	32.51	32.47	24.31	23.16	23.32	23.28
GPRS/ EDGE (GMSK)	1 Tx Slot	33.50	32.35	32.51	32.47	24.31	23.16	23.32	23.28
	2 Tx Slot	32.00	30.74	30.94	30.95	25.87	24.61	24.81	24.82
	3 Tx Slot	30.00	28.76	29.00	28.98	25.58	24.34	24.58	24.56
	4 Tx Slot	29.00	27.78	28.00	28.02	25.82	24.60	24.82	24.84
EDGE (8PSK)	1 Tx Slot	27.50	25.72	26.08	26.30	18.31	16.53	16.89	17.11
	2 Tx Slot	26.50	24.61	24.96	25.18	20.37	18.48	18.83	19.05
	3 Tx Slot	24.50	22.56	22.87	23.07	20.08	18.14	18.45	18.65
	4 Tx Slot	23.50	21.59	21.63	21.91	20.32	18.41	18.45	18.73

Down 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)		32.50	31.59	31.75	31.75	23.31	22.40	22.56	22.56
GPRS/ EDGE (GMSK)	1 Tx Slot	32.50	31.59	31.75	31.75	23.31	22.40	22.56	22.56
	2 Tx Slot	31.00	29.41	29.66	29.64	24.87	23.28	23.53	23.51
	3 Tx Slot	29.00	27.25	27.20	27.16	24.58	22.83	22.78	22.74
	4 Tx Slot	28.00	26.01	26.26	26.27	24.82	22.83	23.08	23.09
EDGE (8PSK)	1 Tx Slot	26.50	24.72	25.07	25.31	17.31	15.53	15.88	16.12
	2 Tx Slot	25.50	23.53	23.91	24.12	19.37	17.40	17.78	17.99
	3 Tx Slot	23.50	21.65	21.92	22.26	19.08	17.23	17.50	17.84
	4 Tx Slot	22.50	20.53	20.69	20.86	19.32	17.35	17.51	17.68

Up 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	31.53	31.67	31.66	23.31	22.34	22.48	22.47
GPRS/ EDGE (GMSK)	1 Tx Slot	32.50	31.53	31.67	31.66	23.31	22.34	22.48	22.47
	2 Tx Slot	31.00	29.13	29.12	29.01	24.87	23.00	22.99	22.88
	3 Tx Slot	29.00	27.15	27.33	27.28	24.58	22.73	22.91	22.86
	4 Tx Slot	28.00	26.13	26.12	26.08	24.82	22.95	22.94	22.90
EDGE (8PSK)	1 Tx Slot	26.50	25.29	25.62	25.42	17.31	16.10	16.43	16.23
	2 Tx Slot	25.50	23.65	23.55	23.51	19.37	17.52	17.42	17.38
	3 Tx Slot	23.50	21.56	21.98	21.87	19.08	17.14	17.56	17.45
	4 Tx Slot	22.50	20.66	20.94	20.74	19.32	17.48	17.76	17.56

Up 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)		33.50	32.50	32.59	32.52	24.31	23.31	23.40	23.33
GPRS/ EDGE (GMSK)	1 Tx Slot	33.50	32.50	32.59	32.52	24.31	23.31	23.40	23.33
	2 Tx Slot	32.00	30.12	30.27	30.18	25.87	23.99	24.14	24.05
	3 Tx Slot	30.00	28.30	28.49	28.37	25.58	23.88	24.07	23.95
	4 Tx Slot	29.00	27.03	27.19	27.08	25.82	23.85	24.01	23.90
EDGE (8PSK)	1 Tx Slot	27.50	26.30	26.59	26.72	18.31	17.11	17.40	17.53
	2 Tx Slot	26.50	24.61	24.92	25.03	20.37	18.48	18.79	18.90
	3 Tx Slot	24.50	22.58	22.81	23.00	20.08	18.16	18.39	18.58
	4 Tx Slot	23.50	21.69	21.57	21.53	20.32	18.51	18.39	18.35

Note:

- 1) The conducted power of GSM850 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.

2. Conducted power measurements of GSM1900

Down Antenna_Receiver on

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)		30.50	29.09	29.06	29.13	21.31	19.90	19.87	19.94
GPRS/ EDGE (GMSK)	1 Tx Slot	30.50	29.09	29.06	29.13	21.31	19.90	19.87	19.94
	2 Tx Slot	28.50	27.55	27.54	27.71	22.37	21.42	21.41	21.58
	3 Tx Slot	27.00	25.52	25.49	25.70	22.58	21.10	21.07	21.28
	4 Tx Slot	26.00	24.68	24.50	24.74	22.82	21.50	21.32	21.56
EDGE (8PSK)	1 Tx Slot	26.00	25.09	24.98	24.96	16.81	15.90	15.79	15.77
	2 Tx Slot	25.00	23.89	23.78	23.83	18.87	17.76	17.65	17.70
	3 Tx Slot	23.00	21.75	21.63	21.64	18.58	17.33	17.21	17.22
	4 Tx Slot	22.50	20.60	20.52	20.55	19.32	17.42	17.34	17.37

Down Antenna_Receiver off

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)		28.50	27.61	27.59	27.74	19.31	18.42	18.40	18.55
GPRS/ EDGE (GMSK)	1 Tx Slot	28.50	27.61	27.59	27.74	19.31	18.42	18.40	18.55
	2 Tx Slot	26.50	24.61	24.58	24.82	20.37	18.48	18.45	18.69
	3 Tx Slot	25.00	23.51	23.50	23.40	20.58	19.09	19.08	18.98
	4 Tx Slot	24.00	22.41	22.51	22.39	20.82	19.23	19.33	19.21
EDGE (8PSK)	1 Tx Slot	24.00	23.11	23.02	23.03	14.81	13.92	13.83	13.84
	2 Tx Slot	23.00	21.33	21.32	21.29	16.87	15.20	15.19	15.16
	3 Tx Slot	21.00	19.54	19.48	19.50	16.58	15.12	15.06	15.08
	4 Tx Slot	20.50	19.06	18.78	18.85	17.32	15.88	15.60	15.67

Up Antenna Receiver on

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	25.53	25.54	25.76	16.81	16.34	16.35	16.57
GPRS/ EDGE (GMSK)	1 Tx Slot	26.00	25.53	25.54	25.76	16.81	16.34	16.35	16.57
	2 Tx Slot	24.00	22.51	22.54	22.81	17.87	16.38	16.41	16.68
	3 Tx Slot	22.50	20.76	20.78	21.02	18.08	16.34	16.36	16.60
	4 Tx Slot	21.50	19.71	19.50	19.79	18.32	16.53	16.32	16.61
EDGE (8PSK)	1 Tx Slot	21.50	20.95	20.88	20.96	12.31	11.76	11.69	11.77
	2 Tx Slot	20.50	18.52	18.54	18.59	14.37	12.39	12.41	12.46
	3 Tx Slot	18.50	17.07	16.95	17.04	14.08	12.65	12.53	12.62
	4 Tx Slot	18.00	16.77	16.75	16.83	14.82	13.59	13.57	13.65

Up Antenna Receiver off

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	28.42	28.42	28.54	19.81	19.23	19.23	19.35
GPRS/ EDGE (GMSK)	1 Tx Slot	29.00	28.42	28.42	28.54	19.81	19.23	19.23	19.35
	2 Tx Slot	27.00	25.50	25.51	25.74	20.87	19.37	19.38	19.61
	3 Tx Slot	25.50	23.71	23.74	23.97	21.08	19.29	19.32	19.55
	4 Tx Slot	24.50	22.65	22.67	22.74	21.32	19.47	19.49	19.56
EDGE (8PSK)	1 Tx Slot	24.50	23.95	23.87	23.93	15.31	14.76	14.68	14.74
	2 Tx Slot	23.50	22.31	22.29	22.37	17.37	16.18	16.16	16.24
	3 Tx Slot	21.50	20.49	20.39	20.45	17.08	16.07	15.97	16.03
	4 Tx Slot	21.00	19.25	19.04	19.14	17.82	16.07	15.86	15.96

Note:

- 1) The conducted power of GSM1900 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. Conducted power measurements of UMTS B2

Down Antenna Receiver on

Band	UMTS B2 Average Conducted Power(dBm)			
Tx Channel	Max.	9262	9400	9538
Frequency(MHz)	Tune-up	1852.4	1880	1907.6
AMR Voice	24.00	22.78	22.91	22.92
RMC 12.2K	24.00	22.78	22.91	22.92
HSDPA Subtest-1	23.50	21.85	21.92	21.94
HSDPA Subtest-2	23.50	21.77	21.88	21.89
HSDPA Subtest-3	22.50	21.28	21.43	21.42
HSDPA Subtest-4	22.50	21.26	21.40	21.43
HSUPA Subtest-1	22.50	20.77	20.79	20.88
HSUPA Subtest-2	22.50	20.78	20.92	21.00
HSUPA Subtest-3	23.50	21.76	21.83	21.89
HSUPA Subtest-4	22.00	20.46	20.64	20.57
HSUPA Subtest-5	23.50	21.88	21.99	22.01
DC-HSDPA Subtest-1	23.50	21.85	21.92	21.94
DC-HSDPA Subtest-2	23.50	21.77	21.88	21.89
DC-HSDPA Subtest-3	22.50	21.28	21.43	21.42
DC-HSDPA Subtest-4	22.50	21.26	21.40	21.43
HSPA+ Subtest-1	21.50	20.63	20.74	20.82

Down Antenna Receiver off

Band	UMTS B2 Average Conducted Power(dBm)			
Tx Channel	Max.	9262	9400	9538
Frequency(MHz)	Tune-up	1852.4	1880	1907.6
AMR Voice	20.50	19.26	19.38	19.36
RMC 12.2K	20.50	19.26	19.38	19.36
HSDPA Subtest-1	20.00	19.25	19.39	19.41
HSDPA Subtest-2	20.00	19.23	19.44	19.37
HSDPA Subtest-3	19.00	18.77	18.92	18.89
HSDPA Subtest-4	19.00	18.75	18.87	18.86
HSUPA Subtest-1	19.00	17.75	17.37	17.85
HSUPA Subtest-2	19.00	17.28	17.45	17.41
HSUPA Subtest-3	20.00	18.28	18.43	18.39
HSUPA Subtest-4	18.50	16.78	16.94	16.91
HSUPA Subtest-5	20.00	18.26	18.43	18.40
DC-HSDPA Subtest-1	20.00	19.25	19.39	19.41
DC-HSDPA Subtest-2	20.00	19.23	19.44	19.37
DC-HSDPA Subtest-3	19.00	18.77	18.92	18.89
DC-HSDPA Subtest-4	19.00	18.75	18.87	18.86
HSPA+ Subtest-1	18.00	17.77	17.96	17.96

Up Antenna Receiver on

Band	UMTS B2 Average Conducted Power(dBm)			
Tx Channel	Max.	9262	9400	9538
Frequency(MHz)	Tune-up	1852.4	1880	1907.6
AMR Voice	17.00	16.12	16.18	16.13
RMC 12.2K	17.00	16.12	16.18	16.13
HSDPA Subtest-1	16.50	16.14	16.26	16.26
HSDPA Subtest-2	16.50	16.07	16.17	16.21
HSDPA Subtest-3	15.50	14.71	14.84	14.82
HSDPA Subtest-4	15.50	14.67	14.80	14.81
HSUPA Subtest-1	15.50	14.07	14.22	14.14
HSUPA Subtest-2	15.50	14.11	14.23	14.18
HSUPA Subtest-3	16.50	15.10	15.21	15.19
HSUPA Subtest-4	15.00	13.64	13.74	13.72
HSUPA Subtest-5	16.50	15.13	15.23	15.22
DC-HSDPA Subtest-1	16.50	16.14	16.26	16.26
DC-HSDPA Subtest-2	16.50	16.07	16.17	16.21
DC-HSDPA Subtest-3	15.50	14.71	14.84	14.82
DC-HSDPA Subtest-4	15.50	14.67	14.80	14.81
HSPA+ Subtest-1	14.50	14.20	14.32	14.28

Up Antenna Receiver off

Band	UMTS B2 Average Conducted Power(dBm)			
Tx Channel	Max.	9262	9400	9538
Frequency(MHz)	Tune-up	1852.4	1880	1907.6
AMR Voice	20.50	19.63	19.76	19.73
RMC 12.2K	20.50	19.63	19.76	19.73
HSDPA Subtest-1	20.00	19.69	19.80	19.77
HSDPA Subtest-2	20.00	19.61	19.83	19.74
HSDPA Subtest-3	19.00	18.13	18.32	18.24
HSDPA Subtest-4	19.00	18.17	18.29	18.23
HSUPA Subtest-1	19.00	17.61	17.71	18.19
HSUPA Subtest-2	19.00	17.67	17.73	17.72
HSUPA Subtest-3	20.00	18.71	18.74	18.72
HSUPA Subtest-4	18.50	17.15	17.22	17.24
HSUPA Subtest-5	20.00	18.69	18.77	18.76
DC-HSDPA Subtest-1	20.00	19.69	19.80	19.77
DC-HSDPA Subtest-2	20.00	19.61	19.83	19.74
DC-HSDPA Subtest-3	19.00	18.13	18.32	18.24
DC-HSDPA Subtest-4	19.00	18.17	18.29	18.23
HSPA+ Subtest-1	18.00	17.55	17.73	17.70

Note:

- 1) The conducted power of UMTS B2 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.

2. Conducted power measurements of UMTS B4

Down Antenna_Receiver on

Band	UMTS B4 Average Conducted Power(dBm)			
Tx Channel	Max.	1312	1413	1513
Frequency(MHz)	Tune-up	1712.4	1732.6	1752.6
AMR Voice	24.00	22.69	22.77	22.75
RMC 12.2K	24.00	22.69	22.77	22.75
HSDPA Subtest-1	23.50	21.71	21.76	21.79
HSDPA Subtest-2	23.50	21.65	21.75	21.73
HSDPA Subtest-3	22.50	21.19	21.32	21.28
HSDPA Subtest-4	22.50	21.18	21.26	21.30
HSUPA Subtest-1	22.50	20.56	20.68	20.58
HSUPA Subtest-2	22.50	20.71	20.79	20.91
HSUPA Subtest-3	23.50	21.61	21.75	21.55
HSUPA Subtest-4	22.00	20.36	20.47	20.52
HSUPA Subtest-5	23.50	21.78	21.91	21.95
DC-HSDPA Subtest-1	23.50	21.71	21.76	21.79
DC-HSDPA Subtest-2	23.50	21.65	21.75	21.73
DC-HSDPA Subtest-3	22.50	21.19	21.32	21.28
DC-HSDPA Subtest-4	22.50	21.18	21.26	21.30
HSPA+ Subtest-1	21.50	20.62	20.72	20.18

Down Antenna Receiver off

Band	UMTS B4 Average Conducted Power(dBm)			
Tx Channel	Max.	1312	1413	1513
Frequency(MHz)	Tune-up	1712.4	1732.6	1752.6
AMR Voice	21.00	19.69	19.75	19.78
RMC 12.2K	21.00	19.69	19.75	19.78
HSDPA Subtest-1	20.50	19.73	19.79	19.80
HSDPA Subtest-2	20.50	19.65	19.76	19.72
HSDPA Subtest-3	19.50	19.16	19.29	19.25
HSDPA Subtest-4	19.50	19.15	19.24	19.26
HSUPA Subtest-1	19.50	17.71	17.81	17.82
HSUPA Subtest-2	19.50	17.72	17.81	17.84
HSUPA Subtest-3	20.50	18.66	18.77	18.80
HSUPA Subtest-4	19.00	17.23	17.29	17.33
HSUPA Subtest-5	20.50	18.64	18.77	18.81
DC-HSDPA Subtest-1	20.50	19.73	19.79	19.80
DC-HSDPA Subtest-2	20.50	19.65	19.76	19.72
DC-HSDPA Subtest-3	19.50	19.16	19.29	19.25
DC-HSDPA Subtest-4	19.50	19.15	19.24	19.26
HSPA+ Subtest-1	18.50	18.41	18.35	18.24

Up Antenna Receiver on

Band	UMTS B4 Average Conducted Power(dBm)			
Tx Channel	Max.	1312	1413	1513
Frequency(MHz)	Tune-up	1712.4	1732.6	1752.6
AMR Voice	19.00	18.01	18.10	18.14
RMC 12.2K	19.00	18.01	18.10	18.14
HSDPA Subtest-1	18.50	18.06	18.17	18.15
HSDPA Subtest-2	18.50	18.01	18.16	18.13
HSDPA Subtest-3	17.50	16.59	16.58	16.53
HSDPA Subtest-4	17.50	16.40	16.49	16.53
HSUPA Subtest-1	17.50	16.00	16.11	16.66
HSUPA Subtest-2	17.50	16.03	16.16	16.18
HSUPA Subtest-3	18.50	16.98	17.14	17.17
HSUPA Subtest-4	17.00	15.59	15.67	15.73
HSUPA Subtest-5	18.50	17.02	17.16	17.17
DC-HSDPA Subtest-1	18.50	18.06	18.17	18.15
DC-HSDPA Subtest-2	18.50	18.01	18.16	18.13
DC-HSDPA Subtest-3	17.50	16.59	16.58	16.53
DC-HSDPA Subtest-4	17.50	16.40	16.49	16.53
HSPA+ Subtest-1	16.50	16.13	16.26	16.23

Up Antenna Receiver off

Band	UMTS B4 Average Conducted Power(dBm)			
Tx Channel	Max.	1312	1413	1513
Frequency(MHz)	Tune-up	1712.4	1732.6	1752.6
AMR Voice	21.00	20.03	20.14	20.16
RMC 12.2K	21.00	20.03	20.14	20.16
HSDPA Subtest-1	20.50	20.08	20.17	20.14
HSDPA Subtest-2	20.50	20.02	20.10	20.12
HSDPA Subtest-3	19.50	18.53	18.65	18.63
HSDPA Subtest-4	19.50	18.55	18.65	18.61
HSUPA Subtest-1	19.50	18.05	18.66	18.19
HSUPA Subtest-2	19.50	18.07	18.18	18.23
HSUPA Subtest-3	20.50	19.00	19.13	19.15
HSUPA Subtest-4	19.00	17.59	17.67	17.72
HSUPA Subtest-5	20.50	19.03	19.15	19.17
DC-HSDPA Subtest-1	20.50	20.08	20.17	20.14
DC-HSDPA Subtest-2	20.50	20.02	20.10	20.12
DC-HSDPA Subtest-3	19.50	18.53	18.65	18.63
DC-HSDPA Subtest-4	19.50	18.55	18.65	18.61
HSPA+ Subtest-1	18.50	17.88	18.02	18.48

Note:

- 1) The conducted power of UMTS B4 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.

3. Conducted power measurements of UMTS B5

Down Antenna

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	24.00	22.54	22.62	22.63
RMC 12.2K	24.00	22.54	22.62	22.63
HSDPA Subtest-1	23.50	21.60	21.66	21.62
HSDPA Subtest-2	23.50	21.56	21.60	21.59
HSDPA Subtest-3	22.50	21.08	21.18	21.15
HSDPA Subtest-4	22.50	21.04	21.14	21.11
HSUPA Subtest-1	22.50	20.56	20.51	20.68
HSUPA Subtest-2	22.50	20.57	20.62	20.60
HSUPA Subtest-3	23.50	21.57	21.58	21.51
HSUPA Subtest-4	22.00	20.18	20.27	20.21
HSUPA Subtest-5	23.50	21.62	21.72	21.68
DC-HSDPA Subtest-1	23.50	21.60	21.66	21.62
DC-HSDPA Subtest-2	23.50	21.56	21.60	21.59
DC-HSDPA Subtest-3	22.50	21.08	21.18	21.15
DC-HSDPA Subtest-4	22.50	21.04	21.14	21.11
HSPA+ Subtest-1	21.50	20.49	20.44	20.57

Up Antenna

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	24.00	22.78	22.87	22.93
RMC 12.2K	24.00	22.78	22.87	22.93
HSDPA Subtest-1	23.50	21.78	21.86	21.83
HSDPA Subtest-2	23.50	21.80	21.86	21.81
HSDPA Subtest-3	22.50	21.33	21.41	21.35
HSDPA Subtest-4	22.50	21.29	21.39	21.34
HSUPA Subtest-1	22.50	20.68	20.76	20.72
HSUPA Subtest-2	22.50	20.83	20.90	20.84
HSUPA Subtest-3	23.50	21.55	21.62	21.61
HSUPA Subtest-4	22.00	20.37	20.42	20.36
HSUPA Subtest-5	23.50	21.81	21.88	21.86
DC-HSDPA Subtest-1	23.50	21.78	21.86	21.83
DC-HSDPA Subtest-2	23.50	21.80	21.86	21.81
DC-HSDPA Subtest-3	22.50	21.33	21.41	21.35
DC-HSDPA Subtest-4	22.50	21.29	21.39	21.34
HSPA+ Subtest-1	21.50	20.04	20.08	20.06

Note:

- 1) The conducted power of UMTS B5 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.
- 5) The receiver on/off power of UMTS B5 Down Antenna and Up Antenna are the same.

7.1.3 CONDUCTED POWER MEASUREMENTS OF LTE

1. Conducted power measurement results of LTE B2

Down 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	24.00	22.95	22.91	23.07	QPSK	1/0	24.00	23.05	22.96	23.03
	1/2	24.00	23.04	23.01	23.17		1/7	24.00	23.22	23.10	23.21
	1/5	24.00	22.93	22.91	23.08		1/14	24.00	23.07	22.99	23.08
	3/0	24.00	23.00	22.93	23.07		8/0	23.00	22.07	21.93	22.09
	3/1	24.00	23.08	22.98	23.11		8/3	23.00	22.11	21.98	22.11
	3/3	24.00	23.06	22.96	23.07		8/7	23.00	22.07	21.93	22.05
	6/0	23.00	22.07	21.96	22.08		15/0	23.00	22.10	21.94	22.07
16QAM	1/0	23.00	22.02	21.99	22.30	16QAM	1/0	23.00	22.01	22.27	22.01
	1/2	23.00	22.09	22.07	22.37		1/7	23.00	22.11	22.42	22.15
	1/5	23.00	22.03	21.98	22.31		1/14	23.00	21.95	22.31	21.96
	3/0	23.00	22.16	21.95	22.20		8/0	22.00	21.15	21.02	21.10
	3/1	23.00	22.23	22.00	22.22		8/3	22.00	21.19	21.04	21.12
	3/3	23.00	22.17	21.96	22.19		8/7	22.00	21.14	20.99	21.08
	6/0	22.00	21.20	21.09	20.96		15/0	22.00	21.05	20.94	21.01
64QAM	1/0	22.00	21.08	21.05	21.36	64QAM	1/0	22.00	21.27	21.02	21.19
	1/2	22.00	21.23	21.16	21.48		1/7	22.00	21.46	21.17	21.36
	1/5	22.00	21.12	21.05	21.34		1/14	22.00	21.28	21.12	21.13
	3/0	22.00	21.12	20.86	21.33		8/0	21.00	20.10	20.01	19.99
	3/1	22.00	21.15	20.93	21.37		8/3	21.00	20.15	20.05	20.02
	3/3	22.00	21.14	20.92	21.31		8/7	21.00	20.09	20.00	19.96
	6/0	21.00	20.32	20.02	20.02		15/0	21.00	20.03	19.98	20.06

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	24.00	23.07	22.86	22.95	QPSK	1/0	24.00	23.00	22.95	22.96
	1/12	24.00	23.18	22.99	23.16		1/24	24.00	23.20	23.15	23.19
	1/24	24.00	23.04	22.85	23.06		1/49	24.00	23.04	22.95	23.07
	12/0	23.00	22.08	21.98	22.06		25/0	23.00	22.07	22.02	22.06
	12/6	23.00	22.14	22.01	22.13		25/12	23.00	22.11	22.01	22.07
	12/13	23.00	22.09	21.97	22.07		25/25	23.00	22.12	21.96	22.02
	25/0	23.00	22.08	21.94	22.05		50/0	23.00	22.09	22.01	22.06
16QAM	1/0	23.00	22.13	22.31	22.04	16QAM	1/0	23.00	21.96	22.24	21.98
	1/12	23.00	22.23	22.46	22.15		1/24	23.00	22.14	22.43	22.16
	1/24	23.00	22.10	22.33	22.00		1/49	23.00	21.92	22.24	21.93
	12/0	22.00	21.09	21.06	21.09		25/0	22.00	21.06	21.05	21.18
	12/6	22.00	21.15	21.11	21.16		25/12	22.00	21.07	21.02	21.19
	12/13	22.00	21.12	21.09	21.12		25/25	22.00	21.08	21.01	21.14
	25/0	22.00	21.06	21.02	21.04		50/0	22.00	21.02	21.01	21.11
64QAM	1/0	22.00	20.85	21.12	21.15	64QAM	1/0	22.00	21.27	21.02	21.12
	1/12	22.00	20.95	21.31	21.26		1/24	22.00	21.46	21.24	21.35
	1/24	22.00	20.83	21.16	21.15		1/49	22.00	21.25	21.05	21.12
	12/0	21.00	20.04	19.90	20.10		25/0	21.00	20.11	20.08	20.20
	12/6	21.00	20.12	19.92	20.16		25/12	21.00	20.12	20.08	20.17
	12/13	21.00	20.08	19.92	20.10		25/25	21.00	20.15	20.04	20.08
	25/0	21.00	20.01	19.92	20.04		50/0	21.00	20.10	20.06	20.07

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	24.00	22.97	22.89	23.00	QPSK	1/0	24.00	22.81	22.69	22.72
	1/37	24.00	23.08	23.01	23.07		1/50	24.00	23.23	23.01	23.17
	1/74	24.00	22.90	22.87	23.06		1/99	24.00	22.74	22.66	22.52
	36/0	23.00	22.11	22.87	22.10		50/0	23.00	21.97	21.99	21.88
	36/19	23.00	22.11	22.03	22.11		50/25	23.00	22.06	22.00	22.07
	36/39	23.00	22.11	21.98	22.11		50/50	23.00	22.01	21.86	21.78
	75/0	23.00	22.12	22.01	22.15		100/0	23.00	22.00	21.94	21.83
16QAM	1/0	23.00	21.88	22.19	22.35	16QAM	1/0	23.00	22.25	22.11	22.06
	1/37	23.00	21.97	22.31	22.43		1/50	23.00	22.63	22.52	22.51
	1/74	23.00	21.81	22.17	22.22		1/99	23.00	22.19	22.08	22.06
	36/0	22.00	21.03	21.17	21.04		50/0	22.00	20.98	21.01	21.02
	36/19	22.00	21.03	21.05	21.04		50/25	22.00	21.06	20.98	21.06
	36/39	22.00	21.05	20.98	21.05		50/50	22.00	20.92	20.89	20.92
	75/0	22.00	21.03	21.00	21.11		100/0	22.00	21.00	20.95	21.01
64QAM	1/0	22.00	21.20	20.94	21.54	64QAM	1/0	22.00	20.92	20.98	21.33
	1/37	22.00	21.31	21.09	21.60		1/50	22.00	21.31	20.95	21.79
	1/74	22.00	21.15	20.99	21.51		1/99	22.00	20.83	21.03	21.35
	36/0	21.00	20.09	20.99	20.09		50/0	21.00	19.97	20.06	20.13
	36/19	21.00	20.09	20.07	20.10		50/25	21.00	20.04	20.05	20.16
	36/39	21.00	20.11	20.04	20.06		50/50	21.00	19.95	19.94	20.01
	75/0	21.00	20.07	20.05	20.18		100/0	21.00	20.00	19.98	20.05

Down 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	19.52	19.52	19.90	QPSK	1/0	20.50	19.53	19.83	19.62
	1/2	20.50	19.61	19.65	20.01		1/7	20.50	19.65	19.62	19.77
	1/5	20.50	19.52	19.57	19.94		1/14	20.50	19.48	19.86	19.58
	3/0	20.50	19.78	19.54	19.80		8/0	20.50	19.69	19.59	19.66
	3/1	20.50	19.84	19.57	19.82		8/3	20.50	19.74	19.62	19.68
	3/3	20.50	19.81	19.58	19.79		8/7	20.50	19.69	19.57	19.64
	6/0	20.50	19.73	19.65	19.53		15/0	20.50	19.66	19.53	19.59
16QAM	1/0	20.50	19.43	19.44	19.58	16QAM	1/0	20.50	19.52	19.49	19.54
	1/2	20.50	19.57	19.55	19.74		1/7	20.50	19.69	19.68	19.71
	1/5	20.50	19.45	19.43	19.59		1/14	20.50	19.54	19.53	19.55
	3/0	20.50	19.60	19.51	19.66		8/0	20.50	19.61	19.51	19.63
	3/1	20.50	19.65	19.52	19.72		8/3	20.50	19.62	19.54	19.66
	3/3	20.50	19.67	19.50	19.67		8/7	20.50	19.60	19.47	19.62
	6/0	20.50	19.57	19.49	19.65		15/0	20.50	19.63	19.47	19.61
64QAM	1/0	20.50	19.67	19.80	19.68	64QAM	1/0	20.50	19.72	19.77	19.69
	1/2	20.50	19.78	19.94	19.81		1/7	20.50	19.90	19.91	19.89
	1/5	20.50	19.72	19.81	19.68		1/14	20.50	19.63	19.77	19.77
	3/0	20.50	19.55	19.79	19.74		8/0	20.50	19.52	19.55	19.68
	3/1	20.50	19.59	19.84	19.78		8/3	20.50	19.55	19.57	19.73
	3/3	20.50	19.56	19.79	19.75		8/7	20.50	19.54	19.50	19.67
	6/0	20.50	19.62	19.46	19.89		15/0	20.50	19.63	19.46	19.64

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	19.62	19.56	19.82	QPSK	1/0	20.50	19.48	19.80	19.56
	1/12	20.50	19.77	19.67	19.96		1/24	20.50	19.64	20.01	19.76
	1/24	20.50	19.65	19.55	19.80		1/49	20.50	19.48	19.83	19.57
	12/0	20.50	19.62	19.54	19.75		25/0	20.50	19.63	19.61	19.77
	12/6	20.50	19.72	19.59	19.82		25/12	20.50	19.64	19.57	19.75
	12/13	20.50	19.68	19.57	19.74		25/25	20.50	19.67	19.56	19.69
	25/0	20.50	19.61	19.49	19.69		50/0	20.50	19.64	19.59	19.69
16QAM	1/0	20.50	19.55	19.39	19.54	16QAM	1/0	20.50	19.48	19.41	19.49
	1/12	20.50	19.65	19.53	19.74		1/24	20.50	19.67	19.61	19.67
	1/24	20.50	19.53	19.42	19.58		1/49	20.50	19.52	19.42	19.56
	12/0	20.50	19.57	19.50	19.65		25/0	20.50	19.60	19.55	19.61
	12/6	20.50	19.65	19.55	19.71		25/12	20.50	19.64	19.51	19.65
	12/13	20.50	19.63	19.52	19.66		25/25	20.50	19.64	19.49	19.60
	25/0	20.50	19.61	19.49	19.64		50/0	20.50	19.64	19.54	19.65
64QAM	1/0	20.50	19.43	19.70	19.68	64QAM	1/0	20.50	19.64	19.73	19.65
	1/12	20.50	19.54	19.84	19.87		1/24	20.50	19.84	19.92	19.87
	1/24	20.50	19.45	19.70	19.72		1/49	20.50	19.65	19.72	19.67
	12/0	20.50	19.66	19.45	19.63		25/0	20.50	19.67	19.60	19.74
	12/6	20.50	19.71	19.47	19.71		25/12	20.50	19.67	19.60	19.71
	12/13	20.50	19.67	19.46	19.67		25/25	20.50	19.69	19.57	19.66
	25/0	20.50	19.59	19.46	19.63		50/0	20.50	19.60	19.58	19.68

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	19.42	19.77	19.45	QPSK	1/0	20.50	19.64	19.82	19.49
	1/37	20.50	19.51	19.88	19.54		1/50	20.50	20.04	19.88	19.92
	1/74	20.50	19.37	19.79	19.43		1/99	20.50	19.56	19.84	19.53
	36/0	20.50	19.59	19.79	19.64		50/0	20.50	19.58	19.57	19.69
	36/19	20.50	19.59	19.61	19.61		50/25	20.50	19.67	19.56	19.72
	36/39	20.50	19.60	19.58	19.61		50/50	20.50	19.58	19.47	19.59
	75/0	20.50	19.60	19.58	19.65		100/0	20.50	19.58	19.50	19.64
16QAM	1/0	20.50	19.43	19.44	19.53	16QAM	1/0	20.50	19.82	19.71	19.72
	1/37	20.50	19.53	19.54	19.60		1/50	20.50	19.62	19.57	19.58
	1/74	20.50	19.40	19.40	19.58		1/99	20.50	19.78	19.74	19.75
	36/0	20.50	19.61	19.40	19.61		50/0	20.50	19.57	19.58	19.63
	36/19	20.50	19.62	19.57	19.64		50/25	20.50	19.67	19.57	19.70
	36/39	20.50	19.65	19.53	19.66		50/50	20.50	19.57	19.49	19.56
	75/0	20.50	19.61	19.53	19.66		100/0	20.50	19.58	19.53	19.64
64QAM	1/0	20.50	19.76	19.54	19.81	64QAM	1/0	20.50	19.26	19.25	19.25
	1/37	20.50	19.85	19.65	19.93		1/50	20.50	19.67	19.47	19.66
	1/74	20.50	19.72	19.54	19.77		1/99	20.50	19.23	19.25	19.36
	36/0	20.50	19.64	19.54	19.61		50/0	20.50	19.48	19.57	19.61
	36/19	20.50	19.61	19.63	19.63		50/25	20.50	19.58	19.55	19.67
	36/39	20.50	19.61	19.57	19.61		50/50	20.50	19.47	19.45	19.55
	75/0	20.50	19.61	19.54	19.68		100/0	20.50	19.49	19.50	19.60

Up 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	17.00	16.41	16.32	16.46	QPSK	1/0	17.00	16.43	16.42	16.39
	1/2	17.00	16.57	16.45	16.54		1/7	17.00	16.62	16.55	16.57
	1/5	17.00	16.44	16.31	16.46		1/14	17.00	16.46	16.41	16.40
	3/0	17.00	16.53	16.38	16.44		8/0	17.00	16.50	16.36	16.46
	3/1	17.00	16.59	16.39	16.52		8/3	17.00	16.55	16.41	16.49
	3/3	17.00	16.57	16.36	16.44		8/7	17.00	16.49	16.34	16.44
	6/0	17.00	16.54	16.39	16.47		15/0	17.00	16.52	16.34	16.43
16QAM	1/0	17.00	16.51	16.41	16.78	16QAM	1/0	17.00	16.49	16.68	16.48
	1/2	17.00	16.58	16.52	16.37		1/7	17.00	16.59	16.67	16.69
	1/5	17.00	16.50	16.41	16.78		1/14	17.00	16.38	16.75	16.44
	3/0	17.00	16.66	16.37	16.65		8/0	17.00	16.59	16.44	16.50
	3/1	17.00	16.74	16.40	16.70		8/3	17.00	16.63	16.47	16.54
	3/3	17.00	16.67	16.36	16.68		8/7	17.00	16.60	16.42	16.49
	6/0	17.00	16.68	16.52	16.40		15/0	17.00	16.52	16.34	16.41
64QAM	1/0	17.00	16.44	16.41	16.60	64QAM	1/0	17.00	16.80	16.46	16.66
	1/2	17.00	16.64	16.57	16.68		1/7	17.00	16.54	16.64	16.80
	1/5	17.00	16.49	16.44	16.59		1/14	17.00	16.76	16.54	16.58
	3/0	17.00	16.63	16.46	16.40		8/0	17.00	16.57	16.40	16.42
	3/1	17.00	16.66	16.51	16.44		8/3	17.00	16.59	16.45	16.45
	3/3	17.00	16.70	16.47	16.42		8/7	17.00	16.55	16.40	16.42
	6/0	17.00	16.51	16.66	16.56		15/0	17.00	16.50	16.37	16.48

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	17.00	16.46	16.27	16.36	QPSK	1/0	17.00	16.39	16.39	16.34
	1/12	17.00	16.59	16.42	16.52		1/24	17.00	16.61	16.60	16.54
	1/24	17.00	16.41	16.26	16.39		1/49	17.00	16.40	16.41	16.40
	12/0	17.00	16.43	16.35	16.41		25/0	17.00	16.46	16.40	16.42
	12/6	17.00	16.53	16.42	16.52		25/12	17.00	16.51	16.39	16.45
	12/13	17.00	16.48	16.35	16.46		25/25	17.00	16.46	16.30	16.37
	25/0	17.00	16.45	16.31	16.40		50/0	17.00	16.45	16.36	16.40
16QAM	1/0	17.00	16.58	16.77	16.53	16QAM	1/0	17.00	16.39	16.67	16.44
	1/12	17.00	16.69	16.60	16.64		1/24	17.00	16.60	16.68	16.64
	1/24	17.00	16.55	16.77	16.49		1/49	17.00	16.33	16.69	16.45
	12/0	17.00	16.48	16.45	16.49		25/0	17.00	16.48	16.42	16.55
	12/6	17.00	16.60	16.51	16.59		25/12	17.00	16.52	16.45	16.59
	12/13	17.00	16.55	16.49	16.53		25/25	17.00	16.48	16.42	16.56
	25/0	17.00	16.47	16.37	16.42		50/0	17.00	16.42	16.41	16.51
64QAM	1/0	17.00	16.36	16.55	16.59	64QAM	1/0	17.00	16.72	16.45	16.60
	1/12	17.00	16.44	16.67	16.72		1/24	17.00	16.64	16.65	16.78
	1/24	17.00	16.30	16.56	16.60		1/49	17.00	16.31	16.47	16.59
	12/0	17.00	16.47	16.26	16.46		25/0	17.00	16.53	16.47	16.56
	12/6	17.00	16.55	16.33	16.57		25/12	17.00	16.55	16.49	16.56
	12/13	17.00	16.53	16.31	16.53		25/25	17.00	16.52	16.45	16.55
	25/0	17.00	16.43	16.27	16.49		50/0	17.00	16.48	16.46	16.48

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	17.00	16.35	16.31	16.36	QPSK	1/0	17.00	16.42	16.29	16.28
	1/37	17.00	16.44	16.43	16.42		1/50	17.00	16.82	16.59	16.71
	1/74	17.00	16.28	16.33	16.33		1/99	17.00	16.35	16.30	16.37
	36/0	17.00	16.47	16.33	16.42		50/0	17.00	16.40	16.43	16.45
	36/19	17.00	16.51	16.40	16.41		50/25	17.00	16.45	16.37	16.47
	36/39	17.00	16.51	16.34	16.45		50/50	17.00	16.39	16.26	16.41
	75/0	17.00	16.44	16.34	16.42		100/0	17.00	16.43	16.36	16.46
16QAM	1/0	17.00	16.35	16.63	16.49	16QAM	1/0	17.00	16.73	16.58	16.67
	1/37	17.00	16.43	16.74	16.69		1/50	17.00	16.42	16.39	16.51
	1/74	17.00	16.34	16.64	16.72		1/99	17.00	16.64	16.59	16.70
	36/0	17.00	16.47	16.64	16.46		50/0	17.00	16.43	16.39	16.53
	36/19	17.00	16.46	16.43	16.43		50/25	17.00	16.49	16.37	16.54
	36/39	17.00	16.43	16.40	16.45		50/50	17.00	16.39	16.28	16.47
	75/0	17.00	16.45	16.39	16.47		100/0	17.00	16.47	16.35	16.51
64QAM	1/0	17.00	16.69	16.42	16.70	64QAM	1/0	17.00	16.54	16.74	16.36
	1/37	17.00	16.77	16.51	16.56		1/50	17.00	16.48	16.43	16.33
	1/74	17.00	16.66	16.38	16.33		1/99	17.00	16.41	16.75	16.41
	36/0	17.00	16.49	16.38	16.45		50/0	17.00	16.43	16.42	16.50
	36/19	17.00	16.53	16.42	16.46		50/25	17.00	16.52	16.40	16.56
	36/39	17.00	16.49	16.40	16.48		50/50	17.00	16.43	16.31	16.46
	75/0	17.00	16.45	16.39	16.51		100/0	17.00	16.43	16.35	16.51

Up 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	19.89	19.83	19.83	QPSK	1/0	20.50	19.90	19.89	19.90
	1/2	20.50	19.99	19.90	19.97		1/7	20.50	20.09	20.03	20.07
	1/5	20.50	19.86	19.81	19.86		1/14	20.50	19.94	19.88	19.89
	3/0	20.50	19.97	19.89	19.96		8/0	20.50	20.00	19.85	19.95
	3/1	20.50	20.04	19.95	20.01		8/3	20.50	20.01	19.89	20.00
	3/3	20.50	20.00	19.89	20.02		8/7	20.50	19.97	19.83	19.97
	6/0	20.50	19.94	19.83	19.96		15/0	20.50	20.01	19.83	19.97
16QAM	1/0	20.50	19.92	19.81	20.20	16QAM	1/0	20.50	19.99	19.78	20.26
	1/2	20.50	20.04	19.89	20.30		1/7	20.50	20.14	19.90	20.14
	1/5	20.50	19.95	19.85	20.22		1/14	20.50	19.90	19.74	20.29
	3/0	20.50	20.20	20.02	20.12		8/0	20.50	20.00	19.97	20.04
	3/1	20.50	20.25	20.07	20.14		8/3	20.50	20.03	19.99	20.04
	3/3	20.50	20.21	20.04	20.12		8/7	20.50	20.02	19.94	19.94
	6/0	20.50	20.16	20.00	19.84		15/0	20.50	19.95	19.88	19.99
64QAM	1/0	20.50	19.99	19.89	20.22	64QAM	1/0	20.50	20.28	19.94	20.06
	1/2	20.50	20.16	20.02	20.16		1/7	20.50	20.14	20.11	20.25
	1/5	20.50	19.98	19.96	20.22		1/14	20.50	20.25	19.99	20.02
	3/0	20.50	20.10	19.79	20.21		8/0	20.50	20.06	19.89	19.90
	3/1	20.50	20.13	19.83	20.24		8/3	20.50	20.09	19.93	19.90
	3/3	20.50	20.14	19.83	20.18		8/7	20.50	20.03	19.89	19.86
	6/0	20.50	20.22	19.91	19.90		15/0	20.50	20.00	19.86	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	19.92	19.74	19.85	QPSK	1/0	20.50	19.90	19.85	19.83
	1/12	20.50	20.06	19.91	20.03		1/24	20.50	20.06	20.04	20.04
	1/24	20.50	19.95	19.74	19.87		1/49	20.50	19.86	19.83	19.88
	12/0	20.50	19.96	19.86	19.96		25/0	20.50	19.99	19.91	19.97
	12/6	20.50	20.04	19.90	20.02		25/12	20.50	20.01	19.88	19.95
	12/13	20.50	19.98	19.88	19.98		25/25	20.50	20.04	19.86	19.94
	25/0	20.50	19.99	19.87	19.95		50/0	20.50	20.04	19.92	19.98
16QAM	1/0	20.50	20.04	20.23	19.90	16QAM	1/0	20.50	19.89	20.15	19.92
	1/12	20.50	20.20	20.19	20.05		1/24	20.50	20.05	20.26	20.09
	1/24	20.50	20.05	20.24	19.93		1/49	20.50	19.87	20.17	19.90
	12/0	20.50	20.04	19.98	19.99		25/0	20.50	20.03	19.96	20.09
	12/6	20.50	20.13	20.02	20.05		25/12	20.50	20.05	19.94	20.08
	12/13	20.50	20.08	19.99	19.99		25/25	20.50	20.09	19.93	20.03
	25/0	20.50	20.02	19.93	19.90		50/0	20.50	20.02	19.95	20.01
64QAM	1/0	20.50	19.80	20.04	20.04	64QAM	1/0	20.50	20.21	19.93	20.02
	1/12	20.50	19.94	20.18	20.20		1/24	20.50	20.10	20.15	20.22
	1/24	20.50	19.82	20.04	20.04		1/49	20.50	20.19	19.93	20.03
	12/0	20.50	20.00	19.80	19.98		25/0	20.50	20.04	20.00	20.07
	12/6	20.50	20.08	19.84	20.03		25/12	20.50	20.06	19.97	20.07
	12/13	20.50	20.04	19.80	20.00		25/25	20.50	20.09	19.96	20.01
	25/0	20.50	19.97	19.80	19.97		50/0	20.50	20.05	19.95	19.98

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	19.81	19.81	19.86	QPSK	1/0	20.50	19.89	19.84	19.85
	1/37	20.50	19.93	19.90	19.94		1/50	20.50	20.35	20.12	20.28
	1/74	20.50	19.79	19.75	19.87		1/99	20.50	19.83	19.82	19.97
	36/0	20.50	19.98	19.75	19.95		50/0	20.50	20.10	20.14	20.22
	36/19	20.50	20.02	19.92	19.99		50/25	20.50	20.20	20.06	20.25
	36/39	20.50	20.02	19.88	19.97		50/50	20.50	20.12	19.98	20.13
	75/0	20.50	19.97	19.90	19.97		100/0	20.50	20.12	20.08	20.17
16QAM	1/0	20.50	19.82	20.12	20.31	16QAM	1/0	20.50	20.19	20.08	20.03
	1/37	20.50	19.90	20.22	20.28		1/50	20.50	20.18	19.95	20.16
	1/74	20.50	19.78	20.10	20.22		1/99	20.50	20.13	20.06	20.06
	36/0	20.50	20.00	20.10	19.94		50/0	20.50	19.95	19.92	19.97
	36/19	20.50	20.00	19.95	19.95		50/25	20.50	20.03	19.93	20.01
	36/39	20.50	20.01	19.89	19.93		50/50	20.50	19.95	19.82	19.89
	75/0	20.50	19.99	19.91	20.00		100/0	20.50	19.95	19.86	19.95
64QAM	1/0	20.50	20.18	20.00	20.02	64QAM	1/0	20.50	20.02	20.17	19.81
	1/37	20.50	20.26	20.10	20.07		1/50	20.50	20.19	19.98	20.27
	1/74	20.50	20.14	20.00	19.97		1/99	20.50	19.97	20.21	19.84
	36/0	20.50	20.03	20.00	20.06		50/0	20.50	19.96	19.90	20.02
	36/19	20.50	20.02	19.86	20.04		50/25	20.50	20.05	19.92	20.04
	36/39	20.50	20.03	19.82	20.03		50/50	20.50	19.98	19.82	19.95
	75/0	20.50	20.01	19.86	20.01		100/0	20.50	19.95	19.84	19.97

Note: The tested channels are marks in bold.

2. Conducted power measurement results of LTE B4

Down 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	24.00	22.75	22.81	22.73	QPSK	1/0	24.00	22.73	22.93	22.77
	1/2	24.00	22.88	22.99	22.84		1/7	24.00	22.91	23.08	22.88
	1/5	24.00	22.77	22.82	22.71		1/14	24.00	22.84	22.94	22.75
	3/0	24.00	22.85	22.91	22.88		8/0	23.00	21.81	21.90	21.78
	3/1	24.00	22.89	22.96	22.92		8/3	23.00	21.83	21.96	21.84
	3/3	24.00	22.85	22.98	22.96		8/7	23.00	21.79	21.90	21.77
	6/0	23.00	21.77	21.92	21.72		15/0	23.00	21.80	21.93	21.81
16QAM	1/0	23.00	21.77	21.93	22.23	16QAM	1/0	23.00	21.75	22.23	21.92
	1/2	23.00	21.87	22.09	22.30		1/7	23.00	21.86	22.43	22.02
	1/5	23.00	21.79	21.98	22.20		1/14	23.00	21.75	22.31	21.88
	3/0	23.00	22.01	21.98	22.19		8/0	22.00	20.93	21.01	20.89
	3/1	23.00	22.09	22.03	22.18		8/3	22.00	20.98	21.04	20.96
	3/3	23.00	22.04	21.99	22.20		8/7	22.00	20.92	20.98	20.89
	6/0	22.00	20.95	21.05	20.74		15/0	22.00	20.89	20.92	20.83
64QAM	1/0	22.00	20.87	21.00	21.21	64QAM	1/0	22.00	21.10	20.98	21.02
	1/2	22.00	21.02	21.11	21.38		1/7	22.00	21.26	21.18	21.18
	1/5	22.00	20.87	21.04	21.22		1/14	22.00	21.17	21.07	20.97
	3/0	22.00	20.97	20.88	21.26		8/0	21.00	19.86	19.94	19.75
	3/1	22.00	21.04	20.92	21.30		8/3	21.00	19.91	19.98	19.81
	3/3	22.00	20.99	20.93	21.26		8/7	21.00	19.87	19.97	19.74
	6/0	21.00	20.06	20.01	19.76		15/0	21.00	19.80	19.92	19.86

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	24.00	22.78	22.82	22.74	QPSK	1/0	24.00	22.75	22.92	22.79
	1/12	24.00	22.97	22.99	22.87		1/24	24.00	22.86	22.99	22.77
	1/24	24.00	22.83	22.83	22.76		1/49	24.00	22.80	22.94	22.73
	12/0	23.00	21.78	21.92	21.80		25/0	23.00	21.83	21.98	21.84
	12/6	23.00	21.86	21.98	21.87		25/12	23.00	21.91	21.97	21.85
	12/13	23.00	21.88	21.97	21.86		25/25	23.00	21.95	21.93	21.87
	25/0	23.00	21.83	21.90	21.85		50/0	23.00	21.93	21.99	21.91
16QAM	1/0	23.00	21.91	22.33	21.86	16QAM	1/0	23.00	21.72	22.19	21.86
	1/12	23.00	22.08	22.48	21.98		1/24	23.00	21.96	22.48	22.03
	1/24	23.00	21.93	22.36	21.86		1/49	23.00	21.80	22.30	21.84
	12/0	22.00	20.87	21.00	20.93		25/0	22.00	20.90	21.05	21.02
	12/6	22.00	20.98	21.09	20.98		25/12	22.00	20.98	21.02	21.02
	12/13	22.00	20.99	21.09	20.98		25/25	22.00	21.01	21.02	21.03
	25/0	22.00	20.88	20.99	20.86		50/0	22.00	20.95	21.04	20.97
64QAM	1/0	22.00	20.65	21.09	20.96	64QAM	1/0	22.00	21.08	21.00	20.99
	1/12	22.00	20.84	21.28	21.14		1/24	22.00	21.32	21.23	21.16
	1/24	22.00	20.72	21.14	21.01		1/49	22.00	21.16	21.06	21.02
	12/0	21.00	19.81	19.81	19.86		25/0	21.00	19.86	20.01	19.94
	12/6	21.00	19.87	19.87	19.92		25/12	21.00	19.96	20.01	19.93
	12/13	21.00	19.93	19.85	19.92		25/25	21.00	19.97	19.99	19.95
	25/0	21.00	19.79	19.83	19.84		50/0	21.00	19.93	19.99	19.88

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	24.00	22.66	22.82	22.74	QPSK	1/0	24.00	22.65	22.75	22.69
	1/37	24.00	22.84	22.98	22.83		1/50	24.00	23.14	23.02	23.11
	1/74	24.00	22.77	22.86	22.70		1/99	24.00	22.78	22.74	22.68
	36/0	23.00	21.84	22.86	21.88		50/0	23.00	21.78	21.93	21.88
	36/19	23.00	21.91	21.95	21.84		50/25	23.00	21.90	21.92	21.90
	36/39	23.00	21.92	21.91	21.79		50/50	23.00	21.87	21.88	21.85
	75/0	23.00	21.85	21.96	21.82		100/0	23.00	21.80	21.90	21.84
16QAM	1/0	23.00	21.61	22.14	22.18	16QAM	1/0	23.00	22.02	22.03	22.06
	1/37	23.00	21.77	22.31	22.33		1/50	23.00	22.49	22.44	22.53
	1/74	23.00	21.74	22.21	22.23		1/99	23.00	22.15	22.14	22.11
	36/0	22.00	20.85	21.01	20.82		50/0	22.00	20.84	20.98	20.94
	36/19	22.00	20.89	21.00	20.87		50/25	22.00	20.97	20.98	20.98
	36/39	22.00	20.91	20.95	20.77		50/50	22.00	20.94	20.92	20.93
	75/0	22.00	20.89	20.94	20.83		100/0	22.00	20.89	20.93	20.97
64QAM	1/0	22.00	21.01	20.89	21.35	64QAM	1/0	22.00	20.86	21.22	20.81
	1/37	22.00	21.19	21.06	21.48		1/50	22.00	21.33	21.15	21.26
	1/74	22.00	21.09	20.96	21.37		1/99	22.00	21.01	21.28	20.83
	36/0	21.00	19.88	20.96	19.88		50/0	21.00	19.85	19.96	19.88
	36/19	21.00	19.95	20.02	19.89		50/25	21.00	19.96	19.93	19.90
	36/39	21.00	19.97	20.00	19.86		50/50	21.00	19.95	19.88	19.86
	75/0	21.00	19.90	19.98	19.91		100/0	21.00	19.86	19.91	19.85

Down 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	21.00	20.03	20.02	19.97	QPSK	1/0	21.00	19.78	19.84	19.82
	1/2	21.00	20.12	20.14	20.08		1/7	21.00	19.95	20.05	20.00
	1/5	21.00	19.99	20.03	19.98		1/14	21.00	19.80	19.94	19.85
	3/0	21.00	19.90	19.91	19.85		8/0	21.00	19.86	19.95	19.83
	3/1	21.00	19.95	20.00	19.91		8/3	21.00	19.88	19.99	19.86
	3/3	21.00	19.88	19.98	19.88		8/7	21.00	19.83	19.93	19.82
	6/0	21.00	19.82	19.98	19.82		15/0	21.00	19.84	19.94	19.82
16QAM	1/0	21.00	19.76	19.97	20.15	16QAM	1/0	21.00	19.75	20.04	19.88
	1/2	21.00	19.89	20.06	20.25		1/7	21.00	19.86	20.23	20.01
	1/5	21.00	19.82	19.96	20.14		1/14	21.00	19.77	20.11	19.82
	3/0	21.00	20.06	19.95	20.04		8/0	21.00	19.93	20.01	19.88
	3/1	21.00	20.11	20.01	20.12		8/3	21.00	19.97	20.05	19.92
	3/3	21.00	20.08	19.92	20.08		8/7	21.00	19.93	19.99	19.90
	6/0	21.00	20.00	20.06	19.75		15/0	21.00	19.84	19.94	19.81
64QAM	1/0	21.00	19.95	20.01	19.98	64QAM	1/0	21.00	20.00	19.99	19.94
	1/2	21.00	20.04	20.19	20.08		1/7	21.00	20.17	20.16	20.11
	1/5	21.00	19.97	20.01	19.97		1/14	21.00	19.97	20.02	20.02
	3/0	21.00	19.84	20.20	19.83		8/0	21.00	19.79	19.98	19.89
	3/1	21.00	19.84	20.23	19.89		8/3	21.00	19.83	20.03	19.94
	3/3	21.00	19.82	20.19	19.87		8/7	21.00	19.79	19.95	19.90
	6/0	21.00	19.92	19.91	19.94		15/0	21.00	19.88	19.89	19.88

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	21.00	19.79	19.82	19.76	QPSK	1/0	21.00	19.76	19.92	19.82
	1/12	21.00	19.95	19.97	19.91		1/24	21.00	19.99	20.16	19.97
	1/24	21.00	19.80	19.88	19.81		1/49	21.00	19.88	19.97	19.77
	12/0	21.00	19.79	19.92	19.86		25/0	21.00	19.82	19.97	19.89
	12/6	21.00	19.88	19.99	19.91		25/12	21.00	19.92	19.98	19.88
	12/13	21.00	19.89	19.94	19.94		25/25	21.00	19.89	20.00	19.90
	25/0	21.00	19.80	19.91	19.83		50/0	21.00	19.90	20.02	19.90
16QAM	1/0	21.00	19.90	20.10	19.80	16QAM	1/0	21.00	19.71	20.03	19.85
	1/12	21.00	20.08	20.24	19.97		1/24	21.00	19.93	20.24	20.01
	1/24	21.00	19.95	20.12	19.87		1/49	21.00	19.80	20.06	19.83
	12/0	21.00	19.86	20.03	19.86		25/0	21.00	19.87	20.02	19.99
	12/6	21.00	19.94	20.07	19.92		25/12	21.00	19.96	20.01	19.98
	12/13	21.00	19.99	20.07	19.93		25/25	21.00	19.97	20.00	20.00
	25/0	21.00	19.84	19.98	19.82		50/0	21.00	19.92	20.00	19.95
64QAM	1/0	21.00	19.66	20.10	19.97	64QAM	1/0	21.00	20.09	20.00	20.01
	1/12	21.00	19.81	20.18	20.10		1/24	21.00	20.14	20.02	20.17
	1/24	21.00	19.70	20.12	19.98		1/49	21.00	20.15	20.06	19.96
	12/0	21.00	19.81	19.84	19.89		25/0	21.00	19.88	20.05	19.97
	12/6	21.00	19.91	19.91	19.95		25/12	21.00	19.97	20.04	19.97
	12/13	21.00	19.94	19.89	19.95		25/25	21.00	20.00	20.03	20.00
	25/0	21.00	19.80	19.89	19.87		50/0	21.00	19.97	20.05	19.92

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	21.00	19.87	19.97	20.01	QPSK	1/0	21.00	19.72	19.81	19.78
	1/37	21.00	20.11	20.12	20.10		1/50	21.00	20.28	20.10	20.22
	1/74	21.00	20.09	20.00	19.95		1/99	21.00	19.90	19.85	19.76
	36/0	21.00	19.88	19.80	19.99		50/0	21.00	19.83	19.97	19.92
	36/19	21.00	19.95	20.03	19.94		50/25	21.00	19.91	19.96	19.92
	36/39	21.00	19.96	19.99	19.92		50/50	21.00	19.90	19.90	19.87
	75/0	21.00	19.90	19.99	19.93		100/0	21.00	19.87	19.96	19.91
16QAM	1/0	21.00	19.62	20.14	20.15	16QAM	1/0	21.00	20.06	20.08	19.97
	1/37	21.00	19.79	20.18	20.18		1/50	21.00	20.02	19.97	20.01
	1/74	21.00	19.73	20.16	20.18		1/99	21.00	20.08	20.06	20.03
	36/0	21.00	19.90	20.16	19.90		50/0	21.00	19.86	19.95	19.87
	36/19	21.00	19.93	20.03	19.88		50/25	21.00	19.94	19.98	19.88
	36/39	21.00	19.97	20.03	19.85		50/50	21.00	19.97	19.91	19.87
	75/0	21.00	19.92	20.00	19.92		100/0	21.00	19.91	19.94	19.91
64QAM	1/0	21.00	20.00	19.91	20.10	64QAM	1/0	21.00	19.84	20.00	19.91
	1/37	21.00	20.19	20.06	20.23		1/50	21.00	20.12	19.95	20.13
	1/74	21.00	20.11	19.96	20.14		1/99	21.00	19.98	20.05	19.95
	36/0	21.00	19.92	19.96	19.92		50/0	21.00	19.84	19.97	19.95
	36/19	21.00	19.97	20.06	19.92		50/25	21.00	19.96	19.98	19.94
	36/39	21.00	19.99	20.02	19.91		50/50	21.00	19.95	19.92	19.95
	75/0	21.00	19.95	20.02	19.96		100/0	21.00	19.89	19.92	19.96

Up 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	18.00	17.11	17.33	17.21	QPSK	1/0	18.00	17.17	17.18	17.59
	1/2	18.00	17.21	17.45	17.29		1/7	18.00	17.33	17.33	17.76
	1/5	18.00	17.13	17.34	17.24		1/14	18.00	17.14	17.19	17.62
	3/0	18.00	17.29	17.33	17.43		8/0	18.00	17.19	17.39	17.33
	3/1	18.00	17.41	17.36	17.48		8/3	18.00	17.23	17.42	17.36
	3/3	18.00	17.36	17.32	17.45		8/7	18.00	17.21	17.38	17.31
	6/0	18.00	17.32	17.43	17.39		15/0	18.00	17.12	17.30	17.25
16QAM	1/0	18.00	17.10	17.25	17.14	16QAM	1/0	18.00	17.06	17.30	17.20
	1/2	18.00	17.25	17.42	17.30		1/7	18.00	17.27	17.48	17.36
	1/5	18.00	17.10	17.29	17.13		1/14	18.00	17.19	17.33	17.19
	3/0	18.00	17.17	17.39	17.29		8/0	18.00	17.16	17.30	17.24
	3/1	18.00	17.23	17.41	17.33		8/3	18.00	17.19	17.36	17.29
	3/3	18.00	17.21	17.37	17.34		8/7	18.00	17.16	17.29	17.23
	6/0	18.00	17.17	17.31	17.26		15/0	18.00	17.16	17.25	17.23
64QAM	1/0	18.00	17.24	17.58	17.30	64QAM	1/0	18.00	17.43	17.35	17.42
	1/2	18.00	17.37	17.75	17.45		1/7	18.00	17.59	17.55	17.57
	1/5	18.00	17.26	17.59	17.29		1/14	18.00	17.48	17.43	17.37
	3/0	18.00	17.11	17.57	17.36		8/0	18.00	17.22	17.31	17.21
	3/1	18.00	17.15	17.59	17.39		8/3	18.00	17.25	17.38	17.22
	3/3	18.00	17.13	17.55	17.38		8/7	18.00	17.20	17.35	17.21
	6/0	18.00	17.23	17.26	17.53		15/0	18.00	17.12	17.30	17.26

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	18.00	17.22	17.66	17.22	QPSK	1/0	18.00	17.02	17.56	17.24
	1/12	18.00	17.38	17.82	17.40		1/24	18.00	17.29	17.79	17.40
	1/24	18.00	17.27	17.70	17.28		1/49	18.00	17.12	17.65	17.25
	12/0	18.00	17.19	17.37	17.28		25/0	18.00	17.16	17.36	17.34
	12/6	18.00	17.25	17.45	17.33		25/12	18.00	17.30	17.37	17.34
	12/13	18.00	17.32	17.43	17.30		25/25	18.00	17.24	17.32	17.31
	25/0	18.00	17.14	17.32	17.18		50/0	18.00	17.22	17.33	17.28
16QAM	1/0	18.00	17.12	17.18	17.19	16QAM	1/0	18.00	17.12	17.29	17.19
	1/12	18.00	17.30	17.36	17.32		1/24	18.00	17.31	17.51	17.36
	1/24	18.00	17.17	17.24	17.22		1/49	18.00	17.20	17.35	17.17
	12/0	18.00	17.12	17.24	17.27		25/0	18.00	17.15	17.32	17.21
	12/6	18.00	17.22	17.36	17.31		25/12	18.00	17.27	17.35	17.24
	12/13	18.00	17.21	17.32	17.27		25/25	18.00	17.22	17.30	17.21
	25/0	18.00	17.14	17.25	17.20		50/0	18.00	17.23	17.33	17.23
64QAM	1/0	18.00	16.96	17.45	17.36	64QAM	1/0	18.00	17.41	17.33	17.36
	1/12	18.00	17.15	17.62	17.52		1/24	18.00	17.65	17.57	17.54
	1/24	18.00	16.98	17.51	17.39		1/49	18.00	17.52	17.42	17.46
	12/0	18.00	17.13	17.17	17.25		25/0	18.00	17.19	17.38	17.32
	12/6	18.00	17.23	17.25	17.33		25/12	18.00	17.30	17.40	17.35
	12/13	18.00	17.23	17.24	17.30		25/25	18.00	17.25	17.37	17.30
	25/0	18.00	17.08	17.21	17.23		50/0	18.00	17.23	17.35	17.25

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	18.00	16.94	17.51	17.52	QPSK	1/0	18.00	17.35	17.38	17.36
	1/37	18.00	17.13	17.65	17.66		1/50	18.00	17.86	17.56	17.82
	1/74	18.00	17.10	17.54	17.57		1/99	18.00	17.52	17.50	17.38
	36/0	18.00	17.19	17.54	17.25		50/0	18.00	17.19	17.31	17.27
	36/19	18.00	17.24	17.38	17.25		50/25	18.00	17.28	17.33	17.25
	36/39	18.00	17.23	17.35	17.20		50/50	18.00	17.26	17.30	17.20
	75/0	18.00	17.22	17.31	17.26		100/0	18.00	17.24	17.28	17.27
16QAM	1/0	18.00	17.00	17.17	17.12	16QAM	1/0	18.00	16.83	16.98	16.95
	1/37	18.00	17.21	17.39	17.23		1/50	18.00	17.32	17.23	17.41
	1/74	18.00	17.16	17.25	17.13		1/99	18.00	17.04	17.04	16.97
	36/0	18.00	17.19	17.25	17.29		50/0	18.00	17.17	17.30	17.27
	36/19	18.00	17.30	17.36	17.30		50/25	18.00	17.25	17.32	17.26
	36/39	18.00	17.27	17.32	17.22		50/50	18.00	17.23	17.27	17.21
	75/0	18.00	17.22	17.33	17.24		100/0	18.00	17.19	17.28	17.24
64QAM	1/0	18.00	17.34	17.24	17.40	64QAM	1/0	18.00	17.15	17.53	17.15
	1/37	18.00	17.51	17.40	17.55		1/50	18.00	17.64	17.25	17.59
	1/74	18.00	17.47	17.29	17.43		1/99	18.00	17.32	17.63	17.17
	36/0	18.00	17.21	17.29	17.28		50/0	18.00	17.19	17.32	17.26
	36/19	18.00	17.27	17.41	17.31		50/25	18.00	17.30	17.32	17.30
	36/39	18.00	17.27	17.34	17.26		50/50	18.00	17.25	17.28	17.22
	75/0	18.00	17.23	17.30	17.27		100/0	18.00	17.25	17.27	17.27

Up 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	22.00	21.06	21.21	21.04	QPSK	1/0	22.00	21.06	21.29	21.14
	1/2	22.00	21.17	21.33	21.20		1/7	22.00	21.22	21.44	21.29
	1/5	22.00	21.04	21.22	21.03		1/14	22.00	21.14	21.30	21.12
	3/0	22.00	21.13	21.28	21.19		8/0	22.00	21.11	21.28	21.18
	3/1	22.00	21.16	21.32	21.23		8/3	22.00	21.16	21.32	21.24
	3/3	22.00	21.13	21.26	21.24		8/7	22.00	21.11	21.28	21.17
	6/0	22.00	21.14	21.29	21.18		15/0	22.00	21.09	21.23	21.17
16QAM	1/0	22.00	21.09	21.35	21.55	16QAM	1/0	22.00	21.04	21.62	21.29
	1/2	22.00	21.18	21.43	21.46		1/7	22.00	21.18	21.49	21.41
	1/5	22.00	21.11	21.35	21.55		1/14	22.00	21.11	21.26	21.24
	3/0	22.00	21.37	21.36	21.49		8/0	22.00	21.26	21.35	21.25
	3/1	22.00	21.42	21.40	21.52		8/3	22.00	21.31	21.39	21.32
	3/3	22.00	21.38	21.36	21.51		8/7	22.00	21.25	21.34	21.24
	6/0	22.00	21.29	21.40	21.11		15/0	22.00	21.20	21.30	21.23
64QAM	1/0	22.00	21.21	21.55	21.28	64QAM	1/0	22.00	21.42	21.35	21.38
	1/2	22.00	21.32	21.45	21.44		1/7	22.00	21.59	21.53	21.53
	1/5	22.00	21.25	21.61	21.30		1/14	22.00	21.44	21.42	21.30
	3/0	22.00	21.14	21.44	21.39		8/0	22.00	20.19	20.29	20.16
	3/1	22.00	21.18	21.35	21.45		8/3	22.00	20.25	20.35	20.20
	3/3	22.00	21.16	21.62	21.49		8/7	22.00	20.20	20.31	20.14
	6/0	22.00	20.17	20.24	20.48		15/0	22.00	20.14	20.27	20.23

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	22.00	21.07	21.13	21.10	QPSK	1/0	22.00	21.05	21.22	21.13
	1/12	22.00	21.26	21.30	21.26		1/24	22.00	21.30	21.46	21.30
	1/24	22.00	21.13	21.16	21.15		1/49	22.00	21.13	21.28	21.12
	12/0	22.00	21.05	21.22	21.16		25/0	22.00	21.10	21.31	21.18
	12/6	22.00	21.16	21.30	21.23		25/12	22.00	21.19	21.29	21.22
	12/13	22.00	21.19	21.29	21.23		25/25	22.00	21.22	21.29	21.19
	25/0	22.00	21.08	21.22	21.15		50/0	22.00	21.20	21.29	21.19
16QAM	1/0	22.00	21.21	21.57	21.23	16QAM	1/0	22.00	21.03	21.57	21.22
	1/12	22.00	21.41	21.40	21.36		1/24	22.00	21.27	21.23	21.43
	1/24	22.00	21.28	21.20	21.26		1/49	22.00	21.12	21.47	21.25
	12/0	22.00	21.18	21.37	21.31		25/0	22.00	21.22	21.40	21.39
	12/6	22.00	21.29	21.46	21.33		25/12	22.00	21.30	21.39	21.42
	12/13	22.00	21.33	21.46	21.36		25/25	22.00	21.31	21.39	21.42
	25/0	22.00	21.20	21.37	21.23		50/0	22.00	21.31	21.39	21.39
64QAM	1/0	22.00	20.95	21.46	21.30	64QAM	1/0	22.00	21.42	21.33	21.34
	1/12	22.00	21.15	21.61	21.47		1/24	22.00	21.54	21.59	21.56
	1/24	22.00	21.03	21.50	21.35		1/49	22.00	21.45	21.44	21.36
	12/0	22.00	20.11	20.16	20.24		25/0	22.00	20.20	20.37	20.33
	12/6	22.00	20.22	20.23	20.28		25/12	22.00	20.29	20.36	20.31
	12/13	22.00	20.24	20.21	20.30		25/25	22.00	20.30	20.36	20.32
	25/0	22.00	20.10	20.18	20.21		50/0	22.00	20.25	20.35	20.25

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	22.00	21.29	21.24	21.36	QPSK	1/0	22.00	21.25	21.27	21.54
	1/37	22.00	21.53	21.40	21.23		1/50	22.00	21.64	21.26	21.06
	1/74	22.00	21.43	21.31	21.32		1/99	22.00	21.32	21.35	21.34
	36/0	22.00	20.23	21.31	20.26		50/0	22.00	20.20	20.31	20.23
	36/19	22.00	20.27	20.38	20.22		50/25	22.00	20.28	20.33	20.27
	36/39	22.00	20.33	20.34	20.22		50/50	22.00	20.26	20.31	20.22
	75/0	22.00	20.23	20.32	20.29		100/0	22.00	20.22	20.32	20.20
16QAM	1/0	22.00	20.94	21.47	21.53	16QAM	1/0	22.00	21.34	21.43	21.36
	1/37	22.00	21.14	21.36	21.50		1/50	22.00	21.43	21.31	21.43
	1/74	22.00	21.09	21.60	21.57		1/99	22.00	21.52	21.54	21.42
	36/0	22.00	21.16	21.60	21.22		50/0	22.00	21.22	21.34	21.26
	36/19	22.00	21.24	21.37	21.21		50/25	22.00	21.29	21.39	21.33
	36/39	22.00	21.22	21.33	21.21		50/50	22.00	21.31	21.31	21.25
	75/0	22.00	21.22	21.32	21.22		100/0	22.00	21.27	21.32	21.29
64QAM	1/0	22.00	20.94	21.13	21.08	64QAM	1/0	22.00	20.77	20.89	20.89
	1/37	22.00	21.16	21.30	21.18		1/50	22.00	21.34	21.16	21.36
	1/74	22.00	21.09	21.18	21.08		1/99	22.00	20.98	20.95	20.89
	36/0	22.00	21.21	21.18	21.29		50/0	22.00	21.08	21.27	21.19
	36/19	22.00	21.25	21.37	21.27		50/25	22.00	21.16	21.24	21.22
	36/39	22.00	21.29	21.36	21.25		50/50	22.00	21.16	21.25	21.17
	75/0	22.00	21.23	21.33	21.26		100/0	22.00	21.11	21.26	21.19

Note: The tested channels are marks in bold.

3. Conducted power measurement results of LTE B5

Down Antenna

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	24.00	22.94	22.91	22.88	QPSK	1/0	24.00	22.93	22.97	22.95
	1/2	24.00	23.05	23.00	23.00		1/7	24.00	23.05	23.05	23.04
	1/5	24.00	22.84	22.89	22.91		1/14	24.00	22.96	23.00	22.93
	3/0	24.00	23.00	22.97	23.00		8/0	23.00	21.97	21.95	21.96
	3/1	24.00	23.03	23.06	23.02		8/3	23.00	21.99	21.99	22.00
	3/3	24.00	22.99	23.04	23.01		8/7	23.00	21.94	21.96	21.92
	6/0	23.00	21.96	21.98	21.93		15/0	23.00	21.96	21.95	21.97
16QAM	1/0	23.00	21.93	22.08	22.27	16QAM	1/0	23.00	21.96	22.36	22.02
	1/2	23.00	22.03	22.19	22.40		1/7	23.00	22.06	22.54	22.13
	1/5	23.00	21.97	22.09	22.30		1/14	23.00	21.99	22.38	21.99
	3/0	23.00	22.15	22.08	22.22		8/0	22.00	21.11	21.07	20.99
	3/1	23.00	22.21	22.13	22.26		8/3	22.00	21.14	21.13	21.06
	3/3	23.00	22.17	22.08	22.22		8/7	22.00	21.09	21.07	20.99
	6/0	22.00	21.15	21.14	20.90		15/0	22.00	21.02	21.01	20.95
64QAM	1/0	22.00	21.10	21.11	21.32	64QAM	1/0	22.00	21.30	21.10	21.14
	1/2	22.00	21.21	21.19	21.50		1/7	22.00	21.46	21.28	21.30
	1/5	22.00	21.06	21.12	21.31		1/14	22.00	21.31	21.18	21.09
	3/0	22.00	21.08	20.97	21.31		8/0	21.00	20.07	20.00	19.89
	3/1	22.00	21.17	20.93	21.34		8/3	21.00	20.11	20.10	19.95
	3/3	22.00	21.16	20.97	21.32		8/7	21.00	20.03	20.03	19.90
	6/0	21.00	20.27	20.09	19.91		15/0	21.00	19.97	20.00	20.03

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	24.00	22.96	22.85	22.91	QPSK	1/0	24.00	22.84	22.95	22.92
	1/12	24.00	23.10	23.01	23.06		1/24	24.00	23.08	23.15	23.07
	1/24	24.00	22.97	22.89	22.94		1/49	24.00	22.93	23.05	22.89
	12/0	23.00	21.93	21.96	21.98		25/0	23.00	21.98	22.04	22.03
	12/6	23.00	22.01	22.00	22.01		25/12	23.00	22.02	22.08	22.03
	12/13	23.00	21.99	22.02	21.99		25/25	23.00	22.01	22.07	21.94
	25/0	23.00	21.95	21.99	21.94		50/0	23.00	22.03	22.06	22.02
16QAM	1/0	23.00	22.11	22.40	22.00	16QAM	1/0	23.00	21.94	22.35	21.90
	1/12	23.00	22.26	22.53	22.09		1/24	23.00	22.11	22.52	22.04
	1/24	23.00	22.11	22.42	22.04		1/49	23.00	21.94	22.44	21.90
	12/0	22.00	21.07	21.10	21.02		25/0	22.00	21.04	21.09	21.04
	12/6	22.00	21.09	21.12	21.04		25/12	22.00	21.06	21.10	21.01
	12/13	22.00	21.08	21.15	21.02		25/25	22.00	21.07	21.09	20.94
	25/0	22.00	21.02	21.06	20.90		50/0	22.00	21.01	21.09	20.97
64QAM	1/0	22.00	20.86	21.23	21.13	64QAM	1/0	22.00	21.23	21.08	21.09
	1/12	22.00	20.99	21.38	21.23		1/24	22.00	21.48	21.29	21.29
	1/24	22.00	20.86	21.24	21.13		1/49	22.00	21.28	21.18	21.13
	12/0	21.00	20.02	19.90	19.99		25/0	21.00	20.04	20.10	20.08
	12/6	21.00	20.04	19.93	20.04		25/12	21.00	20.08	20.10	20.14
	12/13	21.00	20.05	19.94	20.00		25/25	21.00	20.07	20.12	19.99
	25/0	21.00	19.96	19.96	19.95		50/0	21.00	20.08	20.10	20.00

Up 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	24.00	23.12	23.20	23.17	QPSK	1/0	24.00	23.20	23.24	23.22
	1/2	24.00	23.24	23.31	23.31		1/7	24.00	23.32	23.42	23.33
	1/5	24.00	23.18	23.15	23.19		1/14	24.00	23.24	23.31	23.18
	3/0	24.00	23.26	23.26	23.29		8/0	23.00	22.26	22.22	22.22
	3/1	24.00	23.30	23.31	23.31		8/3	23.00	22.27	22.28	22.31
	3/3	24.00	23.31	23.28	23.32		8/7	23.00	22.21	22.21	22.20
	6/0	23.00	22.20	22.25	22.26		15/0	23.00	22.27	22.24	22.25
16QAM	1/0	23.00	22.25	22.32	22.51	16QAM	1/0	23.00	22.25	22.60	22.27
	1/2	23.00	22.32	22.42	22.65		1/7	23.00	22.34	22.77	22.38
	1/5	23.00	22.27	22.34	22.57		1/14	23.00	22.26	22.63	22.26
	3/0	23.00	22.43	22.33	22.43		8/0	22.00	21.42	21.29	21.24
	3/1	23.00	22.49	22.35	22.50		8/3	22.00	21.42	21.38	21.33
	3/3	23.00	22.48	22.31	22.47		8/7	22.00	21.38	21.29	21.25
	6/0	22.00	21.44	21.40	21.16		15/0	22.00	21.32	21.28	21.20
64QAM	1/0	22.00	21.58	21.34	21.33	64QAM	1/0	22.00	21.55	21.38	21.39
	1/2	22.00	21.77	21.45	21.44		1/7	22.00	21.70	21.53	21.53
	1/5	22.00	21.59	21.30	21.39		1/14	22.00	21.60	21.43	21.34
	3/0	22.00	21.59	21.34	21.19		8/0	21.00	20.32	20.26	20.14
	3/1	22.00	21.64	21.43	21.29		8/3	21.00	20.36	20.32	20.18
	3/3	22.00	21.61	21.44	21.21		8/7	21.00	20.30	20.27	20.12
	6/0	21.00	20.20	20.55	20.31		15/0	21.00	20.25	20.25	20.23

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	24.00	23.21	23.14	23.18	QPSK	1/0	24.00	23.13	23.25	23.18
	1/12	24.00	23.38	23.30	23.33		1/24	24.00	23.31	23.45	23.35
	1/24	24.00	23.25	23.16	23.22		1/49	24.00	23.17	23.33	23.21
	12/0	23.00	22.25	22.27	22.20		25/0	23.00	22.25	22.30	22.34
	12/6	23.00	22.27	22.27	22.28		25/12	23.00	22.28	22.32	22.31
	12/13	23.00	22.29	22.25	22.23		25/25	23.00	22.33	22.23	22.28
	25/0	23.00	22.27	22.25	22.16		50/0	23.00	22.31	22.28	22.32
16QAM	1/0	23.00	22.38	22.65	22.27	16QAM	1/0	23.00	22.21	22.58	22.18
	1/12	23.00	22.55	22.79	22.35		1/24	23.00	22.38	22.80	22.33
	1/24	23.00	22.44	22.71	22.28		1/49	23.00	22.22	22.72	22.13
	12/0	22.00	21.34	21.36	21.24		25/0	22.00	21.32	21.32	21.35
	12/6	22.00	21.37	21.36	21.32		25/12	22.00	21.36	21.32	21.31
	12/13	22.00	21.39	21.36	21.29		25/25	22.00	21.40	21.27	21.28
	25/0	22.00	21.32	21.31	21.11		50/0	22.00	21.33	21.29	21.27
64QAM	1/0	22.00	21.12	21.45	21.41	64QAM	1/0	22.00	21.37	21.47	21.35
	1/12	22.00	21.27	21.59	21.49		1/24	22.00	21.60	21.73	21.58
	1/24	22.00	21.15	21.50	21.40		1/49	22.00	21.39	21.62	21.36
	12/0	21.00	20.31	20.18	20.21		25/0	21.00	20.32	20.34	20.42
	12/6	21.00	20.32	20.18	20.28		25/12	21.00	20.37	20.34	20.43
	12/13	21.00	20.33	20.18	20.26		25/25	21.00	20.39	20.27	20.33
	25/0	21.00	20.24	20.22	20.15		50/0	21.00	20.34	20.27	20.36

Up 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	24.00	23.10	23.24	23.17	QPSK	1/0	24.00	23.16	23.25	23.22
	1/2	24.00	23.25	23.33	23.32		1/7	24.00	23.29	23.43	23.32
	1/5	24.00	23.17	23.23	23.19		1/14	24.00	23.24	23.27	23.20
	3/0	24.00	23.26	23.27	23.28		8/0	23.00	22.23	22.23	22.23
	3/1	24.00	23.32	23.31	23.36		8/3	23.00	22.26	22.30	22.30
	3/3	24.00	23.33	23.27	23.26		8/7	23.00	22.18	22.21	22.21
	6/0	23.00	22.22	22.26	22.27		15/0	23.00	22.26	22.24	22.24
16QAM	1/0	23.00	22.24	22.32	22.51	16QAM	1/0	23.00	22.24	22.65	22.28
	1/2	23.00	22.36	22.42	22.67		1/7	23.00	22.35	22.77	22.40
	1/5	23.00	22.27	22.31	22.57		1/14	23.00	22.26	22.64	22.27
	3/0	23.00	22.49	22.30	22.45		8/0	22.00	21.40	21.32	21.27
	3/1	23.00	22.53	22.34	22.50		8/3	22.00	21.42	21.39	21.33
	3/3	23.00	22.47	22.30	22.51		8/7	22.00	21.36	21.30	21.26
	6/0	22.00	21.44	21.38	21.18		15/0	22.00	21.33	21.28	21.19
64QAM	1/0	22.00	21.35	21.32	21.58	64QAM	1/0	22.00	21.59	21.34	21.41
	1/2	22.00	21.50	21.45	21.77		1/7	22.00	21.73	21.52	21.55
	1/5	22.00	21.35	21.35	21.62		1/14	22.00	21.61	21.43	21.37
	3/0	22.00	21.41	21.20	21.56		8/0	21.00	20.35	20.26	20.16
	3/1	22.00	21.43	21.27	21.60		8/3	21.00	20.37	20.33	20.20
	3/3	22.00	21.41	21.23	21.60		8/7	21.00	20.32	20.29	20.12
	6/0	21.00	20.54	20.32	20.20		15/0	21.00	20.26	20.23	20.24

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	24.00	23.23	23.16	23.19	QPSK	1/0	24.00	23.14	23.24	23.17
	1/12	24.00	23.40	23.35	23.32		1/24	24.00	23.34	23.47	23.37
	1/24	24.00	23.25	23.16	23.21		1/49	24.00	23.20	23.29	23.22
	12/0	23.00	22.26	22.28	22.23		25/0	23.00	22.25	22.30	22.35
	12/6	23.00	22.27	22.27	22.30		25/12	23.00	22.32	22.31	22.31
	12/13	23.00	22.28	22.26	22.26		25/25	23.00	22.33	22.22	22.25
	25/0	23.00	22.26	22.25	22.17		50/0	23.00	22.37	22.31	22.32
16QAM	1/0	23.00	22.40	22.63	22.30	16QAM	1/0	23.00	22.20	22.16	22.65
	1/12	23.00	22.55	22.78	22.36		1/24	23.00	22.37	22.32	22.83
	1/24	23.00	22.40	22.70	22.30		1/49	23.00	22.22	22.25	22.61
	12/0	22.00	21.33	21.37	21.25		25/0	22.00	21.28	21.24	21.46
	12/6	22.00	21.38	21.37	21.34		25/12	22.00	21.35	21.28	21.41
	12/13	22.00	21.39	21.37	21.29		25/25	22.00	21.40	21.19	21.32
	25/0	22.00	21.33	21.30	21.14		50/0	22.00	21.33	21.25	21.39
64QAM	1/0	22.00	21.12	21.45	21.40	64QAM	1/0	22.00	21.50	21.36	21.44
	1/12	22.00	21.30	21.61	21.48		1/24	22.00	21.73	21.58	21.60
	1/24	22.00	21.17	21.52	21.41		1/49	22.00	21.53	21.48	21.39
	12/0	21.00	20.31	20.18	20.22		25/0	21.00	20.29	20.35	20.38
	12/6	21.00	20.32	20.18	20.29		25/12	21.00	20.36	20.36	20.41
	12/13	21.00	20.33	20.17	20.25		25/25	21.00	20.39	20.31	20.32
	25/0	21.00	20.27	20.17	20.15		50/0	21.00	20.37	20.31	20.32

Note:

- 1) The tested channels are marks in bold.
- 2) The receiver on/off power of LTE B5 Down Antenna are the same.

4. Conducted power measurement results of LTE B7

Down 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	24.00	22.88	22.88	22.81	QPSK	1/0	24.00	22.93	22.92	22.83
	1/12	24.00	22.99	22.98	22.99		1/24	24.00	23.09	23.05	23.07
	1/24	24.00	22.89	22.89	22.91		1/49	24.00	22.97	22.90	22.96
	12/0	23.00	21.92	21.89	21.99		25/0	23.00	21.96	21.96	21.97
	12/6	23.00	21.97	21.93	22.02		25/12	23.00	22.01	21.96	22.02
	12/13	23.00	22.00	21.91	22.05		25/25	23.00	22.12	21.97	22.02
	25/0	23.00	21.97	21.89	21.95		50/0	23.00	22.09	22.01	22.03
16QAM	1/0	23.00	21.90	21.97	22.32	16QAM	1/0	23.00	21.80	22.26	21.87
	1/12	23.00	22.03	22.08	22.49		1/24	23.00	22.04	22.40	22.09
	1/24	23.00	21.90	21.97	22.41		1/49	23.00	21.93	22.24	21.97
	12/0	22.00	20.96	21.01	21.09		25/0	22.00	21.05	21.07	21.12
	12/6	22.00	21.04	21.05	21.17		25/12	22.00	21.08	21.03	21.16
	12/13	22.00	21.09	21.06	21.18		25/25	22.00	21.19	21.09	21.16
	25/0	22.00	20.95	20.96	21.08		50/0	22.00	21.11	21.06	21.10
64QAM	1/0	22.00	21.15	21.08	20.83	64QAM	1/0	22.00	21.23	21.06	21.07
	1/12	22.00	21.27	21.13	20.96		1/24	22.00	21.43	21.23	21.22
	1/24	22.00	21.17	21.06	20.90		1/49	22.00	21.32	21.07	21.12
	12/0	21.00	19.79	19.91	20.01		25/0	21.00	19.96	20.00	20.03
	12/6	21.00	19.87	19.97	20.03		25/12	21.00	19.98	19.99	20.12
	12/13	21.00	19.89	19.96	20.08		25/25	21.00	20.11	20.03	20.10
	25/0	21.00	19.84	19.90	19.95		50/0	21.00	19.98	19.98	20.02

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	24.00	22.86	22.87	22.82	QPSK	1/0	24.00	22.69	22.63	22.59
	1/37	24.00	23.01	22.97	22.98		1/50	24.00	23.09	23.03	23.04
	1/74	24.00	22.83	22.83	22.96		1/99	24.00	22.69	22.56	22.74
	36/0	23.00	22.00	22.01	21.95		50/0	23.00	21.93	21.93	21.93
	36/19	23.00	22.08	22.05	22.01		50/25	23.00	22.06	21.96	22.00
	36/39	23.00	22.10	21.98	22.06		50/50	23.00	22.05	21.89	21.97
	75/0	23.00	22.12	21.99	21.99		100/0	23.00	21.97	21.88	21.92
16QAM	1/0	23.00	21.76	22.18	22.23	16QAM	1/0	23.00	22.16	22.12	22.10
	1/37	23.00	21.96	22.33	22.33		1/50	23.00	22.62	22.46	22.52
	1/74	23.00	21.80	22.16	22.31		1/99	23.00	22.23	22.08	22.24
	36/0	22.00	20.96	21.04	20.91		50/0	22.00	21.02	21.01	20.98
	36/19	22.00	21.08	21.02	20.99		50/25	22.00	21.15	21.04	21.04
	36/39	22.00	21.07	21.01	20.99		50/50	22.00	21.15	21.01	21.03
	75/0	22.00	21.11	21.02	21.00		100/0	22.00	21.06	20.96	21.00
64QAM	1/0	22.00	21.21	21.00	21.41	64QAM	1/0	22.00	21.03	21.28	20.88
	1/37	22.00	21.34	21.11	21.53		1/50	22.00	21.50	21.68	21.31
	1/74	22.00	21.26	20.94	21.49		1/99	22.00	21.07	21.32	20.96
	36/0	21.00	20.01	20.06	19.95		50/0	21.00	19.92	19.92	19.93
	36/19	21.00	20.08	20.05	20.01		50/25	21.00	20.05	19.94	20.02
	36/39	21.00	20.10	20.02	20.05		50/50	21.00	20.07	19.93	19.98
	75/0	21.00	20.05	20.00	20.05		100/0	21.00	19.96	19.89	19.97

Down 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	20.51	20.51	20.48	QPSK	1/0	21.50	20.56	20.58	20.46
	1/12	21.50	20.63	20.61	20.62		1/24	21.50	20.72	20.73	20.66
	1/24	21.50	20.52	20.49	20.53		1/49	21.50	20.61	20.54	20.59
	12/0	21.50	20.54	20.48	20.58		25/0	21.50	20.60	20.54	20.56
	12/6	21.50	20.59	20.53	20.65		25/12	21.50	20.58	20.54	20.61
	12/13	21.50	20.60	20.53	20.64		25/25	21.50	20.69	20.56	20.64
	25/0	21.50	20.53	20.49	20.54		50/0	21.50	20.59	20.55	20.58
16QAM	1/0	21.50	20.55	20.55	20.94	16QAM	1/0	21.50	20.42	20.79	20.51
	1/12	21.50	20.61	20.65	21.10		1/24	21.50	20.60	20.95	20.70
	1/24	21.50	20.53	20.56	20.99		1/49	21.50	20.48	20.81	20.60
	12/0	21.50	20.48	20.52	20.68		25/0	21.50	20.49	20.53	20.64
	12/6	21.50	20.56	20.54	20.72		25/12	21.50	20.55	20.53	20.71
	12/13	21.50	20.56	20.56	20.72		25/25	21.50	20.64	20.53	20.72
	25/0	21.50	20.43	20.46	20.64		50/0	21.50	20.52	20.53	20.62
64QAM	1/0	21.50	20.67	20.61	20.40	64QAM	1/0	21.50	20.78	20.57	20.65
	1/12	21.50	20.81	20.72	20.52		1/24	21.50	20.92	20.70	20.86
	1/24	21.50	20.69	20.61	20.46		1/49	21.50	20.82	20.59	20.71
	12/0	21.50	19.90	19.99	20.10		25/0	21.50	20.00	20.09	20.12
	12/6	21.50	19.97	20.04	20.11		25/12	21.50	20.09	20.06	20.18
	12/13	21.50	20.00	20.03	20.12		25/25	21.50	20.16	20.07	20.15
	25/0	21.50	19.94	19.96	20.01		50/0	21.50	20.04	20.04	20.09

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	20.49	20.49	20.44	QPSK	1/0	21.50	20.76	20.69	20.72
	1/37	21.50	20.60	20.60	20.59		1/50	21.50	21.12	21.06	21.15
	1/74	21.50	20.49	20.45	20.56		1/99	21.50	20.76	20.70	20.84
	36/0	21.50	20.66	20.63	20.54		50/0	21.50	20.44	20.48	20.49
	36/19	21.50	20.69	20.64	20.59		50/25	21.50	20.59	20.51	20.57
	36/39	21.50	20.71	20.59	20.67		50/50	21.50	20.56	20.45	20.56
	75/0	21.50	20.67	20.60	20.58		100/0	21.50	20.53	20.43	20.55
16QAM	1/0	21.50	20.35	20.75	20.83	16QAM	1/0	21.50	20.33	20.32	20.24
	1/37	21.50	20.48	20.85	20.97		1/50	21.50	20.75	20.69	20.65
	1/74	21.50	20.39	20.73	20.92		1/99	21.50	20.32	20.26	20.36
	36/0	21.50	20.53	20.60	20.50		50/0	21.50	20.45	20.50	20.51
	36/19	21.50	20.64	20.63	20.54		50/25	21.50	20.60	20.52	20.59
	36/39	21.50	20.65	20.60	20.59		50/50	21.50	20.62	20.50	20.58
	75/0	21.50	20.62	20.57	20.55		100/0	21.50	20.55	20.49	20.54
64QAM	1/0	21.50	20.69	20.55	20.95	64QAM	1/0	21.50	20.48	20.81	20.42
	1/37	21.50	20.87	20.61	21.10		1/50	21.50	20.99	20.99	20.85
	1/74	21.50	20.75	20.46	21.04		1/99	21.50	20.52	20.79	20.57
	36/0	21.50	20.06	20.08	19.99		50/0	21.50	19.95	19.96	20.00
	36/19	21.50	20.14	20.11	20.06		50/25	21.50	20.09	19.98	20.09
	36/39	21.50	20.17	20.10	20.10		50/50	21.50	20.11	19.97	20.06
	75/0	21.50	20.12	20.04	20.08		100/0	21.50	20.01	19.93	20.03

Up 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	17.00	16.38	16.28	16.28	QPSK	1/0	17.00	16.35	16.41	16.24
	1/12	17.00	16.48	16.36	16.45		1/24	17.00	16.53	16.55	16.47
	1/24	17.00	16.38	16.28	16.35		1/49	17.00	16.43	16.35	16.33
	12/0	17.00	16.35	16.30	16.33		25/0	17.00	16.34	16.33	16.30
	12/6	17.00	16.42	16.38	16.38		25/12	17.00	16.43	16.35	16.38
	12/13	17.00	16.43	16.37	16.41		25/25	17.00	16.47	16.36	16.36
	25/0	17.00	16.37	16.29	16.31		50/0	17.00	16.41	16.35	16.32
16QAM	1/0	17.00	16.38	16.43	16.73	16QAM	1/0	17.00	16.30	16.70	16.26
	1/12	17.00	16.54	16.55	16.58		1/24	17.00	16.47	16.34	16.49
	1/24	17.00	16.44	16.42	16.79		1/49	17.00	16.37	16.66	16.38
	12/0	17.00	16.35	16.34	16.43		25/0	17.00	16.35	16.37	16.35
	12/6	17.00	16.45	16.40	16.49		25/12	17.00	16.43	16.40	16.48
	12/13	17.00	16.47	16.40	16.51		25/25	17.00	16.52	16.37	16.44
	25/0	17.00	16.28	16.32	16.39		50/0	17.00	16.38	16.38	16.36
64QAM	1/0	17.00	16.56	16.48	16.21	64QAM	1/0	17.00	16.63	16.46	16.43
	1/12	17.00	16.72	16.62	16.32		1/24	17.00	16.76	16.62	16.68
	1/24	17.00	16.62	16.49	16.24		1/49	17.00	16.72	16.41	16.55
	12/0	17.00	16.26	16.33	16.34		25/0	17.00	16.36	16.39	16.40
	12/6	17.00	16.34	16.43	16.42		25/12	17.00	16.45	16.44	16.46
	12/13	17.00	16.33	16.40	16.42		25/25	17.00	16.51	16.42	16.45
	25/0	17.00	16.30	16.30	16.27		50/0	17.00	16.42	16.39	16.35

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	16.30	16.30	16.20	QPSK	1/0	17.00	16.35	16.32	16.19
	1/37	17.00	16.42	16.46	16.37		1/50	17.00	16.82	16.71	16.63
	1/74	17.00	16.33	16.26	16.31		1/99	17.00	16.38	16.27	16.30
	36/0	17.00	16.42	16.43	16.29		50/0	17.00	16.35	16.35	16.28
	36/19	17.00	16.53	16.44	16.37		50/25	17.00	16.46	16.37	16.34
	36/39	17.00	16.48	16.39	16.38		50/50	17.00	16.34	16.30	16.31
	75/0	17.00	16.47	16.38	16.30		100/0	17.00	16.43	16.31	16.33
16QAM	1/0	17.00	16.22	16.65	16.63	16QAM	1/0	17.00	16.61	16.62	16.52
	1/37	17.00	16.42	16.73	16.82		1/50	17.00	16.68	16.52	16.56
	1/74	17.00	16.28	16.58	16.74		1/99	17.00	16.63	16.56	16.62
	36/0	17.00	16.38	16.40	16.25		50/0	17.00	16.36	16.38	16.35
	36/19	17.00	16.45	16.44	16.32		50/25	17.00	16.45	16.39	16.38
	36/39	17.00	16.45	16.40	16.34		50/50	17.00	16.47	16.31	16.35
	75/0	17.00	16.45	16.38	16.29		100/0	17.00	16.45	16.38	16.32
64QAM	1/0	17.00	16.61	16.42	16.76	64QAM	1/0	17.00	16.43	16.71	16.24
	1/37	17.00	16.77	16.52	16.65		1/50	17.00	16.68	16.61	16.67
	1/74	17.00	16.63	16.35	16.49		1/99	17.00	16.49	16.66	16.36
	36/0	17.00	16.42	16.45	16.29		50/0	17.00	16.41	16.36	16.31
	36/19	17.00	16.49	16.46	16.35		50/25	17.00	16.52	16.44	16.39
	36/39	17.00	16.49	16.42	16.39		50/50	17.00	16.52	16.34	16.38
	75/0	17.00	16.44	16.39	16.34		100/0	17.00	16.47	16.36	16.38

Up 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	18.00	17.81	17.65	17.65	QPSK	1/0	18.00	17.80	17.74	17.66
	1/12	18.00	17.81	17.75	17.79		1/24	18.00	17.87	17.77	17.77
	1/24	18.00	17.84	17.66	17.72		1/49	18.00	17.86	17.73	17.77
	12/0	18.00	17.76	17.73	17.70		25/0	18.00	17.84	17.75	17.73
	12/6	18.00	17.84	17.72	17.77		25/12	18.00	17.64	17.77	17.83
	12/13	18.00	17.86	17.77	17.80		25/25	18.00	17.71	17.79	17.79
	25/0	18.00	17.87	17.76	17.74		50/0	18.00	17.85	17.75	17.74
16QAM	1/0	18.00	17.64	17.76	17.83	16QAM	1/0	18.00	17.75	17.66	17.79
	1/12	18.00	17.78	17.86	17.71		1/24	18.00	17.83	17.70	17.77
	1/24	18.00	17.70	17.76	17.78		1/49	18.00	17.82	17.80	17.73
	12/0	18.00	17.81	17.69	17.77		25/0	18.00	17.81	17.78	17.67
	12/6	18.00	17.90	17.76	17.84		25/12	18.00	17.89	17.80	17.76
	12/13	18.00	17.88	17.74	17.86		25/25	18.00	17.64	17.79	17.72
	25/0	18.00	17.83	17.72	17.77		50/0	18.00	17.81	17.73	17.72
64QAM	1/0	18.00	17.64	17.78	17.79	64QAM	1/0	18.00	17.85	17.72	17.90
	1/12	18.00	17.77	17.71	17.79		1/24	18.00	17.64	17.80	17.69
	1/24	18.00	17.68	17.88	17.71		1/49	18.00	17.79	17.73	17.67
	12/0	18.00	17.67	17.68	17.69		25/0	18.00	17.78	17.77	17.77
	12/6	18.00	17.79	17.74	17.75		25/12	18.00	17.75	17.79	17.85
	12/13	18.00	17.81	17.72	17.77		25/25	18.00	17.80	17.78	17.81
	25/0	18.00	17.87	17.70	17.75		50/0	18.00	17.68	17.66	17.75

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	18.00	17.72	17.69	17.48	QPSK	1/0	18.00	17.70	17.57	17.49
	1/37	18.00	17.88	17.76	17.66		1/50	18.00	17.92	17.70	17.69
	1/74	18.00	17.75	17.64	17.66		1/99	18.00	17.72	17.50	17.66
	36/0	18.00	17.85	17.75	17.68		50/0	18.00	17.80	17.75	17.71
	36/19	18.00	17.65	17.78	17.75		50/25	18.00	17.76	17.79	17.74
	36/39	18.00	17.79	17.73	17.79		50/50	18.00	17.90	17.74	17.75
	75/0	18.00	17.78	17.74	17.72		100/0	18.00	17.78	17.72	17.72
16QAM	1/0	18.00	17.67	17.77	17.64	16QAM	1/0	18.00	17.80	17.71	17.82
	1/37	18.00	17.83	17.69	17.81		1/50	18.00	17.86	17.69	17.90
	1/74	18.00	17.71	17.88	17.76		1/99	18.00	17.82	17.68	17.71
	36/0	18.00	17.83	17.71	17.63		50/0	18.00	17.81	17.68	17.66
	36/19	18.00	17.79	17.72	17.68		50/25	18.00	17.77	17.69	17.70
	36/39	18.00	17.80	17.69	17.72		50/50	18.00	17.80	17.66	17.74
	75/0	18.00	17.88	17.70	17.70		100/0	18.00	17.72	17.70	17.68
64QAM	1/0	18.00	17.77	17.69	17.85	64QAM	1/0	18.00	17.59	17.71	17.71
	1/37	18.00	17.64	17.77	17.73		1/50	18.00	17.65	17.75	17.75
	1/74	18.00	17.82	17.64	17.67		1/99	18.00	17.61	17.70	17.86
	36/0	18.00	17.73	17.70	17.63		50/0	18.00	17.76	17.74	17.68
	36/19	18.00	17.86	17.69	17.73		50/25	18.00	17.87	17.76	17.72
	36/39	18.00	17.88	17.67	17.73		50/50	18.00	17.89	17.72	17.75
	75/0	18.00	17.78	17.66	17.75		100/0	18.00	17.80	17.73	17.73

Note: The tested channels are marks in bold.

5. Conducted power measurement results of LTE B12

Down Antenna_Receiver on

LTE B12/BW=1.4M		Average Conducted Power(dBm)				LTE B12/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)		
			23017/699.7	23095/707.5	23173/715.3				23025/700.5	23095/707.5	23165/714.5
QPSK	1/0	24.00	22.75	22.70	22.80	QPSK	1/0	24.00	22.74	22.84	22.78
	1/2	24.00	22.88	22.82	22.93		1/7	24.00	22.90	22.93	22.88
	1/5	24.00	22.80	22.73	22.80		1/14	24.00	22.82	22.83	22.81
	3/0	24.00	22.77	22.83	22.84		8/0	23.00	21.80	21.80	21.83
	3/1	24.00	22.82	22.86	22.88		8/3	23.00	21.83	21.85	21.82
	3/3	24.00	22.80	22.84	22.89		8/7	23.00	21.81	21.82	21.81
	6/0	23.00	21.84	21.87	21.87		15/0	23.00	21.78	21.80	21.77
16QAM	1/0	23.00	21.72	21.91	22.06	16QAM	1/0	23.00	21.64	22.15	21.76
	1/2	23.00	21.77	21.97	22.19		1/7	23.00	21.77	22.30	21.90
	1/5	23.00	21.72	21.89	22.15		1/14	23.00	21.64	22.15	21.81
	3/0	23.00	21.86	21.87	21.96		8/0	22.00	20.85	20.89	20.86
	3/1	23.00	21.91	21.90	22.02		8/3	22.00	20.90	20.92	20.88
	3/3	23.00	21.91	21.91	22.03		8/7	22.00	20.86	20.89	20.86
	6/0	22.00	20.91	20.98	20.78		15/0	22.00	20.79	20.83	20.75
64QAM	1/0	22.00	20.85	20.91	21.17	64QAM	1/0	22.00	21.03	20.92	20.97
	1/2	22.00	20.98	21.02	21.31		1/7	22.00	21.18	21.07	21.10
	1/5	22.00	20.85	20.89	21.22		1/14	22.00	21.05	20.97	20.99
	3/0	22.00	20.88	20.78	21.17		8/0	21.00	19.81	19.81	19.79
	3/1	22.00	20.93	20.82	21.19		8/3	21.00	19.88	19.90	19.80
	3/3	22.00	20.94	20.70	21.18		8/7	21.00	19.80	19.86	19.76
	6/0	21.00	20.07	19.90	19.87		15/0	21.00	19.74	19.83	19.82

LTE B12/BW=5M		Average Conducted Power(dBm)				LTE B12/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)		
			23035/701.5	23095/707.5	23155/713.5				23060/704	23095/707.5	23130/711
QPSK	1/0	24.00	22.78	22.69	22.70	QPSK	1/0	24.00	22.74	22.81	22.73
	1/12	24.00	22.87	22.81	22.87		1/24	24.00	22.93	22.99	22.90
	1/24	24.00	22.85	22.77	22.82		1/49	24.00	22.80	22.85	22.84
	12/0	23.00	21.80	21.71	21.87		25/0	23.00	21.85	21.71	21.75
	12/6	23.00	21.81	21.85	21.79		25/12	23.00	21.85	21.85	21.77
	12/13	23.00	21.80	21.86	21.73		25/25	23.00	22.06	21.79	21.62
	25/0	23.00	21.80	21.79	21.77		50/0	23.00	21.95	21.76	21.69
16QAM	1/0	23.00	21.80	22.22	21.76	16QAM	1/0	23.00	21.62	22.04	21.77
	1/12	23.00	21.93	22.30	21.87		1/24	23.00	21.90	22.31	21.83
	1/24	23.00	21.96	22.19	21.86		1/49	23.00	21.74	22.08	21.77
	12/0	22.00	20.83	20.82	20.91		25/0	22.00	20.88	20.74	20.81
	12/6	22.00	20.86	20.98	20.87		25/12	22.00	20.91	20.88	20.83
	12/13	22.00	20.84	20.97	20.79		25/25	22.00	21.07	20.86	20.66
	25/0	22.00	20.76	20.85	20.73		50/0	22.00	20.91	20.82	20.72
64QAM	1/0	22.00	20.62	21.09	20.88	64QAM	1/0	22.00	21.03	20.90	20.95
	1/12	22.00	20.73	21.19	21.04		1/24	22.00	21.26	21.08	21.08
	1/24	22.00	20.72	21.09	20.99		1/49	22.00	21.13	21.00	21.02
	12/0	21.00	19.81	19.67	19.93		25/0	21.00	19.90	19.78	19.86
	12/6	21.00	19.83	19.77	19.88		25/12	21.00	19.90	19.92	19.92
	12/13	21.00	19.82	19.81	19.79		25/25	21.00	20.11	19.97	19.74
	25/0	21.00	19.77	19.77	19.80		50/0	21.00	19.99	19.86	19.73

Down Antenna Receiver off

LTE B12/BW=1.4M		Average Conducted Power(dBm)				LTE B12/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)		
			23017/ 699.7	23095/ 707.5	23173/ 715.3				23025/ 700.5	23095/ 707.5	23165/ 714.5
QPSK	1/0	24.00	22.67	22.66	22.56	QPSK	1/0	24.00	22.62	22.69	22.67
	1/2	24.00	22.76	22.77	22.74		1/7	24.00	22.78	22.80	22.76
	1/5	24.00	22.70	22.69	22.59		1/14	24.00	22.69	22.68	22.65
	3/0	24.00	22.61	22.72	22.69		8/0	23.00	21.71	21.68	21.67
	3/1	24.00	22.68	22.75	22.78		8/3	23.00	21.76	21.75	21.69
	3/3	24.00	22.66	22.69	22.73		8/7	23.00	21.67	21.70	21.66
	6/0	23.00	21.76	21.75	21.69		15/0	23.00	21.66	21.65	21.63
16QAM	1/0	23.00	21.56	21.77	21.94	16QAM	1/0	23.00	21.54	22.03	21.63
	1/2	23.00	21.64	21.84	22.07		1/7	23.00	21.63	22.16	21.76
	1/5	23.00	21.60	21.75	22.01		1/14	23.00	21.54	21.99	21.66
	3/0	23.00	21.74	21.74	21.89		8/0	22.00	20.71	20.76	20.73
	3/1	23.00	21.79	21.78	21.88		8/3	22.00	20.77	20.81	20.75
	3/3	23.00	21.78	21.72	21.88		8/7	22.00	20.74	20.75	20.71
	6/0	22.00	20.82	20.83	20.64		15/0	22.00	20.64	20.68	20.63
64QAM	1/0	22.00	20.75	21.05	20.74	64QAM	1/0	22.00	20.87	20.82	20.83
	1/2	22.00	20.81	21.25	20.93		1/7	22.00	21.05	20.91	20.95
	1/5	22.00	20.77	21.00	20.80		1/14	22.00	20.92	20.82	20.78
	3/0	22.00	20.57	21.08	20.84		8/0	21.00	19.73	19.69	19.64
	3/1	22.00	20.61	21.11	20.90		8/3	21.00	19.77	19.76	19.64
	3/3	22.00	20.62	21.01	20.86		8/7	21.00	19.71	19.73	19.62
	6/0	21.00	19.82	19.69	20.02		15/0	21.00	19.62	19.71	19.66

LTE B12/BW=5M		Average Conducted Power(dBm)				LTE B12/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)		
			23035/701.5	23095/707.5	23155/713.5				23060/704	23095/707.5	23130/711
QPSK	1/0	24.00	22.65	22.61	22.56	QPSK	1/0	24.00	22.63	22.68	22.62
	1/12	24.00	22.74	22.64	22.71		1/24	24.00	22.80	22.83	22.75
	1/24	24.00	22.70	22.62	22.64		1/49	24.00	22.64	22.70	22.65
	12/0	23.00	21.69	21.57	21.71		25/0	23.00	21.73	21.62	21.66
	12/6	23.00	21.69	21.71	21.68		25/12	23.00	21.74	21.69	21.61
	12/13	23.00	21.65	21.72	21.59		25/25	23.00	21.92	21.64	21.47
	25/0	23.00	21.65	21.65	21.63		50/0	23.00	21.84	21.62	21.55
16QAM	1/0	23.00	21.69	22.09	21.64	16QAM	1/0	23.00	21.53	21.96	21.71
	1/12	23.00	21.80	22.19	21.68		1/24	23.00	21.74	22.15	21.79
	1/24	23.00	21.79	22.05	21.70		1/49	23.00	21.59	21.92	21.69
	12/0	22.00	20.71	20.69	20.77		25/0	22.00	20.73	20.59	20.78
	12/6	22.00	20.71	20.81	20.73		25/12	22.00	20.74	20.74	20.77
	12/13	22.00	20.68	20.82	20.63		25/25	22.00	20.95	20.71	20.59
	25/0	22.00	20.65	20.71	20.60		50/0	22.00	20.81	20.64	20.65
64QAM	1/0	22.00	20.47	20.93	20.76	64QAM	1/0	22.00	20.88	20.80	20.98
	1/12	22.00	20.60	21.06	20.88		1/24	22.00	21.12	20.93	20.99
	1/24	22.00	20.56	20.91	20.85		1/49	22.00	20.99	20.77	20.95
	12/0	21.00	19.67	19.52	19.77		25/0	21.00	19.79	19.65	19.70
	12/6	21.00	19.72	19.64	19.73		25/12	21.00	19.77	19.76	19.71
	12/13	21.00	19.67	19.63	19.65		25/25	21.00	19.97	19.81	19.53
	25/0	21.00	19.61	19.62	19.67		50/0	21.00	19.85	19.69	19.58

Up Antenna Receiver on

LTE B12/BW=1.4M		Average Conducted Power(dBm)				LTE B12/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)		
			23017/ 699.7	23095/ 707.5	23173/ 715.3				23025/ 700.5	23095/ 707.5	23165/ 714.5
QPSK	1/0	24.00	23.19	23.17	23.11	QPSK	1/0	24.00	23.14	23.25	23.20
	1/2	24.00	23.31	23.32	23.26		1/7	24.00	23.31	23.32	23.29
	1/5	24.00	23.19	23.20	23.12		1/14	24.00	23.21	23.25	23.18
	3/0	24.00	23.18	23.23	23.24		8/0	23.00	22.19	22.24	22.22
	3/1	24.00	23.22	23.32	23.28		8/3	23.00	22.25	22.28	22.22
	3/3	24.00	23.24	23.24	23.26		8/7	23.00	22.22	22.22	22.19
	6/0	23.00	22.27	22.33	22.25		15/0	23.00	22.20	22.20	22.15
16QAM	1/0	23.00	22.16	22.29	22.48	16QAM	1/0	23.00	22.10	22.54	22.18
	1/2	23.00	22.22	22.38	22.60		1/7	23.00	22.23	22.70	22.31
	1/5	23.00	22.18	22.30	22.55		1/14	23.00	22.11	22.55	22.18
	3/0	23.00	22.33	22.26	22.38		8/0	22.00	21.28	21.32	21.26
	3/1	23.00	22.39	22.32	22.42		8/3	22.00	21.33	21.33	21.28
	3/3	23.00	22.36	22.27	22.40		8/7	22.00	21.29	21.29	21.23
	6/0	22.00	21.38	21.39	21.15		15/0	22.00	21.21	21.23	21.17
64QAM	1/0	22.00	21.53	21.32	21.29	64QAM	1/0	22.00	21.50	21.33	21.34
	1/2	22.00	21.68	21.42	21.43		1/7	22.00	21.62	21.43	21.49
	1/5	22.00	21.57	21.33	21.35		1/14	22.00	21.50	21.37	21.31
	3/0	22.00	21.48	21.37	21.19		8/0	21.00	20.24	20.23	20.16
	3/1	22.00	21.54	21.41	21.23		8/3	21.00	20.30	20.27	20.17
	3/3	22.00	21.53	21.37	21.18		8/7	21.00	20.25	20.26	20.15
	6/0	21.00	20.19	20.53	20.31		15/0	21.00	20.17	20.22	20.20

LTE B12/BW=5M		Average Conducted Power(dBm)				LTE B12/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)		
			23035/701.5	23095/707.5	23155/713.5				23060/704	23095/707.5	23130/711
QPSK	1/0	24.00	23.17	23.14	23.11	QPSK	1/0	24.00	23.13	23.21	23.16
	1/12	24.00	23.31	23.20	23.26		1/24	24.00	23.35	23.36	23.27
	1/24	24.00	23.26	23.16	23.21		1/49	24.00	23.21	23.25	23.23
	12/0	23.00	22.19	22.18	22.24		25/0	23.00	22.25	22.20	22.22
	12/6	23.00	22.24	22.24	22.22		25/12	23.00	22.25	22.26	22.18
	12/13	23.00	22.22	22.26	22.14		25/25	23.00	22.37	22.23	22.08
	25/0	23.00	22.19	22.17	22.13		50/0	23.00	22.28	22.23	22.16
16QAM	1/0	23.00	22.27	22.63	22.13	16QAM	1/0	23.00	22.10	22.09	22.53
	1/12	23.00	22.38	22.75	22.29		1/24	23.00	22.37	22.30	22.64
	1/24	23.00	22.36	22.63	22.25		1/49	23.00	22.18	22.11	22.56
	12/0	22.00	21.21	21.29	21.28		25/0	22.00	21.22	21.22	21.28
	12/6	22.00	21.29	21.38	21.27		25/12	22.00	21.27	21.29	21.28
	12/13	22.00	21.26	21.37	21.20		25/25	22.00	21.38	21.30	21.18
	25/0	22.00	21.20	21.27	21.14		50/0	22.00	21.27	21.23	21.22
64QAM	1/0	22.00	21.05	21.45	21.28	64QAM	1/0	22.00	21.36	21.47	21.34
	1/12	22.00	21.15	21.54	21.41		1/24	22.00	21.55	21.68	21.42
	1/24	22.00	21.15	21.48	21.38		1/49	22.00	21.38	21.49	21.41
	12/0	21.00	20.18	20.06	20.27		25/0	21.00	20.30	20.25	20.30
	12/6	21.00	20.26	20.16	20.26		25/12	21.00	20.34	20.31	20.31
	12/13	21.00	20.25	20.17	20.19		25/25	21.00	20.45	20.33	20.23
	25/0	21.00	20.16	20.16	20.17		50/0	21.00	20.33	20.28	20.23

Up Antenna Receiver off

LTE B12/BW=1.4M		Average Conducted Power(dBm)				LTE B12/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)		
			23017/699.7	23095/707.5	23173/715.3				23025/700.5	23095/707.5	23165/714.5
QPSK	1/0	24.00	23.09	23.21	23.15	QPSK	1/0	24.00	23.15	23.23	23.17
	1/2	24.00	23.22	23.28	23.31		1/7	24.00	23.30	23.35	23.27
	1/5	24.00	23.13	23.17	23.15		1/14	24.00	23.21	23.21	23.18
	3/0	24.00	23.18	23.16	23.23		8/0	23.00	22.22	22.24	22.19
	3/1	24.00	23.22	23.25	23.30		8/3	23.00	22.27	22.29	22.21
	3/3	24.00	23.26	23.19	23.23		8/7	23.00	22.23	22.21	22.16
	6/0	23.00	22.27	22.32	22.26		15/0	23.00	22.20	22.16	22.14
16QAM	1/0	23.00	22.50	22.20	22.22	16QAM	1/0	23.00	22.10	22.57	22.16
	1/2	23.00	22.58	22.26	22.31		1/7	23.00	22.21	22.69	22.26
	1/5	23.00	22.50	22.20	22.24		1/14	23.00	22.08	22.53	22.15
	3/0	23.00	22.36	22.37	22.20		8/0	22.00	21.28	21.34	21.23
	3/1	23.00	22.38	22.43	22.24		8/3	22.00	21.33	21.33	21.26
	3/3	23.00	22.36	22.40	22.20		8/7	22.00	21.29	21.26	21.22
	6/0	22.00	21.14	21.47	21.38		15/0	22.00	21.21	21.23	21.11
64QAM	1/0	22.00	21.30	21.33	21.49	64QAM	1/0	22.00	21.46	21.34	21.36
	1/2	22.00	21.48	21.43	21.71		1/7	22.00	21.62	21.46	21.50
	1/5	22.00	21.29	21.35	21.60		1/14	22.00	21.47	21.37	21.31
	3/0	22.00	21.32	21.18	21.53		8/0	21.00	20.22	20.24	20.16
	3/1	22.00	21.37	21.25	21.55		8/3	21.00	20.31	20.29	20.16
	3/3	22.00	21.37	21.20	21.54		8/7	21.00	20.25	20.23	20.14
	6/0	21.00	20.55	20.32	20.23		15/0	21.00	20.16	20.24	20.19

LTE B12/BW=5M		Average Conducted Power(dBm)				LTE B12/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)		
			23035/701.5	23095/707.5	23155/713.5				23060/704	23095/707.5	23130/711
QPSK	1/0	24.00	23.19	23.16	23.11	QPSK	1/0	24.00	23.14	23.22	23.17
	1/12	24.00	23.29	23.22	23.22		1/24	24.00	23.34	23.36	23.27
	1/24	24.00	23.25	23.13	23.17		1/49	24.00	23.18	23.21	23.18
	12/0	23.00	22.20	22.16	22.21		25/0	23.00	22.26	22.19	22.22
	12/6	23.00	22.23	22.21	22.19		25/12	23.00	22.26	22.23	22.19
	12/13	23.00	22.21	22.24	22.11		25/25	23.00	22.35	22.21	22.04
	25/0	23.00	22.22	22.15	22.13		50/0	23.00	22.30	22.20	22.10
16QAM	1/0	23.00	22.26	22.63	22.13	16QAM	1/0	23.00	22.06	22.51	22.17
	1/12	23.00	22.36	22.71	22.21		1/24	23.00	22.27	22.65	22.21
	1/24	23.00	22.35	22.59	22.19		1/49	23.00	22.09	22.47	22.13
	12/0	22.00	21.20	21.30	21.25		25/0	22.00	21.24	21.22	21.24
	12/6	22.00	21.26	21.34	21.24		25/12	22.00	21.26	21.26	21.24
	12/13	22.00	21.24	21.34	21.16		25/25	22.00	21.35	21.30	21.14
	25/0	22.00	21.18	21.25	21.09		50/0	22.00	21.24	21.23	21.16
64QAM	1/0	22.00	21.05	21.46	21.30	64QAM	1/0	22.00	21.33	21.51	21.33
	1/12	22.00	21.14	21.56	21.46		1/24	22.00	21.55	21.66	21.40
	1/24	22.00	21.12	21.45	21.36		1/49	22.00	21.35	21.49	21.37
	12/0	21.00	20.17	20.10	20.29		25/0	21.00	20.28	20.24	20.30
	12/6	21.00	20.24	20.17	20.23		25/12	21.00	20.32	20.29	20.30
	12/13	21.00	20.21	20.18	20.17		25/25	21.00	20.44	20.31	20.18
	25/0	21.00	20.13	20.17	20.16		50/0	21.00	20.31	20.26	20.21

Note: The tested channels are marks in bold.

6. Conducted power measurement results of LTE B17

Down Antenna_Receiver on

LTE B17/BW=5M		Average Conducted Power(dBm)				LTE B17/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)		
			23755/706.5	23790/710	23825/713.5				23780/709	23790/710	23800/711
QPSK	1/0	24.00	22.71	22.75	22.67	QPSK	1/0	24.00	22.67	22.75	22.68
	1/12	24.00	22.79	22.84	22.78		1/24	24.00	22.89	22.96	22.86
	1/24	24.00	22.75	22.75	22.66		1/49	24.00	22.74	22.82	22.70
	12/0	23.00	21.69	21.73	21.86		25/0	23.00	21.69	21.68	21.80
	12/6	23.00	21.83	21.79	21.78		25/12	23.00	21.81	21.80	21.79
	12/13	23.00	21.87	21.76	21.72		25/25	23.00	21.68	21.64	21.61
	25/0	23.00	21.79	21.74	21.76		50/0	23.00	21.65	21.67	21.71
16QAM	1/0	23.00	21.79	21.86	22.12	16QAM	1/0	23.00	21.69	22.10	21.74
	1/12	23.00	21.94	21.92	22.23		1/24	23.00	21.80	22.27	21.86
	1/24	23.00	21.84	21.82	22.20		1/49	23.00	21.68	22.09	21.75
	12/0	22.00	20.67	20.77	20.91		25/0	22.00	20.69	20.71	20.80
	12/6	22.00	20.84	20.85	20.90		25/12	22.00	20.85	20.82	20.81
	12/13	22.00	20.90	20.79	20.83		25/25	22.00	20.72	20.66	20.67
	25/0	22.00	20.77	20.72	20.83		50/0	22.00	20.69	20.70	20.73
64QAM	1/0	22.00	21.07	21.01	20.62	64QAM	1/0	22.00	21.06	20.92	20.92
	1/12	22.00	21.21	21.03	20.74		1/24	22.00	21.26	21.08	21.09
	1/24	22.00	21.09	20.93	20.69		1/49	22.00	21.05	20.95	20.94
	12/0	21.00	19.65	19.83	19.88		25/0	21.00	19.73	19.76	19.85
	12/6	21.00	19.75	19.87	19.84		25/12	21.00	19.90	19.89	19.89
	12/13	21.00	19.81	19.83	19.79		25/25	21.00	19.79	19.77	19.74
	25/0	21.00	19.81	19.79	19.81		50/0	21.00	19.72	19.77	19.72

Down Antenna Receiver off

LTE B17/BW=5M		Average Conducted Power(dBm)				LTE B17/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)		
			23755/706.5	23790/710	23825/713.5				23780/709	23790/710	23800/711
QPSK	1/0	24.00	22.55	22.62	22.52	QPSK	1/0	24.00	22.58	22.57	22.57
	1/12	24.00	22.69	22.70	22.63		1/24	24.00	22.77	22.78	22.71
	1/24	24.00	22.61	22.57	22.43		1/49	24.00	22.57	22.63	22.52
	12/0	23.00	21.54	21.60	21.70		25/0	23.00	21.53	21.54	21.65
	12/6	23.00	21.68	21.65	21.61		25/12	23.00	21.68	21.65	21.62
	12/13	23.00	21.72	21.60	21.55		25/25	23.00	21.54	21.47	21.42
	25/0	23.00	21.63	21.59	21.58		50/0	23.00	21.56	21.58	21.53
16QAM	1/0	23.00	21.63	21.73	22.00	16QAM	1/0	23.00	21.55	21.96	21.61
	1/12	23.00	21.81	21.75	22.09		1/24	23.00	21.69	22.07	21.69
	1/24	23.00	21.69	21.63	22.04		1/49	23.00	21.50	21.90	21.57
	12/0	22.00	20.56	20.63	20.79		25/0	22.00	20.55	20.57	20.66
	12/6	22.00	20.71	20.70	20.77		25/12	22.00	20.69	20.65	20.66
	12/13	22.00	20.73	20.63	20.69		25/25	22.00	20.52	20.47	20.48
	25/0	22.00	20.59	20.57	20.68		50/0	22.00	20.50	20.52	20.57
64QAM	1/0	22.00	20.85	20.78	20.42	64QAM	1/0	22.00	20.78	20.91	20.76
	1/12	22.00	21.01	20.84	20.56		1/24	22.00	20.94	21.05	20.87
	1/24	22.00	20.90	20.72	20.50		1/49	22.00	20.70	20.89	20.76
	12/0	21.00	19.45	19.65	19.69		25/0	21.00	19.58	19.59	19.71
	12/6	21.00	19.62	19.68	19.68		25/12	21.00	19.72	19.69	19.71
	12/13	21.00	19.65	19.63	19.61		25/25	21.00	19.63	19.52	19.55
	25/0	21.00	19.61	19.61	19.60		50/0	21.00	19.56	19.55	19.60

Up Antenna Receiver on

LTE B17/BW=5M		Average Conducted Power(dBm)				LTE B17/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)		
			23755/706.5	23790/710	23825/713.5				23780/709	23790/710	23800/711
QPSK	1/0	24.00	23.10	23.18	23.07	QPSK	1/0	24.00	23.07	23.15	23.09
	1/12	24.00	23.25	23.26	23.22		1/24	24.00	23.32	23.37	23.33
	1/24	24.00	23.19	23.17	23.04		1/49	24.00	23.12	23.20	23.12
	12/0	23.00	22.13	22.18	22.21		25/0	23.00	22.16	22.17	22.21
	12/6	23.00	22.26	22.22	22.18		25/12	23.00	22.23	22.24	22.23
	12/13	23.00	22.27	22.20	22.12		25/25	23.00	22.18	22.13	22.09
	25/0	23.00	22.21	22.19	22.13		50/0	23.00	22.18	22.19	22.17
16QAM	1/0	23.00	22.19	22.30	22.57	16QAM	1/0	23.00	22.10	22.51	22.16
	1/12	23.00	22.32	22.37	22.66		1/24	23.00	22.28	22.68	22.30
	1/24	23.00	22.29	22.27	22.63		1/49	23.00	22.07	22.52	22.17
	12/0	22.00	21.17	21.23	21.29		25/0	22.00	21.18	21.20	21.30
	12/6	22.00	21.27	21.28	21.32		25/12	22.00	21.27	21.27	21.30
	12/13	22.00	21.30	21.26	21.29		25/25	22.00	21.21	21.17	21.16
	25/0	22.00	21.16	21.20	21.22		50/0	22.00	21.15	21.20	21.19
64QAM	1/0	22.00	21.43	21.38	21.00	64QAM	1/0	22.00	21.32	21.45	21.28
	1/12	22.00	21.60	21.40	21.13		1/24	22.00	21.54	21.63	21.46
	1/24	22.00	21.50	21.33	21.03		1/49	22.00	21.29	21.49	21.34
	12/0	21.00	20.07	20.21	20.20		25/0	21.00	20.24	20.19	20.27
	12/6	21.00	20.17	20.25	20.23		25/12	21.00	20.32	20.28	20.31
	12/13	21.00	20.20	20.24	20.17		25/25	21.00	20.28	20.19	20.20
	25/0	21.00	20.20	20.19	20.14		50/0	21.00	20.19	20.19	20.22

Up Antenna Receiver off

LTE B17/BW=5M		Average Conducted Power(dBm)				LTE B17/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)		
			23755/706.5	23790/710	23825/713.5				23780/709	23790/710	23800/711
QPSK	1/0	24.00	23.51	23.58	23.49	QPSK	1/0	24.00	23.50	23.58	23.53
	1/12	24.00	23.64	23.63	23.58		1/24	24.00	23.70	23.75	23.67
	1/24	24.00	23.54	23.51	23.40		1/49	24.00	23.51	23.57	23.45
	12/0	23.00	22.53	22.56	22.59		25/0	23.00	22.57	22.55	22.61
	12/6	23.00	22.63	22.62	22.57		25/12	23.00	22.62	22.60	22.60
	12/13	23.00	22.66	22.58	22.49		25/25	23.00	22.56	22.51	22.40
	25/0	23.00	22.59	22.55	22.49		50/0	23.00	22.57	22.57	22.54
16QAM	1/0	23.00	22.63	22.71	22.97	16QAM	1/0	23.00	22.50	22.92	22.54
	1/12	23.00	22.70	22.75	22.73		1/24	23.00	22.64	22.56	22.62
	1/24	23.00	22.67	22.63	22.96		1/49	23.00	22.47	22.84	22.48
	12/0	22.00	21.55	21.60	21.66		25/0	22.00	21.58	21.58	21.66
	12/6	22.00	21.64	21.66	21.69		25/12	22.00	21.65	21.66	21.63
	12/13	22.00	21.66	21.61	21.62		25/25	22.00	21.57	21.51	21.51
	25/0	22.00	21.55	21.60	21.61		50/0	22.00	21.52	21.56	21.56
64QAM	1/0	22.00	21.83	21.75	21.42	64QAM	1/0	22.00	21.87	21.71	21.73
	1/12	22.00	21.95	21.80	21.53		1/24	22.00	21.74	21.89	21.89
	1/24	22.00	21.87	21.68	21.41		1/49	22.00	21.84	21.70	21.66
	12/0	21.00	20.47	20.62	20.61		25/0	21.00	20.61	20.63	20.69
	12/6	21.00	20.56	20.66	20.64		25/12	21.00	20.66	20.68	20.68
	12/13	21.00	20.56	20.63	20.55		25/25	21.00	20.62	20.60	20.56
	25/0	21.00	20.56	20.58	20.52		50/0	21.00	20.58	20.62	20.58

Note: The tested channels are marks in bold.

7. Conducted power measurement results of LTE B26

Down 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	24.00	22.92	22.99	22.98	QPSK	1/0	24.00	22.77	22.80	22.75
	1/2	24.00	23.03	23.10	23.11		1/7	24.00	22.92	22.94	22.86
	1/5	24.00	22.98	23.00	23.02		1/14	24.00	22.78	22.79	22.73
	3/0	24.00	23.05	23.09	23.08		8/0	23.00	22.07	22.00	22.03
	3/1	24.00	23.09	23.11	23.15		8/3	23.00	22.08	22.03	22.04
	3/3	24.00	23.09	23.07	23.08		8/7	23.00	22.03	21.98	22.01
	6/0	23.00	22.07	22.03	22.04		15/0	23.00	22.09	22.02	21.99
16QAM	1/0	23.00	22.00	22.09	22.37	16QAM	1/0	23.00	21.98	22.41	22.03
	1/2	23.00	22.09	22.22	22.46		1/7	23.00	22.12	22.54	22.19
	1/5	23.00	22.03	22.09	22.40		1/14	23.00	21.95	22.39	22.02
	3/0	23.00	22.18	22.12	22.27		8/0	22.00	21.18	21.11	21.06
	3/1	23.00	22.27	22.15	22.29		8/3	22.00	21.20	21.15	21.10
	3/3	23.00	22.25	22.09	22.28		8/7	22.00	21.16	21.08	21.06
	6/0	22.00	21.18	21.19	20.99		15/0	22.00	21.09	21.01	20.96
64QAM	1/0	22.00	21.09	21.14	21.34	64QAM	1/0	22.00	21.36	21.12	21.16
	1/2	22.00	21.25	21.22	21.52		1/7	22.00	21.50	21.28	21.33
	1/5	22.00	21.09	21.15	21.42		1/14	22.00	21.36	21.18	21.15
	3/0	22.00	21.14	21.01	21.35		8/0	21.00	20.10	20.05	19.95
	3/1	22.00	21.22	21.04	21.40		8/3	21.00	20.12	20.09	19.97
	3/3	22.00	21.19	21.01	21.36		8/7	21.00	20.06	20.04	19.93
	6/0	21.00	20.29	20.09	19.96		15/0	21.00	20.05	20.00	20.00

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	24.00	23.05	22.96	22.98	QPSK	1/0	24.00	23.02	23.01	22.97
	1/12	24.00	23.15	23.01	23.06		1/24	24.00	23.14	23.12	23.14
	1/24	24.00	23.11	22.94	23.02		1/49	24.00	23.05	23.06	23.04
	12/0	23.00	22.04	22.01	22.00		25/0	23.00	22.05	22.03	22.05
	12/6	23.00	22.08	22.06	22.06		25/12	23.00	22.09	22.06	22.05
	12/13	23.00	22.10	22.05	22.03		25/25	23.00	22.13	22.04	21.94
	25/0	23.00	22.05	21.99	21.99		50/0	23.00	22.11	22.06	22.02
16QAM	1/0	23.00	22.14	22.44	22.03	16QAM	1/0	23.00	21.96	22.36	22.03
	1/12	23.00	22.25	22.53	22.12		1/24	23.00	22.16	22.51	22.17
	1/24	23.00	22.15	22.43	22.04		1/49	23.00	21.98	22.39	22.06
	12/0	22.00	21.11	21.12	21.03		25/0	22.00	21.06	21.08	21.17
	12/6	22.00	21.15	21.19	21.09		25/12	22.00	21.12	21.09	21.15
	12/13	22.00	21.18	21.16	21.05		25/25	22.00	21.16	21.06	21.07
	25/0	22.00	21.09	21.08	20.98		50/0	22.00	21.08	21.07	21.06
64QAM	1/0	22.00	20.89	21.24	21.15	64QAM	1/0	22.00	21.30	21.11	21.16
	1/12	22.00	21.05	21.39	21.23		1/24	22.00	21.52	21.28	21.28
	1/24	22.00	20.97	21.25	21.18		1/49	22.00	21.36	21.14	21.15
	12/0	21.00	20.03	19.92	20.02		25/0	21.00	20.05	20.08	20.09
	12/6	21.00	20.10	19.97	20.06		25/12	21.00	20.11	20.09	20.09
	12/13	21.00	20.12	19.96	20.03		25/25	21.00	20.16	20.07	19.98
	25/0	21.00	20.03	19.95	19.97		50/0	21.00	20.08	20.08	20.00

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	24.00	22.92	22.93	22.88
	1/37	24.00	22.98	23.16	23.10
	1/74	24.00	22.91	22.97	22.93
	36/0	23.00	21.98	22.07	22.03
	36/19	23.00	22.02	22.03	22.06
	36/39	23.00	22.05	22.01	22.00
	75/0	23.00	22.00	21.98	22.03
16QAM	1/0	23.00	21.87	22.25	21.80
	1/37	23.00	22.01	22.43	21.95
	1/74	23.00	21.93	22.34	21.83
	36/0	22.00	20.97	21.04	21.01
	36/19	22.00	21.05	21.09	21.01
	36/39	22.00	21.00	21.05	20.90
	75/0	22.00	21.03	21.01	21.01
64QAM	1/0	22.00	21.45	21.17	21.02
	1/37	22.00	21.59	21.34	21.20
	1/74	22.00	21.52	21.22	21.03
	36/0	21.00	19.89	20.22	20.10
	36/19	21.00	20.02	20.06	20.11
	36/39	21.00	20.01	20.05	20.06
	75/0	21.00	20.03	20.03	20.07

Down 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	24.00	22.84	22.88	22.83	QPSK	1/0	24.00	22.95	22.99	22.83
	1/2	24.00	23.02	22.98	22.96		1/7	24.00	22.99	22.98	22.89
	1/5	24.00	22.84	22.85	22.82		1/14	24.00	22.96	22.92	22.85
	3/0	24.00	22.95	22.95	22.95		8/0	23.00	21.99	21.91	21.88
	3/1	24.00	23.02	22.99	23.02		8/3	23.00	22.02	21.90	21.90
	3/3	24.00	23.00	22.95	22.93		8/7	23.00	21.96	21.86	21.86
	6/0	23.00	21.94	21.89	21.93		15/0	23.00	22.00	21.89	21.89
16QAM	1/0	23.00	21.88	21.99	22.16	16QAM	1/0	23.00	21.96	21.89	22.23
	1/2	23.00	21.97	22.09	22.32		1/7	23.00	22.09	21.96	22.39
	1/5	23.00	21.87	21.97	22.28		1/14	23.00	21.91	21.86	22.28
	3/0	23.00	22.09	21.97	22.08		8/0	22.00	20.95	21.03	20.98
	3/1	23.00	22.14	22.01	22.14		8/3	22.00	20.99	21.04	20.99
	3/3	23.00	22.10	21.98	22.13		8/7	22.00	20.96	20.98	20.96
	6/0	22.00	21.11	21.06	20.81		15/0	22.00	20.88	20.93	20.90
64QAM	1/0	22.00	21.04	21.30	20.93	64QAM	1/0	22.00	21.25	21.04	21.04
	1/2	22.00	21.12	21.44	21.15		1/7	22.00	21.42	21.19	21.22
	1/5	22.00	21.08	21.30	21.01		1/14	22.00	21.30	21.07	21.03
	3/0	22.00	20.89	21.27	21.06		8/0	21.00	20.00	19.95	19.82
	3/1	22.00	20.93	21.29	21.11		8/3	21.00	20.05	19.99	19.85
	3/3	22.00	20.91	21.26	21.09		8/7	21.00	20.00	19.95	19.82
	6/0	21.00	19.99	19.90	20.17		15/0	21.00	19.93	19.93	19.88

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	24.00	23.00	22.88	22.82	QPSK	1/0	24.00	22.96	22.85	22.92
	1/12	24.00	23.02	22.94	22.91		1/24	24.00	23.04	22.98	23.01
	1/24	24.00	22.97	22.83	22.87		1/49	24.00	22.91	22.85	22.89
	12/0	23.00	21.98	21.93	21.91		25/0	23.00	21.97	21.93	21.95
	12/6	23.00	22.01	21.98	21.92		25/12	23.00	22.00	21.91	21.93
	12/13	23.00	22.00	21.94	21.91		25/25	23.00	22.03	21.91	21.82
	25/0	23.00	22.00	21.90	21.88		50/0	23.00	22.01	21.92	21.89
16QAM	1/0	23.00	22.04	22.34	21.90	16QAM	1/0	23.00	21.91	22.30	21.92
	1/12	23.00	22.14	22.47	21.91		1/24	23.00	22.03	22.42	22.07
	1/24	23.00	22.04	22.29	21.89		1/49	23.00	21.89	22.28	21.90
	12/0	22.00	21.02	21.03	20.92		25/0	22.00	20.99	20.99	21.04
	12/6	22.00	21.06	21.09	20.94		25/12	22.00	21.04	20.98	21.03
	12/13	22.00	21.07	21.05	20.91		25/25	22.00	21.05	20.93	20.87
	25/0	22.00	21.01	20.98	20.82		50/0	22.00	20.97	20.95	20.95
64QAM	1/0	22.00	20.82	21.16	21.04	64QAM	1/0	22.00	21.23	21.08	21.21
	1/12	22.00	20.95	21.30	21.08		1/24	22.00	21.44	21.18	21.29
	1/24	22.00	20.85	21.16	21.03		1/49	22.00	21.21	21.09	21.17
	12/0	21.00	20.00	19.82	19.90		25/0	21.00	19.97	20.03	19.93
	12/6	21.00	19.99	19.87	19.94		25/12	21.00	20.02	19.98	19.93
	12/13	21.00	20.01	19.87	19.91		25/25	21.00	20.05	19.95	19.80
	25/0	21.00	19.92	19.85	19.86		50/0	21.00	19.98	19.99	19.86

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	24.00	22.84	22.84	22.80
	1/37	24.00	22.98	23.06	23.01
	1/74	24.00	22.75	22.83	22.78
	36/0	23.00	21.88	21.83	21.91
	36/19	23.00	21.93	21.94	21.91
	36/39	23.00	21.90	21.88	21.82
	75/0	23.00	21.86	21.88	21.91
16QAM	1/0	23.00	21.80	22.14	22.25
	1/37	23.00	21.88	22.27	22.41
	1/74	23.00	21.77	22.16	22.21
	36/0	22.00	20.84	21.16	20.88
	36/19	22.00	20.91	20.96	20.88
	36/39	22.00	20.90	20.86	20.74
	75/0	22.00	20.89	20.89	20.90
64QAM	1/0	22.00	21.13	20.98	21.43
	1/37	22.00	21.18	21.09	21.55
	1/74	22.00	21.07	20.96	21.39
	36/0	21.00	19.89	20.96	19.95
	36/19	21.00	19.97	19.98	19.93
	36/39	21.00	19.93	19.97	19.83
	75/0	21.00	19.93	19.94	19.98

Up Antenna Receiver on

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	24.00	23.18	23.28	23.25	QPSK	1/0	24.00	23.28	23.31	23.26
	1/2	24.00	23.29	23.34	23.40		1/7	24.00	23.42	23.42	23.39
	1/5	24.00	23.22	23.25	23.26		1/14	24.00	23.31	23.33	23.26
	3/0	24.00	23.31	23.32	23.36		8/0	23.00	22.31	22.27	22.27
	3/1	24.00	23.36	23.37	23.39		8/3	23.00	22.36	22.32	22.32
	3/3	24.00	23.36	23.33	23.36		8/7	23.00	22.32	22.23	22.26
	6/0	23.00	22.29	22.32	22.33		15/0	23.00	22.35	22.29	22.26
16QAM	1/0	23.00	22.25	22.39	22.55	16QAM	1/0	23.00	22.28	22.69	22.26
	1/2	23.00	22.36	22.47	22.69		1/7	23.00	22.39	22.81	22.42
	1/5	23.00	22.28	22.38	22.67		1/14	23.00	22.23	22.62	22.29
	3/0	23.00	22.47	22.38	22.49		8/0	22.00	21.45	21.39	21.30
	3/1	23.00	22.55	22.40	22.52		8/3	22.00	21.47	21.43	21.35
	3/3	23.00	22.52	22.36	22.51		8/7	22.00	21.43	21.36	21.30
	6/0	22.00	21.46	21.45	21.24		15/0	22.00	21.38	21.30	21.20
64QAM	1/0	22.00	21.41	21.67	21.34	64QAM	1/0	22.00	21.49	21.62	21.36
	1/2	22.00	21.51	21.83	21.43		1/7	22.00	21.64	21.73	21.54
	1/5	22.00	21.42	21.65	21.35		1/14	22.00	21.39	21.58	21.50
	3/0	22.00	21.29	21.66	21.19		8/0	21.00	20.22	20.37	20.30
	3/1	22.00	21.31	21.69	21.24		8/3	21.00	20.26	20.39	20.34
	3/3	22.00	21.27	21.65	21.25		8/7	21.00	20.24	20.33	20.31
	6/0	21.00	20.37	20.27	20.33		15/0	21.00	20.30	20.28	20.25

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	24.00	23.33	23.20	23.18	QPSK	1/0	24.00	23.26	23.29	23.21
	1/12	24.00	23.42	23.35	23.32		1/24	24.00	23.41	23.45	23.36
	1/24	24.00	23.35	23.20	23.26		1/49	24.00	23.32	23.34	23.27
	12/0	23.00	22.28	22.24	22.19		25/0	23.00	22.25	22.27	22.33
	12/6	23.00	22.35	22.33	22.30		25/12	23.00	22.33	22.31	22.30
	12/13	23.00	22.38	22.32	22.25		25/25	23.00	22.29	22.30	22.26
	25/0	23.00	22.31	22.26	22.21		50/0	23.00	22.28	22.28	22.31
16QAM	1/0	23.00	22.42	22.75	22.28	16QAM	1/0	23.00	22.21	22.67	22.30
	1/12	23.00	22.51	22.78	22.34		1/24	23.00	22.39	22.80	22.45
	1/24	23.00	22.44	22.70	22.35		1/49	23.00	22.26	22.64	22.29
	12/0	22.00	21.31	21.37	21.21		25/0	22.00	21.28	21.31	21.47
	12/6	22.00	21.43	21.46	21.33		25/12	22.00	21.37	21.36	21.47
	12/13	22.00	21.45	21.45	21.29		25/25	22.00	21.32	21.33	21.37
	25/0	22.00	21.35	21.34	21.19		50/0	22.00	21.28	21.35	21.40
64QAM	1/0	22.00	21.19	21.54	21.43	64QAM	1/0	22.00	21.55	21.40	21.40
	1/12	22.00	21.26	21.68	21.54		1/24	22.00	21.75	21.60	21.59
	1/24	22.00	21.23	21.51	21.43		1/49	22.00	21.60	21.43	21.41
	12/0	21.00	20.25	20.14	20.24		25/0	21.00	20.28	20.31	20.40
	12/6	21.00	20.37	20.25	20.29		25/12	21.00	20.36	20.37	20.36
	12/13	21.00	20.38	20.24	20.24		25/25	21.00	20.31	20.34	20.29
	25/0	21.00	20.26	20.22	20.16		50/0	21.00	20.27	20.33	20.32

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	24.00	23.14	23.17	23.11
	1/37	24.00	23.27	23.46	23.29
	1/74	24.00	23.15	23.22	23.22
	36/0	23.00	22.22	22.22	22.37
	36/19	23.00	22.33	22.31	22.30
	36/39	23.00	22.28	22.28	22.31
	75/0	23.00	22.24	22.24	22.36
16QAM	1/0	23.00	22.57	22.08	22.49
	1/37	23.00	22.72	22.26	22.74
	1/74	23.00	22.68	22.19	22.57
	36/0	22.00	21.16	21.19	21.41
	36/19	22.00	21.23	21.29	21.38
	36/39	22.00	21.23	21.26	21.40
	75/0	22.00	21.20	21.26	21.39
64QAM	1/0	22.00	21.47	21.28	21.69
	1/37	22.00	21.57	21.42	21.95
	1/74	22.00	21.52	21.36	21.77
	36/0	21.00	20.26	20.36	20.31
	36/19	21.00	20.34	20.37	20.34
	36/39	21.00	20.33	20.35	20.31
	75/0	21.00	20.28	20.29	20.45

Up 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	24.00	23.16	23.21	23.21	QPSK	1/0	24.00	23.25	23.26	23.23
	1/2	24.00	23.31	23.32	23.34		1/7	24.00	23.40	23.41	23.35
	1/5	24.00	23.20	23.19	23.23		1/14	24.00	23.29	23.30	23.24
	3/0	24.00	23.31	23.30	23.31		8/0	23.00	22.29	22.23	22.24
	3/1	24.00	23.36	23.34	23.33		8/3	23.00	22.31	22.27	22.27
	3/3	24.00	23.32	23.29	23.35		8/7	23.00	22.28	22.24	22.22
	6/0	23.00	22.28	22.26	22.28		15/0	23.00	22.29	22.24	22.22
16QAM	1/0	23.00	22.27	22.38	22.49	16QAM	1/0	23.00	22.29	22.62	22.26
	1/2	23.00	22.34	22.43	22.65		1/7	23.00	22.37	22.78	22.43
	1/5	23.00	22.29	22.35	22.55		1/14	23.00	22.23	22.66	22.22
	3/0	23.00	22.46	22.34	22.45		8/0	22.00	21.41	21.35	21.27
	3/1	23.00	22.51	22.38	22.48		8/3	22.00	21.45	21.40	21.31
	3/3	23.00	22.48	22.32	22.49		8/7	22.00	21.41	21.33	21.26
	6/0	22.00	21.45	21.41	21.20		15/0	22.00	21.34	21.28	21.18
64QAM	1/0	22.00	21.37	21.38	21.59	64QAM	1/0	22.00	21.62	21.36	21.41
	1/2	22.00	21.50	21.50	21.78		1/7	22.00	21.78	21.53	21.51
	1/5	22.00	21.32	21.38	21.64		1/14	22.00	21.54	21.42	21.44
	3/0	22.00	21.42	21.25	21.57		8/0	21.00	20.37	20.29	20.18
	3/1	22.00	21.50	21.29	21.61		8/3	21.00	20.42	20.34	20.21
	3/3	22.00	21.45	21.27	21.60		8/7	21.00	20.36	20.29	20.16
	6/0	21.00	20.55	20.35	20.28		15/0	21.00	20.31	20.27	20.25

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	24.00	23.31	23.22	23.19	QPSK	1/0	24.00	23.27	23.30	23.24
	1/12	24.00	23.41	23.33	23.27		1/24	24.00	23.40	23.42	23.34
	1/24	24.00	23.26	23.17	23.23		1/49	24.00	23.26	23.30	23.24
	12/0	23.00	22.24	22.21	22.14		25/0	23.00	22.22	22.24	22.37
	12/6	23.00	22.29	22.30	22.30		25/12	23.00	22.30	22.29	22.32
	12/13	23.00	22.33	22.30	22.25		25/25	23.00	22.27	22.28	22.24
	25/0	23.00	22.26	22.24	22.20		50/0	23.00	22.22	22.27	22.32
16QAM	1/0	23.00	22.42	22.78	22.28	16QAM	1/0	23.00	22.25	22.69	22.33
	1/12	23.00	22.51	22.81	22.34		1/24	23.00	22.38	22.78	22.44
	1/24	23.00	22.40	22.65	22.28		1/49	23.00	22.25	22.58	22.27
	12/0	22.00	21.33	21.34	21.20		25/0	22.00	21.27	21.29	21.49
	12/6	22.00	21.40	21.43	21.31		25/12	22.00	21.35	21.33	21.44
	12/13	22.00	21.43	21.43	21.26		25/25	22.00	21.28	21.31	21.36
	25/0	22.00	21.30	21.32	21.15		50/0	22.00	21.23	21.30	21.37
64QAM	1/0	22.00	21.18	21.54	21.43	64QAM	1/0	22.00	21.60	21.46	21.47
	1/12	22.00	21.29	21.65	21.46		1/24	22.00	21.73	21.52	21.58
	1/24	22.00	21.18	21.44	21.40		1/49	22.00	21.60	21.36	21.40
	12/0	21.00	20.27	20.14	20.22		25/0	21.00	20.27	20.31	20.43
	12/6	21.00	20.35	20.25	20.29		25/12	21.00	20.35	20.33	20.38
	12/13	21.00	20.35	20.24	20.24		25/25	21.00	20.27	20.33	20.28
	25/0	21.00	20.24	20.21	20.17		50/0	21.00	20.25	20.33	20.31

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	24.00	23.29	23.32	23.26
	1/37	24.00	23.31	23.44	23.36
	1/74	24.00	23.20	23.31	23.27
	36/0	23.00	22.22	22.21	22.37
	36/19	23.00	22.29	22.25	22.28
	36/39	23.00	22.27	22.24	22.26
	75/0	23.00	22.21	22.20	22.33
16QAM	1/0	23.00	22.19	22.14	22.50
	1/37	23.00	22.23	22.24	22.72
	1/74	23.00	22.17	22.07	22.51
	36/0	22.00	21.22	21.37	21.41
	36/19	22.00	21.28	21.25	21.35
	36/39	22.00	21.25	21.20	21.37
	75/0	22.00	21.22	21.21	21.40
64QAM	1/0	22.00	21.82	21.49	21.27
	1/37	22.00	21.83	21.59	21.46
	1/74	22.00	21.79	21.47	21.24
	36/0	21.00	20.21	20.47	20.47
	36/19	21.00	20.28	20.31	20.38
	36/39	21.00	20.24	20.25	20.36
	75/0	21.00	20.27	20.26	20.43

Note: The tested channels are marks in bold.

8. Conducted power measurement results of LTE B38

Down 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	23.50	22.68	22.64	22.60	QPSK	1/0	23.50	22.77	22.77	22.70
	1/12	23.50	22.80	22.74	22.73		1/24	23.50	22.83	22.86	22.81
	1/24	23.50	22.67	22.59	22.61		1/49	23.50	22.75	22.79	22.74
	12/0	22.50	21.82	21.76	21.78		25/0	22.50	21.86	21.85	21.82
	12/6	22.50	21.88	21.89	21.89		25/12	22.50	21.90	21.78	21.86
	12/13	22.50	21.86	21.79	21.86		25/25	22.50	21.83	21.77	21.86
	25/0	22.50	21.84	21.75	21.82		50/0	22.50	21.86	21.80	21.85
16QAM	1/0	22.50	21.75	21.55	21.64	16QAM	1/0	22.50	21.72	21.70	21.84
	1/12	22.50	21.85	21.69	21.80		1/24	22.50	21.84	21.85	22.03
	1/24	22.50	21.72	21.53	21.66		1/49	22.50	21.68	21.68	21.90
	12/0	21.50	20.92	20.79	20.78		25/0	21.50	20.94	20.92	20.89
	12/6	21.50	20.99	20.91	20.89		25/12	21.50	20.96	20.88	20.92
	12/13	21.50	20.97	20.85	20.84		25/25	21.50	20.87	20.84	20.92
	25/0	21.50	20.91	20.81	20.90		50/0	21.50	20.92	20.89	20.95
64QAM	1/0	21.50	20.88	20.43	21.10	64QAM	1/0	21.50	20.45	21.04	20.82
	1/12	21.50	20.96	20.58	21.25		1/24	21.50	20.58	21.24	21.01
	1/24	21.50	20.82	20.40	21.12		1/49	21.50	20.42	21.04	20.91
	12/0	20.50	19.56	19.61	19.77		25/0	20.50	19.78	19.70	19.67
	12/6	20.50	19.63	19.70	19.88		25/12	20.50	19.73	19.63	19.69
	12/13	20.50	19.59	19.62	19.84		25/25	20.50	19.72	19.67	19.68
	25/0	20.50	19.56	19.65	19.70		50/0	20.50	19.70	19.60	19.74

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	23.50	22.67	22.70	22.66	QPSK	1/0	23.50	22.51	22.55	22.57
	1/37	23.50	22.76	22.78	22.80		1/50	23.50	22.84	22.86	22.86
	1/74	23.50	22.62	22.63	22.68		1/99	23.50	22.45	22.47	22.55
	36/0	22.50	21.84	21.80	21.78		50/0	22.50	21.74	21.76	21.73
	36/19	22.50	21.85	21.82	21.78		50/25	22.50	21.78	21.80	21.78
	36/39	22.50	21.81	21.73	21.81		50/50	22.50	21.70	21.72	21.77
	75/0	22.50	21.83	21.79	21.79		100/0	22.50	21.70	21.72	21.73
16QAM	1/0	22.50	21.64	21.63	21.66	16QAM	1/0	22.50	21.53	21.39	21.59
	1/37	22.50	21.72	21.72	21.83		1/50	22.50	21.76	21.72	21.93
	1/74	22.50	21.57	21.61	21.72		1/99	22.50	21.44	21.35	21.64
	36/0	21.50	20.81	20.78	20.78		50/0	21.50	20.82	20.84	20.78
	36/19	21.50	20.84	20.79	20.80		50/25	21.50	20.87	20.87	20.86
	36/39	21.50	20.80	20.71	20.81		50/50	21.50	20.77	20.82	20.85
	75/0	21.50	20.85	20.79	20.81		100/0	21.50	20.81	20.79	20.77
64QAM	1/0	21.50	20.35	20.94	20.52	64QAM	1/0	21.50	20.99	20.47	20.85
	1/37	21.50	20.47	21.05	20.68		1/50	21.50	21.27	20.79	21.18
	1/74	21.50	20.29	20.96	20.59		1/99	21.50	20.92	20.46	20.94
	36/0	20.50	19.79	19.83	19.66		50/0	20.50	19.68	19.65	19.61
	36/19	20.50	19.80	19.85	19.67		50/25	20.50	19.71	19.70	19.67
	36/39	20.50	19.78	19.74	19.69		50/50	20.50	19.63	19.59	19.65
	75/0	20.50	19.74	19.77	19.72		100/0	20.50	19.62	19.59	19.60

Down 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	22.50	21.38	21.31	21.38	QPSK	1/0	22.50	21.44	21.56	21.46
	1/12	22.50	21.50	21.45	21.52		1/24	22.50	21.70	21.80	21.74
	1/24	22.50	21.40	21.27	21.39		1/49	22.50	21.41	21.50	21.46
	12/0	22.50	21.52	21.45	21.47		25/0	22.50	21.57	21.52	21.53
	12/6	22.50	21.54	21.47	21.50		25/12	22.50	21.51	21.47	21.54
	12/13	22.50	21.53	21.45	21.52		25/25	22.50	21.54	21.47	21.54
	25/0	22.50	21.49	21.41	21.50		50/0	22.50	21.55	21.50	21.53
16QAM	1/0	22.50	21.67	21.67	21.56	16QAM	1/0	22.50	21.77	21.82	21.76
	1/12	22.50	21.80	21.79	21.71		1/24	22.50	21.68	21.75	21.82
	1/24	22.50	21.62	21.62	21.58		1/49	22.50	21.69	21.78	21.81
	12/0	21.50	20.52	20.56	20.55		25/0	21.50	20.63	20.56	20.54
	12/6	21.50	20.58	20.57	20.58		25/12	21.50	20.60	20.51	20.55
	12/13	21.50	20.57	20.57	20.60		25/25	21.50	20.60	20.49	20.59
	25/0	21.50	20.58	20.45	20.54		50/0	21.50	20.61	20.52	20.57
64QAM	1/0	21.50	20.73	20.93	20.52	64QAM	1/0	21.50	20.39	20.97	20.68
	1/12	21.50	20.86	20.66	20.68		1/24	21.50	20.61	20.72	20.96
	1/24	21.50	20.70	20.89	20.54		1/49	21.50	20.34	20.94	20.73
	12/0	20.50	19.35	19.47	19.44		25/0	20.50	19.53	19.36	19.34
	12/6	20.50	19.38	19.49	19.47		25/12	20.50	19.46	19.32	19.37
	12/13	20.50	19.45	19.50	19.47		25/25	20.50	19.42	19.32	19.37
	25/0	20.50	19.30	19.32	19.48		50/0	20.50	19.45	19.30	19.42

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	22.50	21.38	21.49	21.42	QPSK	1/0	22.50	21.39	21.41	21.40
	1/37	22.50	21.43	21.56	21.53		1/50	22.50	21.85	21.88	21.83
	1/74	22.50	21.27	21.39	21.39		1/99	22.50	21.32	21.29	21.37
	36/0	22.50	21.52	21.53	21.48		50/0	22.50	21.50	21.46	21.42
	36/19	22.50	21.63	21.50	21.49		50/25	22.50	21.53	21.46	21.45
	36/39	22.50	21.50	21.44	21.49		50/50	22.50	21.43	21.39	21.43
	75/0	22.50	21.54	21.49	21.50		100/0	22.50	21.46	21.42	21.41
16QAM	1/0	22.50	21.66	21.77	21.63	16QAM	1/0	22.50	21.55	21.36	21.55
	1/37	22.50	21.71	21.83	21.76		1/50	22.50	21.77	21.81	21.81
	1/74	22.50	21.57	21.72	21.64		1/99	22.50	21.46	21.28	21.60
	36/0	21.50	20.54	20.46	20.47		50/0	21.50	20.55	20.51	20.47
	36/19	21.50	20.53	20.45	20.47		50/25	21.50	20.57	20.49	20.51
	36/39	21.50	20.54	20.39	20.49		50/50	21.50	20.50	20.44	20.49
	75/0	21.50	20.56	20.46	20.47		100/0	21.50	20.54	20.47	20.43
64QAM	1/0	21.50	20.28	20.88	20.44	64QAM	1/0	21.50	20.78	20.35	20.53
	1/37	21.50	20.32	20.97	20.60		1/50	21.50	20.76	20.80	20.51
	1/74	21.50	20.16	20.87	20.50		1/99	21.50	20.69	20.31	20.60
	36/0	20.50	19.51	19.49	19.39		50/0	20.50	19.40	19.37	19.36
	36/19	20.50	19.52	19.49	19.39		50/25	20.50	19.40	19.35	19.37
	36/39	20.50	19.48	19.42	19.37		50/50	20.50	19.32	19.25	19.39
	75/0	20.50	19.45	19.43	19.42		100/0	20.50	19.33	19.29	19.35

Up 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	18.50	18.33	18.09	18.12	QPSK	1/0	18.50	18.35	18.41	18.27
	1/12	18.50	18.45	18.22	18.25		1/24	18.50	18.28	18.25	18.28
	1/24	18.50	18.30	18.04	18.11		1/49	18.50	18.31	18.35	18.35
	12/0	18.50	18.08	17.98	17.90		25/0	18.50	18.15	18.02	17.97
	12/6	18.50	18.15	18.02	17.94		25/12	18.50	18.10	17.96	17.98
	12/13	18.50	18.16	17.98	17.94		25/25	18.50	18.06	17.98	18.00
	25/0	18.50	18.04	17.90	17.93		50/0	18.50	18.04	17.98	18.02
16QAM	1/0	18.50	17.98	17.88	17.81	16QAM	1/0	18.50	18.03	18.14	17.89
	1/12	18.50	18.11	18.01	17.92		1/24	18.50	18.26	18.34	18.20
	1/24	18.50	17.99	17.84	17.78		1/49	18.50	17.98	18.07	17.90
	12/0	18.50	18.04	17.94	17.91		25/0	18.50	18.06	18.00	17.97
	12/6	18.50	18.11	18.02	17.95		25/12	18.50	18.08	17.97	17.97
	12/13	18.50	18.11	17.99	17.96		25/25	18.50	18.05	17.93	17.99
	25/0	18.50	18.07	17.91	17.92		50/0	18.50	18.07	17.94	17.98
64QAM	1/0	18.50	18.16	18.17	17.90	64QAM	1/0	18.50	17.94	18.37	18.13
	1/12	18.50	18.18	18.29	18.04		1/24	18.50	18.16	18.22	18.40
	1/24	18.50	18.44	18.11	17.89		1/49	18.50	17.88	18.41	18.15
	12/0	18.50	18.07	17.92	17.90		25/0	18.50	18.07	18.00	17.88
	12/6	18.50	18.16	17.93	17.93		25/12	18.50	18.09	17.93	17.90
	12/13	18.50	18.18	17.89	17.94		25/25	18.50	18.07	17.92	17.89
	25/0	18.50	17.97	17.83	17.95		50/0	18.50	18.02	17.93	17.93

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	18.50	18.32	18.34	18.14	QPSK	1/0	18.50	17.85	17.86	17.79
	1/37	18.50	18.33	18.41	18.25		1/50	18.50	18.45	18.46	18.39
	1/74	18.50	18.20	18.27	18.13		1/99	18.50	17.70	17.74	17.71
	36/0	18.50	18.01	18.00	17.94		50/0	18.50	18.03	17.99	17.93
	36/19	18.50	18.05	18.00	17.95		50/25	18.50	18.05	17.97	17.94
	36/39	18.50	18.02	17.91	17.94		50/50	18.50	18.00	17.89	17.91
	75/0	18.50	18.05	17.99	17.93		100/0	18.50	18.02	17.93	17.92
16QAM	1/0	18.50	17.96	17.90	17.84	16QAM	1/0	18.50	17.85	17.86	17.79
	1/37	18.50	18.02	18.08	17.96		1/50	18.50	18.25	18.42	18.19
	1/74	18.50	17.88	18.04	17.83		1/99	18.50	17.70	17.74	17.71
	36/0	18.50	18.09	18.03	17.97		50/0	18.50	18.03	17.99	17.93
	36/19	18.50	18.12	18.04	17.96		50/25	18.50	18.05	17.97	17.94
	36/39	18.50	18.07	17.95	17.97		50/50	18.50	18.00	17.89	17.91
	75/0	18.50	18.08	17.98	17.94		100/0	18.50	18.02	17.93	17.92
64QAM	1/0	18.50	17.79	18.40	17.93	64QAM	1/0	18.50	17.93	18.13	18.21
	1/37	18.50	17.89	18.45	18.04		1/50	18.50	18.35	18.36	18.23
	1/74	18.50	17.71	18.31	17.93		1/99	18.50	17.86	18.03	18.19
	36/0	18.50	18.07	18.03	17.87		50/0	18.50	18.00	18.02	17.92
	36/19	18.50	18.08	18.03	17.88		50/25	18.50	18.05	17.98	17.92
	36/39	18.50	18.06	17.98	17.90		50/50	18.50	18.05	17.93	17.93
	75/0	18.50	18.01	17.98	17.93		100/0	18.50	17.99	17.98	17.88

Up 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	20.00	19.84	19.46	19.23	QPSK	1/0	20.00	19.25	19.79	19.48
	1/12	20.00	19.93	19.55	19.35		1/24	20.00	19.48	19.81	19.71
	1/24	20.00	19.79	19.41	19.21		1/49	20.00	19.19	19.70	19.46
	12/0	20.00	19.49	19.17	19.19		25/0	20.00	19.46	19.35	19.19
	12/6	20.00	19.52	19.20	19.29		25/12	20.00	19.43	19.22	19.22
	12/13	20.00	19.52	19.17	19.28		25/25	20.00	19.43	19.24	19.20
	25/0	20.00	19.38	19.11	19.24		50/0	20.00	19.40	19.27	19.25
16QAM	1/0	20.00	19.70	19.40	19.42	16QAM	1/0	20.00	19.67	19.71	19.61
	1/12	20.00	19.81	19.58	19.56		1/24	20.00	19.89	19.92	19.87
	1/24	20.00	19.66	19.34	19.42		1/49	20.00	19.62	19.66	19.61
	12/0	20.00	19.47	19.36	19.21		25/0	20.00	19.46	19.36	19.28
	12/6	20.00	19.52	19.32	19.25		25/12	20.00	19.43	19.25	19.32
	12/13	20.00	19.50	19.32	19.25		25/25	20.00	19.42	19.29	19.30
	25/0	20.00	19.42	19.24	19.25		50/0	20.00	19.45	19.29	19.32
64QAM	1/0	20.00	19.36	19.19	19.18	64QAM	1/0	20.00	19.41	19.46	19.26
	1/12	20.00	19.46	19.31	19.27		1/24	20.00	19.64	19.66	19.54
	1/24	20.00	19.31	19.15	19.16		1/49	20.00	19.36	19.36	19.24
	12/0	20.00	19.46	19.30	19.28		25/0	20.00	19.49	19.39	19.30
	12/6	20.00	19.49	19.32	19.27		25/12	20.00	19.42	19.31	19.29
	12/13	20.00	19.51	19.28	19.38		25/25	20.00	19.43	19.31	19.28
	25/0	20.00	19.43	19.28	19.30		50/0	20.00	19.47	19.31	19.29

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	20.00	19.15	19.72	19.23	QPSK	1/0	20.00	19.56	19.56	19.15
	1/37	20.00	19.21	19.79	19.34		1/50	20.00	19.94	19.99	19.54
	1/74	20.00	19.03	19.61	19.22		1/99	20.00	19.42	19.42	19.09
	36/0	20.00	19.49	19.39	19.26		50/0	20.00	19.43	19.31	19.22
	36/19	20.00	19.48	19.33	19.25		50/25	20.00	19.42	19.25	19.23
	36/39	20.00	19.45	19.32	19.23		50/50	20.00	19.37	19.19	19.20
	75/0	20.00	19.42	19.31	19.29		100/0	20.00	19.40	19.22	19.20
16QAM	1/0	20.00	19.59	19.65	19.47	16QAM	1/0	20.00	19.48	19.25	19.25
	1/37	20.00	19.64	19.74	19.57		1/50	20.00	19.86	19.68	19.65
	1/74	20.00	19.46	19.56	19.45		1/99	20.00	19.37	19.15	19.19
	36/0	20.00	19.45	19.37	19.30		50/0	20.00	19.35	19.30	19.25
	36/19	20.00	19.44	19.36	19.30		50/25	20.00	19.37	19.29	19.28
	36/39	20.00	19.42	19.26	19.30		50/50	20.00	19.29	19.20	19.22
	75/0	20.00	19.46	19.33	19.27		100/0	20.00	19.34	19.24	19.25
64QAM	1/0	20.00	19.30	19.37	19.21	64QAM	1/0	20.00	19.20	19.18	19.09
	1/37	20.00	19.37	19.40	19.31		1/50	20.00	19.62	19.60	19.50
	1/74	20.00	19.20	19.24	19.15		1/99	20.00	19.07	19.03	19.00
	36/0	20.00	19.52	19.44	19.35		50/0	20.00	19.40	19.32	19.24
	36/19	20.00	19.50	19.42	19.33		50/25	20.00	19.43	19.31	19.25
	36/39	20.00	19.48	19.34	19.31		50/50	20.00	19.35	19.24	19.22
	75/0	20.00	19.53	19.38	19.30		100/0	20.00	19.39	19.28	19.23

Note: The tested channels are marks in bold.

9. Conducted power measurement results of LTE B41

Down 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)			
			40065/2537.5	40440/2575	40840/2615	41215/2652.5				40090/2540	40440/2575	40840/2615	41190/2650
QPSK	1/0	23.50	22.46	22.63	22.61	22.36	QPSK	1/0	23.50	22.53	22.71	22.71	22.51
	1/12	23.50	22.55	22.76	22.75	22.50		1/24	23.50	22.73	22.89	22.92	22.78
	1/24	23.50	22.43	22.66	22.62	22.37		1/49	23.50	22.50	22.73	22.75	22.48
	12/0	22.50	21.51	21.77	21.72	21.51		25/0	22.50	21.53	21.87	21.82	21.65
	12/6	22.50	21.58	21.83	21.82	21.53		25/12	22.50	21.57	21.89	21.83	21.59
	12/13	22.50	21.55	21.82	21.78	21.55		25/25	22.50	21.60	21.87	21.83	21.61
	25/0	22.50	21.53	21.79	21.77	21.55		50/0	22.50	21.58	21.89	21.81	21.67
16QAM	1/0	22.50	21.74	21.59	21.76	21.98	16QAM	1/0	22.50	21.83	21.70	21.83	21.83
	1/12	22.50	21.88	21.72	21.86	22.10		1/24	22.50	22.08	21.89	22.02	22.06
	1/24	22.50	21.73	21.61	21.74	21.95		1/49	22.50	21.81	21.75	21.87	21.76
	12/0	21.50	20.64	20.84	20.82	20.70		25/0	21.50	20.67	20.94	20.88	20.83
	12/6	21.50	20.70	20.93	20.91	20.73		25/12	21.50	20.71	20.95	20.88	20.78
	12/13	21.50	20.68	20.88	20.87	20.74		25/25	21.50	20.72	20.94	20.89	20.76
	25/0	21.50	20.65	20.88	20.81	20.75		50/0	21.50	20.68	20.94	20.92	20.81
64QAM	1/0	21.50	20.80	20.47	20.85	20.64	64QAM	1/0	21.50	20.86	20.42	20.81	20.81
	1/12	21.50	20.92	20.63	20.97	20.76		1/24	21.50	21.03	20.61	20.97	21.10
	1/24	21.50	20.78	20.51	20.84	20.62		1/49	21.50	20.86	20.46	20.84	20.75
	12/0	20.50	19.56	19.67	19.56	19.65		25/0	20.50	19.58	19.84	19.68	19.83
	12/6	20.50	19.63	19.78	19.64	19.67		25/12	20.50	19.63	19.81	19.66	19.74
	12/13	20.50	19.61	19.73	19.60	19.67		25/25	20.50	19.66	19.81	19.67	19.75
	25/0	20.50	19.57	19.77	19.57	19.65		50/0	20.50	19.60	19.81	19.72	19.72

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)			
			40115/2542.5	40440/2575	40840/2615	41165/2647.5				40140/2545	40440/2575	40840/2615	41140/2645
QPSK	1/0	23.50	22.47	22.64	22.67	22.50	QPSK	1/0	23.50	22.24	22.50	22.55	22.34
	1/37	23.50	22.55	22.76	22.80	22.59		1/50	23.50	22.66	22.88	22.93	22.75
	1/74	23.50	22.39	22.65	22.68	22.37		1/99	23.50	22.16	22.57	22.54	22.18
	36/0	22.50	21.49	21.79	21.79	21.56		50/0	22.50	21.44	21.79	21.74	21.66
	36/19	22.50	21.53	21.87	21.84	21.58		50/25	22.50	21.50	21.86	21.82	21.69
	36/39	22.50	21.51	21.83	21.84	21.50		50/50	22.50	21.49	21.88	21.77	21.59
	75/0	22.50	21.53	21.82	21.84	21.58		100/0	22.50	21.44	21.81	21.75	21.61
16QAM	1/0	22.50	21.79	21.62	21.69	21.92	16QAM	1/0	22.50	21.82	21.44	21.61	21.72
	1/37	22.50	21.87	21.78	21.84	21.97		1/50	22.50	22.25	21.85	21.98	22.09
	1/74	22.50	21.69	21.70	21.66	21.78		1/99	22.50	21.72	21.57	21.59	21.52
	36/0	21.50	20.56	20.85	20.79	20.69		50/0	21.50	20.60	20.82	20.83	20.83
	36/19	21.50	20.62	20.83	20.83	20.70		50/25	21.50	20.69	20.93	20.91	20.84
	36/39	21.50	20.58	20.88	20.86	20.64		50/50	21.50	20.67	20.92	20.84	20.75
	75/0	21.50	20.62	20.91	20.84	20.69		100/0	21.50	20.58	20.88	20.81	20.79
64QAM	1/0	21.50	20.80	20.34	20.55	21.05	64QAM	1/0	21.50	20.48	20.92	20.58	20.56
	1/37	21.50	20.88	20.47	20.67	21.09		1/50	21.50	20.89	21.31	20.94	20.95
	1/74	21.50	20.71	20.40	20.54	20.89		1/99	21.50	20.40	21.09	20.58	20.39
	36/0	20.50	19.60	19.83	19.68	19.72		50/0	20.50	19.47	19.75	19.68	19.75
	36/19	20.50	19.63	19.84	19.72	19.71		50/25	20.50	19.56	19.82	19.75	19.78
	36/39	20.50	19.62	19.86	19.72	19.65		50/50	20.50	19.55	19.83	19.70	19.70
	75/0	20.50	19.64	19.75	19.76	19.68		100/0	20.50	19.50	19.72	19.69	19.71

Down 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)			
			40065/2537.5	40440/2575	40840/2615	41215/2652.5				40090/2540	40440/2575	40840/2615	41190/2650
QPSK	1/0	22.50	21.38	21.36	21.35	21.41	QPSK	1/0	22.50	21.40	21.38	21.48	21.51
	1/12	22.50	21.48	21.48	21.46	21.53		1/24	22.50	21.65	21.67	21.74	21.77
	1/24	22.50	21.33	21.37	21.35	21.40		1/49	22.50	21.35	21.38	21.46	21.43
	12/0	22.50	21.45	21.47	21.44	21.57		25/0	22.50	21.46	21.46	21.54	21.66
	12/6	22.50	21.52	21.47	21.48	21.52		25/12	22.50	21.47	21.46	21.52	21.58
	12/13	22.50	21.51	21.48	21.48	21.56		25/25	22.50	21.50	21.49	21.55	21.60
	25/0	22.50	21.46	21.43	21.49	21.58		50/0	22.50	21.47	21.48	21.56	21.67
16QAM	1/0	22.50	21.58	21.57	21.72	21.70	16QAM	1/0	22.50	21.75	21.71	21.83	21.72
	1/12	22.50	21.69	21.68	21.83	21.83		1/24	22.50	21.75	21.73	21.88	21.73
	1/24	22.50	21.76	21.56	21.74	21.66		1/49	22.50	21.70	21.69	21.86	21.85
	12/0	21.50	20.60	20.52	20.56	20.56		25/0	21.50	20.55	20.55	20.61	20.79
	12/6	21.50	20.65	20.52	20.61	20.62		25/12	21.50	20.58	20.58	20.63	20.75
	12/13	21.50	20.65	20.54	20.61	20.65		25/25	21.50	20.60	20.59	20.62	20.72
	25/0	21.50	20.54	20.48	20.52	20.68		50/0	21.50	20.58	20.57	20.62	20.79
64QAM	1/0	21.50	20.98	20.47	20.69	20.58	64QAM	1/0	21.50	20.37	20.30	20.72	20.87
	1/12	21.50	20.87	20.59	20.83	20.72		1/24	21.50	20.58	20.56	20.78	20.86
	1/24	21.50	20.95	20.44	20.72	20.56		1/49	21.50	20.30	20.31	20.76	20.76
	12/0	20.50	19.50	19.40	19.32	19.48		25/0	20.50	19.43	19.46	19.40	19.53
	12/6	20.50	19.56	19.31	19.38	19.49		25/12	20.50	19.51	19.41	19.38	19.50
	12/13	20.50	19.57	19.42	19.37	19.49		25/25	20.50	19.50	19.47	19.42	19.50
	25/0	20.50	19.35	19.31	19.32	19.56		50/0	20.50	19.42	19.41	19.45	19.58

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)			
			40115/2542.5	40440/2575	40840/2615	41165/2647.5				40140/2545	40440/2575	40840/2615	41140/2645
QPSK	1/0	22.50	21.35	21.32	21.42	21.52	QPSK	1/0	22.50	21.20	21.19	21.25	21.43
	1/37	22.50	21.39	21.41	21.54	21.59		1/50	22.50	21.68	21.70	21.79	21.90
	1/74	22.50	21.20	21.27	21.39	21.39		1/99	22.50	21.09	21.18	21.29	21.29
	36/0	22.50	21.42	21.48	21.50	21.60		50/0	22.50	21.38	21.42	21.50	21.69
	36/19	22.50	21.46	21.52	21.51	21.58		50/25	22.50	21.44	21.49	21.54	21.72
	36/39	22.50	21.43	21.52	21.53	21.53		50/50	22.50	21.42	21.42	21.55	21.60
	75/0	22.50	21.45	21.50	21.52	21.61		100/0	22.50	21.39	21.43	21.49	21.64
16QAM	1/0	22.50	21.67	21.63	21.67	21.85	16QAM	1/0	22.50	21.55	21.51	21.53	21.60
	1/37	22.50	21.74	21.71	21.80	21.68		1/50	22.50	21.76	21.78	21.87	21.83
	1/74	22.50	21.56	21.58	21.70	21.69		1/99	22.50	21.41	21.46	21.64	21.43
	36/0	21.50	20.47	20.50	20.52	20.64		50/0	21.50	20.45	20.50	20.54	20.79
	36/19	21.50	20.51	20.53	20.54	20.63		50/25	21.50	20.52	20.53	20.59	20.79
	36/39	21.50	20.47	20.52	20.55	20.56		50/50	21.50	20.51	20.48	20.60	20.72
	75/0	21.50	20.51	20.55	20.51	20.65		100/0	21.50	20.47	20.49	20.54	20.76
64QAM	1/0	21.50	20.28	20.24	20.49	20.72	64QAM	1/0	21.50	20.65	20.74	20.54	20.58
	1/37	21.50	20.32	20.32	20.64	20.76		1/50	21.50	20.66	20.77	20.64	20.61
	1/74	21.50	20.15	20.18	20.55	20.54		1/99	21.50	20.55	20.70	20.69	20.45
	36/0	20.50	19.45	19.42	19.42	19.54		50/0	20.50	19.39	19.39	19.47	19.67
	36/19	20.50	19.52	19.57	19.43	19.54		50/25	20.50	19.43	19.40	19.50	19.67
	36/39	20.50	19.46	19.50	19.46	19.46		50/50	20.50	19.45	19.37	19.50	19.58
	75/0	20.50	19.38	19.44	19.48	19.60		100/0	20.50	19.42	19.35	19.46	19.63

Up 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)			
			40065/2537.5	40440/2575	40840/2615	41215/2652.5				40090/2540	40440/2575	40840/2615	41190/2650
QPSK	1/0	18.50	17.97	17.92	17.85	17.78	QPSK	1/0	18.50	18.02	17.95	17.90	17.88
	1/12	18.50	18.07	18.02	17.96	17.90		1/24	18.50	18.26	18.25	18.20	18.15
	1/24	18.50	17.93	17.90	17.84	17.77		1/49	18.50	17.98	17.97	17.91	17.81
	12/0	18.50	18.02	17.98	17.90	17.87		25/0	18.50	18.02	17.99	18.00	18.01
	12/6	18.50	18.10	18.02	17.95	17.88		25/12	18.50	18.10	18.05	17.96	17.96
	12/13	18.50	18.08	18.03	17.95	17.90		25/25	18.50	18.09	18.06	17.99	17.98
	25/0	18.50	18.03	17.97	17.90	17.89		50/0	18.50	18.05	18.02	17.97	17.99
16QAM	1/0	18.50	18.41	18.22	18.23	18.14	16QAM	1/0	18.50	18.38	18.32	18.33	18.40
	1/12	18.50	18.26	18.28	18.35	18.27		1/24	18.50	18.36	18.32	18.36	18.42
	1/24	18.50	18.38	18.19	18.23	18.10		1/49	18.50	18.34	18.31	18.33	18.33
	12/0	18.50	18.16	18.02	17.99	17.89		25/0	18.50	18.14	18.01	18.01	18.09
	12/6	18.50	18.17	18.07	18.02	17.88		25/12	18.50	18.11	18.06	17.99	18.03
	12/13	18.50	18.14	18.08	18.02	17.92		25/25	18.50	18.11	18.07	18.01	18.04
	25/0	18.50	18.03	18.01	17.92	17.95		50/0	18.50	18.12	18.02	18.01	18.05
64QAM	1/0	18.50	18.32	18.04	18.16	17.96	64QAM	1/0	18.50	17.95	17.88	18.18	18.23
	1/12	18.50	18.41	18.11	18.27	18.08		1/24	18.50	18.18	18.15	18.16	18.25
	1/24	18.50	18.28	18.02	18.15	17.91		1/49	18.50	17.93	17.87	18.18	18.15
	12/0	18.50	18.19	17.96	17.82	17.90		25/0	18.50	18.16	18.02	17.93	18.01
	12/6	18.50	18.18	18.01	17.89	17.92		25/12	18.50	18.14	18.08	17.92	17.93
	12/13	18.50	18.16	17.99	17.86	17.93		25/25	18.50	18.15	18.07	17.93	17.96
	25/0	18.50	17.97	18.01	17.82	17.97		50/0	18.50	18.05	18.01	17.96	17.98

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)			
			40115/2542.5	40440/2575	40840/2615	41165/2647.5				40140/2545	40440/2575	40840/2615	41140/2645
QPSK	1/0	18.50	18.14	18.08	18.08	18.11	QPSK	1/0	18.50	18.25	18.32	18.07	17.92
	1/37	18.50	18.21	18.22	18.17	18.15		1/50	18.50	18.44	18.36	18.34	18.42
	1/74	18.50	18.03	18.06	18.06	17.94		1/99	18.50	18.12	18.26	18.12	17.74
	36/0	18.50	18.05	18.04	17.98	17.96		50/0	18.50	18.02	18.00	17.99	18.06
	36/19	18.50	18.12	18.10	17.98	17.96		50/25	18.50	18.08	18.06	18.01	18.05
	36/39	18.50	18.07	18.07	17.98	17.89		50/50	18.50	18.07	18.02	18.02	18.01
	75/0	18.50	18.08	18.03	17.96	17.94		100/0	18.50	18.03	18.00	17.99	18.03
16QAM	1/0	18.50	18.31	18.23	18.18	18.26	16QAM	1/0	18.50	18.16	18.10	18.07	18.02
	1/37	18.50	18.39	18.36	18.28	18.33		1/50	18.50	18.38	18.34	18.36	18.29
	1/74	18.50	18.21	18.19	18.18	18.11		1/99	18.50	18.06	18.05	18.16	17.85
	36/0	18.50	18.05	17.99	17.98	18.01		50/0	18.50	17.97	17.96	17.98	18.05
	36/19	18.50	18.08	18.05	17.98	17.99		50/25	18.50	18.01	18.02	18.00	18.05
	36/39	18.50	18.02	18.01	17.99	17.96		50/50	18.50	18.01	17.95	18.00	17.98
	75/0	18.50	18.06	18.04	17.97	17.98		100/0	18.50	17.98	17.99	17.95	18.01
64QAM	1/0	18.50	17.88	17.79	17.97	18.07	64QAM	1/0	18.50	17.84	17.78	17.75	17.82
	1/37	18.50	17.95	17.95	18.07	18.13		1/50	18.50	18.31	18.29	18.25	18.27
	1/74	18.50	17.77	17.76	17.97	17.91		1/99	18.50	17.73	17.78	17.73	17.65
	36/0	18.50	18.10	18.06	17.93	17.95		50/0	18.50	17.99	18.01	17.97	18.02
	36/19	18.50	18.17	18.08	17.91	17.94		50/25	18.50	18.06	18.05	17.97	18.01
	36/39	18.50	18.10	18.06	17.93	17.89		50/50	18.50	18.06	18.02	17.97	17.97
	75/0	18.50	18.03	18.02	17.97	18.00		100/0	18.50	18.00	18.03	17.95	17.99

Up 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)			
			40065/2537.5	40440/2575	40840/2615	41215/2652.5				40090/2540	40440/2575	40840/2615	41190/2650
QPSK	1/0	20.00	19.34	19.30	19.14	18.99	QPSK	1/0	20.00	19.41	19.35	19.26	19.16
	1/12	20.00	19.44	19.41	19.25	19.11		1/24	20.00	19.59	19.60	19.47	19.38
	1/24	20.00	19.28	19.30	19.13	18.97		1/49	20.00	19.33	19.37	19.22	19.05
	12/0	20.00	19.34	19.35	19.22	19.07		25/0	20.00	19.36	19.38	19.29	19.19
	12/6	20.00	19.44	19.39	19.26	19.09		25/12	20.00	19.39	19.38	19.27	19.13
	12/13	20.00	19.40	19.39	19.25	19.11		25/25	20.00	19.40	19.41	19.24	19.13
	25/0	20.00	19.35	19.33	19.20	19.09		50/0	20.00	19.38	19.38	19.26	19.18
16QAM	1/0	20.00	19.55	19.55	19.38	19.54	16QAM	1/0	20.00	19.65	19.57	19.47	19.42
	1/12	20.00	19.68	19.64	19.50	19.63		1/24	20.00	19.63	19.61	19.50	19.43
	1/24	20.00	19.50	19.54	19.36	19.49		1/49	20.00	19.57	19.58	19.44	19.31
	12/0	20.00	19.36	19.34	19.21	19.16		25/0	20.00	19.37	19.36	19.31	19.27
	12/6	20.00	19.43	19.37	19.25	19.19		25/12	20.00	19.39	19.38	19.30	19.19
	12/13	20.00	19.41	19.38	19.26	19.18		25/25	20.00	19.41	19.39	19.28	19.21
	25/0	20.00	19.36	19.34	19.21	19.18		50/0	20.00	19.38	19.35	19.28	19.23
64QAM	1/0	20.00	19.49	19.69	19.34	19.14	64QAM	1/0	20.00	19.60	19.51	19.32	19.28
	1/12	20.00	19.60	19.48	19.46	19.26		1/24	20.00	19.48	19.73	19.52	19.46
	1/24	20.00	19.48	19.68	19.31	19.08		1/49	20.00	19.50	19.52	19.27	19.15
	12/0	20.00	19.38	19.19	19.20	19.13		25/0	20.00	19.37	19.38	19.33	19.29
	12/6	20.00	19.44	19.22	19.25	19.19		25/12	20.00	19.41	19.39	19.30	19.23
	12/13	20.00	19.42	19.25	19.25	19.16		25/25	20.00	19.43	19.40	19.28	19.23
	25/0	20.00	19.39	19.27	19.23	19.15		50/0	20.00	19.39	19.36	19.24	19.21

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)			
			40115/2542.5	40440/2575	40840/2615	41165/2647.5				40140/2545	40440/2575	40840/2615	41140/2645
QPSK	1/0	20.00	19.33	19.32	19.22	19.16	QPSK	1/0	20.00	19.35	19.34	19.17	19.18
	1/37	20.00	19.40	19.40	19.29	19.20		1/50	20.00	19.65	19.75	19.63	19.58
	1/74	20.00	19.19	19.26	19.15	18.95		1/99	20.00	19.20	19.29	19.14	18.95
	36/0	20.00	19.38	19.43	19.33	19.15		50/0	20.00	19.28	19.35	19.23	19.24
	36/19	20.00	19.41	19.45	19.29	19.17		50/25	20.00	19.33	19.39	19.25	19.22
	36/39	20.00	19.37	19.45	19.29	19.08		50/50	20.00	19.34	19.35	19.20	19.12
	75/0	20.00	19.39	19.43	19.28	19.14		100/0	20.00	19.30	19.36	19.21	19.16
16QAM	1/0	20.00	19.58	19.50	19.42	19.51	16QAM	1/0	20.00	19.62	19.59	19.19	19.26
	1/37	20.00	19.63	19.62	19.55	19.54		1/50	20.00	19.63	19.61	19.63	19.65
	1/74	20.00	19.42	19.43	19.40	19.24		1/99	20.00	19.48	19.53	19.18	19.05
	36/0	20.00	19.35	19.38	19.26	19.19		50/0	20.00	19.30	19.36	19.23	19.28
	36/19	20.00	19.40	19.40	19.31	19.19		50/25	20.00	19.40	19.39	19.23	19.27
	36/39	20.00	19.37	19.40	19.27	19.13		50/50	20.00	19.38	19.38	19.21	19.18
	75/0	20.00	19.39	19.40	19.24	19.17		100/0	20.00	19.31	19.34	19.22	19.23
64QAM	1/0	20.00	19.54	19.48	19.56	19.57	64QAM	1/0	20.00	19.20	19.17	19.00	18.95
	1/37	20.00	19.55	19.55	19.55	19.57		1/50	20.00	19.63	19.60	19.46	19.38
	1/74	20.00	19.39	19.37	19.40	19.25		1/99	20.00	19.06	19.12	19.02	18.68
	36/0	20.00	19.37	19.38	19.26	19.20		50/0	20.00	19.29	19.32	19.25	19.25
	36/19	20.00	19.40	19.40	19.28	19.20		50/25	20.00	19.34	19.35	19.24	19.26
	36/39	20.00	19.36	19.41	19.28	19.14		50/50	20.00	19.36	19.33	19.22	19.17
	75/0	20.00	19.40	19.40	19.22	19.16		100/0	20.00	19.29	19.31	19.19	19.24

Note: The tested channels are marks in bold.

10. Conducted power measurement results of LTE B66

Down Antenna_Receiver on

LTE B66/BW=1.4M		Average Conducted Power(dBm)				LTE B66/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)		
			131979/1710.7	132272/1740	132565/1769.3				131987/1711.5	132272/1740	132557/1768.5
QPSK	1/0	24.00	22.85	22.81	22.81	QPSK	1/0	24.00	22.74	22.89	22.74
	1/2	24.00	22.98	22.93	22.92		1/7	24.00	22.95	23.03	22.89
	1/5	24.00	22.84	22.82	22.81		1/14	24.00	22.86	22.92	22.76
	3/0	24.00	22.88	22.87	22.88		8/0	23.00	21.91	21.98	21.87
	3/1	24.00	22.93	22.97	22.93		8/3	23.00	21.92	21.98	21.91
	3/3	24.00	22.90	22.96	22.92		8/7	23.00	21.89	21.94	21.88
	6/0	23.00	21.84	21.89	21.85		15/0	23.00	21.89	21.94	21.90
16QAM	1/0	23.00	21.78	21.91	22.19	16QAM	1/0	23.00	21.77	22.28	21.91
	1/2	23.00	21.85	22.04	22.27		1/7	23.00	21.91	22.42	22.06
	1/5	23.00	21.80	21.96	22.16		1/14	23.00	21.78	22.29	21.89
	3/0	23.00	22.00	21.96	22.09		8/0	22.00	20.95	21.02	20.93
	3/1	23.00	22.02	21.98	22.12		8/3	22.00	21.01	21.04	20.97
	3/3	23.00	22.03	21.94	22.11		8/7	22.00	20.97	21.00	20.94
	6/0	22.00	20.97	21.03	20.75		15/0	22.00	20.90	20.96	20.89
64QAM	1/0	22.00	20.91	21.23	20.95	64QAM	1/0	22.00	21.15	21.03	21.06
	1/2	22.00	21.00	21.38	21.09		1/7	22.00	21.31	21.19	21.22
	1/5	22.00	20.92	21.22	20.95		1/14	22.00	21.20	21.11	21.06
	3/0	22.00	20.81	21.24	21.03		8/0	21.00	19.95	19.98	19.84
	3/1	22.00	20.84	21.27	21.07		8/3	21.00	19.98	20.04	19.88
	3/3	22.00	20.83	21.23	21.06		8/7	21.00	19.93	20.00	19.83
	6/0	21.00	19.90	19.88	20.15		15/0	21.00	19.89	19.97	19.93

LTE B66/BW=5M		Average Conducted Power(dBm)				LTE B66/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)		
			131997/1712.5	132272/1740	132547/1767.5				132022/1715	132272/1740	132522/1765
QPSK	1/0	24.00	22.93	22.89	22.84	QPSK	1/0	24.00	22.83	22.97	22.84
	1/12	24.00	23.06	22.98	22.99		1/24	24.00	23.08	23.13	22.99
	1/24	24.00	22.96	22.89	22.88		1/49	24.00	22.96	22.96	22.91
	12/0	23.00	21.85	21.92	21.94		25/0	23.00	21.90	21.99	21.96
	12/6	23.00	21.92	21.98	21.95		25/12	23.00	21.96	21.98	21.96
	12/13	23.00	21.95	21.98	21.96		25/25	23.00	21.99	21.97	21.92
	25/0	23.00	21.88	21.91	21.92		50/0	23.00	21.95	22.01	21.97
16QAM	1/0	23.00	21.94	22.33	21.92	16QAM	1/0	23.00	21.75	22.24	21.91
	1/12	23.00	22.07	22.44	22.05		1/24	23.00	21.99	22.44	22.05
	1/24	23.00	21.99	22.38	21.93		1/49	23.00	21.81	22.28	21.93
	12/0	22.00	20.91	21.06	20.97		25/0	22.00	20.91	21.05	21.07
	12/6	22.00	20.99	21.09	21.01		25/12	22.00	20.98	21.06	21.08
	12/13	22.00	21.00	21.10	21.01		25/25	22.00	21.02	21.02	21.05
	25/0	22.00	20.91	21.02	20.91		50/0	22.00	20.96	21.05	21.06
64QAM	1/0	22.00	20.74	21.14	21.04	64QAM	1/0	22.00	21.13	20.99	21.03
	1/12	22.00	20.89	21.28	21.14		1/24	22.00	21.37	21.22	21.22
	1/24	22.00	20.78	21.20	21.07		1/49	22.00	21.22	21.08	21.05
	12/0	21.00	19.92	19.86	19.98		25/0	21.00	19.94	20.07	20.02
	12/6	21.00	19.96	19.91	19.96		25/12	21.00	20.00	20.02	20.02
	12/13	21.00	19.98	19.90	20.00		25/25	21.00	20.04	20.05	20.00
	25/0	21.00	19.85	19.89	19.92		50/0	21.00	19.98	20.04	19.96

LTE B66/BW=15M		Average Conducted Power(dBm)				LTE B66/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)		
			132047/1717.5	132272/1740	132497/1762.5				132072/1720	132272/1740	132472/1760
QPSK	1/0	24.00	22.80	22.89	22.76	QPSK	1/0	24.00	22.73	22.80	22.69
	1/37	24.00	22.97	23.02	22.97		1/50	24.00	23.17	23.04	23.15
	1/74	24.00	22.89	22.85	22.83		1/99	24.00	22.88	22.77	22.75
	36/0	23.00	21.92	22.85	21.88		50/0	23.00	21.85	21.97	21.88
	36/19	23.00	22.02	22.05	21.96		50/25	23.00	21.93	22.00	21.96
	36/39	23.00	22.08	21.99	21.94		50/50	23.00	21.94	21.94	21.91
	75/0	23.00	21.99	22.02	21.94		100/0	23.00	21.88	21.98	21.90
16QAM	1/0	23.00	21.67	22.16	22.20	16QAM	1/0	23.00	22.10	22.10	22.07
	1/37	23.00	21.86	22.32	22.37		1/50	23.00	22.56	22.48	22.46
	1/74	23.00	21.78	22.18	22.22		1/99	23.00	22.24	22.16	22.08
	36/0	22.00	20.89	20.88	20.88		50/0	22.00	20.93	21.00	20.87
	36/19	22.00	20.96	21.06	20.93		50/25	22.00	21.00	21.03	20.98
	36/39	22.00	21.01	21.04	20.89		50/50	22.00	20.98	20.97	20.94
	75/0	22.00	20.98	21.01	20.93		100/0	22.00	20.97	20.99	20.95
64QAM	1/0	22.00	21.05	20.92	21.35	64QAM	1/0	22.00	20.92	21.27	20.92
	1/37	22.00	21.25	21.07	21.52		1/50	22.00	21.37	21.00	21.38
	1/74	22.00	21.16	21.00	21.43		1/99	22.00	21.06	21.29	21.00
	36/0	21.00	19.97	21.00	19.90		50/0	21.00	19.95	19.99	19.92
	36/19	21.00	20.02	20.07	19.96		50/25	21.00	20.02	20.00	20.01
	36/39	21.00	20.06	20.05	19.97		50/50	21.00	20.00	19.97	19.98
	75/0	21.00	20.02	20.03	20.00		100/0	21.00	19.95	19.97	19.96

Down Antenna Receiver off

LTE B66/BW=1.4M			Average Conducted Power(dBm)			LTE B66/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)		
			131979/ 1710.7	132272/ 1740	132565/ 1769.3				131987/ 1711.5	132272/ 1740	132557/ 1768.5
QPSK	1/0	21.00	20.47	20.60	20.39	QPSK	1/0	21.00	20.72	20.42	20.61
	1/2	21.00	20.63	20.63	20.54		1/7	21.00	20.66	20.60	20.74
	1/5	21.00	20.51	20.62	20.39		1/14	21.00	20.79	20.46	20.60
	3/0	21.00	20.39	20.69	20.38		8/0	21.00	20.40	20.47	20.52
	3/1	21.00	20.43	20.73	20.42		8/3	21.00	20.47	20.51	20.53
	3/3	21.00	20.34	20.69	20.36		8/7	21.00	20.43	20.49	20.52
	6/0	21.00	20.42	20.42	20.44		15/0	21.00	20.44	20.42	20.42
16QAM	1/0	21.00	20.56	20.59	20.58	16QAM	1/0	21.00	20.64	20.67	20.65
	1/2	21.00	20.71	20.77	20.78		1/7	21.00	20.59	20.58	20.65
	1/5	21.00	20.56	20.61	20.62		1/14	21.00	20.69	20.67	20.69
	3/0	21.00	20.56	20.45	20.44		8/0	21.00	20.34	20.50	20.46
	3/1	21.00	20.59	20.48	20.48		8/3	21.00	20.39	20.53	20.46
	3/3	21.00	20.51	20.43	20.42		8/7	21.00	20.37	20.53	20.43
	6/0	21.00	20.40	20.49	20.49		15/0	21.00	20.39	20.46	20.45
64QAM	1/0	21.00	20.29	20.39	20.30	64QAM	1/0	21.00	20.36	20.44	20.39
	1/2	21.00	20.48	20.51	20.49		1/7	21.00	20.63	20.76	20.67
	1/5	21.00	20.32	20.38	20.35		1/14	21.00	20.39	20.44	20.44
	3/0	21.00	20.38	20.42	20.38		8/0	21.00	20.38	20.47	20.42
	3/1	21.00	20.44	20.49	20.43		8/3	21.00	20.44	20.48	20.42
	3/3	21.00	20.39	20.43	20.38		8/7	21.00	20.41	20.46	20.42
	6/0	21.00	20.35	20.42	20.37		15/0	21.00	20.38	20.41	20.43

LTE B66/BW=5M		Average Conducted Power(dBm)				LTE B66/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)		
			131997/1712.5	132272/1740	132547/1767.5				132022/1715	132272/1740	132522/1765
QPSK	1/0	21.00	20.64	20.58	20.61	QPSK	1/0	21.00	20.70	20.41	20.63
	1/12	21.00	20.77	20.66	20.66		1/24	21.00	20.80	20.47	20.68
	1/24	21.00	20.71	20.58	20.65		1/49	21.00	20.76	20.47	20.64
	12/0	21.00	20.34	20.40	20.45		25/0	21.00	20.42	20.59	20.56
	12/6	21.00	20.41	20.45	20.47		25/12	21.00	20.47	20.56	20.54
	12/13	21.00	20.41	20.42	20.48		25/25	21.00	20.52	20.56	20.55
	25/0	21.00	20.45	20.52	20.48		50/0	21.00	20.44	20.51	20.50
16QAM	1/0	21.00	20.49	20.57	20.59	16QAM	1/0	21.00	20.57	20.65	20.67
	1/12	21.00	20.57	20.66	20.70		1/24	21.00	20.70	20.72	20.72
	1/24	21.00	20.54	20.62	20.61		1/49	21.00	20.63	20.68	20.71
	12/0	21.00	20.39	20.53	20.50		25/0	21.00	20.44	20.61	20.49
	12/6	21.00	20.45	20.55	20.51		25/12	21.00	20.51	20.56	20.46
	12/13	21.00	20.47	20.55	20.52		25/25	21.00	20.56	20.60	20.43
	25/0	21.00	20.47	20.54	20.48		50/0	21.00	20.45	20.56	20.48
64QAM	1/0	21.00	20.31	20.38	20.41	64QAM	1/0	21.00	20.32	20.48	20.39
	1/12	21.00	20.45	20.49	20.52		1/24	21.00	20.43	20.51	20.45
	1/24	21.00	20.36	20.44	20.44		1/49	21.00	20.39	20.49	20.45
	12/0	21.00	20.37	20.47	20.43		25/0	21.00	20.42	20.62	20.52
	12/6	21.00	20.44	20.52	20.48		25/12	21.00	20.53	20.57	20.49
	12/13	21.00	20.43	20.50	20.45		25/25	21.00	20.53	20.58	20.48
	25/0	21.00	20.46	20.54	20.50		50/0	21.00	20.42	20.57	20.49

LTE B66/BW=15M		Average Conducted Power(dBm)				LTE B66/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)		
			132047/1717.5	132272/1740	132497/1762.5				132072/1720	132272/1740	132472/1760
QPSK	1/0	21.00	20.62	20.32	20.56	QPSK	1/0	21.00	20.30	20.67	20.18
	1/37	21.00	20.79	20.47	20.72		1/50	21.00	20.81	20.78	20.79
	1/74	21.00	20.69	20.40	20.62		1/99	21.00	20.47	20.79	20.29
	36/0	21.00	20.38	20.40	20.42		50/0	21.00	20.40	20.51	20.39
	36/19	21.00	20.44	20.46	20.47		50/25	21.00	20.48	20.51	20.47
	36/39	21.00	20.48	20.48	20.45		50/50	21.00	20.50	20.45	20.46
	75/0	21.00	20.53	20.49	20.52		100/0	21.00	20.38	20.49	20.45
16QAM	1/0	21.00	20.52	20.54	20.67	16QAM	1/0	21.00	20.33	20.41	20.60
	1/37	21.00	20.65	20.70	20.72		1/50	21.00	20.68	20.54	20.62
	1/74	21.00	20.59	20.63	20.72		1/99	21.00	20.47	20.49	20.69
	36/0	21.00	20.45	20.63	20.39		50/0	21.00	20.42	20.49	20.37
	36/19	21.00	20.50	20.48	20.43		50/25	21.00	20.50	20.47	20.47
	36/39	21.00	20.53	20.51	20.42		50/50	21.00	20.54	20.43	20.45
	75/0	21.00	20.49	20.52	20.48		100/0	21.00	20.46	20.52	20.48
64QAM	1/0	21.00	20.27	20.35	20.24	64QAM	1/0	21.00	20.10	20.21	20.07
	1/37	21.00	20.43	20.51	20.39		1/50	21.00	20.43	20.50	20.41
	1/74	21.00	20.30	20.41	20.32		1/99	21.00	20.26	20.23	20.20
	36/0	21.00	20.40	20.41	20.45		50/0	21.00	20.43	20.59	20.38
	36/19	21.00	20.52	20.54	20.51		50/25	21.00	20.51	20.55	20.50
	36/39	21.00	20.49	20.56	20.50		50/50	21.00	20.50	20.50	20.48
	75/0	21.00	20.47	20.57	20.49		100/0	21.00	20.43	20.54	20.48

Up Antenna Receiver on

LTE B66/BW=1.4M		Average Conducted Power(dBm)				LTE B66/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)		
			131979/ 1710.7	132272/ 1740	132565/ 1769.3				131987/ 1711.5	132272/ 1740	132557/ 1768.5
QPSK	1/0	20.00	19.48	19.64	19.63	QPSK	1/0	20.00	19.54	19.73	19.69
	1/2	20.00	19.64	19.79	19.79		1/7	20.00	19.69	19.86	19.74
	1/5	20.00	19.50	19.64	19.64		1/14	20.00	19.57	19.76	19.76
	3/0	20.00	19.52	19.68	19.65		8/0	20.00	19.58	19.73	19.72
	3/1	20.00	19.55	19.75	19.73		8/3	20.00	19.62	19.76	19.74
	3/3	20.00	19.52	19.69	19.69		8/7	20.00	19.59	19.73	19.73
	6/0	20.00	19.54	19.66	19.68		15/0	20.00	19.59	19.66	19.73
16QAM	1/0	20.00	19.77	19.71	19.80	16QAM	1/0	20.00	19.70	19.73	19.63
	1/2	20.00	19.82	19.78	19.83		1/7	20.00	19.84	19.74	19.64
	1/5	20.00	19.78	19.80	19.80		1/14	20.00	19.76	19.72	19.64
	3/0	20.00	19.58	19.75	19.80		8/0	20.00	19.64	19.73	19.71
	3/1	20.00	19.60	19.77	19.80		8/3	20.00	19.68	19.76	19.73
	3/3	20.00	19.57	19.72	19.75		8/7	20.00	19.67	19.74	19.72
	6/0	20.00	19.65	19.77	19.77		15/0	20.00	19.63	19.72	19.77
64QAM	1/0	20.00	19.72	19.67	19.68	64QAM	1/0	20.00	19.69	19.74	19.70
	1/2	20.00	19.85	19.80	19.74		1/7	20.00	19.78	19.75	19.82
	1/5	20.00	19.73	19.70	19.71		1/14	20.00	19.74	19.76	19.71
	3/0	20.00	19.59	19.81	19.67		8/0	20.00	19.65	19.75	19.85
	3/1	20.00	19.63	19.84	19.71		8/3	20.00	19.68	19.78	19.87
	3/3	20.00	19.53	19.82	19.66		8/7	20.00	19.65	19.75	19.84
	6/0	20.00	19.66	19.68	19.75		15/0	20.00	19.66	19.68	19.76

LTE B66/BW=5M		Average Conducted Power(dBm)				LTE B66/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)		
			131997/1712.5	132272/1740	132547/1767.5				132022/1715	132272/1740	132522/1765
QPSK	1/0	20.00	19.53	19.64	19.74	QPSK	1/0	20.00	19.52	19.66	19.65
	1/12	20.00	19.63	19.73	19.84		1/24	20.00	19.63	19.77	19.76
	1/24	20.00	19.57	19.63	19.80		1/49	20.00	19.61	19.80	19.77
	12/0	20.00	19.56	19.65	19.74		25/0	20.00	19.61	19.73	19.79
	12/6	20.00	19.63	19.72	19.75		25/12	20.00	19.68	19.75	19.78
	12/13	20.00	19.63	19.72	19.74		25/25	20.00	19.66	19.74	19.71
	25/0	20.00	19.62	19.71	19.76		50/0	20.00	19.61	19.71	19.70
16QAM	1/0	20.00	19.71	19.57	19.67	16QAM	1/0	20.00	19.58	19.68	19.73
	1/12	20.00	19.83	19.71	19.78		1/24	20.00	19.65	19.76	19.78
	1/24	20.00	19.76	19.62	19.69		1/49	20.00	19.64	19.71	19.80
	12/0	20.00	19.57	19.77	19.85		25/0	20.00	19.59	19.84	19.79
	12/6	20.00	19.61	19.83	19.84		25/12	20.00	19.70	19.81	19.74
	12/13	20.00	19.61	19.84	19.83		25/25	20.00	19.64	19.83	19.74
	25/0	20.00	19.59	19.79	19.81		50/0	20.00	19.56	19.80	19.76
64QAM	1/0	20.00	19.60	19.61	19.74	64QAM	1/0	20.00	19.79	19.55	19.81
	1/12	20.00	19.75	19.72	19.85		1/24	20.00	19.76	19.66	19.74
	1/24	20.00	19.66	19.65	19.76		1/49	20.00	19.73	19.62	19.74
	12/0	20.00	19.54	19.65	19.79		25/0	20.00	19.59	19.83	19.74
	12/6	20.00	19.59	19.70	19.80		25/12	20.00	19.64	19.82	19.84
	12/13	20.00	19.59	19.71	19.80		25/25	20.00	19.63	19.83	19.80
	25/0	20.00	19.62	19.80	19.80		50/0	20.00	19.56	19.73	19.81

LTE B66/BW=15M		Average Conducted Power(dBm)				LTE B66/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)		
			132047/1717.5	132272/1740	132497/1762.5				132072/1720	132272/1740	132472/1760
QPSK	1/0	20.00	19.47	19.60	19.56	QPSK	1/0	20.00	19.46	19.49	19.51
	1/37	20.00	19.62	19.76	19.67		1/50	20.00	19.83	19.81	19.87
	1/74	20.00	19.59	19.71	19.58		1/99	20.00	19.67	19.55	19.65
	36/0	20.00	19.61	19.71	19.70		50/0	20.00	19.66	19.76	19.67
	36/19	20.00	19.69	19.77	19.79		50/25	20.00	19.71	19.75	19.73
	36/39	20.00	19.70	19.74	19.75		50/50	20.00	19.68	19.68	19.66
	75/0	20.00	19.66	19.75	19.75		100/0	20.00	19.65	19.73	19.72
16QAM	1/0	20.00	19.77	19.57	19.71	16QAM	1/0	20.00	19.56	19.67	19.75
	1/37	20.00	19.75	19.76	19.86		1/50	20.00	19.77	19.70	19.83
	1/74	20.00	19.77	19.67	19.82		1/99	20.00	19.71	19.77	19.76
	36/0	20.00	19.65	19.80	19.69		50/0	20.00	19.62	19.68	19.64
	36/19	20.00	19.70	19.73	19.72		50/25	20.00	19.69	19.69	19.73
	36/39	20.00	19.69	19.75	19.71		50/50	20.00	19.70	19.68	19.70
	75/0	20.00	19.63	19.77	19.76		100/0	20.00	19.66	19.76	19.77
64QAM	1/0	20.00	19.75	19.47	19.76	64QAM	1/0	20.00	19.54	19.86	19.69
	1/37	20.00	19.75	19.65	19.77		1/50	20.00	19.75	19.68	19.75
	1/74	20.00	19.74	19.54	19.72		1/99	20.00	19.73	19.83	19.83
	36/0	20.00	19.59	19.67	19.71		50/0	20.00	19.61	19.75	19.69
	36/19	20.00	19.64	19.72	19.76		50/25	20.00	19.66	19.76	19.75
	36/39	20.00	19.63	19.76	19.75		50/50	20.00	19.68	19.73	19.72
	75/0	20.00	19.66	19.76	19.82		100/0	20.00	19.63	19.80	19.78

Up Antenna Receiver off

LTE B66/BW=1.4M		Average Conducted Power(dBm)				LTE B66/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)		
			131979/1710.7	132272/1740	132565/1769.3				131987/1711.5	132272/1740	132557/1768.5
QPSK	1/0	21.00	20.48	20.61	20.62	QPSK	1/0	21.00	20.49	20.71	20.68
	1/2	21.00	20.65	20.74	20.78		1/7	21.00	20.82	20.72	20.63
	1/5	21.00	20.45	20.65	20.58		1/14	21.00	20.57	20.74	20.71
	3/0	21.00	20.56	20.63	20.66		8/0	21.00	20.56	20.71	20.72
	3/1	21.00	20.61	20.70	20.72		8/3	21.00	20.60	20.74	20.74
	3/3	21.00	20.56	20.67	20.69		8/7	21.00	20.56	20.71	20.74
	6/0	21.00	20.51	20.64	20.66		15/0	21.00	20.53	20.67	20.70
16QAM	1/0	21.00	20.71	20.83	20.87	16QAM	1/0	21.00	20.68	20.76	20.86
	1/2	21.00	20.87	20.75	20.64		1/7	21.00	20.65	20.82	20.84
	1/5	21.00	20.72	20.86	20.76		1/14	21.00	20.84	20.81	20.87
	3/0	21.00	20.57	20.74	20.76		8/0	21.00	20.62	20.69	20.65
	3/1	21.00	20.59	20.77	20.79		8/3	21.00	20.65	20.74	20.70
	3/3	21.00	20.54	20.72	20.85		8/7	21.00	20.63	20.71	20.69
	6/0	21.00	20.61	20.74	20.73		15/0	21.00	20.58	20.69	20.74
64QAM	1/0	21.00	20.69	20.73	20.63	64QAM	1/0	21.00	20.65	20.69	20.66
	1/2	21.00	20.79	20.77	20.80		1/7	21.00	20.75	20.70	20.79
	1/5	21.00	20.65	20.78	20.63		1/14	21.00	20.68	20.73	20.64
	3/0	21.00	20.56	20.66	20.66		8/0	21.00	20.59	20.71	20.79
	3/1	21.00	20.61	20.71	20.69		8/3	21.00	20.63	20.78	20.83
	3/3	21.00	20.51	20.67	20.64		8/7	21.00	20.60	20.72	20.82
	6/0	21.00	20.58	20.67	20.71		15/0	21.00	20.61	20.66	20.73

LTE B66/BW=5M		Average Conducted Power(dBm)				LTE B66/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)		
			131997/1712.5	132272/1740	132547/1767.5				132022/1715	132272/1740	132522/1765
QPSK	1/0	21.00	20.48	20.63	20.68	QPSK	1/0	21.00	20.51	20.70	20.66
	1/12	21.00	20.62	20.73	20.84		1/24	21.00	20.62	20.77	20.75
	1/24	21.00	20.57	20.67	20.74		1/49	21.00	20.55	20.73	20.75
	12/0	21.00	20.55	20.70	20.76		25/0	21.00	20.62	20.82	20.84
	12/6	21.00	20.62	20.76	20.78		25/12	21.00	20.74	20.79	20.80
	12/13	21.00	20.62	20.76	20.78		25/25	21.00	20.69	20.80	20.79
	25/0	21.00	20.63	20.79	20.82		50/0	21.00	20.62	20.80	20.79
16QAM	1/0	21.00	20.80	20.80	20.75	16QAM	1/0	21.00	20.76	20.88	20.80
	1/12	21.00	20.67	20.79	20.86		1/24	21.00	20.72	20.84	20.86
	1/24	21.00	20.84	20.85	20.77		1/49	21.00	20.69	20.81	20.87
	12/0	21.00	20.56	20.74	20.79		25/0	21.00	20.63	20.81	20.75
	12/6	21.00	20.61	20.77	20.81		25/12	21.00	20.69	20.80	20.74
	12/13	21.00	20.61	20.80	20.82		25/25	21.00	20.72	20.85	20.72
	25/0	21.00	20.63	20.77	20.78		50/0	21.00	20.63	20.80	20.76
64QAM	1/0	21.00	20.82	20.78	20.76	64QAM	1/0	21.00	20.83	20.69	20.87
	1/12	21.00	20.82	20.76	20.87		1/24	21.00	20.82	20.74	20.82
	1/24	21.00	20.86	20.85	20.84		1/49	21.00	20.82	20.71	20.81
	12/0	21.00	20.52	20.63	20.75		25/0	21.00	20.60	20.83	20.87
	12/6	21.00	20.57	20.66	20.76		25/12	21.00	20.66	20.81	20.83
	12/13	21.00	20.58	20.68	20.79		25/25	21.00	20.68	20.83	20.81
	25/0	21.00	20.65	20.76	20.79		50/0	21.00	20.59	20.74	20.79

LTE B66/BW=15M		Average Conducted Power(dBm)				LTE B66/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)		
			132047/1717.5	132272/1740	132497/1762.5				132072/1720	132272/1740	132472/1760
QPSK	1/0	21.00	20.44	20.62	20.52	QPSK	1/0	21.00	20.44	20.48	20.53
	1/37	21.00	20.58	20.75	20.70		1/50	21.00	20.81	20.88	20.86
	1/74	21.00	20.54	20.66	20.62		1/99	21.00	20.64	20.53	20.65
	36/0	21.00	20.61	20.66	20.77		50/0	21.00	20.67	20.76	20.68
	36/19	21.00	20.70	20.79	20.83		50/25	21.00	20.71	20.81	20.79
	36/39	21.00	20.71	20.80	20.80		50/50	21.00	20.75	20.75	20.76
	75/0	21.00	20.68	20.80	20.80		100/0	21.00	20.62	20.74	20.75
16QAM	1/0	21.00	20.68	20.82	20.81	16QAM	1/0	21.00	20.49	20.65	20.72
	1/37	21.00	20.82	20.81	20.82		1/50	21.00	20.86	20.72	20.79
	1/74	21.00	20.77	20.86	20.78		1/99	21.00	20.72	20.74	20.86
	36/0	21.00	20.62	20.86	20.67		50/0	21.00	20.64	20.68	20.68
	36/19	21.00	20.71	20.73	20.73		50/25	21.00	20.71	20.72	20.75
	36/39	21.00	20.70	20.73	20.72		50/50	21.00	20.72	20.70	20.72
	75/0	21.00	20.68	20.75	20.76		100/0	21.00	20.63	20.74	20.73
64QAM	1/0	21.00	20.67	20.58	20.68	64QAM	1/0	21.00	20.46	20.69	20.64
	1/37	21.00	20.80	20.72	20.84		1/50	21.00	20.81	20.69	20.70
	1/74	21.00	20.73	20.66	20.80		1/99	21.00	20.68	20.66	20.54
	36/0	21.00	20.56	20.66	20.72		50/0	21.00	20.59	20.74	20.69
	36/19	21.00	20.62	20.70	20.74		50/25	21.00	20.68	20.77	20.77
	36/39	21.00	20.67	20.72	20.75		50/50	21.00	20.69	20.75	20.75
	75/0	21.00	20.67	20.72	20.83		100/0	21.00	20.60	20.77	20.76

Note: The tested channels are marks in bold.

7.1.4 CONDUCTED POWER MEASUREMENTS OF BT

BT	Average Conducted Power(dBm)			
	Max.	CH0	CH39	CH78
	Tune up	2402MHz	2441MHz	2480MHz
DH5	11.00	10.09	9.46	9.08
2DH5	8.00	7.52	6.24	6.07
3DH5	8.00	7.66	6.30	6.04

BT	Average Conducted Power(dBm)			
	Max.	CH0	CH19	CH39
	Tune up	2402MHz	2441MHz	2480MHz
BLE(1M)	6.00	5.29	5.95	4.97
BLE(2M)	5.00	3.34	4.39	3.34

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

Full Power

Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
802.11b	1	2412	1	16.00	15.62
	6	2437		19.00	18.71
	11	2462		16.00	15.62
802.11g	1	2412	6	16.00	15.66
	6	2437		19.00	17.52
	11	2462		16.00	15.79
802.11n HT20	1	2412	6.5	16.00	15.61
	6	2437		19.00	17.45
	11	2462		16.00	15.65

Receiver on & Receiver off

Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
802.11b	1	2412	1	15.00	14.86
	6	2437		18.00	16.77
	11	2462		15.00	14.55
802.11g	1	2412	6	15.00	14.57
	6	2437		18.00	17.72
	11	2462		15.00	14.75
802.11n HT20	1	2412	6.5	15.00	14.63
	6	2437		18.00	17.66
	11	2462		15.00	14.61

WiFi Antenna Simultaneous with 2G&3G&4G Receiver on

Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
802.11b	1	2412	1	14.00	13.75
	6	2437		14.00	13.73
	11	2462		14.00	13.34
802.11g	1	2412	6	13.00	12.63
	6	2437		13.00	12.53
	11	2462		13.00	12.57
802.11n HT20	1	2412	6.5	13.00	12.58
	6	2437		13.00	12.44
	11	2462		13.00	12.51

Note:

- 1) The Average conducted power of WiFi 2.4G is measured with RMS detector.
- 2) Per KDB248227 D01, for WiFi 2.4G, 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

Full Power

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.2G	802.11a	36	5180	6	15.00	13.37
		40	5200		18.00	17.63
		44	5220		20.00	18.69
		48	5240		20.00	18.72
	802.11n HT20	36	5180	MCS0	15.00	13.09
		40	5200		18.00	17.66
		44	5220		20.00	18.13
		48	5240		20.00	18.51
	802.11n HT40	38	5190	MCS0	15.00	13.72
		46	5230		18.00	17.66
	802.11ac VHT20	36	5180	MCS0	15.00	13.52
		40	5200		18.00	17.80
		44	5220		20.00	18.63
		48	5240		20.00	18.61
	802.11ac VHT40	38	5190	MCS0	15.00	13.38
		46	5230		18.00	17.67
	802.11ac VHT80	42	5210	MCS0	14.00	12.36

Receiver on & Receiver off (Hotspot)

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.2G	802.11a	36	5180	6	13.00	11.57
		40	5200		13.00	11.66
		44	5220		13.00	11.66
		48	5240		13.00	11.68
	802.11n HT20	36	5180	MCS0	13.00	11.49
		40	5200		13.00	11.48
		44	5220		13.00	11.50
		48	5240		13.00	11.54
	802.11n HT40	38	5190	MCS0	12.00	10.51
		46	5230		12.00	10.53
	802.11ac VHT20	36	5180	MCS0	13.00	11.48
		40	5200		13.00	11.50
		44	5220		13.00	11.54
		48	5240		13.00	11.54
	802.11ac VHT40	38	5190	MCS0	12.00	10.51
		46	5230		12.00	10.53
	802.11ac VHT80	42	5210	MCS0	12.00	10.43

WiFi Antenna Simultaneous with 2G&3G&4G Receiver on

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.2G	802.11a	36	5180	6	10.00	9.82
		40	5200		10.00	9.86
		44	5220		10.00	9.85
		48	5240		10.00	9.76
	802.11n HT20	36	5180	MCS0	10.00	9.78
		40	5200		10.00	9.73
		44	5220		10.00	9.76
		48	5240		10.00	9.62
	802.11n HT40	38	5190	MCS0	9.00	8.75
		46	5230		9.00	8.73
	802.11ac VHT20	36	5180	MCS0	10.00	9.62
		40	5200		10.00	9.75
		44	5220		10.00	9.76
		48	5240		10.00	9.67
	802.11ac VHT40	38	5190	MCS0	9.00	8.88
		46	5230		9.00	8.71
	802.11ac VHT80	42	5210	MCS0	9.00	8.81

Note:

- 1) The Average conducted power of WiFi 5.2G is measured with RMS detector.
- 2) The tested channels are marks in bold.

3. Conducted power measurement results of WiFi 5.3G

Full Power

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.3G	802.11a	52	5260	6	20.00	18.69
		56	5280		20.00	18.85
		60	5300		17.00	16.70
		64	5320		14.00	13.17
	802.11n HT20	52	5260	MCS0	20.00	18.56
		56	5280		20.00	18.52
		60	5300		17.00	15.15
		64	5320		14.00	12.03
	802.11n HT40	54	5270	MCS0	17.00	16.72
		62	5310		13.00	11.53
	802.11ac VHT20	52	5260	MCS0	20.00	18.61
		56	5280		20.00	18.57
		60	5300		17.00	16.56
		64	5320		14.00	12.53
	802.11ac VHT40	54	5270	MCS0	17.00	15.62
		62	5310		13.00	11.51
	802.11ac VHT80	58	5290	MCS0	12.00	10.45

Receiver on

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.3G	802.11a	52	5260	6	13.00	11.71
		56	5280		13.00	11.69
		60	5300		13.00	11.65
		64	5320		13.00	11.62
	802.11n HT20	52	5260	MCS0	13.00	11.67
		56	5280		13.00	11.64
		60	5300		13.00	11.67
		64	5320		13.00	11.59
	802.11n HT40	54	5270	MCS0	12.00	10.61
		62	5310		12.00	10.58
	802.11ac VHT20	52	5260	MCS0	13.00	11.56
		56	5280		13.00	11.57
		60	5300		13.00	11.57
		64	5320		13.00	11.59
	802.11ac VHT40	54	5270	MCS0	12.00	10.57
		62	5310		12.00	10.55
	802.11ac VHT80	58	5290	MCS0	12.00	10.57

Receiver off (Specific 10g SAR)

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.3G	802.11a	52	5260	6	19.00	18.69
		56	5280		19.00	18.85
		60	5300		16.00	15.70
		64	5320		13.00	12.17
	802.11n HT20	52	5260	MCS0	19.00	18.56
		56	5280		19.00	18.52
		60	5300		16.00	15.15
		64	5320		13.00	12.03
	802.11n HT40	54	5270	MCS0	16.00	15.72
		62	5310		12.00	11.53
	802.11ac VHT20	52	5260	MCS0	19.00	18.61
		56	5280		19.00	18.57
		60	5300		16.00	15.56
		64	5320		13.00	12.53
	802.11ac VHT40	54	5270	MCS0	16.00	15.62
		62	5310		12.00	11.51
	802.11ac VHT80	58	5290	MCS0	11.00	10.45

WiFi Antenna Simultaneous with 2G&3G&4G Receiver on

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.3G	802.11a	52	5260	6	10.00	9.65
		56	5280		10.00	9.30
		60	5300		10.00	9.56
		64	5320		10.00	9.61
	802.11n HT20	52	5260	MCS0	10.00	9.71
		56	5280		10.00	9.67
		60	5300		10.00	9.76
		64	5320		10.00	9.73
	802.11n HT40	54	5270	MCS0	9.00	8.72
		62	5310		9.00	8.76
	802.11ac VHT20	52	5260	MCS0	10.00	9.72
		56	5280		10.00	9.65
		60	5300		10.00	9.75
		64	5320		10.00	9.72
	802.11ac VHT40	54	5270	MCS0	9.00	8.70
		62	5310		9.00	8.87
	802.11ac VHT80	58	5290	MCS0	9.00	8.83

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

Full Power & Receiver off (Specific 10g SAR)

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.6G	802.11a	100	5500	6	15.00	13.35
		104	5520		20.00	18.62
		108	5540		20.00	18.67
		112	5560		20.00	18.65
		116	5580		20.00	18.45
		132	5660		20.00	18.52
		136	5680		20.00	18.51
		140	5700		15.00	13.38
	802.11n HT20	100	5500	MCS0	15.00	13.07
		104	5520		20.00	18.46
		108	5540		20.00	18.42
		112	5560		20.00	18.53
		116	5580		20.00	18.51
		132	5660		20.00	18.41
		136	5680		20.00	18.39
		140	5700		15.00	13.53
	802.11n HT40	102	5510	MCS0	12.00	11.59
		110	5550		17.00	16.62
		134	5670		15.00	13.02
	802.11ac VHT20	100	5500	MCS0	15.00	13.58
		104	5520		20.00	18.52
		108	5540		20.00	18.47
		112	5560		20.00	18.48
		116	5580		20.00	18.51
		132	5660		20.00	18.40
		136	5680		20.00	18.43
		140	5700		15.00	13.53
	802.11ac VHT40	102	5510	MCS0	12.00	10.58
		110	5550		17.00	15.67
		134	5670		15.00	14.61
	802.11ac VHT80	106	5530	MCS0	13.00	11.46

WiFi Antenna Simultaneous with 2G&3G&4G Receiver on

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.6G	802.11a	100	5500	6	9.00	8.12
		104	5520		9.00	8.16
		108	5540		9.00	8.28
		112	5560		9.00	8.26
		116	5580		9.00	8.23
		132	5660		9.00	8.13
		136	5680		9.00	8.11
		140	5700		9.00	8.08
	802.11n HT20	100	5500	MCS0	9.00	8.66
		104	5520		9.00	8.64
		108	5540		9.00	8.73
		112	5560		9.00	8.72
		116	5580		9.00	8.81
		132	5660		9.00	8.51
		136	5680		9.00	8.53
		140	5700		9.00	8.70
	802.11n HT40	102	5510	MCS0	8.00	7.76
		110	5550		8.00	7.78
		134	5670		8.00	7.50
	802.11ac VHT20	100	5500	MCS0	9.00	8.58
		104	5520		9.00	8.71
		108	5540		9.00	8.76
		112	5560		9.00	8.79
		116	5580		9.00	8.82
		132	5660		9.00	8.50
		136	5680		9.00	8.61
		140	5700		9.00	8.72
	802.11ac VHT40	102	5510	MCS0	8.00	7.80
		110	5550		8.00	7.75
		134	5670		8.00	7.50
	802.11ac VHT80	106	5530	MCS0	8.00	7.76

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

Full Power & Receiver off (Hotspot)

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.8G	802.11a	149	5745	6	20.00	18.57
		153	5765		20.00	18.65
		157	5785		20.00	18.68
		161	5805		20.00	18.61
		165	5825		20.00	18.59
	802.11n HT20	149	5745	MCS0	20.00	18.46
		153	5765		20.00	18.51
		157	5785		20.00	18.51
		161	5805		20.00	18.57
		165	5825		20.00	18.49
	802.11n HT40	151	5755	MCS0	19.00	17.47
		159	5795		19.00	17.58
	802.11ac VHT20	149	5745	MCS0	20.00	18.48
		153	5765		20.00	18.55
		157	5785		20.00	18.42
		161	5805		20.00	18.53
		165	5825		20.00	18.56
	802.11ac VHT40	151	5755	MCS0	19.00	17.51
		159	5795		19.00	17.70
	802.11ac VHT80	155	5775	MCS0	19.00	17.50

WiFi Antenna Simultaneous with 2G&3G&4G Receiver on

Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Max. Tune up	Average Power(dBm)
5.8G	802.11a	149	5745	6	8.00	7.84
		153	5765		8.00	7.68
		157	5785		8.00	7.78
		161	5805		8.00	7.83
		165	5825		8.00	7.82
	802.11n HT20	149	5745	MCS0	8.00	7.78
		153	5765		8.00	7.82
		157	5785		8.00	7.85
		161	5805		8.00	7.90
		165	5825		8.00	7.80
	802.11n HT40	151	5755	MCS0	7.00	6.90
		159	5795		7.00	6.91
	802.11ac VHT20	149	5745	MCS0	8.00	7.80
		153	5765		8.00	7.85
		157	5785		8.00	7.86
		161	5805		8.00	7.89
		165	5825		8.00	7.91
	802.11ac VHT40	151	5755	MCS0	7.00	6.85
		159	5795		7.00	6.83
	802.11ac VHT80	155	5775	MCS0	7.00	6.85

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	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
G01	GSM 850	GSM	190	Right Cheek	Down	1	33.5	32.51	-0.1	0.153	0.117	0.192
G02	GSM 850	GSM	190	Right Tilted	Down	1	33.5	32.51	0.02	0.097	0.088	0.122
G03	GSM 850	GSM	190	Left Cheek	Down	1	33.5	32.51	-0.09	0.139	0.107	0.175
G04	GSM 850	GSM	190	Left Tilted	Down	1	33.5	32.51	0.12	0.103	0.088	0.129
G05	GSM 850	GSM	190	Right Cheek	Down	2	33.5	32.51	0.06	0.144	0.102	0.181
G06	GSM 850	GSM	190	Right Cheek	Down	3	33.5	32.51	-0.02	0.164	0.126	0.206
G07	GSM 850	GSM	190	Right Cheek	Down	4	33.5	32.51	0.04	0.157	0.119	0.197
G09	GSM 850	GSM	190	Right Cheek	Up	1	32.5	31.67	0.02	0.367	0.219	0.444
G10	GSM 850	GSM	190	Right Tilted	Up	1	32.5	31.67	0.01	0.225	0.136	0.272
G11	GSM 850	GSM	190	Left Cheek	Up	1	32.5	31.67	-0.06	0.253	0.169	0.306
G12	GSM 850	GSM	190	Left Tilted	Up	1	32.5	31.67	0.09	0.188	0.116	0.228
G13	GSM 850	GSM	190	Right Cheek	Up	2	32.5	31.67	0.03	0.357	0.201	0.432
G14	GSM 850	GSM	190	Right Cheek	Up	3	32.5	31.67	-0.14	0.396	0.240	0.479
G15	GSM 850	GSM	190	Right Cheek	Up	4	32.5	31.67	0.04	0.361	0.215	0.437
G17	GSM 1900	GSM	661	Right Cheek	Down	1	30.5	29.06	0.01	0.059	0.035	0.082
G18	GSM 1900	GSM	661	Right Tilted	Down	1	30.5	29.06	0.03	0.031	0.017	0.043
G19	GSM 1900	GSM	661	Left Cheek	Down	1	30.5	29.06	0.04	0.057	0.035	0.079
G20	GSM 1900	GSM	661	Left Tilted	Down	1	30.5	29.06	-0.02	0.039	0.023	0.054
G21	GSM 1900	GSM	661	Right Cheek	Down	2	30.5	29.06	0.06	0.050	0.236	0.070
G22	GSM 1900	GSM	661	Right Cheek	Down	3	30.5	29.06	0.09	0.052	0.031	0.072
G23	GSM 1900	GSM	661	Right Cheek	Down	4	30.5	29.06	0.02	0.051	0.032	0.071
G25	GSM 1900	GSM	661	Right Cheek	Up	1	26	25.54	0.09	0.359	0.183	0.399
G26	GSM 1900	GSM	661	Right Tilted	Up	1	26	25.54	0.02	0.442	0.205	0.491
G27	GSM 1900	GSM	661	Left Cheek	Up	1	26	25.54	0.03	0.253	0.143	0.281
G28	GSM 1900	GSM	661	Left Tilted	Up	1	26	25.54	-0.01	0.311	0.163	0.346
G29	GSM 1900	GSM	661	Right Tilted	Up	2	26	25.54	-0.08	0.389	0.198	0.432
G30	GSM 1900	GSM	661	Right Tilted	Up	3	26	25.54	0.07	0.458	0.211	0.509
G31	GSM 1900	GSM	661	Right Tilted	Up	4	26	25.54	0.05	0.486	0.225	0.540

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	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
U01	UMTS B2	RMC12.2K	9400	Right Cheek	Down	1	24	22.91	0.01	0.134	0.081	0.172
U02	UMTS B2	RMC12.2K	9400	Right Tilted	Down	1	24	22.91	0.05	0.085	0.047	0.109
U03	UMTS B2	RMC12.2K	9400	Left Cheek	Down	1	24	22.91	0.02	0.120	0.073	0.154
U04	UMTS B2	RMC12.2K	9400	Left Tilted	Down	1	24	22.91	-0.06	0.110	0.067	0.141
U05	UMTS B2	RMC12.2K	9400	Right Cheek	Down	2	24	22.91	0.12	0.105	0.068	0.135
U06	UMTS B2	RMC12.2K	9400	Right Cheek	Down	3	24	22.91	0.01	0.119	0.071	0.153
U07	UMTS B2	RMC12.2K	9400	Right Cheek	Down	4	24	22.91	0.08	0.115	0.069	0.148
U09	UMTS B2	RMC12.2K	9400	Right Cheek	Up	1	17	16.18	0.05	0.455	0.229	0.550
U10	UMTS B2	RMC12.2K	9400	Right Tilted	Up	1	17	16.18	0.14	0.480	0.226	0.580
U11	UMTS B2	RMC12.2K	9400	Left Cheek	Up	1	17	16.18	0.02	0.281	0.169	0.339
U12	UMTS B2	RMC12.2K	9400	Left Tilted	Up	1	17	16.18	-0.09	0.377	0.200	0.455
U13	UMTS B2	RMC12.2K	9400	Right Tilted	Up	2	17	16.18	0.05	0.512	0.214	0.618
U14	UMTS B2	RMC12.2K	9400	Right Tilted	Up	3	17	16.18	-0.11	0.523	0.245	0.632
U15	UMTS B2	RMC12.2K	9400	Right Tilted	Up	4	17	16.18	0.03	0.542	0.251	0.655
U17	UMTS B4	RMC12.2K	1413	Right Cheek	Down	1	24	22.77	-0.01	0.095	0.060	0.126
U18	UMTS B4	RMC12.2K	1413	Right Tilted	Down	1	24	22.77	0.02	0.059	0.055	0.078
U19	UMTS B4	RMC12.2K	1413	Left Cheek	Down	1	24	22.77	0.04	0.085	0.051	0.113
U20	UMTS B4	RMC12.2K	1413	Left Tilted	Down	1	24	22.77	-0.03	0.061	0.057	0.081
U21	UMTS B4	RMC12.2K	1413	Right Cheek	Down	2	24	22.77	0.09	0.080	0.042	0.106
U22	UMTS B4	RMC12.2K	1413	Right Cheek	Down	3	24	22.77	0.12	0.081	0.050	0.108
U23	UMTS B4	RMC12.2K	1413	Right Cheek	Down	4	24	22.77	0.01	0.089	0.055	0.118
U25	UMTS B4	RMC12.2K	1413	Right Cheek	Up	1	19	18.1	0.09	0.506	0.263	0.623
U26	UMTS B4	RMC12.2K	1413	Right Tilted	Up	1	19	18.1	-0.07	0.562	0.268	0.691
U27	UMTS B4	RMC12.2K	1413	Left Cheek	Up	1	19	18.1	0.02	0.346	0.199	0.426
U28	UMTS B4	RMC12.2K	1413	Left Tilted	Up	1	19	18.1	0.05	0.375	0.206	0.461
U29	UMTS B4	RMC12.2K	1413	Right Tilted	Up	2	19	18.1	-0.01	0.578	0.278	0.711
U30	UMTS B4	RMC12.2K	1413	Right Tilted	Up	3	19	18.1	0.08	0.625	0.297	0.769
U31	UMTS B4	RMC12.2K	1413	Right Tilted	Up	4	19	18.1	0.12	0.615	0.283	0.757
U33	UMTS B5	RMC12.2K	4182	Right Cheek	Down	1	24	22.62	0.12	0.144	0.110	0.198
U34	UMTS B5	RMC12.2K	4182	Right Tilted	Down	1	24	22.62	0.01	0.087	0.068	0.120
U35	UMTS B5	RMC12.2K	4182	Left Cheek	Down	1	24	22.62	-0.08	0.125	0.096	0.172
U36	UMTS B5	RMC12.2K	4182	Left Tilted	Down	1	24	22.62	0.03	0.095	0.066	0.131
U37	UMTS B5	RMC12.2K	4182	Right Cheek	Down	2	24	22.62	0.15	0.157	0.121	0.216
U38	UMTS B5	RMC12.2K	4182	Right Cheek	Down	3	24	22.62	0.01	0.149	0.116	0.205
U39	UMTS B5	RMC12.2K	4182	Right Cheek	Down	4	24	22.62	0.12	0.150	0.106	0.206
U41	UMTS B5	RMC12.2K	4182	Right Cheek	Up	1	24	22.87	0.05	0.521	0.295	0.676
U42	UMTS B5	RMC12.2K	4182	Right Tilted	Up	1	24	22.87	0.02	0.414	0.225	0.537
U43	UMTS B5	RMC12.2K	4182	Left Cheek	Up	1	24	22.87	-0.08	0.284	0.192	0.368
U44	UMTS B5	RMC12.2K	4182	Left Tilted	Up	1	24	22.87	0.1	0.319	0.178	0.414
U45	UMTS B5	RMC12.2K	4182	Right Cheek	Up	2	24	22.87	-0.06	0.491	0.286	0.637
U46	UMTS B5	RMC12.2K	4182	Right Cheek	Up	3	24	22.87	0.08	0.495	0.286	0.642
U47	UMTS B5	RMC12.2K	4182	Right Cheek	Up	4	24	22.87	0.03	0.507	0.290	0.658

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	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L01	LTE B2	QPSK20M	18700	1	50	Right Cheek	Down	1	24	23.23	-0.01	0.124	0.078	0.148
L02	LTE B2	QPSK20M	18700	1	50	Right Tilted	Down	1	24	23.23	-0.06	0.092	0.041	0.110
L03	LTE B2	QPSK20M	18700	1	50	Left Cheek	Down	1	24	23.23	0.02	0.111	0.054	0.133
L04	LTE B2	QPSK20M	18700	1	50	Left Tilted	Down	1	24	23.23	0.09	0.094	0.045	0.113
L05	LTE B2	QPSK20M	19100	50	25	Right Cheek	Down	1	23	22.07	0.11	0.121	0.075	0.150
L06	LTE B2	QPSK20M	19100	50	25	Right Tilted	Down	1	23	22.07	0.06	0.094	0.043	0.117
L07	LTE B2	QPSK20M	19100	50	25	Left Cheek	Down	1	23	22.07	-0.03	0.106	0.052	0.131
L08	LTE B2	QPSK20M	19100	50	25	Left Tilted	Down	1	23	22.07	0.05	0.097	0.047	0.120
L09	LTE B2	QPSK20M	19100	50	25	Right Cheek	Down	2	23	22.07	-0.12	0.106	0.061	0.131
L10	LTE B2	QPSK20M	19100	50	25	Right Cheek	Down	3	23	22.07	0.2	0.118	0.073	0.146
L11	LTE B2	QPSK20M	19100	50	25	Right Cheek	Down	4	23	22.07	0.03	0.112	0.065	0.139
L13	LTE B2	QPSK20M	18700	1	50	Right Cheek	Up	1	17	16.82	0.02	0.486	0.234	0.507
L14	LTE B2	QPSK20M	18700	1	50	Right Tilted	Up	1	17	16.82	-0.08	0.485	0.232	0.506
L15	LTE B2	QPSK20M	18700	1	50	Left Cheek	Up	1	17	16.82	0.06	0.348	0.181	0.363
L16	LTE B2	QPSK20M	18700	1	50	Left Tilted	Up	1	17	16.82	0.04	0.421	0.206	0.439
L17	LTE B2	QPSK20M	19100	50	25	Right Cheek	Up	1	17	16.47	-0.03	0.487	0.234	0.551
L18	LTE B2	QPSK20M	19100	50	25	Right Tilted	Up	1	17	16.47	0.07	0.510	0.239	0.577
L19	LTE B2	QPSK20M	19100	50	25	Left Cheek	Up	1	17	16.47	0.01	0.338	0.185	0.382
L20	LTE B2	QPSK20M	19100	50	25	Left Tilted	Up	1	17	16.47	0.09	0.400	0.193	0.452
L21	LTE B2	QPSK20M	19100	50	25	Right Tilted	Up	2	17	16.47	0.11	0.604	0.278	0.683
L22	LTE B2	QPSK20M	19100	50	25	Right Tilted	Up	3	17	16.47	-0.03	0.568	0.241	0.642
L23	LTE B2	QPSK20M	19100	50	25	Right Tilted	Up	4	17	16.47	-0.12	0.562	0.256	0.635
L25	LTE B4	QPSK20M	20050	1	50	Right Cheek	Down	1	24	23.14	-0.08	0.097	0.061	0.119
L26	LTE B4	QPSK20M	20050	1	50	Right Tilted	Down	1	24	23.14	0.05	0.067	0.041	0.081
L27	LTE B4	QPSK20M	20050	1	50	Left Cheek	Down	1	24	23.14	-0.01	0.085	0.055	0.104
L28	LTE B4	QPSK20M	20050	1	50	Left Tilted	Down	1	24	23.14	0.12	0.077	0.046	0.094
L29	LTE B4	QPSK20M	20175	50	0	Right Cheek	Down	1	23	21.93	0.01	0.075	0.047	0.095
L30	LTE B4	QPSK20M	20175	50	0	Right Tilted	Down	1	23	21.93	0.09	0.059	0.036	0.075
L31	LTE B4	QPSK20M	20175	50	0	Left Cheek	Down	1	23	21.93	-0.16	0.069	0.045	0.089
L32	LTE B4	QPSK20M	20175	50	0	Left Tilted	Down	1	23	21.93	0.1	0.063	0.038	0.080
L33	LTE B4	QPSK20M	20050	1	50	Right Cheek	Down	2	24	23.14	0.09	0.081	0.041	0.099
L34	LTE B4	QPSK20M	20050	1	50	Right Cheek	Down	3	24	23.14	0.06	0.089	0.056	0.109
L35	LTE B4	QPSK20M	20050	1	50	Right Cheek	Down	4	24	23.14	0.07	0.079	0.050	0.096
L37	LTE B4	QPSK20M	20050	1	50	Right Cheek	Up	1	18	17.86	0.05	0.389	0.200	0.402
L38	LTE B4	QPSK20M	20050	1	50	Right Tilted	Up	1	18	17.86	0.14	0.437	0.209	0.451
L39	LTE B4	QPSK20M	20050	1	50	Left Cheek	Up	1	18	17.86	0.02	0.322	0.171	0.332
L40	LTE B4	QPSK20M	20050	1	50	Left Tilted	Up	1	18	17.86	-0.01	0.378	0.195	0.390
L41	LTE B4	QPSK20M	20175	50	25	Right Cheek	Up	1	18	17.33	-0.11	0.449	0.214	0.524
L42	LTE B4	QPSK20M	20175	50	25	Right Tilted	Up	1	18	17.33	0.06	0.464	0.221	0.541
L43	LTE B4	QPSK20M	20175	50	25	Left Cheek	Up	1	18	17.33	0.09	0.320	0.172	0.373
L44	LTE B4	QPSK20M	20175	50	25	Left Tilted	Up	1	18	17.33	0.04	0.417	0.207	0.486
L45	LTE B4	QPSK20M	20175	50	25	Right Tilted	Up	2	18	17.33	0.01	0.459	0.205	0.535
L46	LTE B4	QPSK20M	20175	50	25	Right Tilted	Up	3	18	17.33	0.06	0.515	0.244	0.601
L47	LTE B4	QPSK20M	20175	50	25	Right Tilted	Up	4	18	17.33	-0.08	0.501	0.239	0.584

Test No.	Band	Mode	Channel	RB	offset	Test Position	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L49	LTE B5	QPSK10M	20525	1	25	Right Cheek	Down	1	24	23.15	-0.03	0.150	0.116	0.183
L50	LTE B5	QPSK10M	20525	1	25	Right Tilted	Down	1	24	23.15	0	0.092	0.075	0.112
L51	LTE B5	QPSK10M	20525	1	25	Left Cheek	Down	1	24	23.15	-0.02	0.144	0.109	0.175
L52	LTE B5	QPSK10M	20525	1	25	Left Tilted	Down	1	24	23.15	0.01	0.095	0.071	0.116
L53	LTE B5	QPSK10M	20525	25	12	Right Cheek	Down	1	23	22.08	0.06	0.115	0.095	0.142
L54	LTE B5	QPSK10M	20525	25	12	Right Tilted	Down	1	23	22.08	-0.01	0.073	0.061	0.090
L55	LTE B5	QPSK10M	20525	25	12	Left Cheek	Down	1	23	22.08	0.09	0.113	0.085	0.140
L56	LTE B5	QPSK10M	20525	25	12	Left Tilted	Down	1	23	22.08	0.17	0.079	0.058	0.097
L57	LTE B5	QPSK10M	20525	1	25	Right Cheek	Down	2	24	23.15	0.07	0.157	0.122	0.191
L58	LTE B5	QPSK10M	20525	1	25	Right Cheek	Down	3	24	23.15	0.11	0.148	0.114	0.180
L59	LTE B5	QPSK10M	20525	1	25	Right Cheek	Down	4	24	23.15	0.17	0.130	0.101	0.158
L61	LTE B5	QPSK10M	20525	1	24	Right Cheek	Up	1	24	23.45	0.08	0.543	0.321	0.617
L62	LTE B5	QPSK10M	20525	1	24	Right Tilted	Up	1	24	23.45	0.01	0.413	0.256	0.469
L63	LTE B5	QPSK10M	20525	1	24	Left Cheek	Up	1	24	23.45	-0.03	0.321	0.215	0.365
L64	LTE B5	QPSK10M	20525	1	24	Left Tilted	Up	1	24	23.45	0.01	0.298	0.201	0.338
L65	LTE B5	QPSK10M	20600	25	0	Right Cheek	Up	1	23	22.34	-0.03	0.499	0.285	0.581
L66	LTE B5	QPSK10M	20600	25	0	Right Tilted	Up	1	23	22.34	0.18	0.359	0.226	0.418
L67	LTE B5	QPSK10M	20600	25	0	Left Cheek	Up	1	23	22.34	0.05	0.405	0.280	0.472
L68	LTE B5	QPSK10M	20600	25	0	Left Tilted	Up	1	23	22.34	-0.07	0.329	0.212	0.383
L69	LTE B5	QPSK10M	20525	1	24	Right Cheek	Up	2	24	23.45	0.06	0.689	0.402	0.782
L70	LTE B5	QPSK10M	20525	1	24	Right Cheek	Up	3	24	23.45	0.02	0.501	0.335	0.569
L71	LTE B5	QPSK10M	20525	1	24	Right Cheek	Up	4	24	23.45	0	0.520	0.338	0.591
L73	LTE B7	QPSK20M	20850	1	50	Right Cheek	Down	1	24	23.09	0.01	0.086	0.041	0.105
L74	LTE B7	QPSK20M	20850	1	50	Right Tilted	Down	1	24	23.09	0.05	0.046	0.024	0.056
L75	LTE B7	QPSK20M	20850	1	50	Left Cheek	Down	1	24	23.09	0.18	0.116	0.061	0.143
L76	LTE B7	QPSK20M	20850	1	50	Left Tilted	Down	1	24	23.09	-0.12	0.088	0.044	0.109
L77	LTE B7	QPSK20M	20850	50	25	Right Cheek	Down	1	23	22.06	0.06	0.056	0.031	0.069
L78	LTE B7	QPSK20M	20850	50	25	Right Tilted	Down	1	23	22.06	-0.02	0.043	0.022	0.053
L79	LTE B7	QPSK20M	20850	50	25	Left Cheek	Down	1	23	22.06	0.05	0.094	0.048	0.116
L80	LTE B7	QPSK20M	20850	50	25	Left Tilted	Down	1	23	22.06	0.03	0.075	0.037	0.093
L81	LTE B7	QPSK20M	20850	1	50	Left Cheek	Down	2	24	23.09	-0.06	0.107	0.558	0.132
L82	LTE B7	QPSK20M	20850	1	50	Left Cheek	Down	3	24	23.09	0.15	0.099	0.542	0.122
L83	LTE B7	QPSK20M	20850	1	50	Left Cheek	Down	4	24	23.09	0.03	0.105	0.055	0.129

Test No.	Band	Mode	Channel	RB	offset	Test Position	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L85	LTE B7	QPSK20M	20850	1	50	Right Cheek	Up	1	17	16.82	0.01	0.698	0.288	0.727
L86	LTE B7	QPSK20M	20850	1	50	Right Tilted	Up	1	17	16.82	-0.14	0.807	0.321	0.841
L87	LTE B7	QPSK20M	20850	1	50	Left Cheek	Up	1	17	16.82	0.06	0.212	0.101	0.221
L88	LTE B7	QPSK20M	20850	1	50	Left Tilted	Up	1	17	16.82	0.02	0.335	0.153	0.349
L89	LTE B7	QPSK20M	20850	50	25	Right Cheek	Up	1	17	16.46	0.09	0.783	0.316	0.887
L90	LTE B7	QPSK20M	20850	50	25	Right Tilted	Up	1	17	16.46	-0.03	0.809	0.325	0.916
L91	LTE B7	QPSK20M	20850	50	25	Left Cheek	Up	1	17	16.46	-0.11	0.307	0.146	0.348
L92	LTE B7	QPSK20M	20850	50	25	Left Tilted	Up	1	17	16.46	0.06	0.368	0.172	0.417
L240	LTE B7	QPSK20M	21100	1	50	Right Tilted	Up	1	17	16.71	0.08	0.775	0.313	0.828
L241	LTE B7	QPSK20M	21350	1	50	Right Tilted	Up	1	17	16.63	0.02	0.697	0.282	0.759
L242	LTE B7	QPSK20M	21100	50	25	Right Cheek	Up	1	17	16.37	0.03	0.751	0.306	0.869
L243	LTE B7	QPSK20M	21350	50	25	Right Cheek	Up	1	17	16.34	0.08	0.702	0.290	0.817
L244	LTE B7	QPSK20M	21100	50	25	Right Tilted	Up	1	17	16.37	0.09	0.778	0.314	0.900
L245	LTE B7	QPSK20M	21350	50	25	Right Tilted	Up	1	17	16.34	0	0.702	0.285	0.817
L246	LTE B7	QPSK20M	20850	100	0	Right Tilted	Up	1	17	16.43	0.03	0.831	0.321	0.948
L247	LTE B7	QPSK20M	20850	100	0	Right Cheek	Up	1	17	16.43	0.04	0.766	0.310	0.874
L248	LTE B7	QPSK20M	20850	100	0	Right Tilted	Up	2	17	16.43	0.07	0.856	0.321	0.977
L249	LTE B7	QPSK20M	20850	100	0	Right Tilted	Up	3	17	16.43	-0.01	0.902	0.343	1.029
L250	LTE B7	QPSK20M	20850	100	0	Right Tilted	Up	4	17	16.43	0.09	0.899	0.336	1.026
L251	LTE B7	QPSK20M	20850	100	0	Right Tilted (Repeated)	Up	3	17	16.43	0.09	0.886	0.302	1.011
L97	LTE B12	QPSK10M	23095	1	24	Right Cheek	Down	1	24	22.99	-0.06	0.097	0.077	0.123
L98	LTE B12	QPSK10M	23095	1	24	Right Tilted	Down	1	24	22.99	0.03	0.065	0.050	0.082
L99	LTE B12	QPSK10M	23095	1	24	Left Cheek	Down	1	24	22.99	-0.04	0.097	0.076	0.122
L100	LTE B12	QPSK10M	23095	1	24	Left Tilted	Down	1	24	22.99	0.07	0.068	0.048	0.085
L101	LTE B12	QPSK10M	23060	25	25	Right Cheek	Down	1	23	22.06	-0.19	0.075	0.060	0.093
L102	LTE B12	QPSK10M	23060	25	25	Right Tilted	Down	1	23	22.06	0.02	0.037	0.026	0.046
L103	LTE B12	QPSK10M	23060	25	25	Left Cheek	Down	1	23	22.06	0.03	0.076	0.051	0.094
L104	LTE B12	QPSK10M	23060	25	25	Left Tilted	Down	1	23	22.06	-0.06	0.057	0.040	0.071
L105	LTE B12	QPSK10M	23095	1	24	Right Cheek	Down	2	24	22.99	-0.14	0.101	0.079	0.127
L106	LTE B12	QPSK10M	23095	1	24	Right Cheek	Down	3	24	22.99	0.16	0.098	0.078	0.123
L107	LTE B12	QPSK10M	23095	1	24	Right Cheek	Down	4	24	22.99	0.08	0.099	0.078	0.125
L109	LTE B12	QPSK10M	23095	1	24	Right Cheek	Up	1	24	23.36	0.01	0.053	0.029	0.062
L110	LTE B12	QPSK10M	23095	1	24	Right Tilted	Up	1	24	23.36	0.17	0.050	0.030	0.058
L111	LTE B12	QPSK10M	23095	1	24	Left Cheek	Up	1	24	23.36	-0.02	0.033	0.023	0.038
L112	LTE B12	QPSK10M	23095	1	24	Left Tilted	Up	1	24	23.36	0.01	0.028	0.019	0.032
L113	LTE B12	QPSK10M	23060	25	25	Right Cheek	Up	1	23	22.37	0.07	0.048	0.026	0.055
L114	LTE B12	QPSK10M	23060	25	25	Right Tilted	Up	1	23	22.37	-0.05	0.046	0.023	0.053
L115	LTE B12	QPSK10M	23060	25	25	Left Cheek	Up	1	23	22.37	0.16	0.029	0.020	0.033
L116	LTE B12	QPSK10M	23060	25	25	Left Tilted	Up	1	23	22.37	0	0.024	0.016	0.028
L117	LTE B12	QPSK10M	23095	1	24	Right Cheek	Up	2	24	23.36	-0.06	0.049	0.023	0.057
L118	LTE B12	QPSK10M	23095	1	24	Right Cheek	Up	3	24	23.36	0.13	0.053	0.027	0.061
L119	LTE B12	QPSK10M	23095	1	24	Right Cheek	Up	4	24	23.36	0.15	0.052	0.024	0.060

Test No.	Band	Mode	Channel	RB	offset	Test Position	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L121	LTE B17	QPSK10M	23790	1	24	Right Cheek	Down	1	24	22.96	-0.01	0.096	0.076	0.122
L122	LTE B17	QPSK10M	23790	1	24	Right Tilted	Down	1	24	22.96	0.09	0.047	0.033	0.060
L123	LTE B17	QPSK10M	23790	1	24	Left Cheek	Down	1	24	22.96	0.04	0.094	0.070	0.120
L124	LTE B17	QPSK10M	23790	1	24	Left Tilted	Down	1	24	22.96	-0.03	0.049	0.035	0.062
L125	LTE B17	QPSK10M	23780	25	12	Right Cheek	Down	1	23	21.81	-0.06	0.074	0.059	0.098
L126	LTE B17	QPSK10M	23780	25	12	Right Tilted	Down	1	23	21.81	0.09	0.038	0.027	0.050
L127	LTE B17	QPSK10M	23780	25	12	Left Cheek	Down	1	23	21.81	0.04	0.040	0.031	0.052
L128	LTE B17	QPSK10M	23780	25	12	Left Tilted	Down	1	23	21.81	0.16	0.039	0.028	0.051
L129	LTE B17	QPSK10M	23790	1	24	Right Cheek	Down	2	24	22.96	-0.09	0.103	0.081	0.131
L130	LTE B17	QPSK10M	23790	1	24	Right Cheek	Down	3	24	22.96	-0.13	0.097	0.078	0.123
L131	LTE B17	QPSK10M	23790	1	24	Right Cheek	Down	4	24	22.96	0.09	0.099	0.079	0.125
L133	LTE B17	QPSK10M	23790	1	24	Right Cheek	Up	1	24	23.37	-0.09	0.065	0.035	0.075
L134	LTE B17	QPSK10M	23790	1	24	Right Tilted	Up	1	24	23.37	0.13	0.049	0.030	0.056
L135	LTE B17	QPSK10M	23790	1	24	Left Cheek	Up	1	24	23.37	-0.08	0.044	0.029	0.051
L136	LTE B17	QPSK10M	23790	1	24	Left Tilted	Up	1	24	23.37	-0.08	0.042	0.027	0.049
L137	LTE B17	QPSK10M	23790	25	12	Right Cheek	Up	1	23	22.24	-0.04	0.062	0.035	0.073
L138	LTE B17	QPSK10M	23790	25	12	Right Tilted	Up	1	23	22.24	-0.05	0.048	0.027	0.057
L139	LTE B17	QPSK10M	23790	25	12	Left Cheek	Up	1	23	22.24	0.06	0.042	0.027	0.050
L140	LTE B17	QPSK10M	23790	25	12	Left Tilted	Up	1	23	22.24	-0.13	0.041	0.026	0.049
L141	LTE B17	QPSK10M	23790	1	24	Right Cheek	Up	2	24	23.37	0.06	0.062	0.035	0.071
L142	LTE B17	QPSK10M	23790	1	24	Right Cheek	Up	3	24	23.37	0.05	0.062	0.034	0.072
L143	LTE B17	QPSK10M	23790	1	24	Right Cheek	Up	4	24	23.37	-0.01	0.064	0.035	0.073
L145	LTE B26	QPSK15M	26865	1	37	Right Cheek	Down	1	24	23.16	0.1	0.161	0.123	0.195
L146	LTE B26	QPSK15M	26865	1	37	Right Tilted	Down	1	24	23.16	-0.02	0.102	0.079	0.124
L147	LTE B26	QPSK15M	26865	1	37	Left Cheek	Down	1	24	23.16	0.05	0.137	0.105	0.166
L148	LTE B26	QPSK15M	26865	1	37	Left Tilted	Down	1	24	23.16	0.06	0.103	0.072	0.125
L149	LTE B26	QPSK15M	26865	36	0	Right Cheek	Down	1	23	22.07	0.12	0.102	0.091	0.126
L150	LTE B26	QPSK15M	26865	36	0	Right Tilted	Down	1	23	22.07	0.01	0.077	0.058	0.095
L151	LTE B26	QPSK15M	26865	36	0	Left Cheek	Down	1	23	22.07	-0.03	0.135	0.090	0.167
L152	LTE B26	QPSK15M	26865	36	0	Left Tilted	Down	1	23	22.07	0.02	0.081	0.057	0.100
L153	LTE B26	QPSK15M	26865	1	37	Right Cheek	Down	2	24	23.16	0.09	0.145	0.105	0.176
L154	LTE B26	QPSK15M	26865	1	37	Right Cheek	Down	3	24	23.16	0.07	0.154	0.110	0.187
L155	LTE B26	QPSK15M	26865	1	37	Right Cheek	Down	4	24	23.16	-0.12	0.142	0.102	0.172
L157	LTE B26	QPSK15M	26865	1	37	Right Cheek	Up	1	24	23.46	0.03	0.435	0.259	0.493
L158	LTE B26	QPSK15M	26865	1	37	Right Tilted	Up	1	24	23.46	0.01	0.307	0.178	0.348
L159	LTE B26	QPSK15M	26865	1	37	Left Cheek	Up	1	24	23.46	0	0.325	0.202	0.368
L160	LTE B26	QPSK15M	26865	1	37	Left Tilted	Up	1	24	23.46	0.14	0.359	0.205	0.407
L161	LTE B26	QPSK15M	26965	36	0	Right Cheek	Up	1	23	22.37	0.07	0.462	0.269	0.534
L162	LTE B26	QPSK15M	26965	36	0	Right Tilted	Up	1	23	22.37	0	0.283	0.163	0.327
L163	LTE B26	QPSK15M	26965	36	0	Left Cheek	Up	1	23	22.37	-0.1	0.295	0.183	0.341
L164	LTE B26	QPSK15M	26965	36	0	Left Tilted	Up	1	23	22.37	0.06	0.263	0.153	0.304
L165	LTE B26	QPSK15M	26965	36	0	Right Cheek	Up	2	23	22.37	-0.18	0.560	0.323	0.647
L166	LTE B26	QPSK15M	26965	36	0	Right Cheek	Up	3	23	22.37	0.11	0.434	0.258	0.502
L167	LTE B26	QPSK15M	26965	36	0	Right Cheek	Up	4	23	22.37	0.17	0.394	0.233	0.455

Test No.	Band	Mode	Channel	RB	offset	Test Position	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L169	LTE B38	QPSK20M	38000	1	50	Right Cheek	Down	1	23.5	22.86	0.02	0.058	0.033	0.067
L170	LTE B38	QPSK20M	38000	1	50	Right Tilted	Down	1	23.5	22.86	-0.06	0.040	0.022	0.047
L171	LTE B38	QPSK20M	38000	1	50	Left Cheek	Down	1	23.5	22.86	0.04	0.106	0.055	0.123
L172	LTE B38	QPSK20M	38000	1	50	Left Tilted	Down	1	23.5	22.86	0.01	0.070	0.033	0.081
L173	LTE B38	QPSK20M	38000	50	25	Right Cheek	Down	1	22.5	21.80	0.12	0.046	0.023	0.054
L174	LTE B38	QPSK20M	38000	50	25	Right Tilted	Down	1	22.5	21.80	0.03	0.034	0.018	0.039
L175	LTE B38	QPSK20M	38000	50	25	Left Cheek	Down	1	22.5	21.80	0.01	0.085	0.043	0.100
L176	LTE B38	QPSK20M	38000	50	25	Left Tilted	Down	1	22.5	21.80	-0.04	0.065	0.033	0.077
L177	LTE B38	QPSK20M	38000	1	50	Left Cheek	Down	2	23.5	22.86	0.09	0.083	0.043	0.096
L178	LTE B38	QPSK20M	38000	1	50	Left Cheek	Down	3	23.5	22.86	0.07	0.095	0.054	0.111
L179	LTE B38	QPSK20M	38000	1	50	Left Cheek	Down	4	23.5	22.86	0.05	0.090	0.051	0.104
L181	LTE B38	QPSK20M	38000	1	50	Right Cheek	Up	1	18.5	18.46	0.02	0.510	0.222	0.515
L182	LTE B38	QPSK20M	38000	1	50	Right Tilted	Up	1	18.5	18.46	0.12	0.641	0.259	0.647
L183	LTE B38	QPSK20M	38000	1	50	Left Cheek	Up	1	18.5	18.46	0.01	0.206	0.099	0.208
L184	LTE B38	QPSK20M	38000	1	50	Left Tilted	Up	1	18.5	18.46	-0.03	0.285	0.129	0.288
L185	LTE B38	QPSK20M	37850	50	25	Right Cheek	Up	1	18.5	18.05	0.05	0.506	0.212	0.562
L186	LTE B38	QPSK20M	37850	50	25	Right Tilted	Up	1	18.5	18.05	0.01	0.674	0.265	0.748
L187	LTE B38	QPSK20M	37850	50	25	Left Cheek	Up	1	18.5	18.05	-0.09	0.211	0.093	0.234
L188	LTE B38	QPSK20M	37850	50	25	Left Tilted	Up	1	18.5	18.05	0.04	0.281	0.129	0.312
L192	LTE B38	QPSK20M	38000	50	0	Right Tilted	Up	2	18.5	17.99	0.01	0.689	0.215	0.774
L193	LTE B38	QPSK20M	38000	50	0	Right Tilted	Up	3	18.5	17.99	-0.09	0.704	0.248	0.791
L194	LTE B38	QPSK20M	38000	50	0	Right Tilted	Up	4	18.5	17.99	0.04	0.710	0.267	0.798
L195	LTE B38	QPSK20M	38000	50	0	Right Tilted (Repeated)	Up	4	18.5	17.99	0.09	0.706	0.261	0.793
L201	LTE B41	QPSK20M	40840	1	50	Right Cheek	Down	1	23.5	22.93	0.05	0.075	0.033	0.085
L202	LTE B41	QPSK20M	40840	1	50	Right Tilted	Down	1	23.5	22.93	-0.02	0.055	0.029	0.063
L203	LTE B41	QPSK20M	40840	1	50	Left Cheek	Down	1	23.5	22.93	0.05	0.141	0.071	0.161
L204	LTE B41	QPSK20M	40840	1	50	Left Tilted	Down	1	23.5	22.93	0.03	0.093	0.046	0.106
L205	LTE B41	QPSK20M	40440	50	50	Right Cheek	Down	1	22.5	21.88	0.01	0.052	0.023	0.060
L206	LTE B41	QPSK20M	40440	50	50	Right Tilted	Down	1	22.5	21.88	0.07	0.040	0.020	0.046
L207	LTE B41	QPSK20M	40440	50	50	Left Cheek	Down	1	22.5	21.88	0.08	0.085	0.043	0.098
L208	LTE B41	QPSK20M	40440	50	50	Left Tilted	Down	1	22.5	21.88	0.12	0.061	0.030	0.070
L209	LTE B41	QPSK20M	40840	1	50	Left Cheek	Down	2	23.5	22.93	-0.06	0.095	0.031	0.109
L210	LTE B41	QPSK20M	40840	1	50	Left Cheek	Down	3	23.5	22.93	0.01	0.102	0.046	0.116
L211	LTE B41	QPSK20M	40840	1	50	Left Cheek	Down	4	23.5	22.93	0.09	0.116	0.059	0.132
L220	LTE B41	QPSK20M	40140	1	50	Right Cheek	Up	1	18.5	18.44	-0.02	0.570	0.241	0.578
L221	LTE B41	QPSK20M	40140	1	50	Right Tilted	Up	1	18.5	18.44	0.19	0.682	0.269	0.691
L222	LTE B41	QPSK20M	40140	1	50	Left Cheek	Up	1	18.5	18.44	0.03	0.207	0.100	0.210
L223	LTE B41	QPSK20M	40140	1	50	Left Tilted	Up	1	18.5	18.44	0.09	0.261	0.124	0.265
L224	LTE B41	QPSK20M	40140	50	50	Right Cheek	Up	1	18.5	18.07	-0.05	0.550	0.233	0.607
L225	LTE B41	QPSK20M	40140	50	50	Right Tilted	Up	1	18.5	18.07	0.03	0.659	0.259	0.728
L226	LTE B41	QPSK20M	40140	50	50	Left Cheek	Up	1	18.5	18.07	0.12	0.218	0.101	0.241
L227	LTE B41	QPSK20M	40140	50	50	Left Tilted	Up	1	18.5	18.07	-0.03	0.257	0.127	0.284
L228	LTE B41	QPSK20M	40140	50	50	Right Tilted	Up	2	18.5	18.07	0.09	0.623	0.246	0.688
L229	LTE B41	QPSK20M	40140	50	50	Right Tilted	Up	3	18.5	18.07	0	0.658	0.257	0.727
L230	LTE B41	QPSK20M	40140	50	50	Right Tilted	Up	4	18.5	18.07	0.07	0.645	0.244	0.712

Test No.	Band	Mode	Channel	RB	offset	Test Position	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L240	LTE B66	QPSK20M	132072	1	50	Right Cheek	Down	1	24	23.17	0.05	0.094	0.059	0.114
L241	LTE B66	QPSK20M	132072	1	50	Right Tilted	Down	1	24	23.17	0.03	0.073	0.045	0.089
L242	LTE B66	QPSK20M	132072	1	50	Left Cheek	Down	1	24	23.17	-0.06	0.083	0.053	0.100
L243	LTE B66	QPSK20M	132072	1	50	Left Tilted	Down	1	24	23.17	0.07	0.080	0.050	0.097
L244	LTE B66	QPSK20M	132272	50	25	Right Cheek	Down	1	23	22.00	0.01	0.079	0.049	0.099
L245	LTE B66	QPSK20M	132272	50	25	Right Tilted	Down	1	23	22.00	-0.12	0.060	0.035	0.075
L246	LTE B66	QPSK20M	132272	50	25	Left Cheek	Down	1	23	22.00	0.05	0.082	0.052	0.103
L247	LTE B66	QPSK20M	132272	50	25	Left Tilted	Down	1	23	22.00	0.08	0.061	0.037	0.077
L248	LTE B66	QPSK20M	132072	1	50	Right Cheek	Down	2	24	23.17	0.01	0.089	0.054	0.108
L249	LTE B66	QPSK20M	132072	1	50	Right Cheek	Down	3	24	23.17	0.07	0.080	0.050	0.097
L250	LTE B66	QPSK20M	132072	1	50	Right Cheek	Down	4	24	23.17	0.13	0.082	0.051	0.099
L260	LTE B66	QPSK20M	132472	1	50	Right Cheek	Up	1	20	19.87	0.08	0.811	0.414	0.836
L261	LTE B66	QPSK20M	132472	1	50	Right Tilted	Up	1	20	19.87	0.15	0.915	0.436	0.943
L262	LTE B66	QPSK20M	132472	1	50	Left Cheek	Up	1	20	19.87	-0.12	0.645	0.369	0.665
L263	LTE B66	QPSK20M	132472	1	50	Left Tilted	Up	1	20	19.87	0.03	0.765	0.387	0.789
L264	LTE B66	QPSK20M	132272	50	25	Right Cheek	Up	1	20	19.75	0.01	0.743	0.384	0.787
L265	LTE B66	QPSK20M	132272	50	25	Right Tilted	Up	1	20	19.75	0.03	0.867	0.414	0.919
L266	LTE B66	QPSK20M	132272	50	25	Left Cheek	Up	1	20	19.75	0.16	0.626	0.362	0.663
L267	LTE B66	QPSK20M	132272	50	25	Left Tilted	Up	1	20	19.75	-0.01	0.753	0.406	0.798
L268	LTE B66	QPSK20M	132072	1	50	Right Cheek	Up	1	20	19.83	0.02	0.686	0.350	0.714
L269	LTE B66	QPSK20M	132272	1	50	Right Cheek	Up	1	20	19.81	0.06	0.766	0.390	0.801
L270	LTE B66	QPSK20M	132072	1	50	Right Tilted	Up	1	20	19.83	-0.13	0.851	0.409	0.885
L271	LTE B66	QPSK20M	132272	1	50	Right Tilted	Up	1	20	19.81	0.09	0.840	0.401	0.878
L274	LTE B66	QPSK20M	132072	50	25	Right Tilted	Up	1	20	19.71	-0.06	0.853	0.409	0.911
L275	LTE B66	QPSK20M	132472	50	25	Right Tilted	Up	1	20	19.73	0.03	0.890	0.423	0.947
L276	LTE B66	QPSK20M	132272	100	0	Right Cheek	Up	1	20	19.73	0.01	0.861	0.423	0.916
L277	LTE B66	QPSK20M	132272	100	0	Right Tilted	Up	1	20	19.73	0.04	0.827	0.394	0.880
L278	LTE B66	QPSK20M	132472	50	25	Right Tilted	Up	2	20	19.73	0.18	0.887	0.427	0.944
L279	LTE B66	QPSK20M	132472	50	25	Right Tilted	Up	3	20	19.73	-0.01	0.879	0.423	0.935
L280	LTE B66	QPSK20M	132472	50	25	Right Tilted	Up	4	20	19.73	0.06	0.867	0.429	0.922
L281	LTE B66	QPSK20M	132472	50	25	Right Tilted (Repeated)	Up	1	20	19.73	0.07	0.884	0.413	0.940

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

4. Head SAR test results of 2.4G WiFi

WiFi only

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
W01	802.11b	6	Right Cheek	1	1	18	16.77	0.02	0.522	0.252	0.693
W02	802.11b	6	Right Tilted	1	1	18	16.77	0.07	0.495	0.226	0.657
W03	802.11b	6	Left Cheek	1	1	18	16.77	-0.16	0.917	0.420	1.217
W04	802.11b	6	Left Tilted	1	1	18	16.77	0.06	0.689	0.293	0.915
W63	802.11b	1	Left Cheek	1	1	15	14.86	-0.03	0.666	0.295	0.688
W64	802.11b	1	Left Tilted	1	1	15	14.86	0.11	0.474	0.199	0.490
W06	802.11b	6	Left Cheek	2	1	18	16.77	0.02	0.845	0.377	1.122
W07	802.11b	6	Left Cheek	3	1	18	16.77	-0.08	0.805	0.371	1.069
W08	802.11b	6	Left Cheek	4	1	18	16.77	0.19	0.817	0.384	1.084
W09	802.11b	6	Left Cheek (Repeated)	1	1	18	16.77	-0.04	0.868	0.398	1.152

WiFi Antenna Simultaneous with 2G&3G&4G

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
W32	802.11b	1	Right Cheek	1	1	14	13.75	0.11	0.115	0.044	0.122
W33	802.11b	1	Right Tilted	1	1	14	13.75	-0.04	0.209	0.106	0.221
W34	802.11b	1	Left Cheek	1	1	14	13.75	0.03	0.410	0.187	0.434
W35	802.11b	1	Left Tilted	1	1	14	13.75	0.05	0.336	0.141	0.356
W36	802.11b	1	Left Cheek	2	1	14	13.75	0.06	0.389	0.164	0.412
W37	802.11b	1	Left Cheek	3	1	14	13.75	-0.12	0.402	0.175	0.426
W38	802.11b	1	Left Cheek	4	1	14	13.75	0.08	0.376	0.139	0.398

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)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
W90	BT DH5	0	Right Cheek	1	1	11	10.09	-0.07	0.132	0.064	0.163
W91	BT DH5	0	Right Tilted	1	1	11	10.09	0.01	0.137	0.060	0.169
W92	BT DH5	0	Left Cheek	1	1	11	10.09	0	0.235	0.104	0.290
W93	BT DH5	0	Left Tilted	1	1	11	10.09	-0.08	0.194	0.078	0.239
W94	BT DH5	0	Left Cheek	2	1	11	10.09	0.05	0.243	0.109	0.300
W95	BT DH5	0	Left Cheek	3	1	11	10.09	0.02	0.237	0.103	0.292
W96	BT DH5	0	Left Cheek	4	1	11	10.09	0.1	0.228	0.099	0.281

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

6. Head SAR test results of 5G WiFi

WiFi only

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
W11	802.11a	52	Right Cheek	1	6	13	11.71	0.02	0.398	0.088	0.536
W12	802.11a	52	Right Tilted	1	6	13	11.71	-0.05	0.479	0.132	0.645
W13	802.11a	52	Left Cheek	1	6	13	11.71	0.07	0.399	0.110	0.537
W14	802.11a	52	Left Tilted	1	6	13	11.71	0.19	0.563	0.140	0.758
W15	802.11a	52	Left Tilted	2	6	13	11.71	0.01	0.589	0.143	0.793
W16	802.11a	52	Left Tilted	3	6	13	11.71	0.03	0.616	0.156	0.829
W17	802.11a	52	Left Tilted	4	6	13	11.71	-0.19	0.625	0.159	0.841
W18	802.11a	52	Left Tilted (Repeated)	4	6	13	11.71	-0.11	0.609	0.146	0.820
W20	802.11a	108	Right Cheek	1	6	13	11.79	-0.01	0.377	0.113	0.498
W21	802.11a	108	Right Tilted	1	6	13	11.79	0.04	0.527	0.154	0.696
W22	802.11a	108	Left Cheek	1	6	13	11.79	-0.05	0.557	0.146	0.736
W23	802.11a	108	Left Tilted	1	6	13	11.79	-0.05	0.824	0.194	1.089
W24	802.11a	104	Left Tilted	1	6	13	11.78	0.01	0.806	0.187	1.067
W25	802.11a	108	Left Tilted	2	6	13	11.79	0.12	0.802	0.182	1.060
W26	802.11a	108	Left Tilted	3	6	13	11.79	-0.08	0.779	0.196	1.029
W27	802.11a	108	Left Tilted	4	6	13	11.79	0.03	0.781	0.176	1.032
W28	802.11a	108	Left Tilted (Repeated)	4	6	13	11.79	0.02	0.803	0.184	1.061
W30	802.11a	149	Right Cheek	1	6	11	9.89	0.06	0.187	0.060	0.241
W31	802.11a	149	Right Tilted	1	6	11	9.89	-0.01	0.349	0.097	0.451
W32	802.11a	149	Left Cheek	1	6	11	9.89	0.12	0.324	0.090	0.418
W33	802.11a	149	Left Tilted	1	6	11	9.89	-0.05	0.582	0.128	0.751
W34	802.11a	149	Left Tilted	2	6	11	9.89	0.03	0.531	0.124	0.686
W35	802.11a	149	Left Tilted	3	6	11	9.89	-0.18	0.524	0.117	0.677
W36	802.11a	149	Left Tilted	4	6	11	9.89	0.09	0.563	0.125	0.727

WiFi Antenna Simultaneous with 2G&3G&4G

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
W40	802.11a	52	Right Cheek	1	6	10	9.65	0.02	0.152	0.045	0.165
W41	802.11a	52	Right Tilted	1	6	10	9.65	0.08	0.226	0.063	0.245
W42	802.11a	52	Left Cheek	1	6	10	9.65	-0.02	0.281	0.072	0.305
W43	802.11a	52	Left Tilted	1	6	10	9.65	-0.05	0.377	0.089	0.409
W44	802.11a	52	Left Tilted	2	6	10	9.65	-0.06	0.346	0.079	0.375
W45	802.11a	52	Left Tilted	3	6	10	9.65	0.11	0.309	0.068	0.335
W46	802.11a	52	Left Tilted	4	6	10	9.65	0.07	0.373	0.076	0.404
W48	802.11a	108	Right Cheek	1	6	9	8.28	0.01	0.128	0.037	0.151
W49	802.11a	108	Right Tilted	1	6	9	8.28	0.01	0.182	0.042	0.215
W50	802.11a	108	Left Cheek	1	6	9	8.28	0.16	0.200	0.053	0.236
W51	802.11a	108	Left Tilted	1	6	9	8.28	-0.05	0.396	0.088	0.467
W52	802.11a	108	Left Tilted	2	6	9	8.28	0.09	0.348	0.070	0.411
W53	802.11a	108	Left Tilted	3	6	9	8.28	-0.12	0.325	0.059	0.384
W54	802.11a	108	Left Tilted	4	6	9	8.28	0.03	0.387	0.081	0.457
W56	802.11a	149	Right Cheek	1	6	8	7.84	-0.08	0.143	0.042	0.148
W57	802.11a	149	Right Tilted	1	6	8	7.84	0	0.193	0.047	0.200
W58	802.11a	149	Left Cheek	1	6	8	7.84	-0.02	0.203	0.053	0.211
W59	802.11a	149	Left Tilted	1	6	8	7.84	0.01	0.385	0.082	0.399
W60	802.11a	149	Left Tilted	2	6	8	7.84	0.07	0.371	0.071	0.385
W61	802.11a	149	Left Tilted	3	6	8	7.84	0.08	0.309	0.046	0.321
W62	802.11a	149	Left Tilted	4	6	8	7.84	0.14	0.356	0.065	0.369

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	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
G32	GSM 850	GSM	190	Front Face	1.5	Down	1	32.5	31.75	-0.02	0.099	0.076	0.118
G33	GSM 850	GSM	190	Rear Face	1.5	Down	1	32.5	31.75	-0.03	0.149	0.113	0.177
G34	GSM 850	GSM	190	Rear Face	1.5	Down	2	32.5	31.75	0.01	0.139	0.102	0.165
G35	GSM 850	GSM	190	Rear Face	1.5	Down	3	32.5	31.75	-0.05	0.142	0.108	0.169
G36	GSM 850	GSM	190	Rear Face	1.5	Down	4	32.5	31.75	0	0.132	0.098	0.157
G47	GSM 850	GSM	190	Front Face	1.5	Up	1	33.5	32.59	0	0.061	0.046	0.076
G48	GSM 850	GSM	190	Rear Face	1.5	Up	1	33.5	32.59	-0.06	0.081	0.061	0.099
G49	GSM 850	GSM	190	Rear Face	1.5	Up	2	33.5	32.59	0.12	0.075	0.057	0.093
G50	GSM 850	GSM	190	Rear Face	1.5	Up	3	33.5	32.59	0.04	0.084	0.067	0.103
G51	GSM 850	GSM	190	Rear Face	1.5	Up	4	33.5	32.59	-0.18	0.092	0.060	0.113
G61	GSM 1900	GSM	661	Front Face	1.5	Down	1	28.5	27.59	0.08	0.134	0.082	0.165
G62	GSM 1900	GSM	661	Rear Face	1.5	Down	1	28.5	27.59	0	0.280	0.166	0.345
G63	GSM 1900	GSM	661	Rear Face	1.5	Down	2	28.5	27.59	0.02	0.215	0.112	0.265
G64	GSM 1900	GSM	661	Rear Face	1.5	Down	3	28.5	27.59	0.18	0.210	0.124	0.259
G65	GSM 1900	GSM	661	Rear Face	1.5	Down	4	28.5	27.59	-0.01	0.209	0.121	0.258
G76	GSM 1900	GSM	661	Front Face	1.5	Up	1	29	28.42	0	0.100	0.057	0.114
G77	GSM 1900	GSM	661	Rear Face	1.5	Up	1	29	28.42	0.07	0.151	0.085	0.173
G78	GSM 1900	GSM	661	Rear Face	1.5	Up	2	29	28.42	0.03	0.149	0.084	0.170
G79	GSM 1900	GSM	661	Rear Face	1.5	Up	3	29	28.42	0.12	0.157	0.087	0.179
G80	GSM 1900	GSM	661	Rear Face	1.5	Up	4	29	28.42	-0.1	0.145	0.082	0.166

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	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
U48	UMTS B2	RMC12.2K	9400	Front Face	1.5	Down	1	20.5	19.38	0.01	0.104	0.064	0.135
U49	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Down	1	20.5	19.38	0.09	0.221	0.131	0.286
U50	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Down	2	20.5	19.38	0.03	0.214	0.128	0.277
U51	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Down	3	20.5	19.38	-0.03	0.207	0.122	0.268
U52	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Down	4	20.5	19.38	0	0.210	0.124	0.272
U63	UMTS B2	RMC12.2K	9400	Front Face	1.5	Up	1	20.5	19.76	0.01	0.139	0.080	0.165
U64	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Up	1	20.5	19.76	0.15	0.200	0.112	0.237
U65	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Up	2	20.5	19.76	-0.05	0.197	0.108	0.234
U66	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Up	3	20.5	19.76	0.01	0.202	0.112	0.240
U67	UMTS B2	RMC12.2K	9400	Rear Face	1.5	Up	4	20.5	19.76	0.14	0.188	0.107	0.223
U77	UMTS B4	RMC12.2K	1413	Front Face	1.5	Down	1	21	19.75	0.03	0.088	0.056	0.117
U78	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Down	1	21	19.75	0.07	0.256	0.153	0.341
U79	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Down	2	21	19.75	0.12	0.251	0.151	0.335
U80	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Down	3	21	19.75	0.01	0.245	0.147	0.327
U81	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Down	4	21	19.75	-0.05	0.248	0.149	0.331
U92	UMTS B4	RMC12.2K	1413	Front Face	1.5	Up	1	21	20.14	0.06	0.107	0.063	0.130
U93	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Up	1	21	20.14	0.07	0.130	0.076	0.158
U94	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Up	2	21	20.14	0.02	0.134	0.077	0.163
U95	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Up	3	21	20.14	-0.05	0.129	0.071	0.157
U96	UMTS B4	RMC12.2K	1413	Rear Face	1.5	Up	4	21	20.14	0.16	0.140	0.081	0.171
U106	UMTS B5	RMC12.2K	4182	Front Face	1.5	Down	1	24	22.62	0.12	0.112	0.116	0.154
U107	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Down	1	24	22.62	-0.1	0.161	0.122	0.221
U108	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Down	2	24	22.62	0.06	0.149	0.151	0.205
U109	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Down	3	24	22.62	-0.01	0.183	0.138	0.251
U110	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Down	4	24	22.62	0.03	0.178	0.121	0.245
U121	UMTS B5	RMC12.2K	4182	Front Face	1.5	Up	1	24	22.87	-0.02	0.056	0.043	0.073
U122	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Up	1	24	22.87	-0.09	0.076	0.058	0.098
U123	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Up	2	24	22.87	0.01	0.070	0.052	0.091
U124	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Up	3	24	22.87	-0.03	0.075	0.057	0.097
U125	UMTS B5	RMC12.2K	4182	Rear Face	1.5	Up	4	24	22.87	0	0.065	0.045	0.085

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	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L239	LTE B2	QPSK20M	18700	1	50	Front Face	1.5	Down	1	20.5	20.04	0.06	0.116	0.073	0.129
L240	LTE B2	QPSK20M	18700	1	50	Rear Face	1.5	Down	1	20.5	20.04	-0.19	0.245	0.145	0.273
L241	LTE B2	QPSK20M	19100	50	25	Front Face	1.5	Down	1	20.5	19.72	0.13	0.121	0.075	0.145
L242	LTE B2	QPSK20M	19100	50	25	Rear Face	1.5	Down	1	20.5	19.72	0.09	0.265	0.155	0.317
L243	LTE B2	QPSK20M	19100	50	25	Rear Face	1.5	Down	2	20.5	19.72	0.03	0.245	0.136	0.293
L244	LTE B2	QPSK20M	19100	50	25	Rear Face	1.5	Down	3	20.5	19.72	0.06	0.228	0.129	0.273
L245	LTE B2	QPSK20M	19100	50	25	Rear Face	1.5	Down	4	20.5	19.72	-0.02	0.236	0.132	0.282
L261	LTE B2	QPSK20M	18700	1	50	Front Face	1.5	Up	1	20.5	20.35	0.01	0.143	0.082	0.148
L262	LTE B2	QPSK20M	18700	1	50	Rear Face	1.5	Up	1	20.5	20.35	0.11	0.202	0.113	0.209
L263	LTE B2	QPSK20M	19100	50	25	Front Face	1.5	Up	1	20.5	20.25	-0.12	0.163	0.093	0.173
L264	LTE B2	QPSK20M	19100	50	25	Rear Face	1.5	Up	1	20.5	20.25	0.13	0.213	0.119	0.225
L265	LTE B2	QPSK20M	19100	50	25	Rear Face	1.5	Up	2	20.5	20.25	0.06	0.207	0.111	0.219
L266	LTE B2	QPSK20M	19100	50	25	Rear Face	1.5	Up	3	20.5	20.25	0.09	0.209	0.115	0.221
L267	LTE B2	QPSK20M	19100	50	25	Rear Face	1.5	Up	4	20.5	20.25	0.04	0.212	0.119	0.224
L281	LTE B4	QPSK20M	20050	1	50	Front Face	1.5	Down	1	21	20.28	0.12	0.090	0.057	0.106
L282	LTE B4	QPSK20M	20050	1	50	Rear Face	1.5	Down	1	21	20.28	0.02	0.246	0.149	0.290
L283	LTE B4	QPSK20M	20175	50	0	Front Face	1.5	Down	1	21	19.97	-0.05	0.088	0.056	0.111
L284	LTE B4	QPSK20M	20175	50	0	Rear Face	1.5	Down	1	21	19.97	0.09	0.252	0.151	0.319
L285	LTE B4	QPSK20M	20175	50	0	Rear Face	1.5	Down	2	21	19.97	0	0.291	0.175	0.369
L286	LTE B4	QPSK20M	20175	50	0	Rear Face	1.5	Down	3	21	19.97	-0.13	0.272	0.161	0.344
L287	LTE B4	QPSK20M	20175	50	0	Rear Face	1.5	Down	4	21	19.97	0.06	0.267	0.159	0.338
L304	LTE B4	QPSK20M	20050	1	50	Front Face	1.5	Up	1	22	21.64	0.01	0.111	0.067	0.121
L305	LTE B4	QPSK20M	20050	1	50	Rear Face	1.5	Up	1	22	21.64	0.05	0.167	0.098	0.182
L306	LTE B4	QPSK20M	20175	50	25	Front Face	1.5	Up	1	22	20.33	-0.12	0.123	0.074	0.181
L307	LTE B4	QPSK20M	20175	50	25	Rear Face	1.5	Up	1	22	20.33	0.02	0.179	0.105	0.263
L308	LTE B4	QPSK20M	20175	50	25	Rear Face	1.5	Up	2	22	20.33	0.06	0.188	0.114	0.276
L309	LTE B4	QPSK20M	20175	50	25	Rear Face	1.5	Up	3	22	20.33	0.01	0.207	0.121	0.304
L310	LTE B4	QPSK20M	20175	50	25	Rear Face	1.5	Up	4	22	20.33	-0.05	0.193	0.119	0.283
L324	LTE B5	QPSK10M	20525	1	24	Front Face	1.5	Down	1	24	23.15	-0.02	0.096	0.073	0.117
L325	LTE B5	QPSK10M	20525	1	24	Rear Face	1.5	Down	1	24	23.15	0.02	0.143	0.109	0.174
L326	LTE B5	QPSK10M	20525	25	12	Front Face	1.5	Down	1	23	22.08	0.01	0.094	0.072	0.116
L327	LTE B5	QPSK10M	20525	25	12	Rear Face	1.5	Down	1	23	22.08	-0.08	0.148	0.113	0.183
L328	LTE B5	QPSK10M	20525	25	12	Rear Face	1.5	Down	2	23	22.08	0.06	0.134	0.106	0.166
L329	LTE B5	QPSK10M	20525	25	12	Rear Face	1.5	Down	3	23	22.08	-0.01	0.170	0.129	0.210
L330	LTE B5	QPSK10M	20525	25	12	Rear Face	1.5	Down	4	23	22.08	0.11	0.156	0.116	0.193
L346	LTE B5	QPSK10M	20525	1	24	Front Face	1.5	Up	1	24	23.47	0.03	0.046	0.033	0.052
L347	LTE B5	QPSK10M	20525	1	24	Rear Face	1.5	Up	1	24	23.47	0.01	0.068	0.047	0.077
L348	LTE B5	QPSK10M	20600	25	0	Front Face	1.5	Up	1	23	22.35	0.07	0.046	0.033	0.053
L349	LTE B5	QPSK10M	20600	25	0	Rear Face	1.5	Up	1	23	22.35	0.02	0.061	0.042	0.071
L350	LTE B5	QPSK10M	20525	1	24	Rear Face	1.5	Up	2	24	23.47	0	0.088	0.060	0.099
L351	LTE B5	QPSK10M	20525	1	24	Rear Face	1.5	Up	3	24	23.47	0.03	0.082	0.051	0.092
L352	LTE B5	QPSK10M	20525	1	24	Rear Face	1.5	Up	4	24	23.47	-0.11	0.079	0.049	0.089

Test No.	Band	Mode	Channel	RB	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L366	LTE B7	QPKS20M	21350	1	50	Front Face	1.5	Down	1	21.5	21.15	0.11	0.133	0.084	0.144
L367	LTE B7	QPKS20M	21350	1	50	Rear Face	1.5	Down	1	21.5	21.15	0.07	0.236	0.117	0.256
L368	LTE B7	QPKS20M	20850	50	25	Front Face	1.5	Down	1	21.5	20.59	0.06	0.116	0.070	0.143
L369	LTE B7	QPKS20M	20850	50	25	Rear Face	1.5	Down	1	21.5	20.59	0.04	0.261	0.130	0.322
L370	LTE B7	QPKS20M	20850	50	25	Rear Face	1.5	Down	2	21.5	20.59	0.01	0.213	0.109	0.262
L371	LTE B7	QPKS20M	20850	50	25	Rear Face	1.5	Down	3	21.5	20.59	0.04	0.258	0.128	0.318
L372	LTE B7	QPKS20M	20850	50	25	Rear Face	1.5	Down	4	21.5	20.59	-0.02	0.245	0.126	0.302
L388	LTE B7	QPKS20M	20850	1	50	Front Face	1.5	Up	1	18	17.92	0.09	0.088	0.053	0.090
L389	LTE B7	QPKS20M	20850	1	50	Rear Face	1.5	Up	1	18	17.92	0.04	0.200	0.093	0.204
L390	LTE B7	QPKS20M	20850	50	50	Front Face	1.5	Up	1	18	17.90	-0.13	0.086	0.046	0.088
L391	LTE B7	QPKS20M	20850	50	50	Rear Face	1.5	Up	1	18	17.90	0.04	0.196	0.091	0.201
L392	LTE B7	QPKS20M	20850	1	50	Rear Face	1.5	Up	2	18	17.92	0.02	0.189	0.089	0.193
L393	LTE B7	QPKS20M	20850	1	50	Rear Face	1.5	Up	3	18	17.92	-0.01	0.191	0.090	0.195
L394	LTE B7	QPKS20M	20850	1	50	Rear Face	1.5	Up	4	18	17.92	0.07	0.178	0.082	0.181
L413	LTE B12	QPSK10M	23095	1	24	Front Face	1.5	Down	1	24	22.83	0.02	0.150	0.117	0.196
L414	LTE B12	QPSK10M	23095	1	24	Rear Face	1.5	Down	1	24	22.83	-0.14	0.193	0.149	0.253
L415	LTE B12	QPSK10M	23060	25	25	Front Face	1.5	Down	1	23	21.92	0.09	0.122	0.094	0.156
L416	LTE B12	QPSK10M	23060	25	25	Rear Face	1.5	Down	1	23	21.92	-0.04	0.149	0.115	0.191
L417	LTE B12	QPSK10M	23095	1	24	Rear Face	1.5	Down	2	24	22.83	0.01	0.184	0.142	0.241
L418	LTE B12	QPSK10M	23095	1	24	Rear Face	1.5	Down	3	24	22.83	-0.04	0.170	0.131	0.223
L419	LTE B12	QPSK10M	23095	1	24	Rear Face	1.5	Down	4	24	22.83	0.12	0.178	0.128	0.233
L435	LTE B12	QPSK10M	23095	1	24	Front Face	1.5	Up	1	24	23.36	0.03	0.011	0.008	0.013
L436	LTE B12	QPSK10M	23095	1	24	Rear Face	1.5	Up	1	24	23.36	0.01	0.013	0.009	0.015
L437	LTE B12	QPSK10M	23060	25	25	Front Face	1.5	Up	1	23	22.35	0.07	0.009	0.007	0.011
L438	LTE B12	QPSK10M	23060	25	25	Rear Face	1.5	Up	1	23	22.35	0.09	0.012	0.009	0.014
L439	LTE B12	QPSK10M	23095	1	24	Rear Face	1.5	Up	2	24	23.36	0.01	0.012	0.008	0.014
L440	LTE B12	QPSK10M	23095	1	24	Rear Face	1.5	Up	3	24	23.36	0.03	0.012	0.008	0.014
L441	LTE B12	QPSK10M	23095	1	24	Rear Face	1.5	Up	4	24	23.36	0	0.011	0.007	0.013
L455	LTE B17	QPSK10M	23790	1	24	Front Face	1.5	Down	1	24	22.78	0.05	0.134	0.104	0.177
L456	LTE B17	QPSK10M	23790	1	24	Rear Face	1.5	Down	1	24	22.78	-0.03	0.189	0.146	0.250
L457	LTE B17	QPSK10M	23780	25	12	Front Face	1.5	Down	1	23	21.68	0.12	0.104	0.821	0.141
L458	LTE B17	QPSK10M	23780	25	12	Rear Face	1.5	Down	1	23	21.68	0	0.145	0.112	0.197
L459	LTE B17	QPSK10M	23790	1	24	Rear Face	1.5	Down	2	24	22.78	0.09	0.175	0.138	0.232
L460	LTE B17	QPSK10M	23790	1	24	Rear Face	1.5	Down	3	24	22.78	-0.08	0.183	0.142	0.242
L461	LTE B17	QPSK10M	23790	1	24	Rear Face	1.5	Down	4	24	22.78	0.15	0.181	0.139	0.239
L477	LTE B17	QPSK10M	23790	1	24	Front Face	1.5	Up	1	24	23.75	0.07	0.011	0.008	0.012
L478	LTE B17	QPSK10M	23790	1	24	Rear Face	1.5	Up	1	24	23.75	0.04	0.013	0.010	0.014
L479	LTE B17	QPSK10M	23780	25	12	Front Face	1.5	Up	1	23	22.62	0.09	0.008	0.006	0.009
L480	LTE B17	QPSK10M	23780	25	12	Rear Face	1.5	Up	1	23	22.62	0.01	0.011	0.007	0.011
L481	LTE B17	QPSK10M	23790	1	24	Rear Face	1.5	Up	2	24	23.75	0.05	0.015	0.012	0.016
L482	LTE B17	QPSK10M	23790	1	24	Rear Face	1.5	Up	3	24	23.75	-0.12	0.013	0.010	0.014
L483	LTE B17	QPSK10M	23790	1	24	Rear Face	1.5	Up	4	24	23.75	0.06	0.014	0.011	0.015

Test No.	Band	Mode	Channel	RB	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L497	LTE B26	QPSK15M	26865	1	37	Front Face	1.5	Down	1	24	23.06	0.01	0.122	0.093	0.152
L498	LTE B26	QPSK15M	26865	1	37	Rear Face	1.5	Down	1	24	23.06	-0.02	0.179	0.137	0.222
L499	LTE B26	QPSK15M	26865	36	19	Front Face	1.5	Down	1	23	21.94	-0.1	0.088	0.068	0.112
L500	LTE B26	QPSK15M	26865	36	19	Rear Face	1.5	Down	1	23	21.94	0.06	0.132	0.101	0.168
L501	LTE B26	QPSK15M	26865	1	37	Rear Face	1.5	Down	2	24	23.06	0.04	0.187	0.149	0.232
L502	LTE B26	QPSK15M	26865	1	37	Rear Face	1.5	Down	3	24	23.06	-0.06	0.208	0.159	0.258
L503	LTE B26	QPSK15M	26865	1	37	Rear Face	1.5	Down	4	24	23.06	0.07	0.204	0.156	0.253
L519	LTE B26	QPSK15M	26865	1	37	Front Face	1.5	Up	1	24	23.44	0.02	0.047	0.030	0.053
L520	LTE B26	QPSK15M	26865	1	37	Rear Face	1.5	Up	1	24	23.44	-0.09	0.064	0.044	0.073
L521	LTE B26	QPSK15M	26965	36	0	Front Face	1.5	Up	1	23	22.37	0.06	0.020	0.010	0.023
L522	LTE B26	QPSK15M	26965	36	0	Rear Face	1.5	Up	1	23	22.37	-0.02	0.061	0.042	0.070
L523	LTE B26	QPSK15M	26865	1	37	Rear Face	1.5	Up	2	24	23.44	-0.11	0.049	0.031	0.056
L524	LTE B26	QPSK15M	26865	1	37	Rear Face	1.5	Up	3	24	23.44	0.03	0.059	0.040	0.067
L525	LTE B26	QPSK15M	26865	1	37	Rear Face	1.5	Up	4	24	23.44	-0.16	0.051	0.035	0.058
L539	LTE B38	QPSK20M	38000	1	50	Front Face	1.5	Down	1	22.5	21.88	0.01	0.140	0.074	0.162
L540	LTE B38	QPSK20M	38000	1	50	Rear Face	1.5	Down	1	22.5	21.88	0	0.197	0.099	0.227
L541	LTE B38	QPSK20M	37850	50	25	Front Face	1.5	Down	1	22.5	21.53	0.06	0.126	0.068	0.157
L542	LTE B38	QPSK20M	37850	50	25	Rear Face	1.5	Down	1	22.5	21.53	0.05	0.199	0.099	0.249
L543	LTE B38	QPSK20M	38000	1	50	Rear Face	1.5	Down	2	22.5	21.53	-0.02	0.175	0.081	0.219
L544	LTE B38	QPSK20M	38000	1	50	Rear Face	1.5	Down	3	22.5	21.53	0.05	0.178	0.090	0.222
L545	LTE B38	QPSK20M	38000	1	50	Rear Face	1.5	Down	4	22.5	21.53	0.09	0.171	0.086	0.214
L561	LTE B38	QPSK20M	38000	1	50	Front Face	1.5	Up	1	20	19.89	0.02	0.100	0.051	0.103
L562	LTE B38	QPSK20M	38000	1	50	Rear Face	1.5	Up	1	20	19.89	0.06	0.218	0.099	0.224
L563	LTE B38	QPSK20M	37850	50	0	Front Face	1.5	Up	1	20	19.43	-0.13	0.108	0.054	0.123
L564	LTE B38	QPSK20M	37850	50	0	Rear Face	1.5	Up	1	20	19.43	0.01	0.228	0.103	0.260
L565	LTE B38	QPSK20M	37850	50	0	Rear Face	1.5	Up	2	20	19.43	0.07	0.257	0.115	0.293
L566	LTE B38	QPSK20M	37850	50	0	Rear Face	1.5	Up	3	20	19.43	0	0.251	0.109	0.287
L567	LTE B38	QPSK20M	37850	50	0	Rear Face	1.5	Up	4	20	19.43	0.02	0.244	0.101	0.279
L581	LTE B41	QPSK20M	41140	1	50	Front Face	1.5	Down	1	22.5	21.90	0.03	0.143	0.073	0.164
L582	LTE B41	QPSK20M	41140	1	50	Rear Face	1.5	Down	1	22.5	21.90	0.04	0.184	0.091	0.211
L583	LTE B41	QPSK20M	41140	50	25	Front Face	1.5	Down	1	22.5	21.72	-0.01	0.135	0.070	0.162
L584	LTE B41	QPSK20M	41140	50	25	Rear Face	1.5	Down	1	22.5	21.72	0.05	0.171	0.083	0.205
L585	LTE B41	QPSK20M	41140	1	50	Rear Face	1.5	Down	2	22.5	21.90	0.13	0.174	0.084	0.200
L586	LTE B41	QPSK20M	41140	1	50	Rear Face	1.5	Down	3	22.5	21.90	0.06	0.170	0.084	0.195
L587	LTE B41	QPSK20M	41140	1	50	Rear Face	1.5	Down	4	22.5	21.90	0.12	0.178	0.089	0.204
L603	LTE B41	QPSK20M	40440	1	50	Front Face	1.5	Up	1	20	19.75	0.03	0.117	0.060	0.124
L604	LTE B41	QPSK20M	40440	1	50	Rear Face	1.5	Up	1	20	19.75	0.01	0.249	0.114	0.264
L605	LTE B41	QPSK20M	40440	50	50	Front Face	1.5	Up	1	20	19.41	-0.14	0.118	0.060	0.135
L606	LTE B41	QPSK20M	40440	50	50	Rear Face	1.5	Up	1	20	19.41	0.05	0.242	0.110	0.277
L607	LTE B41	QPSK20M	40440	50	50	Rear Face	1.5	Up	2	20	19.41	0.03	0.241	0.111	0.276
L608	LTE B41	QPSK20M	40440	50	50	Rear Face	1.5	Up	3	20	19.41	0.19	0.238	0.107	0.273
L609	LTE B41	QPSK20M	40440	50	50	Rear Face	1.5	Up	4	20	19.41	0.07	0.247	0.113	0.283

Test No.	Band	Mode	Channel	RB	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L623	LTE B66	QPSK20M	132072	1	50	Front Face	1.5	Down	1	21	20.81	0.02	0.110	0.070	0.115
L624	LTE B66	QPSK20M	132072	1	50	Rear Face	1.5	Down	1	21	20.81	0.05	0.271	0.164	0.283
L625	LTE B66	QPSK20M	132272	50	0	Front Face	1.5	Down	1	21	20.51	-0.03	0.012	0.073	0.014
L626	LTE B66	QPSK20M	132272	50	0	Rear Face	1.5	Down	1	21	20.51	0.01	0.269	0.162	0.301
L627	LTE B66	QPSK20M	132272	50	0	Rear Face	1.5	Down	2	21	20.51	0.09	0.256	0.156	0.287
L628	LTE B66	QPSK20M	132272	50	0	Rear Face	1.5	Down	3	21	20.51	0.02	0.271	0.162	0.304
L629	LTE B66	QPSK20M	132272	50	0	Rear Face	1.5	Down	4	21	20.51	-0.12	0.261	0.159	0.292
L655	LTE B66	QPSK20M	132272	1	50	Front Face	1.5	Up	1	21	20.88	0.04	0.123	0.072	0.126
L656	LTE B66	QPSK20M	132272	1	50	Rear Face	1.5	Up	1	21	20.88	0.03	0.170	0.098	0.175
L657	LTE B66	QPSK20M	132272	50	25	Front Face	1.5	Up	1	21	20.81	-0.01	0.125	0.074	0.131
L658	LTE B66	QPSK20M	132272	50	25	Rear Face	1.5	Up	1	21	20.81	0.09	0.171	0.099	0.179
L659	LTE B66	QPSK20M	132272	50	25	Rear Face	1.5	Up	2	21	20.81	-0.12	0.164	0.088	0.171
L660	LTE B66	QPSK20M	132272	50	25	Rear Face	1.5	Up	3	21	20.81	0.07	0.169	0.096	0.176
L661	LTE B66	QPSK20M	132272	50	25	Rear Face	1.5	Up	4	21	20.81	0.05	0.159	0.091	0.166

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

4. Body-worn SAR test results of 2.4G WiFi

WiFi only

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
W32	802.11b	6	Front Face	1.5	1	1	19	18.71	0.07	0.145	0.076	0.155
W33	802.11b	6	Rear Face	1.5	1	1	19	18.71	0.07	0.161	0.081	0.172
W34	802.11b	6	Rear Face	1.5	2	1	19	18.71	0.01	0.159	0.078	0.170
W35	802.11b	6	Rear Face	1.5	3	1	19	18.71	0.04	0.164	0.081	0.175
W36	802.11b	6	Rear Face	1.5	4	1	19	18.71	-0.12	0.154	0.074	0.165

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)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
W97	BT DH5	0	Front Face	1.5	1	1	11	10.09	0.09	0.022	0.009	0.027
W98	BT DH5	0	Rear Face	1.5	1	1	11	10.09	-0.02	0.025	0.011	0.031
W99	BT DH5	0	Rear Face	1.5	2	1	11	10.09	0.06	0.028	0.013	0.035
W100	BT DH5	0	Rear Face	1.5	3	1	11	10.09	0.01	0.027	0.012	0.033
W101	BT DH5	0	Rear Face	1.5	4	1	11	10.09	-0.05	0.024	0.010	0.029

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

6. Body-worn SAR test results of 5G WiFi

WiFi only

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
W46	802.11a	52	Front Face	1.5	1	6	20	18.85	0	0.247	0.050	0.322
W47	802.11a	52	Rear Face	1.5	1	6	20	18.85	0	0.328	0.064	0.427
W48	802.11a	52	Rear Face	1.5	2	6	20	18.85	0.06	0.317	0.054	0.413
W49	802.11a	52	Rear Face	1.5	3	6	20	18.85	0.02	0.321	0.059	0.418
W50	802.11a	52	Rear Face	1.5	4	6	20	18.85	-0.13	0.307	0.053	0.400
W60	802.11a	108	Front Face	1.5	1	6	20	18.67	0.11	0.267	0.103	0.363
W61	802.11a	108	Rear Face	1.5	1	6	20	18.67	0	0.334	0.128	0.454
W62	802.11a	108	Rear Face	1.5	2	6	20	18.67	0.06	0.317	0.121	0.431
W63	802.11a	108	Rear Face	1.5	3	6	20	18.67	-0.12	0.325	0.124	0.441
W64	802.11a	108	Rear Face	1.5	4	6	20	18.67	0.05	0.329	0.126	0.447
W74	802.11a	149	Front Face	1.5	1	6	20	18.68	0.08	0.255	0.100	0.346
W75	802.11a	149	Rear Face	1.5	1	6	20	18.68	0.01	0.244	0.106	0.331
W76	802.11a	149	Front Face	1.5	2	6	20	18.68	0.06	0.249	0.108	0.337
W77	802.11a	149	Front Face	1.5	3	6	20	18.68	-0.05	0.247	0.107	0.335
W78	802.11a	149	Front Face	1.5	4	6	20	18.68	0.12	0.239	0.098	0.324

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	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
G38	GSM 850	GPRS2TX	190	Front Face	1.0	Down	1	31	29.66	0.03	0.080	0.056	0.109
G39	GSM 850	GPRS2TX	190	Rear Face	1.0	Down	1	31	29.66	0.04	0.166	0.099	0.226
G40	GSM 850	GPRS2TX	190	Left Side	1.0	Down	1	31	29.66	0	0.044	0.031	0.059
G41	GSM 850	GPRS2TX	190	Right Side	1.0	Down	1	31	29.66	0.08	0.093	0.063	0.126
G42	GSM 850	GPRS2TX	190	Bottom Side	1.0	Down	1	31	29.66	0.01	0.150	0.080	0.204
G43	GSM 850	GPRS2TX	190	Rear Face	1.0	Down	2	31	29.66	-0.06	0.159	0.089	0.216
G44	GSM 850	GPRS2TX	190	Rear Face	1.0	Down	3	31	29.66	0.03	0.178	0.119	0.242
G45	GSM 850	GPRS2TX	190	Rear Face	1.0	Down	4	31	29.66	-0.11	0.216	0.128	0.294
G53	GSM 850	GPRS2TX	190	Front Face	1.0	Up	1	32	30.27	0	0.106	0.070	0.158
G54	GSM 850	GPRS2TX	190	Rear Face	1.0	Up	1	32	30.27	-0.08	0.155	0.101	0.231
G55	GSM 850	GPRS2TX	190	Left Side	1.0	Up	1	32	30.27	0.03	0.069	0.048	0.103
G56	GSM 850	GPRS2TX	190	Top Side	1.0	Up	1	32	30.27	-0.01	0.149	0.092	0.222
G57	GSM 850	GPRS2TX	190	Rear Face	1.0	Up	2	32	30.27	-0.07	0.190	0.123	0.283
G58	GSM 850	GPRS2TX	190	Rear Face	1.0	Up	3	32	30.27	0.1	0.152	0.099	0.226
G59	GSM 850	GPRS2TX	190	Rear Face	1.0	Up	4	32	30.27	-0.04	0.144	0.094	0.214
G67	GSM 1900	GPRS4TX	661	Front Face	1.0	Down	1	24	22.51	0.03	0.162	0.099	0.228
G68	GSM 1900	GPRS4TX	661	Rear Face	1.0	Down	1	24	22.51	0.13	0.423	0.236	0.596
G69	GSM 1900	GPRS4TX	661	Left Side	1.0	Down	1	24	22.51	-0.01	0.080	0.042	0.112
G70	GSM 1900	GPRS4TX	661	Right Side	1.0	Down	1	24	22.51	0.05	0.039	0.022	0.055
G71	GSM 1900	GPRS4TX	661	Bottom Side	1.0	Down	1	24	22.51	0.02	0.496	0.265	0.699
G72	GSM 1900	GPRS4TX	661	Bottom Side	1.0	Down	2	24	22.51	0.07	0.487	0.258	0.686
G73	GSM 1900	GPRS4TX	661	Bottom Side	1.0	Down	3	24	22.51	0.03	0.445	0.238	0.627
G74	GSM 1900	GPRS4TX	661	Bottom Side	1.0	Down	4	24	22.51	0.01	0.472	0.247	0.665
G82	GSM 1900	GPRS4TX	661	Front Face	1.0	Up	1	24.5	22.67	0	0.183	0.098	0.279
G83	GSM 1900	GPRS4TX	661	Rear Face	1.0	Up	1	24.5	22.67	0.11	0.291	0.155	0.443
G84	GSM 1900	GPRS4TX	661	Left Side	1.0	Up	1	24.5	22.67	0.01	0.086	0.045	0.131
G85	GSM 1900	GPRS4TX	661	Top Side	1.0	Up	1	24.5	22.67	-0.03	0.384	0.184	0.585
G86	GSM 1900	GPRS4TX	661	Top Side	1.0	Up	2	24.5	22.67	-0.04	0.380	0.181	0.579
G87	GSM 1900	GPRS4TX	661	Top Side	1.0	Up	3	24.5	22.67	-0.02	0.387	0.189	0.590
G88	GSM 1900	GPRS4TX	661	Top Side	1.0	Up	4	24.5	22.67	0.01	0.374	0.178	0.570

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	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
U54	UMTS B2	RMC12.2K	9400	Front Face	1.0	Down	1	20.5	19.38	0.03	0.160	0.100	0.207
U55	UMTS B2	RMC12.2K	9400	Rear Face	1.0	Down	1	20.5	19.38	0.02	0.419	0.238	0.542
U56	UMTS B2	RMC12.2K	9400	Left Side	1.0	Down	1	20.5	19.38	0.05	0.075	0.042	0.097
U57	UMTS B2	RMC12.2K	9400	Right Side	1.0	Down	1	20.5	19.38	0.14	0.023	0.005	0.030
U58	UMTS B2	RMC12.2K	9400	Bottom Side	1.0	Down	1	20.5	19.38	-0.01	0.486	0.266	0.629
U59	UMTS B2	RMC12.2K	9400	Bottom Side	1.0	Down	2	20.5	19.38	0.08	0.477	0.257	0.617
U60	UMTS B2	RMC12.2K	9400	Bottom Side	1.0	Down	3	20.5	19.38	0.03	0.485	0.264	0.628
U61	UMTS B2	RMC12.2K	9400	Bottom Side	1.0	Down	4	20.5	19.38	-0.03	0.474	0.258	0.613
U69	UMTS B2	RMC12.2K	9400	Front Face	1.0	Up	1	20.5	19.76	0.02	0.241	0.128	0.286
U70	UMTS B2	RMC12.2K	9400	Rear Face	1.0	Up	1	20.5	19.76	0.09	0.424	0.227	0.503
U71	UMTS B2	RMC12.2K	9400	Left Side	1.0	Up	1	20.5	19.76	0.12	0.109	0.059	0.129
U72	UMTS B2	RMC12.2K	9400	Top Side	1.0	Up	1	20.5	19.76	0.02	0.447	0.224	0.530
U73	UMTS B2	RMC12.2K	9400	Top Side	1.0	Up	2	20.5	19.76	0	0.432	0.230	0.512
U74	UMTS B2	RMC12.2K	9400	Top Side	1.0	Up	3	20.5	19.76	0.06	0.504	0.251	0.598
U75	UMTS B2	RMC12.2K	9400	Top Side	1.0	Up	4	20.5	19.76	-0.04	0.464	0.239	0.550
U83	UMTS B4	RMC12.2K	1413	Front Face	1.0	Down	1	21	19.75	0.08	0.139	0.088	0.185
U84	UMTS B4	RMC12.2K	1413	Rear Face	1.0	Down	1	21	19.75	0.09	0.483	0.278	0.644
U85	UMTS B4	RMC12.2K	1413	Left Side	1.0	Down	1	21	19.75	-0.12	0.099	0.061	0.132
U86	UMTS B4	RMC12.2K	1413	Right Side	1.0	Down	1	21	19.75	0.06	0.045	0.027	0.060
U87	UMTS B4	RMC12.2K	1413	Bottom Side	1.0	Down	1	21	19.75	0.01	0.509	0.284	0.679
U88	UMTS B4	RMC12.2K	1413	Bottom Side	1.0	Down	2	21	19.75	0.01	0.510	0.287	0.680
U89	UMTS B4	RMC12.2K	1413	Bottom Side	1.0	Down	3	21	19.75	0.13	0.501	0.278	0.668
U90	UMTS B4	RMC12.2K	1413	Bottom Side	1.0	Down	4	21	19.75	-0.07	0.506	0.282	0.675
U98	UMTS B4	RMC12.2K	1413	Front Face	1.0	Up	1	21	20.14	0.01	0.208	0.118	0.254
U99	UMTS B4	RMC12.2K	1413	Rear Face	1.0	Up	1	21	20.14	0.07	0.294	0.164	0.358
U100	UMTS B4	RMC12.2K	1413	Left Side	1.0	Up	1	21	20.14	0.06	0.085	0.048	0.104
U101	UMTS B4	RMC12.2K	1413	Top Side	1.0	Up	1	21	20.14	0.03	0.425	0.222	0.518
U102	UMTS B4	RMC12.2K	1413	Top Side	1.0	Up	2	21	20.14	0.11	0.431	0.213	0.525
U103	UMTS B4	RMC12.2K	1413	Top Side	1.0	Up	3	21	20.14	-0.01	0.439	0.233	0.535
U104	UMTS B4	RMC12.2K	1413	Top Side	1.0	Up	4	21	20.14	-0.09	0.413	0.239	0.503
U112	UMTS B5	RMC12.2K	4182	Front Face	1.0	Down	1	24	22.62	0.06	0.113	0.070	0.155
U113	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Down	1	24	22.62	0.04	0.219	0.129	0.301
U114	UMTS B5	RMC12.2K	4182	Left Side	1.0	Down	1	24	22.62	0.12	0.066	0.044	0.090
U115	UMTS B5	RMC12.2K	4182	Right Side	1.0	Down	1	24	22.62	0.1	0.116	0.076	0.159
U116	UMTS B5	RMC12.2K	4182	Bottom Side	1.0	Down	1	24	22.62	-0.03	0.186	0.099	0.256
U117	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Down	2	24	22.62	0.07	0.205	0.114	0.282
U118	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Down	3	24	22.62	0.03	0.209	0.114	0.287
U119	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Down	4	24	22.62	0.02	0.202	0.108	0.278
U127	UMTS B5	RMC12.2K	4182	Front Face	1.0	Up	1	24	22.87	0.12	0.073	0.044	0.095
U128	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Up	1	24	22.87	0	0.110	0.070	0.143
U129	UMTS B5	RMC12.2K	4182	Left Side	1.0	Up	1	24	22.87	0.01	0.057	0.036	0.074
U130	UMTS B5	RMC12.2K	4182	Top Side	1.0	Up	1	24	22.87	0.02	0.098	0.061	0.127
U131	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Up	2	24	22.87	0.09	0.128	0.083	0.166
U132	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Up	3	24	22.87	0	0.157	0.100	0.204
U133	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Up	4	24	22.87	-0.06	0.142	0.091	0.184

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	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L247	LTE B2	QPSK20M	18700	1	50	Front Face	1.0	Down	1	20.5	20.04	0.16	0.186	0.116	0.207
L248	LTE B2	QPSK20M	18700	1	50	Rear Face	1.0	Down	1	20.5	20.04	-0.05	0.456	0.268	0.507
L249	LTE B2	QPSK20M	18700	1	50	Left Side	1.0	Down	1	20.5	20.04	0.02	0.065	0.034	0.072
L250	LTE B2	QPSK20M	18700	1	50	Right Side	1.0	Down	1	20.5	20.04	0.04	0.048	0.029	0.053
L251	LTE B2	QPSK20M	18700	1	50	Bottom Side	1.0	Down	1	20.5	20.04	0.06	0.562	0.308	0.625
L252	LTE B2	QPSK20M	19100	50	25	Front Face	1.0	Down	1	20.5	19.72	-0.05	0.193	0.119	0.231
L253	LTE B2	QPSK20M	19100	50	25	Rear Face	1.0	Down	1	20.5	19.72	0.08	0.471	0.267	0.563
L254	LTE B2	QPSK20M	19100	50	25	Left Side	1.0	Down	1	20.5	19.72	-0.15	0.095	0.049	0.114
L255	LTE B2	QPSK20M	19100	50	25	Right Side	1.0	Down	1	20.5	19.72	0.01	0.053	0.032	0.063
L256	LTE B2	QPSK20M	19100	50	25	Bottom Side	1.0	Down	1	20.5	19.72	0.01	0.554	0.300	0.662
L257	LTE B2	QPSK20M	19100	50	25	Bottom Side	1.0	Down	2	20.5	19.72	0	0.505	0.276	0.604
L258	LTE B2	QPSK20M	19100	50	25	Bottom Side	1.0	Down	3	20.5	19.72	0.13	0.543	0.296	0.649
L259	LTE B2	QPSK20M	19100	50	25	Bottom Side	1.0	Down	4	20.5	19.72	-0.09	0.539	0.283	0.644
L269	LTE B2	QPSK20M	18700	1	50	Front Face	1.0	Up	1	20.5	20.35	-0.02	0.278	0.149	0.287
L270	LTE B2	QPSK20M	18700	1	50	Rear Face	1.0	Up	1	20.5	20.35	0.09	0.383	0.207	0.396
L271	LTE B2	QPSK20M	18700	1	50	Left Side	1.0	Up	1	20.5	20.35	0.13	0.111	0.060	0.115
L272	LTE B2	QPSK20M	18700	1	50	Top Side	1.0	Up	1	20.5	20.35	0	0.502	0.252	0.519
L273	LTE B2	QPSK20M	19100	50	25	Front Face	1.0	Up	1	20.5	20.25	0.18	0.284	0.154	0.301
L274	LTE B2	QPSK20M	19100	50	25	Rear Face	1.0	Up	1	20.5	20.25	-0.06	0.404	0.217	0.428
L275	LTE B2	QPSK20M	19100	50	25	Left Side	1.0	Up	1	20.5	20.25	-0.13	0.117	0.064	0.124
L276	LTE B2	QPSK20M	19100	50	25	Top Side	1.0	Up	1	20.5	20.25	0.01	0.521	0.256	0.551
L277	LTE B2	QPSK20M	19100	50	25	Top Side	1.0	Up	2	20.5	20.25	0.08	0.506	0.249	0.536
L278	LTE B2	QPSK20M	19100	50	25	Top Side	1.0	Up	3	20.5	20.25	0.14	0.513	0.255	0.543
L279	LTE B2	QPSK20M	19100	50	25	Top Side	1.0	Up	4	20.5	20.25	-0.02	0.510	0.254	0.540
L289	LTE B4	QPSK20M	20050	1	50	Front Face	1.0	Down	1	21	20.28	0.03	0.173	0.110	0.204
L290	LTE B4	QPSK20M	20050	1	50	Rear Face	1.0	Down	1	21	20.28	-0.12	0.565	0.331	0.667
L291	LTE B4	QPSK20M	20050	1	50	Left Side	1.0	Down	1	21	20.28	0.09	0.062	0.037	0.073
L292	LTE B4	QPSK20M	20050	1	50	Right Side	1.0	Down	1	21	20.28	0.02	0.060	0.039	0.070
L293	LTE B4	QPSK20M	20050	1	50	Bottom Side	1.0	Down	1	21	20.28	0.01	0.643	0.356	0.759
L294	LTE B4	QPSK20M	20175	50	0	Front Face	1.0	Down	1	21	19.97	0.05	0.177	0.112	0.224
L295	LTE B4	QPSK20M	20175	50	0	Rear Face	1.0	Down	1	21	19.97	0.08	0.531	0.305	0.672
L296	LTE B4	QPSK20M	20175	50	0	Left Side	1.0	Down	1	21	19.97	-0.11	0.061	0.038	0.077
L297	LTE B4	QPSK20M	20175	50	0	Right Side	1.0	Down	1	21	19.97	0.05	0.050	0.031	0.063
L298	LTE B4	QPSK20M	20175	50	0	Bottom Side	1.0	Down	1	21	19.97	0.02	0.630	0.346	0.798
L299	LTE B4	QPSK20M	20050	50	25	Bottom Side	1.0	Down	1	21	20.28	0.05	0.647	0.358	0.764
L300	LTE B4	QPSK20M	20300	50	25	Bottom Side	1.0	Down	1	21	20.27	0.05	0.634	0.350	0.750
L301	LTE B4	QPSK20M	20175	100	0	Bottom Side	1.0	Down	1	21	20.32	0.02	0.633	0.350	0.741
L302	LTE B4	QPSK20M	20175	50	0	Bottom Side	1.0	Down	2	21	19.97	-0.06	0.621	0.320	0.786
L303	LTE B4	QPSK20M	20175	50	0	Bottom Side	1.0	Down	3	21	19.97	0	0.602	0.334	0.762
L311	LTE B4	QPSK20M	20175	50	0	Bottom Side	1.0	Down	4	21	19.97	0.03	0.612	0.321	0.775

Test No.	Band	Mode	Channel	RB	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L312	LTE B4	QPSK20M	20050	1	50	Front Face	1.0	Up	1	22	21.64	-0.02	0.266	0.145	0.289
L313	LTE B4	QPSK20M	20050	1	50	Rear Face	1.0	Up	1	22	21.64	0.13	0.383	0.215	0.416
L314	LTE B4	QPSK20M	20050	1	50	Left Side	1.0	Up	1	22	21.64	0.08	0.110	0.059	0.120
L315	LTE B4	QPSK20M	20050	1	50	Top Side	1.0	Up	1	22	21.64	0	0.466	0.250	0.507
L316	LTE B4	QPSK20M	20175	50	25	Front Face	1.0	Up	1	22	20.33	-0.05	0.296	0.162	0.434
L317	LTE B4	QPSK20M	20175	50	25	Rear Face	1.0	Up	1	22	20.33	0.06	0.467	0.256	0.685
L318	LTE B4	QPSK20M	20175	50	25	Left Side	1.0	Up	1	22	20.33	0.17	0.115	0.064	0.169
L319	LTE B4	QPSK20M	20175	50	25	Top Side	1.0	Up	1	22	20.33	0.02	0.496	0.265	0.728
L320	LTE B4	QPSK20M	20175	50	25	Top Side	1.0	Up	2	22	20.33	-0.14	0.528	0.256	0.775
L321	LTE B4	QPSK20M	20175	50	25	Top Side	1.0	Up	3	22	20.33	0.02	0.537	0.275	0.788
L322	LTE B4	QPSK20M	20175	50	25	Top Side	1.0	Up	4	22	20.33	0.09	0.504	0.239	0.740
L332	LTE B5	QPSK10M	20525	1	24	Front Face	1.0	Down	1	24	23.15	0.02	0.088	0.056	0.107
L333	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Down	1	24	23.15	0	0.171	0.101	0.208
L334	LTE B5	QPSK10M	20525	1	24	Left Side	1.0	Down	1	24	23.15	0.11	0.070	0.042	0.086
L335	LTE B5	QPSK10M	20525	1	24	Right Side	1.0	Down	1	24	23.15	0.06	0.107	0.064	0.131
L336	LTE B5	QPSK10M	20525	1	24	Bottom Side	1.0	Down	1	24	23.15	-0.01	0.154	0.075	0.187
L337	LTE B5	QPSK10M	20525	25	12	Front Face	1.0	Down	1	23	22.08	0.05	0.107	0.060	0.132
L338	LTE B5	QPSK10M	20525	25	12	Rear Face	1.0	Down	1	23	22.08	-0.09	0.173	0.103	0.214
L339	LTE B5	QPSK10M	20525	25	12	Left Side	1.0	Down	1	23	22.08	0.03	0.056	0.033	0.069
L340	LTE B5	QPSK10M	20525	25	12	Right Side	1.0	Down	1	23	22.08	0.04	0.111	0.066	0.137
L341	LTE B5	QPSK10M	20525	25	12	Bottom Side	1.0	Down	1	23	22.08	-0.15	0.148	0.074	0.183
L342	LTE B5	QPSK10M	20525	25	12	Rear Face	1.0	Down	2	23	22.08	0.01	0.201	0.119	0.249
L343	LTE B5	QPSK10M	20525	25	12	Rear Face	1.0	Down	3	23	22.08	0.03	0.214	0.126	0.265
L344	LTE B5	QPSK10M	20525	25	12	Rear Face	1.0	Down	4	23	22.08	-0.08	0.198	0.106	0.245
L354	LTE B5	QPSK10M	20525	1	24	Front Face	1.0	Up	1	24	23.47	0.01	0.097	0.062	0.110
L355	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Up	1	24	23.47	-0.05	0.155	0.097	0.175
L356	LTE B5	QPSK10M	20525	1	24	Left Side	1.0	Up	1	24	23.47	0.06	0.076	0.050	0.086
L357	LTE B5	QPSK10M	20525	1	24	Top Side	1.0	Up	1	24	23.47	0.02	0.121	0.069	0.137
L358	LTE B5	QPSK10M	20600	25	0	Front Face	1.0	Up	1	23	22.35	-0.09	0.090	0.055	0.105
L359	LTE B5	QPSK10M	20600	25	0	Rear Face	1.0	Up	1	23	22.35	-0.02	0.143	0.089	0.166
L360	LTE B5	QPSK10M	20600	25	0	Left Side	1.0	Up	1	23	22.35	0.11	0.071	0.046	0.083
L361	LTE B5	QPSK10M	20600	25	0	Top Side	1.0	Up	1	23	22.35	0.03	0.114	0.067	0.133
L362	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Up	2	24	23.47	0	0.268	0.160	0.303
L363	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Up	3	24	23.47	0.02	0.213	0.121	0.241
L364	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Up	4	24	23.47	0.07	0.209	0.104	0.236

Test No.	Band	Mode	Channel	RB	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L374	LTE B7	QPSK20M	21350	1	50	Front Face	1.0	Down	1	21.5	21.15	0.02	0.227	0.126	0.246
L375	LTE B7	QPSK20M	21350	1	50	Rear Face	1.0	Down	1	21.5	21.15	0.03	0.449	0.217	0.487
L376	LTE B7	QPSK20M	21350	1	50	Left Side	1.0	Down	1	21.5	21.15	0.07	0.085	0.047	0.093
L377	LTE B7	QPSK20M	21350	1	50	Right Side	1.0	Down	1	21.5	21.15	-0.11	0.144	0.080	0.156
L378	LTE B7	QPSK20M	21350	1	50	Bottom Side	1.0	Down	1	21.5	21.15	0.16	0.621	0.288	0.674
L379	LTE B7	QPSK20M	20850	50	25	Front Face	1.0	Down	1	21.5	20.59	0.09	0.203	0.100	0.250
L380	LTE B7	QPSK20M	20850	50	25	Rear Face	1.0	Down	1	21.5	20.59	-0.1	0.432	0.209	0.532
L381	LTE B7	QPSK20M	20850	50	25	Left Side	1.0	Down	1	21.5	20.59	0.06	0.053	0.029	0.066
L382	LTE B7	QPSK20M	20850	50	25	Right Side	1.0	Down	1	21.5	20.59	0.05	0.153	0.082	0.188
L383	LTE B7	QPSK20M	20850	50	25	Bottom Side	1.0	Down	1	21.5	20.59	0.06	0.692	0.322	0.852
L674	LTE B7	QPSK20M	21100	50	25	Bottom Side	1.0	Down	1	21.5	20.51	0	0.656	0.305	0.824
L675	LTE B7	QPSK20M	21350	50	25	Bottom Side	1.0	Down	1	21.5	20.57	0.03	0.615	0.285	0.762
L677	LTE B7	QPSK20M	21350	100	0	Bottom Side	1.0	Down	1	21.5	20.55	0.04	0.681	0.316	0.848
L384	LTE B7	QPSK20M	20850	50	25	Bottom Side	1.0	Down	2	21.5	20.59	-0.01	0.591	0.215	0.728
L385	LTE B7	QPSK20M	20850	50	25	Bottom Side	1.0	Down	3	21.5	20.59	0.08	0.629	0.295	0.775
L386	LTE B7	QPSK20M	20850	50	25	Bottom Side	1.0	Down	4	21.5	20.59	0.02	0.648	0.246	0.798
L676	LTE B7	QPSK20M	20850	50	25	Bottom Side (Repeated)	1.0	Down	1	21.5	20.59	0.08	0.695	0.323	0.856
L396	LTE B7	QPSK20M	20850	1	50	Front Face	1.0	Up	1	18	17.92	0.01	0.205	0.094	0.209
L397	LTE B7	QPSK20M	20850	1	50	Rear Face	1.0	Up	1	18	17.92	-0.03	0.530	0.219	0.540
L398	LTE B7	QPSK20M	20850	1	50	Left Side	1.0	Up	1	18	17.92	0.11	0.161	0.083	0.164
L399	LTE B7	QPSK20M	20850	1	50	Top Side	1.0	Up	1	18	17.92	0.09	0.691	0.281	0.704
L400	LTE B7	QPSK20M	20850	50	50	Front Face	1.0	Up	1	18	17.90	0.04	0.207	0.094	0.212
L401	LTE B7	QPSK20M	20850	50	50	Rear Face	1.0	Up	1	18	17.90	0.01	0.554	0.217	0.567
L402	LTE B7	QPSK20M	20850	50	50	Left Side	1.0	Up	1	18	17.90	0	0.165	0.085	0.169
L403	LTE B7	QPSK20M	20850	50	50	Top Side	1.0	Up	1	18	17.90	0.06	0.680	0.277	0.696
L409	LTE B7	QPSK20M	20850	1	50	Top Side	1.0	Up	2	18	17.92	0.01	0.608	0.256	0.620
L410	LTE B7	QPSK20M	20850	1	50	Top Side	1.0	Up	3	18	17.92	-0.09	0.685	0.267	0.698
L411	LTE B7	QPSK20M	20850	1	50	Top Side	1.0	Up	4	18	17.92	0.02	0.663	0.234	0.676
L421	LTE B12	QPSK10M	23095	1	24	Front Face	1.0	Down	1	24	22.83	0.11	0.156	0.138	0.204
L422	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Down	1	24	22.83	-0.01	0.182	0.141	0.238
L423	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Down	1	24	22.83	0.03	0.117	0.082	0.153
L424	LTE B12	QPSK10M	23095	1	24	Right Side	1.0	Down	1	24	22.83	0.07	0.128	0.103	0.168
L425	LTE B12	QPSK10M	23095	1	24	Bottom Side	1.0	Down	1	24	22.83	-0.05	0.133	0.074	0.174
L426	LTE B12	QPSK10M	23060	25	25	Front Face	1.0	Down	1	23	21.92	0.06	0.130	0.113	0.167
L427	LTE B12	QPSK10M	23060	25	25	Rear Face	1.0	Down	1	23	21.92	-0.03	0.142	0.110	0.182
L428	LTE B12	QPSK10M	23060	25	25	Left Side	1.0	Down	1	23	21.92	-0.09	0.098	0.068	0.125
L429	LTE B12	QPSK10M	23060	25	25	Right Side	1.0	Down	1	23	21.92	-0.12	0.121	0.098	0.155
L430	LTE B12	QPSK10M	23060	25	25	Bottom Side	1.0	Down	1	23	21.92	0.05	0.092	0.056	0.118
L431	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Down	2	24	22.83	0.16	0.168	0.127	0.220
L432	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Down	3	24	22.83	-0.07	0.180	0.139	0.236
L433	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Down	4	24	22.83	0.04	0.171	0.129	0.224

Test No.	Band	Mode	Channel	RB	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L443	LTE B12	QPSK10M	23095	1	24	Front Face	1.0	Up	1	24	23.36	0.05	0.010	0.007	0.011
L444	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Up	1	24	23.36	0.02	0.013	0.008	0.015
L445	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Up	1	24	23.36	0.06	0.020	0.013	0.023
L446	LTE B12	QPSK10M	23095	1	24	Top Side	1.0	Up	1	24	23.36	0.04	0.012	0.074	0.013
L447	LTE B12	QPSK10M	23060	25	25	Front Face	1.0	Up	1	23	22.35	0.09	0.009	0.006	0.010
L448	LTE B12	QPSK10M	23060	25	25	Rear Face	1.0	Up	1	23	22.35	0.05	0.013	0.009	0.015
L449	LTE B12	QPSK10M	23060	25	25	Left Side	1.0	Up	1	23	22.35	0.02	0.017	0.012	0.020
L450	LTE B12	QPSK10M	23060	25	25	Top Side	1.0	Up	1	23	22.35	0.05	0.010	0.007	0.012
L451	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Up	2	24	23.36	-0.01	0.019	0.013	0.022
L452	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Up	3	24	23.36	0.02	0.021	0.015	0.024
L453	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Up	4	24	23.36	0.07	0.019	0.013	0.022
L463	LTE B17	QPSK10M	23790	1	24	Front Face	1.0	Down	1	24	22.78	0.13	0.161	0.105	0.213
L464	LTE B17	QPSK10M	23790	1	24	Rear Face	1.0	Down	1	24	22.78	-0.09	0.198	0.154	0.262
L465	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Down	1	24	22.78	0.08	0.131	0.082	0.173
L466	LTE B17	QPSK10M	23790	1	24	Right Side	1.0	Down	1	24	22.78	0.01	0.129	0.079	0.171
L467	LTE B17	QPSK10M	23790	1	24	Bottom Side	1.0	Down	1	24	22.78	-0.06	0.120	0.052	0.159
L468	LTE B17	QPSK10M	23780	25	12	Front Face	1.0	Down	1	23	21.68	0.18	0.121	0.083	0.164
L469	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Down	1	23	21.68	-0.09	0.203	0.134	0.275
L470	LTE B17	QPSK10M	23780	25	12	Left Side	1.0	Down	1	23	21.68	0.05	0.096	0.058	0.130
L471	LTE B17	QPSK10M	23780	25	12	Right Side	1.0	Down	1	23	21.68	0.09	0.103	0.062	0.140
L472	LTE B17	QPSK10M	23780	25	12	Bottom Side	1.0	Down	1	23	21.68	0.16	0.107	0.045	0.145
L473	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Down	2	23	21.68	0.01	0.178	0.121	0.241
L474	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Down	3	23	21.68	-0.07	0.146	0.113	0.198
L475	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Down	4	23	21.68	0.14	0.172	0.041	0.233
L485	LTE B17	QPSK10M	23790	1	24	Front Face	1.0	Up	1	24	23.75	0.07	0.010	0.007	0.010
L486	LTE B17	QPSK10M	23790	1	24	Rear Face	1.0	Up	1	24	23.75	0.08	0.015	0.010	0.016
L487	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Up	1	24	23.75	0.02	0.020	0.013	0.021
L488	LTE B17	QPSK10M	23790	1	24	Top Side	1.0	Up	1	24	23.75	0.03	0.012	0.008	0.012
L489	LTE B17	QPSK10M	23780	25	12	Front Face	1.0	Up	1	23	22.62	0.09	0.007	0.005	0.008
L490	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Up	1	23	22.62	0.03	0.012	0.008	0.013
L491	LTE B17	QPSK10M	23780	25	12	Left Side	1.0	Up	1	23	22.62	0.01	0.015	0.011	0.016
L492	LTE B17	QPSK10M	23780	25	12	Top Side	1.0	Up	1	23	22.62	0.07	0.009	0.006	0.010
L493	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Up	2	24	23.75	0.15	0.023	0.016	0.024
L494	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Up	3	24	23.75	-0.13	0.020	0.014	0.021
L495	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Up	4	24	23.75	0.09	0.021	0.015	0.022

Test No.	Band	Mode	Channel	RB	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L505	LTE B26	QPSK15M	26865	1	37	Front Face	1.0	Down	1	24	23.06	0.03	0.135	0.082	0.168
L506	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Down	1	24	23.06	-0.02	0.221	0.131	0.275
L507	LTE B26	QPSK15M	26865	1	37	Left Side	1.0	Down	1	24	23.06	-0.11	0.058	0.037	0.071
L508	LTE B26	QPSK15M	26865	1	37	Right Side	1.0	Down	1	24	23.06	0.09	0.134	0.089	0.167
L509	LTE B26	QPSK15M	26865	1	37	Bottom Side	1.0	Down	1	24	23.06	0	0.192	0.101	0.239
L510	LTE B26	QPSK15M	26865	36	19	Front Face	1.0	Down	1	23	21.94	0.12	0.097	0.060	0.124
L511	LTE B26	QPSK15M	26865	36	19	Rear Face	1.0	Down	1	23	21.94	0.06	0.172	0.101	0.220
L512	LTE B26	QPSK15M	26865	36	19	Left Side	1.0	Down	1	23	21.94	-0.07	0.063	0.042	0.080
L513	LTE B26	QPSK15M	26865	36	19	Right Side	1.0	Down	1	23	21.94	0.02	0.094	0.062	0.120
L514	LTE B26	QPSK15M	26865	36	19	Bottom Side	1.0	Down	1	23	21.94	0.08	0.142	0.078	0.181
L515	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Down	2	24	23.06	-0.09	0.214	0.123	0.266
L516	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Down	3	24	23.06	0.01	0.224	0.133	0.278
L517	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Down	4	24	23.06	0.16	0.209	0.109	0.260
L527	LTE B26	QPSK15M	26865	1	37	Front Face	1.0	Up	1	24	23.44	0.01	0.090	0.056	0.102
L528	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Up	1	24	23.44	0	0.133	0.084	0.151
L529	LTE B26	QPSK15M	26865	1	37	Left Side	1.0	Up	1	24	23.44	-0.05	0.081	0.052	0.093
L530	LTE B26	QPSK15M	26865	1	37	Top Side	1.0	Up	1	24	23.44	0.01	0.105	0.066	0.120
L531	LTE B26	QPSK15M	26965	36	0	Front Face	1.0	Up	1	23	22.37	0.11	0.077	0.049	0.089
L532	LTE B26	QPSK15M	26965	36	0	Rear Face	1.0	Up	1	23	22.37	-0.09	0.122	0.075	0.141
L533	LTE B26	QPSK15M	26965	36	0	Left Side	1.0	Up	1	23	22.37	0.04	0.065	0.043	0.076
L534	LTE B26	QPSK15M	26965	36	0	Top Side	1.0	Up	1	23	22.37	0.02	0.112	0.065	0.130
L535	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Up	2	24	23.44	0.06	0.156	0.098	0.178
L536	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Up	3	24	23.44	-0.03	0.168	0.106	0.191
L537	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Up	4	24	23.44	-0.08	0.164	0.101	0.187
L547	LTE B38	QPSK20M	38000	1	50	Front Face	1.0	Down	1	22.5	21.88	0.02	0.187	0.098	0.216
L548	LTE B38	QPSK20M	38000	1	50	Rear Face	1.0	Down	1	22.5	21.88	-0.06	0.313	0.150	0.361
L549	LTE B38	QPSK20M	38000	1	50	Left Side	1.0	Down	1	22.5	21.88	-0.01	0.065	0.035	0.075
L550	LTE B38	QPSK20M	38000	1	50	Right Side	1.0	Down	1	22.5	21.88	0.08	0.138	0.072	0.159
L551	LTE B38	QPSK20M	38000	1	50	Bottom Side	1.0	Down	1	22.5	21.88	0.01	0.476	0.223	0.550
L552	LTE B38	QPSK20M	37850	50	25	Front Face	1.0	Down	1	22.5	21.53	0.07	0.149	0.077	0.186
L553	LTE B38	QPSK20M	37850	50	25	Rear Face	1.0	Down	1	22.5	21.53	0.12	0.263	0.133	0.329
L554	LTE B38	QPSK20M	37850	50	25	Left Side	1.0	Down	1	22.5	21.53	0.03	0.094	0.050	0.117
L555	LTE B38	QPSK20M	37850	50	25	Right Side	1.0	Down	1	22.5	21.53	0.04	0.134	0.068	0.167
L556	LTE B38	QPSK20M	37850	50	25	Bottom Side	1.0	Down	1	22.5	21.53	0.02	0.457	0.214	0.571
L557	LTE B38	QPSK20M	38000	1	50	Bottom Side	1.0	Down	2	22.5	21.88	-0.02	0.539	0.244	0.622
L558	LTE B38	QPSK20M	38000	1	50	Bottom Side	1.0	Down	3	22.5	21.88	0.11	0.513	0.201	0.592
L559	LTE B38	QPSK20M	38000	1	50	Bottom Side	1.0	Down	4	22.5	21.88	-0.08	0.534	0.231	0.617

Test No.	Band	Mode	Channel	RB	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L569	LTE B38	QPSK20M	38000	1	50	Front Face	1.0	Up	1	20	19.89	0.03	0.166	0.087	0.170
L570	LTE B38	QPSK20M	38000	1	50	Rear Face	1.0	Up	1	20	19.89	0.01	0.459	0.189	0.471
L571	LTE B38	QPSK20M	38000	1	50	Left Side	1.0	Up	1	20	19.89	-0.14	0.163	0.083	0.167
L572	LTE B38	QPSK20M	38000	1	50	Top Side	1.0	Up	1	20	19.89	0.06	0.546	0.220	0.560
L573	LTE B38	QPSK20M	37850	50	0	Front Face	1.0	Up	1	20	19.43	0	0.182	0.086	0.208
L574	LTE B38	QPSK20M	37850	50	0	Rear Face	1.0	Up	1	20	19.43	0.02	0.426	0.191	0.486
L575	LTE B38	QPSK20M	37850	50	0	Left Side	1.0	Up	1	20	19.43	0.17	0.160	0.080	0.183
L576	LTE B38	QPSK20M	37850	50	0	Top Side	1.0	Up	1	20	19.43	0	0.603	0.244	0.688
L577	LTE B38	QPSK20M	37850	50	0	Top Side	1.0	Up	2	20	19.43	0.01	0.612	0.250	0.699
L578	LTE B38	QPSK20M	37850	50	0	Top Side	1.0	Up	3	20	19.43	0.12	0.617	0.252	0.704
L579	LTE B38	QPSK20M	37850	50	0	Top Side	1.0	Up	4	20	19.43	0.18	0.608	0.248	0.694
L589	LTE B41	QPSK20M	41140	1	50	Front Face	1.0	Down	1	22.5	21.90	0.03	0.226	0.123	0.260
L590	LTE B41	QPSK20M	41140	1	50	Rear Face	1.0	Down	1	22.5	21.90	-0.11	0.297	0.152	0.341
L591	LTE B41	QPSK20M	41140	1	50	Left Side	1.0	Down	1	22.5	21.90	0.02	0.145	0.076	0.167
L592	LTE B41	QPSK20M	41140	1	50	Right Side	1.0	Down	1	22.5	21.90	0.01	0.095	0.052	0.109
L593	LTE B41	QPSK20M	41140	1	50	Bottom Side	1.0	Down	1	22.5	21.90	-0.04	0.489	0.227	0.562
L594	LTE B41	QPSK20M	41140	50	25	Front Face	1.0	Down	1	22.5	21.72	0	0.209	0.116	0.250
L595	LTE B41	QPSK20M	41140	50	25	Rear Face	1.0	Down	1	22.5	21.72	0.15	0.296	0.144	0.355
L596	LTE B41	QPSK20M	41140	50	25	Left Side	1.0	Down	1	22.5	21.72	0.02	0.104	0.056	0.125
L597	LTE B41	QPSK20M	41140	50	25	Right Side	1.0	Down	1	22.5	21.72	-0.09	0.087	0.045	0.104
L598	LTE B41	QPSK20M	41140	50	25	Bottom Side	1.0	Down	1	22.5	21.72	-0.01	0.465	0.214	0.557
L599	LTE B41	QPSK20M	41140	1	50	Bottom Side	1.0	Down	2	22.5	21.90	0.17	0.481	0.218	0.553
L600	LTE B41	QPSK20M	41140	1	50	Bottom Side	1.0	Down	3	22.5	21.90	0.12	0.471	0.219	0.541
L601	LTE B41	QPSK20M	41140	1	50	Bottom Side	1.0	Down	4	22.5	21.90	0	0.467	0.217	0.536
L611	LTE B41	QPSK20M	40440	1	50	Front Face	1.0	Up	1	20	19.75	0.03	0.093	0.088	0.099
L612	LTE B41	QPSK20M	40440	1	50	Rear Face	1.0	Up	1	20	19.75	0.11	0.440	0.197	0.466
L613	LTE B41	QPSK20M	40440	1	50	Left Side	1.0	Up	1	20	19.75	-0.01	0.147	0.079	0.156
L614	LTE B41	QPSK20M	40440	1	50	Top Side	1.0	Up	1	20	19.75	0.03	0.625	0.254	0.661
L615	LTE B41	QPSK20M	40440	50	50	Front Face	1.0	Up	1	20	19.41	-0.09	0.167	0.082	0.191
L616	LTE B41	QPSK20M	40440	50	50	Rear Face	1.0	Up	1	20	19.41	0.04	0.469	0.196	0.537
L617	LTE B41	QPSK20M	40440	50	50	Left Side	1.0	Up	1	20	19.41	-0.02	0.145	0.076	0.166
L618	LTE B41	QPSK20M	40440	50	50	Top Side	1.0	Up	1	20	19.41	0.05	0.606	0.244	0.694
L619	LTE B41	QPSK20M	40440	50	50	Top Side	1.0	Up	2	20	19.41	0.17	0.641	0.257	0.734
L620	LTE B41	QPSK20M	40440	50	50	Top Side	1.0	Up	3	20	19.41	0.05	0.628	0.231	0.719
L621	LTE B41	QPSK20M	40440	50	50	Top Side	1.0	Up	4	20	19.41	0.09	0.649	0.264	0.743

Test No.	Band	Mode	Channel	RB	off set	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L631	LTE B66	QPSK20M	132072	1	50	Front Face	1.0	Down	1	21	20.81	0.08	0.130	0.085	0.136
L632	LTE B66	QPSK20M	132072	1	50	Rear Face	1.0	Down	1	21	20.81	-0.01	0.411	0.239	0.429
L633	LTE B66	QPSK20M	132072	1	50	Left Side	1.0	Down	1	21	20.81	0.07	0.080	0.049	0.084
L634	LTE B66	QPSK20M	132072	1	50	Right Side	1.0	Down	1	21	20.81	0.03	0.062	0.038	0.065
L635	LTE B66	QPSK20M	132072	1	50	Bottom Side	1.0	Down	1	21	20.81	0.02	0.542	0.305	0.566
L636	LTE B66	QPSK20M	132272	50	0	Front Face	1.0	Down	1	21	20.51	-0.04	0.146	0.092	0.164
L637	LTE B66	QPSK20M	132272	50	0	Rear Face	1.0	Down	1	21	20.51	0.11	0.427	0.245	0.478
L638	LTE B66	QPSK20M	132272	50	0	Left Side	1.0	Down	1	21	20.51	0.01	0.071	0.040	0.079
L639	LTE B66	QPSK20M	132272	50	0	Right Side	1.0	Down	1	21	20.51	0.15	0.043	0.026	0.048
L640	LTE B66	QPSK20M	132272	50	0	Bottom Side	1.0	Down	1	21	20.51	0	0.571	0.319	0.640
L651	LTE B66	QPSK20M	132272	50	0	Bottom Side	1.0	Down	2	21	20.51	0.06	0.562	0.306	0.630
L652	LTE B66	QPSK20M	132272	50	0	Bottom Side	1.0	Down	3	21	20.51	-0.09	0.549	0.301	0.615
L653	LTE B66	QPSK20M	132272	50	0	Bottom Side	1.0	Down	4	21	20.51	-0.04	0.534	0.298	0.598
L663	LTE B66	QPSK20M	132272	1	50	Front Face	1.0	Up	1	21	20.88	0.02	0.290	0.159	0.298
L664	LTE B66	QPSK20M	132272	1	50	Rear Face	1.0	Up	1	21	20.88	0.06	0.463	0.254	0.475
L665	LTE B66	QPSK20M	132272	1	50	Left Side	1.0	Up	1	21	20.88	-0.02	0.162	0.093	0.166
L666	LTE B66	QPSK20M	132272	1	50	Top Side	1.0	Up	1	21	20.88	-0.03	0.457	0.242	0.469
L667	LTE B66	QPSK20M	132272	50	25	Front Face	1.0	Up	1	21	20.81	0.12	0.278	0.157	0.290
L668	LTE B66	QPSK20M	132272	50	25	Rear Face	1.0	Up	1	21	20.81	0.08	0.452	0.249	0.472
L669	LTE B66	QPSK20M	132272	50	25	Left Side	1.0	Up	1	21	20.81	0.17	0.116	0.067	0.121
L670	LTE B66	QPSK20M	132272	50	25	Top Side	1.0	Up	1	21	20.81	-0.02	0.465	0.246	0.486
L671	LTE B66	QPSK20M	132272	50	25	Top Side	1.0	Up	2	21	20.81	0.06	0.453	0.234	0.473
L672	LTE B66	QPSK20M	132272	50	25	Top Side	1.0	Up	3	21	20.81	0.19	0.448	0.229	0.468
L673	LTE B66	QPSK20M	132272	50	25	Top Side	1.0	Up	4	21	20.81	-0.04	0.463	0.245	0.483

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

4. Hotspot SAR test results of 2.4G WiFi

WiFi only

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
W38	802.11b	6	Front Face	1	1	1	18	16.77	0.06	0.137	0.074	0.182
W39	802.11b	6	Rear Face	1	1	1	18	16.77	0.02	0.210	0.102	0.279
W40	802.11b	6	Right Side	1	1	1	18	16.77	-0.01	0.143	0.073	0.190
W41	802.11b	6	Top Side	1	1	1	18	16.77	0.07	0.122	0.062	0.162
W42	802.11b	6	Rear Face	1	2	1	18	16.77	0.11	0.178	0.092	0.236
W43	802.11b	6	Rear Face	1	3	1	18	16.77	0.04	0.153	0.072	0.203
W44	802.11b	6	Rear Face	1	4	1	18	16.77	-0.18	0.167	0.087	0.222

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

5. Hotspot SAR test results of 5G WiFi

WiFi only

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
W87	802.11a	48	Front Face	1	1	6	13	11.68	0.01	0.106	0.021	0.144
W88	802.11a	48	Rear Face	1	1	6	13	11.68	0.13	0.119	0.038	0.161
W89	802.11a	48	Right Side	1	1	6	13	11.68	-0.02	<0.001	<0.001	<0.001
W90	802.11a	48	Top Side	1	1	6	13	11.68	0.15	0.267	0.079	0.362
W91	802.11a	48	Top Side	1	2	6	13	11.68	-0.01	0.245	0.074	0.332
W92	802.11a	48	Top Side	1	3	6	13	11.68	0.06	0.261	0.078	0.354
W93	802.11a	48	Top Side	1	4	6	13	11.68	0.04	0.259	0.077	0.351
W80	802.11a	149	Front Face	1	1	6	11	9.89	0.03	0.100	0.034	0.129
W81	802.11a	149	Rear Face	1	1	6	11	9.89	0.01	0.111	0.036	0.143
W82	802.11a	149	Right Side	1	1	6	11	9.89	-0.04	0.028	0.010	0.036
W83	802.11a	149	Top Side	1	1	6	11	9.89	-0.08	0.348	0.095	0.449
W84	802.11a	149	Top Side	1	2	6	11	9.89	0.06	0.321	0.086	0.414
W85	802.11a	149	Top Side	1	3	6	11	9.89	-0.18	0.293	0.081	0.378
W86	802.11a	149	Top Side	1	4	6	11	9.89	0.07	0.312	0.070	0.403

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	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
G38	GSM 850	GPRS2TX	190	Front Face	1.0	Down	1	31	29.66	0.03	0.080	0.056	0.109	YES
G39	GSM 850	GPRS2TX	190	Rear Face	1.0	Down	1	31	29.66	0.04	0.166	0.099	0.226	YES
G40	GSM 850	GPRS2TX	190	Left Side	1.0	Down	1	31	29.66	0	0.044	0.031	0.059	YES
G41	GSM 850	GPRS2TX	190	Right Side	1.0	Down	1	31	29.66	0.08	0.093	0.063	0.126	YES
G42	GSM 850	GPRS2TX	190	Bottom Side	1.0	Down	1	31	29.66	0.01	0.150	0.080	0.204	YES
G43	GSM 850	GPRS2TX	190	Rear Face	1.0	Down	2	31	29.66	-0.06	0.159	0.089	0.216	YES
G44	GSM 850	GPRS2TX	190	Rear Face	1.0	Down	3	31	29.66	0.03	0.178	0.119	0.242	YES
G45	GSM 850	GPRS2TX	190	Rear Face	1.0	Down	4	31	29.66	-0.11	0.216	0.128	0.294	YES
G53	GSM 850	GPRS2TX	190	Front Face	1.0	Up	1	32	30.27	0	0.106	0.070	0.158	YES
G54	GSM 850	GPRS2TX	190	Rear Face	1.0	Up	1	32	30.27	-0.08	0.155	0.101	0.231	YES
G55	GSM 850	GPRS2TX	190	Left Side	1.0	Up	1	32	30.27	0.03	0.069	0.048	0.103	YES
G56	GSM 850	GPRS2TX	190	Top Side	1.0	Up	1	32	30.27	-0.01	0.149	0.092	0.222	YES
G57	GSM 850	GPRS2TX	190	Rear Face	1.0	Up	2	32	30.27	-0.07	0.190	0.123	0.283	YES
G58	GSM 850	GPRS2TX	190	Rear Face	1.0	Up	3	32	30.27	0.1	0.152	0.099	0.226	YES
G59	GSM 850	GPRS2TX	190	Rear Face	1.0	Up	4	32	30.27	-0.04	0.144	0.094	0.214	YES
G67	GSM 1900	GPRS4TX	661	Front Face	1.0	Down	1	24	22.51	0.03	0.162	0.099	0.228	YES
G68	GSM 1900	GPRS4TX	661	Rear Face	1.0	Down	1	24	22.51	0.13	0.423	0.236	0.596	YES
G69	GSM 1900	GPRS4TX	661	Left Side	1.0	Down	1	24	22.51	-0.01	0.080	0.042	0.112	YES
G70	GSM 1900	GPRS4TX	661	Right Side	1.0	Down	1	24	22.51	0.05	0.039	0.022	0.055	YES
G71	GSM 1900	GPRS4TX	661	Bottom Side	1.0	Down	1	24	22.51	0.02	0.496	0.265	0.699	YES
G72	GSM 1900	GPRS4TX	661	Bottom Side	1.0	Down	2	24	22.51	0.07	0.487	0.258	0.686	YES
G73	GSM 1900	GPRS4TX	661	Bottom Side	1.0	Down	3	24	22.51	0.03	0.445	0.238	0.627	YES
G74	GSM 1900	GPRS4TX	661	Bottom Side	1.0	Down	4	24	22.51	0.01	0.472	0.247	0.665	YES
G82	GSM 1900	GPRS4TX	661	Front Face	1.0	Up	1	24.5	22.67	0	0.183	0.098	0.279	YES
G83	GSM 1900	GPRS4TX	661	Rear Face	1.0	Up	1	24.5	22.67	0.11	0.291	0.155	0.443	YES
G84	GSM 1900	GPRS4TX	661	Left Side	1.0	Up	1	24.5	22.67	0.01	0.086	0.045	0.131	YES
G85	GSM 1900	GPRS4TX	661	Top Side	1.0	Up	1	24.5	22.67	-0.03	0.384	0.184	0.585	YES
G86	GSM 1900	GPRS4TX	661	Top Side	1.0	Up	2	24.5	22.67	-0.04	0.380	0.181	0.579	YES
G87	GSM 1900	GPRS4TX	661	Top Side	1.0	Up	3	24.5	22.67	-0.02	0.387	0.189	0.590	YES
G88	GSM 1900	GPRS4TX	661	Top Side	1.0	Up	4	24.5	22.67	0.01	0.374	0.178	0.570	YES

Test No.	Band	Mode	Channel	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
U54	UMTS B2	RMC12.2K	9400	Front Face	1.0	Down	1	20.5	19.38	0.03	0.160	0.100	0.207	YES
U55	UMTS B2	RMC12.2K	9400	Rear Face	1.0	Down	1	20.5	19.38	0.02	0.419	0.238	0.542	YES
U56	UMTS B2	RMC12.2K	9400	Left Side	1.0	Down	1	20.5	19.38	0.05	0.075	0.042	0.097	YES
U57	UMTS B2	RMC12.2K	9400	Right Side	1.0	Down	1	20.5	19.38	0.14	0.023	0.005	0.030	YES
U58	UMTS B2	RMC12.2K	9400	Bottom Side	1.0	Down	1	20.5	19.38	-0.01	0.486	0.266	0.629	YES
U59	UMTS B2	RMC12.2K	9400	Bottom Side	1.0	Down	2	20.5	19.38	0.08	0.477	0.257	0.617	YES
U60	UMTS B2	RMC12.2K	9400	Bottom Side	1.0	Down	3	20.5	19.38	0.03	0.485	0.264	0.628	YES
U61	UMTS B2	RMC12.2K	9400	Bottom Side	1.0	Down	4	20.5	19.38	-0.03	0.474	0.258	0.613	YES
U69	UMTS B2	RMC12.2K	9400	Front Face	1.0	Up	1	20.5	19.76	0.02	0.241	0.128	0.286	YES
U70	UMTS B2	RMC12.2K	9400	Rear Face	1.0	Up	1	20.5	19.76	0.09	0.424	0.227	0.503	YES
U71	UMTS B2	RMC12.2K	9400	Left Side	1.0	Up	1	20.5	19.76	0.12	0.109	0.059	0.129	YES
U72	UMTS B2	RMC12.2K	9400	Top Side	1.0	Up	1	20.5	19.76	0.02	0.447	0.224	0.530	YES
U73	UMTS B2	RMC12.2K	9400	Top Side	1.0	Up	2	20.5	19.76	0	0.432	0.230	0.512	YES
U74	UMTS B2	RMC12.2K	9400	Top Side	1.0	Up	3	20.5	19.76	0.06	0.504	0.251	0.598	YES
U75	UMTS B2	RMC12.2K	9400	Top Side	1.0	Up	4	20.5	19.76	-0.04	0.464	0.239	0.550	YES
U83	UMTS B4	RMC12.2K	1413	Front Face	1.0	Down	1	21	19.75	0.08	0.139	0.088	0.185	YES
U84	UMTS B4	RMC12.2K	1413	Rear Face	1.0	Down	1	21	19.75	0.09	0.483	0.278	0.644	YES
U85	UMTS B4	RMC12.2K	1413	Left Side	1.0	Down	1	21	19.75	-0.12	0.099	0.061	0.132	YES
U86	UMTS B4	RMC12.2K	1413	Right Side	1.0	Down	1	21	19.75	0.06	0.045	0.027	0.060	YES
U87	UMTS B4	RMC12.2K	1413	Bottom Side	1.0	Down	1	21	19.75	0.01	0.509	0.284	0.679	YES
U88	UMTS B4	RMC12.2K	1413	Bottom Side	1.0	Down	2	21	19.75	0.01	0.510	0.287	0.680	YES
U89	UMTS B4	RMC12.2K	1413	Bottom Side	1.0	Down	3	21	19.75	0.13	0.501	0.278	0.668	YES
U90	UMTS B4	RMC12.2K	1413	Bottom Side	1.0	Down	4	21	19.75	-0.07	0.506	0.282	0.675	YES
U98	UMTS B4	RMC12.2K	1413	Front Face	1.0	Up	1	21	20.14	0.01	0.208	0.118	0.254	YES
U99	UMTS B4	RMC12.2K	1413	Rear Face	1.0	Up	1	21	20.14	0.07	0.294	0.164	0.358	YES
U100	UMTS B4	RMC12.2K	1413	Left Side	1.0	Up	1	21	20.14	0.06	0.085	0.048	0.104	YES
U101	UMTS B4	RMC12.2K	1413	Top Side	1.0	Up	1	21	20.14	0.03	0.425	0.222	0.518	YES
U102	UMTS B4	RMC12.2K	1413	Top Side	1.0	Up	2	21	20.14	0.11	0.431	0.213	0.525	YES
U103	UMTS B4	RMC12.2K	1413	Top Side	1.0	Up	3	21	20.14	-0.01	0.439	0.233	0.535	YES
U104	UMTS B4	RMC12.2K	1413	Top Side	1.0	Up	4	21	20.14	-0.09	0.413	0.239	0.503	YES
U112	UMTS B5	RMC12.2K	4182	Front Face	1.0	Down	1	24	22.62	0.06	0.113	0.070	0.155	YES
U113	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Down	1	24	22.62	0.04	0.219	0.129	0.301	YES
U114	UMTS B5	RMC12.2K	4182	Left Side	1.0	Down	1	24	22.62	0.12	0.066	0.044	0.090	YES
U115	UMTS B5	RMC12.2K	4182	Right Side	1.0	Down	1	24	22.62	0.1	0.116	0.076	0.159	YES
U116	UMTS B5	RMC12.2K	4182	Bottom Side	1.0	Down	1	24	22.62	-0.03	0.186	0.099	0.256	YES
U117	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Down	2	24	22.62	0.07	0.205	0.114	0.282	YES
U118	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Down	3	24	22.62	0.03	0.209	0.114	0.287	YES
U119	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Down	4	24	22.62	0.02	0.202	0.108	0.278	YES
U127	UMTS B5	RMC12.2K	4182	Front Face	1.0	Up	1	24	22.87	0.12	0.073	0.044	0.095	YES
U128	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Up	1	24	22.87	0	0.110	0.070	0.143	YES
U129	UMTS B5	RMC12.2K	4182	Left Side	1.0	Up	1	24	22.87	0.01	0.057	0.036	0.074	YES
U130	UMTS B5	RMC12.2K	4182	Top Side	1.0	Up	1	24	22.87	0.02	0.098	0.061	0.127	YES
U131	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Up	2	24	22.87	0.09	0.128	0.083	0.166	YES
U132	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Up	3	24	22.87	0	0.157	0.100	0.204	YES
U133	UMTS B5	RMC12.2K	4182	Rear Face	1.0	Up	4	24	22.87	-0.06	0.142	0.091	0.184	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
L247	LTE B2	QPSK20M	18700	1	50	Front Face	1.0	Down	1	20.5	20.04	0.16	0.186	0.116	0.207	YES
L248	LTE B2	QPSK20M	18700	1	50	Rear Face	1.0	Down	1	20.5	20.04	-0.05	0.456	0.268	0.507	YES
L249	LTE B2	QPSK20M	18700	1	50	Left Side	1.0	Down	1	20.5	20.04	0.02	0.065	0.034	0.072	YES
L250	LTE B2	QPSK20M	18700	1	50	Right Side	1.0	Down	1	20.5	20.04	0.04	0.048	0.029	0.053	YES
L251	LTE B2	QPSK20M	18700	1	50	Bottom Side	1.0	Down	1	20.5	20.04	0.06	0.562	0.308	0.625	YES
L252	LTE B2	QPSK20M	19100	50	25	Front Face	1.0	Down	1	20.5	19.72	-0.05	0.193	0.119	0.231	YES
L253	LTE B2	QPSK20M	19100	50	25	Rear Face	1.0	Down	1	20.5	19.72	0.08	0.471	0.267	0.563	YES
L254	LTE B2	QPSK20M	19100	50	25	Left Side	1.0	Down	1	20.5	19.72	-0.15	0.095	0.049	0.114	YES
L255	LTE B2	QPSK20M	19100	50	25	Right Side	1.0	Down	1	20.5	19.72	0.01	0.053	0.032	0.063	YES
L256	LTE B2	QPSK20M	19100	50	25	Bottom Side	1.0	Down	1	20.5	19.72	0.01	0.554	0.300	0.662	YES
L257	LTE B2	QPSK20M	19100	50	25	Bottom Side	1.0	Down	2	20.5	19.72	0	0.505	0.276	0.604	YES
L258	LTE B2	QPSK20M	19100	50	25	Bottom Side	1.0	Down	3	20.5	19.72	0.13	0.543	0.296	0.649	YES
L259	LTE B2	QPSK20M	19100	50	25	Bottom Side	1.0	Down	4	20.5	19.72	-0.09	0.539	0.283	0.644	YES
L269	LTE B2	QPSK20M	18700	1	50	Front Face	1.0	Up	1	20.5	20.35	-0.02	0.278	0.149	0.287	YES
L270	LTE B2	QPSK20M	18700	1	50	Rear Face	1.0	Up	1	20.5	20.35	0.09	0.383	0.207	0.396	YES
L271	LTE B2	QPSK20M	18700	1	50	Left Side	1.0	Up	1	20.5	20.35	0.13	0.111	0.060	0.115	YES
L272	LTE B2	QPSK20M	18700	1	50	Top Side	1.0	Up	1	20.5	20.35	0	0.502	0.252	0.519	YES
L273	LTE B2	QPSK20M	19100	50	25	Front Face	1.0	Up	1	20.5	20.25	0.18	0.284	0.154	0.301	YES
L274	LTE B2	QPSK20M	19100	50	25	Rear Face	1.0	Up	1	20.5	20.25	-0.06	0.404	0.217	0.428	YES
L275	LTE B2	QPSK20M	19100	50	25	Left Side	1.0	Up	1	20.5	20.25	-0.13	0.117	0.064	0.124	YES
L276	LTE B2	QPSK20M	19100	50	25	Top Side	1.0	Up	1	20.5	20.25	0.01	0.521	0.256	0.551	YES
L277	LTE B2	QPSK20M	19100	50	25	Top Side	1.0	Up	2	20.5	20.25	0.08	0.506	0.249	0.536	YES
L278	LTE B2	QPSK20M	19100	50	25	Top Side	1.0	Up	3	20.5	20.25	0.14	0.513	0.255	0.543	YES
L279	LTE B2	QPSK20M	19100	50	25	Top Side	1.0	Up	4	20.5	20.25	-0.02	0.510	0.254	0.540	YES
L289	LTE B4	QPSK20M	20050	1	50	Front Face	1.0	Down	1	21	20.28	0.03	0.173	0.110	0.204	YES
L290	LTE B4	QPSK20M	20050	1	50	Rear Face	1.0	Down	1	21	20.28	-0.12	0.565	0.331	0.667	YES
L291	LTE B4	QPSK20M	20050	1	50	Left Side	1.0	Down	1	21	20.28	0.09	0.062	0.037	0.073	YES
L292	LTE B4	QPSK20M	20050	1	50	Right Side	1.0	Down	1	21	20.28	0.02	0.060	0.039	0.070	YES
L293	LTE B4	QPSK20M	20050	1	50	Bottom Side	1.0	Down	1	21	20.28	0.01	0.643	0.356	0.759	YES
L294	LTE B4	QPSK20M	20175	50	0	Front Face	1.0	Down	1	21	19.97	0.05	0.177	0.112	0.224	YES
L295	LTE B4	QPSK20M	20175	50	0	Rear Face	1.0	Down	1	21	19.97	0.08	0.531	0.305	0.672	YES
L296	LTE B4	QPSK20M	20175	50	0	Left Side	1.0	Down	1	21	19.97	-0.11	0.061	0.038	0.077	YES
L297	LTE B4	QPSK20M	20175	50	0	Right Side	1.0	Down	1	21	19.97	0.05	0.050	0.031	0.063	YES
L298	LTE B4	QPSK20M	20175	50	0	Bottom Side	1.0	Down	1	21	19.97	0.02	0.630	0.346	0.798	YES
L299	LTE B4	QPSK20M	20050	50	25	Bottom Side	1.0	Down	1	21	20.28	0.05	0.647	0.358	0.764	YES
L300	LTE B4	QPSK20M	20300	50	25	Bottom Side	1.0	Down	1	21	20.27	0.05	0.634	0.350	0.750	YES
L301	LTE B4	QPSK20M	20175	100	0	Bottom Side	1.0	Down	1	21	20.32	0.02	0.633	0.350	0.741	YES
L302	LTE B4	QPSK20M	20175	50	0	Bottom Side	1.0	Down	2	21	19.97	-0.06	0.621	0.320	0.786	YES
L303	LTE B4	QPSK20M	20175	50	0	Bottom Side	1.0	Down	3	21	19.97	0	0.602	0.334	0.762	YES
L311	LTE B4	QPSK20M	20175	50	0	Bottom Side	1.0	Down	4	21	19.97	0.03	0.612	0.321	0.775	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
L312	LTE B4	QPSK20M	20050	1	50	Front Face	1.0	Up	1	22	21.64	-0.02	0.266	0.145	0.289	YES
L313	LTE B4	QPSK20M	20050	1	50	Rear Face	1.0	Up	1	22	21.64	0.13	0.383	0.215	0.416	YES
L314	LTE B4	QPSK20M	20050	1	50	Left Side	1.0	Up	1	22	21.64	0.08	0.110	0.059	0.120	YES
L315	LTE B4	QPSK20M	20050	1	50	Top Side	1.0	Up	1	22	21.64	0	0.466	0.250	0.507	YES
L316	LTE B4	QPSK20M	20175	50	25	Front Face	1.0	Up	1	22	20.33	-0.05	0.296	0.162	0.434	YES
L317	LTE B4	QPSK20M	20175	50	25	Rear Face	1.0	Up	1	22	20.33	0.06	0.467	0.256	0.685	YES
L318	LTE B4	QPSK20M	20175	50	25	Left Side	1.0	Up	1	22	20.33	0.17	0.115	0.064	0.169	YES
L319	LTE B4	QPSK20M	20175	50	25	Top Side	1.0	Up	1	22	20.33	0.02	0.496	0.265	0.728	YES
L320	LTE B4	QPSK20M	20175	50	25	Top Side	1.0	Up	2	22	20.33	-0.14	0.528	0.256	0.775	YES
L321	LTE B4	QPSK20M	20175	50	25	Top Side	1.0	Up	3	22	20.33	0.02	0.537	0.275	0.788	YES
L322	LTE B4	QPSK20M	20175	50	25	Top Side	1.0	Up	4	22	20.33	0.09	0.504	0.239	0.740	YES
L332	LTE B5	QPSK10M	20525	1	24	Front Face	1.0	Down	1	24	23.15	0.02	0.088	0.056	0.107	YES
L333	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Down	1	24	23.15	0	0.171	0.101	0.208	YES
L334	LTE B5	QPSK10M	20525	1	24	Left Side	1.0	Down	1	24	23.15	0.11	0.070	0.042	0.086	YES
L335	LTE B5	QPSK10M	20525	1	24	Right Side	1.0	Down	1	24	23.15	0.06	0.107	0.064	0.131	YES
L336	LTE B5	QPSK10M	20525	1	24	Bottom Side	1.0	Down	1	24	23.15	-0.01	0.154	0.075	0.187	YES
L337	LTE B5	QPSK10M	20525	25	12	Front Face	1.0	Down	1	23	22.08	0.05	0.107	0.060	0.132	YES
L338	LTE B5	QPSK10M	20525	25	12	Rear Face	1.0	Down	1	23	22.08	-0.09	0.173	0.103	0.214	YES
L339	LTE B5	QPSK10M	20525	25	12	Left Side	1.0	Down	1	23	22.08	0.03	0.056	0.033	0.069	YES
L340	LTE B5	QPSK10M	20525	25	12	Right Side	1.0	Down	1	23	22.08	0.04	0.111	0.066	0.137	YES
L341	LTE B5	QPSK10M	20525	25	12	Bottom Side	1.0	Down	1	23	22.08	-0.15	0.148	0.074	0.183	YES
L342	LTE B5	QPSK10M	20525	25	12	Rear Face	1.0	Down	2	23	22.08	0.01	0.201	0.119	0.249	YES
L343	LTE B5	QPSK10M	20525	25	12	Rear Face	1.0	Down	3	23	22.08	0.03	0.214	0.126	0.265	YES
L344	LTE B5	QPSK10M	20525	25	12	Rear Face	1.0	Down	4	23	22.08	-0.08	0.198	0.106	0.245	YES
L354	LTE B5	QPSK10M	20525	1	24	Front Face	1.0	Up	1	24	23.47	0.01	0.097	0.062	0.110	YES
L355	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Up	1	24	23.47	-0.05	0.155	0.097	0.175	YES
L356	LTE B5	QPSK10M	20525	1	24	Left Side	1.0	Up	1	24	23.47	0.06	0.076	0.050	0.086	YES
L357	LTE B5	QPSK10M	20525	1	24	Top Side	1.0	Up	1	24	23.47	0.02	0.121	0.069	0.137	YES
L358	LTE B5	QPSK10M	20600	25	0	Front Face	1.0	Up	1	23	22.35	-0.09	0.090	0.055	0.105	YES
L359	LTE B5	QPSK10M	20600	25	0	Rear Face	1.0	Up	1	23	22.35	-0.02	0.143	0.089	0.166	YES
L360	LTE B5	QPSK10M	20600	25	0	Left Side	1.0	Up	1	23	22.35	0.11	0.071	0.046	0.083	YES
L361	LTE B5	QPSK10M	20600	25	0	Top Side	1.0	Up	1	23	22.35	0.03	0.114	0.067	0.133	YES
L362	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Up	2	24	23.47	0	0.268	0.160	0.303	YES
L363	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Up	3	24	23.47	0.02	0.213	0.121	0.241	YES
L364	LTE B5	QPSK10M	20525	1	24	Rear Face	1.0	Up	4	24	23.47	0.07	0.209	0.104	0.236	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
L374	LTE B7	QPSK20M	21350	1	50	Front Face	1.0	Down	1	21.5	21.15	0.02	0.227	0.126	0.246	YES
L375	LTE B7	QPSK20M	21350	1	50	Rear Face	1.0	Down	1	21.5	21.15	0.03	0.449	0.217	0.487	YES
L376	LTE B7	QPSK20M	21350	1	50	Left Side	1.0	Down	1	21.5	21.15	0.07	0.085	0.047	0.093	YES
L377	LTE B7	QPSK20M	21350	1	50	Right Side	1.0	Down	1	21.5	21.15	-0.11	0.144	0.080	0.156	YES
L378	LTE B7	QPSK20M	21350	1	50	Bottom Side	1.0	Down	1	21.5	21.15	0.16	0.621	0.288	0.674	YES
L379	LTE B7	QPSK20M	20850	50	25	Front Face	1.0	Down	1	21.5	20.59	0.09	0.203	0.100	0.250	YES
L380	LTE B7	QPSK20M	20850	50	25	Rear Face	1.0	Down	1	21.5	20.59	-0.1	0.432	0.209	0.532	YES
L381	LTE B7	QPSK20M	20850	50	25	Left Side	1.0	Down	1	21.5	20.59	0.06	0.053	0.029	0.066	YES
L382	LTE B7	QPSK20M	20850	50	25	Right Side	1.0	Down	1	21.5	20.59	0.05	0.153	0.082	0.188	YES
L383	LTE B7	QPSK20M	20850	50	25	Bottom Side	1.0	Down	1	21.5	20.59	0.06	0.692	0.322	0.852	YES
L674	LTE B7	QPSK20M	21100	50	25	Bottom Side	1.0	Down	1	21.5	20.51	0	0.656	0.305	0.824	YES
L675	LTE B7	QPSK20M	21350	50	25	Bottom Side	1.0	Down	1	21.5	20.57	0.03	0.615	0.285	0.762	YES
L677	LTE B7	QPSK20M	21350	100	0	Bottom Side	1.0	Down	1	21.5	20.55	0.04	0.681	0.316	0.848	YES
L384	LTE B7	QPSK20M	20850	50	25	Bottom Side	1.0	Down	2	21.5	20.59	-0.01	0.591	0.215	0.728	YES
L385	LTE B7	QPSK20M	20850	50	25	Bottom Side	1.0	Down	3	21.5	20.59	0.08	0.629	0.295	0.775	YES
L386	LTE B7	QPSK20M	20850	50	25	Bottom Side	1.0	Down	4	21.5	20.59	0.02	0.648	0.246	0.798	YES
L676	LTE B7	QPSK20M	20850	50	25	Bottom Side (Repeated)	1.0	Down	1	21.5	20.59	0.08	0.695	0.323	0.856	YES
L396	LTE B7	QPSK20M	20850	1	50	Front Face	1.0	Up	1	18	17.92	0.01	0.205	0.094	0.209	YES
L397	LTE B7	QPSK20M	20850	1	50	Rear Face	1.0	Up	1	18	17.92	-0.03	0.530	0.219	0.540	YES
L398	LTE B7	QPSK20M	20850	1	50	Left Side	1.0	Up	1	18	17.92	0.11	0.161	0.083	0.164	YES
L399	LTE B7	QPSK20M	20850	1	50	Top Side	1.0	Up	1	18	17.92	0.09	0.691	0.281	0.704	YES
L400	LTE B7	QPSK20M	20850	50	50	Front Face	1.0	Up	1	18	17.90	0.04	0.207	0.094	0.212	YES
L401	LTE B7	QPSK20M	20850	50	50	Rear Face	1.0	Up	1	18	17.90	0.01	0.554	0.217	0.567	YES
L402	LTE B7	QPSK20M	20850	50	50	Left Side	1.0	Up	1	18	17.90	0	0.165	0.085	0.169	YES
L403	LTE B7	QPSK20M	20850	50	50	Top Side	1.0	Up	1	18	17.90	0.06	0.680	0.277	0.696	YES
L409	LTE B7	QPSK20M	20850	1	50	Top Side	1.0	Up	2	18	17.92	0.01	0.608	0.256	0.620	YES
L410	LTE B7	QPSK20M	20850	1	50	Top Side	1.0	Up	3	18	17.92	-0.09	0.685	0.267	0.698	YES
L411	LTE B7	QPSK20M	20850	1	50	Top Side	1.0	Up	4	18	17.92	0.02	0.663	0.234	0.676	YES
L421	LTE B12	QPSK10M	23095	1	24	Front Face	1.0	Down	1	24	22.83	0.11	0.156	0.138	0.204	YES
L422	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Down	1	24	22.83	-0.01	0.182	0.141	0.238	YES
L423	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Down	1	24	22.83	0.03	0.117	0.082	0.153	YES
L424	LTE B12	QPSK10M	23095	1	24	Right Side	1.0	Down	1	24	22.83	0.07	0.128	0.103	0.168	YES
L425	LTE B12	QPSK10M	23095	1	24	Bottom Side	1.0	Down	1	24	22.83	-0.05	0.133	0.074	0.174	YES
L426	LTE B12	QPSK10M	23060	25	25	Front Face	1.0	Down	1	23	21.92	0.06	0.130	0.113	0.167	YES
L427	LTE B12	QPSK10M	23060	25	25	Rear Face	1.0	Down	1	23	21.92	-0.03	0.142	0.110	0.182	YES
L428	LTE B12	QPSK10M	23060	25	25	Left Side	1.0	Down	1	23	21.92	-0.09	0.098	0.068	0.125	YES
L429	LTE B12	QPSK10M	23060	25	25	Right Side	1.0	Down	1	23	21.92	-0.12	0.121	0.098	0.155	YES
L430	LTE B12	QPSK10M	23060	25	25	Bottom Side	1.0	Down	1	23	21.92	0.05	0.092	0.056	0.118	YES
L431	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Down	2	24	22.83	0.16	0.168	0.127	0.220	YES
L432	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Down	3	24	22.83	-0.07	0.180	0.139	0.236	YES
L433	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Down	4	24	22.83	0.04	0.171	0.129	0.224	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
L443	LTE B12	QPSK10M	23095	1	24	Front Face	1.0	Up	1	24	23.36	0.05	0.010	0.007	0.011	YES
L444	LTE B12	QPSK10M	23095	1	24	Rear Face	1.0	Up	1	24	23.36	0.02	0.013	0.008	0.015	YES
L445	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Up	1	24	23.36	0.06	0.020	0.013	0.023	YES
L446	LTE B12	QPSK10M	23095	1	24	Top Side	1.0	Up	1	24	23.36	0.04	0.012	0.074	0.013	YES
L447	LTE B12	QPSK10M	23060	25	25	Front Face	1.0	Up	1	23	22.35	0.09	0.009	0.006	0.010	YES
L448	LTE B12	QPSK10M	23060	25	25	Rear Face	1.0	Up	1	23	22.35	0.05	0.013	0.009	0.015	YES
L449	LTE B12	QPSK10M	23060	25	25	Left Side	1.0	Up	1	23	22.35	0.02	0.017	0.012	0.020	YES
L450	LTE B12	QPSK10M	23060	25	25	Top Side	1.0	Up	1	23	22.35	0.05	0.010	0.007	0.012	YES
L451	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Up	2	24	23.36	-0.01	0.019	0.013	0.022	YES
L452	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Up	3	24	23.36	0.02	0.021	0.015	0.024	YES
L453	LTE B12	QPSK10M	23095	1	24	Left Side	1.0	Up	4	24	23.36	0.07	0.019	0.013	0.022	YES
L463	LTE B17	QPSK10M	23790	1	24	Front Face	1.0	Down	1	24	22.78	0.13	0.161	0.105	0.213	YES
L464	LTE B17	QPSK10M	23790	1	24	Rear Face	1.0	Down	1	24	22.78	-0.09	0.198	0.154	0.262	YES
L465	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Down	1	24	22.78	0.08	0.131	0.082	0.173	YES
L466	LTE B17	QPSK10M	23790	1	24	Right Side	1.0	Down	1	24	22.78	0.01	0.129	0.079	0.171	YES
L467	LTE B17	QPSK10M	23790	1	24	Bottom Side	1.0	Down	1	24	22.78	-0.06	0.120	0.052	0.159	YES
L468	LTE B17	QPSK10M	23780	25	12	Front Face	1.0	Down	1	23	21.68	0.18	0.121	0.083	0.164	YES
L469	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Down	1	23	21.68	-0.09	0.203	0.134	0.275	YES
L470	LTE B17	QPSK10M	23780	25	12	Left Side	1.0	Down	1	23	21.68	0.05	0.096	0.058	0.130	YES
L471	LTE B17	QPSK10M	23780	25	12	Right Side	1.0	Down	1	23	21.68	0.09	0.103	0.062	0.140	YES
L472	LTE B17	QPSK10M	23780	25	12	Bottom Side	1.0	Down	1	23	21.68	0.16	0.107	0.045	0.145	YES
L473	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Down	2	23	21.68	0.01	0.178	0.121	0.241	YES
L474	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Down	3	23	21.68	-0.07	0.146	0.113	0.198	YES
L475	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Down	4	23	21.68	0.14	0.172	0.041	0.233	YES
L485	LTE B17	QPSK10M	23790	1	24	Front Face	1.0	Up	1	24	23.75	0.07	0.010	0.007	0.010	YES
L486	LTE B17	QPSK10M	23790	1	24	Rear Face	1.0	Up	1	24	23.75	0.08	0.015	0.010	0.016	YES
L487	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Up	1	24	23.75	0.02	0.020	0.013	0.021	YES
L488	LTE B17	QPSK10M	23790	1	24	Top Side	1.0	Up	1	24	23.75	0.03	0.012	0.008	0.012	YES
L489	LTE B17	QPSK10M	23780	25	12	Front Face	1.0	Up	1	23	22.62	0.09	0.007	0.005	0.008	YES
L490	LTE B17	QPSK10M	23780	25	12	Rear Face	1.0	Up	1	23	22.62	0.03	0.012	0.008	0.013	YES
L491	LTE B17	QPSK10M	23780	25	12	Left Side	1.0	Up	1	23	22.62	0.01	0.015	0.011	0.016	YES
L492	LTE B17	QPSK10M	23780	25	12	Top Side	1.0	Up	1	23	22.62	0.07	0.009	0.006	0.010	YES
L493	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Up	2	24	23.75	0.15	0.023	0.016	0.024	YES
L494	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Up	3	24	23.75	-0.13	0.020	0.014	0.021	YES
L495	LTE B17	QPSK10M	23790	1	24	Left Side	1.0	Up	4	24	23.75	0.09	0.021	0.015	0.022	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
L505	LTE B26	QPSK15M	26865	1	37	Front Face	1.0	Down	1	24	23.06	0.03	0.135	0.082	0.168	YES
L506	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Down	1	24	23.06	-0.02	0.221	0.131	0.275	YES
L507	LTE B26	QPSK15M	26865	1	37	Left Side	1.0	Down	1	24	23.06	-0.11	0.058	0.037	0.071	YES
L508	LTE B26	QPSK15M	26865	1	37	Right Side	1.0	Down	1	24	23.06	0.09	0.134	0.089	0.167	YES
L509	LTE B26	QPSK15M	26865	1	37	Bottom Side	1.0	Down	1	24	23.06	0	0.192	0.101	0.239	YES
L510	LTE B26	QPSK15M	26865	36	19	Front Face	1.0	Down	1	23	21.94	0.12	0.097	0.060	0.124	YES
L511	LTE B26	QPSK15M	26865	36	19	Rear Face	1.0	Down	1	23	21.94	0.06	0.172	0.101	0.220	YES
L512	LTE B26	QPSK15M	26865	36	19	Left Side	1.0	Down	1	23	21.94	-0.07	0.063	0.042	0.080	YES
L513	LTE B26	QPSK15M	26865	36	19	Right Side	1.0	Down	1	23	21.94	0.02	0.094	0.062	0.120	YES
L514	LTE B26	QPSK15M	26865	36	19	Bottom Side	1.0	Down	1	23	21.94	0.08	0.142	0.078	0.181	YES
L515	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Down	2	24	23.06	-0.09	0.214	0.123	0.266	YES
L516	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Down	3	24	23.06	0.01	0.224	0.133	0.278	YES
L517	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Down	4	24	23.06	0.16	0.209	0.109	0.260	YES
L527	LTE B26	QPSK15M	26865	1	37	Front Face	1.0	Up	1	24	23.44	0.01	0.090	0.056	0.102	YES
L528	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Up	1	24	23.44	0	0.133	0.084	0.151	YES
L529	LTE B26	QPSK15M	26865	1	37	Left Side	1.0	Up	1	24	23.44	-0.05	0.081	0.052	0.093	YES
L530	LTE B26	QPSK15M	26865	1	37	Top Side	1.0	Up	1	24	23.44	0.01	0.105	0.066	0.120	YES
L531	LTE B26	QPSK15M	26965	36	0	Front Face	1.0	Up	1	23	22.37	0.11	0.077	0.049	0.089	YES
L532	LTE B26	QPSK15M	26965	36	0	Rear Face	1.0	Up	1	23	22.37	-0.09	0.122	0.075	0.141	YES
L533	LTE B26	QPSK15M	26965	36	0	Left Side	1.0	Up	1	23	22.37	0.04	0.065	0.043	0.076	YES
L534	LTE B26	QPSK15M	26965	36	0	Top Side	1.0	Up	1	23	22.37	0.02	0.112	0.065	0.130	YES
L535	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Up	2	24	23.44	0.06	0.156	0.098	0.178	YES
L536	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Up	3	24	23.44	-0.03	0.168	0.106	0.191	YES
L537	LTE B26	QPSK15M	26865	1	37	Rear Face	1.0	Up	4	24	23.44	-0.08	0.164	0.101	0.187	YES
L547	LTE B38	QPSK20M	38000	1	50	Front Face	1.0	Down	1	22.5	21.88	0.02	0.187	0.098	0.216	YES
L548	LTE B38	QPSK20M	38000	1	50	Rear Face	1.0	Down	1	22.5	21.88	-0.06	0.313	0.150	0.361	YES
L549	LTE B38	QPSK20M	38000	1	50	Left Side	1.0	Down	1	22.5	21.88	-0.01	0.065	0.035	0.075	YES
L550	LTE B38	QPSK20M	38000	1	50	Right Side	1.0	Down	1	22.5	21.88	0.08	0.138	0.072	0.159	YES
L551	LTE B38	QPSK20M	38000	1	50	Bottom Side	1.0	Down	1	22.5	21.88	0.01	0.476	0.223	0.550	YES
L552	LTE B38	QPSK20M	37850	50	25	Front Face	1.0	Down	1	22.5	21.53	0.07	0.149	0.077	0.186	YES
L553	LTE B38	QPSK20M	37850	50	25	Rear Face	1.0	Down	1	22.5	21.53	0.12	0.263	0.133	0.329	YES
L554	LTE B38	QPSK20M	37850	50	25	Left Side	1.0	Down	1	22.5	21.53	0.03	0.094	0.050	0.117	YES
L555	LTE B38	QPSK20M	37850	50	25	Right Side	1.0	Down	1	22.5	21.53	0.04	0.134	0.068	0.167	YES
L556	LTE B38	QPSK20M	37850	50	25	Bottom Side	1.0	Down	1	22.5	21.53	0.02	0.457	0.214	0.571	YES
L557	LTE B38	QPSK20M	38000	1	50	Bottom Side	1.0	Down	2	22.5	21.88	-0.02	0.539	0.244	0.622	YES
L558	LTE B38	QPSK20M	38000	1	50	Bottom Side	1.0	Down	3	22.5	21.88	0.11	0.513	0.201	0.592	YES
L559	LTE B38	QPSK20M	38000	1	50	Bottom Side	1.0	Down	4	22.5	21.88	-0.08	0.534	0.231	0.617	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
L569	LTE B38	QPSK20M	38000	1	50	Front Face	1.0	Up	1	20	19.89	0.03	0.166	0.087	0.170	YES
L570	LTE B38	QPSK20M	38000	1	50	Rear Face	1.0	Up	1	20	19.89	0.01	0.459	0.189	0.471	YES
L571	LTE B38	QPSK20M	38000	1	50	Left Side	1.0	Up	1	20	19.89	-0.14	0.163	0.083	0.167	YES
L572	LTE B38	QPSK20M	38000	1	50	Top Side	1.0	Up	1	20	19.89	0.06	0.546	0.220	0.560	YES
L573	LTE B38	QPSK20M	37850	50	0	Front Face	1.0	Up	1	20	19.43	0	0.182	0.086	0.208	YES
L574	LTE B38	QPSK20M	37850	50	0	Rear Face	1.0	Up	1	20	19.43	0.02	0.426	0.191	0.486	YES
L575	LTE B38	QPSK20M	37850	50	0	Left Side	1.0	Up	1	20	19.43	0.17	0.160	0.080	0.183	YES
L576	LTE B38	QPSK20M	37850	50	0	Top Side	1.0	Up	1	20	19.43	0	0.603	0.244	0.688	YES
L577	LTE B38	QPSK20M	37850	50	0	Top Side	1.0	Up	2	20	19.43	0.01	0.612	0.250	0.699	YES
L578	LTE B38	QPSK20M	37850	50	0	Top Side	1.0	Up	3	20	19.43	0.12	0.617	0.252	0.704	YES
L579	LTE B38	QPSK20M	37850	50	0	Top Side	1.0	Up	4	20	19.43	0.18	0.608	0.248	0.694	YES
L589	LTE B41	QPSK20M	41140	1	50	Front Face	1.0	Down	1	22.5	21.90	0.03	0.226	0.123	0.260	YES
L590	LTE B41	QPSK20M	41140	1	50	Rear Face	1.0	Down	1	22.5	21.90	-0.11	0.297	0.152	0.341	YES
L591	LTE B41	QPSK20M	41140	1	50	Left Side	1.0	Down	1	22.5	21.90	0.02	0.145	0.076	0.167	YES
L592	LTE B41	QPSK20M	41140	1	50	Right Side	1.0	Down	1	22.5	21.90	0.01	0.095	0.052	0.109	YES
L593	LTE B41	QPSK20M	41140	1	50	Bottom Side	1.0	Down	1	22.5	21.90	-0.04	0.489	0.227	0.562	YES
L594	LTE B41	QPSK20M	41140	50	25	Front Face	1.0	Down	1	22.5	21.72	0	0.209	0.116	0.250	YES
L595	LTE B41	QPSK20M	41140	50	25	Rear Face	1.0	Down	1	22.5	21.72	0.15	0.296	0.144	0.355	YES
L596	LTE B41	QPSK20M	41140	50	25	Left Side	1.0	Down	1	22.5	21.72	0.02	0.104	0.056	0.125	YES
L597	LTE B41	QPSK20M	41140	50	25	Right Side	1.0	Down	1	22.5	21.72	-0.09	0.087	0.045	0.104	YES
L598	LTE B41	QPSK20M	41140	50	25	Bottom Side	1.0	Down	1	22.5	21.72	-0.01	0.465	0.214	0.557	YES
L599	LTE B41	QPSK20M	41140	1	50	Bottom Side	1.0	Down	2	22.5	21.90	0.17	0.481	0.218	0.553	YES
L600	LTE B41	QPSK20M	41140	1	50	Bottom Side	1.0	Down	3	22.5	21.90	0.12	0.471	0.219	0.541	YES
L601	LTE B41	QPSK20M	41140	1	50	Bottom Side	1.0	Down	4	22.5	21.90	0	0.467	0.217	0.536	YES
L611	LTE B41	QPSK20M	40440	1	50	Front Face	1.0	Up	1	20	19.75	0.03	0.093	0.088	0.099	YES
L612	LTE B41	QPSK20M	40440	1	50	Rear Face	1.0	Up	1	20	19.75	0.11	0.440	0.197	0.466	YES
L613	LTE B41	QPSK20M	40440	1	50	Left Side	1.0	Up	1	20	19.75	-0.01	0.147	0.079	0.156	YES
L614	LTE B41	QPSK20M	40440	1	50	Top Side	1.0	Up	1	20	19.75	0.03	0.625	0.254	0.661	YES
L615	LTE B41	QPSK20M	40440	50	50	Front Face	1.0	Up	1	20	19.41	-0.09	0.167	0.082	0.191	YES
L616	LTE B41	QPSK20M	40440	50	50	Rear Face	1.0	Up	1	20	19.41	0.04	0.469	0.196	0.537	YES
L617	LTE B41	QPSK20M	40440	50	50	Left Side	1.0	Up	1	20	19.41	-0.02	0.145	0.076	0.166	YES
L618	LTE B41	QPSK20M	40440	50	50	Top Side	1.0	Up	1	20	19.41	0.05	0.606	0.244	0.694	YES
L619	LTE B41	QPSK20M	40440	50	50	Top Side	1.0	Up	2	20	19.41	0.17	0.641	0.257	0.734	YES
L620	LTE B41	QPSK20M	40440	50	50	Top Side	1.0	Up	3	20	19.41	0.05	0.628	0.231	0.719	YES
L621	LTE B41	QPSK20M	40440	50	50	Top Side	1.0	Up	4	20	19.41	0.09	0.649	0.264	0.743	YES

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (cm)	Ant	Battery	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
L631	LTE B66	QPSK20M	132072	1	50	Front Face	1.0	Down	1	21	20.81	0.08	0.130	0.085	0.136	YES
L632	LTE B66	QPSK20M	132072	1	50	Rear Face	1.0	Down	1	21	20.81	-0.01	0.411	0.239	0.429	YES
L633	LTE B66	QPSK20M	132072	1	50	Left Side	1.0	Down	1	21	20.81	0.07	0.080	0.049	0.084	YES
L634	LTE B66	QPSK20M	132072	1	50	Right Side	1.0	Down	1	21	20.81	0.03	0.062	0.038	0.065	YES
L635	LTE B66	QPSK20M	132072	1	50	Bottom Side	1.0	Down	1	21	20.81	0.02	0.542	0.305	0.566	YES
L636	LTE B66	QPSK20M	132272	50	0	Front Face	1.0	Down	1	21	20.51	-0.04	0.146	0.092	0.164	YES
L637	LTE B66	QPSK20M	132272	50	0	Rear Face	1.0	Down	1	21	20.51	0.11	0.427	0.245	0.478	YES
L638	LTE B66	QPSK20M	132272	50	0	Left Side	1.0	Down	1	21	20.51	0.01	0.071	0.040	0.079	YES
L639	LTE B66	QPSK20M	132272	50	0	Right Side	1.0	Down	1	21	20.51	0.15	0.043	0.026	0.048	YES
L640	LTE B66	QPSK20M	132272	50	0	Bottom Side	1.0	Down	1	21	20.51	0	0.571	0.319	0.640	YES
L651	LTE B66	QPSK20M	132272	50	0	Bottom Side	1.0	Down	2	21	20.51	0.06	0.562	0.306	0.630	YES
L652	LTE B66	QPSK20M	132272	50	0	Bottom Side	1.0	Down	3	21	20.51	-0.09	0.549	0.301	0.615	YES
L653	LTE B66	QPSK20M	132272	50	0	Bottom Side	1.0	Down	4	21	20.51	-0.04	0.534	0.298	0.598	YES
L663	LTE B66	QPSK20M	132272	1	50	Front Face	1.0	Up	1	21	20.88	0.02	0.290	0.159	0.298	YES
L664	LTE B66	QPSK20M	132272	1	50	Rear Face	1.0	Up	1	21	20.88	0.06	0.463	0.254	0.475	YES
L665	LTE B66	QPSK20M	132272	1	50	Left Side	1.0	Up	1	21	20.88	-0.02	0.162	0.093	0.166	YES
L666	LTE B66	QPSK20M	132272	1	50	Top Side	1.0	Up	1	21	20.88	-0.03	0.457	0.242	0.469	YES
L667	LTE B66	QPSK20M	132272	50	25	Front Face	1.0	Up	1	21	20.81	0.12	0.278	0.157	0.290	YES
L668	LTE B66	QPSK20M	132272	50	25	Rear Face	1.0	Up	1	21	20.81	0.08	0.452	0.249	0.472	YES
L669	LTE B66	QPSK20M	132272	50	25	Left Side	1.0	Up	1	21	20.81	0.17	0.116	0.067	0.121	YES
L670	LTE B66	QPSK20M	132272	50	25	Top Side	1.0	Up	1	21	20.81	-0.02	0.465	0.246	0.486	YES
L671	LTE B66	QPSK20M	132272	50	25	Top Side	1.0	Up	2	21	20.81	0.06	0.453	0.234	0.473	YES
L672	LTE B66	QPSK20M	132272	50	25	Top Side	1.0	Up	3	21	20.81	0.19	0.448	0.229	0.468	YES
L673	LTE B66	QPSK20M	132272	50	25	Top Side	1.0	Up	4	21	20.81	-0.04	0.463	0.245	0.483	YES

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR	product specific 10-g SAR Exclusion
W38	802.11b	6	Front Face	1	1	1	18	16.77	0.06	0.137	0.074	0.182	YES
W39	802.11b	6	Rear Face	1	1	1	18	16.77	0.02	0.210	0.102	0.279	YES
W40	802.11b	6	Right Side	1	1	1	18	16.77	-0.01	0.143	0.073	0.190	YES
W41	802.11b	6	Top Side	1	1	1	18	16.77	0.07	0.122	0.062	0.162	YES
W42	802.11b	6	Rear Face	1	2	1	18	16.77	0.11	0.178	0.092	0.236	YES
W43	802.11b	6	Rear Face	1	3	1	18	16.77	0.04	0.153	0.072	0.203	YES
W44	802.11b	6	Rear Face	1	4	1	18	16.77	-0.18	0.167	0.087	0.222	YES
W87	802.11a	48	Front Face	1	1	6	13	11.68	0.01	0.106	0.021	0.144	YES
W88	802.11a	48	Rear Face	1	1	6	13	11.68	0.13	0.119	0.038	0.161	YES
W89	802.11a	48	Right Side	1	1	6	13	11.68	-0.02	<0.001	<0.001	<0.001	YES
W90	802.11a	48	Top Side	1	1	6	13	11.68	0.15	0.267	0.079	0.362	YES
W91	802.11a	48	Top Side	1	2	6	13	11.68	-0.01	0.245	0.074	0.332	YES
W92	802.11a	48	Top Side	1	3	6	13	11.68	0.06	0.261	0.078	0.354	YES
W93	802.11a	48	Top Side	1	4	6	13	11.68	0.04	0.259	0.077	0.351	YES
W80	802.11a	149	Front Face	1	1	6	11	9.89	0.03	0.100	0.034	0.129	YES
W81	802.11a	149	Rear Face	1	1	6	11	9.89	0.01	0.111	0.036	0.143	YES
W82	802.11a	149	Right Side	1	1	6	11	9.89	-0.04	0.028	0.010	0.036	YES
W83	802.11a	149	Top Side	1	1	6	11	9.89	-0.08	0.348	0.095	0.449	YES
W84	802.11a	149	Top Side	1	2	6	11	9.89	0.06	0.321	0.086	0.414	YES
W85	802.11a	149	Top Side	1	3	6	11	9.89	-0.18	0.293	0.081	0.378	YES
W86	802.11a	149	Top Side	1	4	6	11	9.89	0.07	0.312	0.070	0.403	YES

Product specific 10-g SAR test results

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
W103	BT DH5	0	Front Face	0	1	1	11	10.09	-0.03	0.367	0.151	0.453
W104	BT DH5	0	Rear Face	0	1	1	11	10.09	0.07	0.438	0.180	0.540
W105	BT DH5	0	Right Side	0	1	1	11	10.09	0.09	0.212	0.090	0.261
W106	BT DH5	0	Top Side	0	1	1	11	10.09	0	0.358	0.142	0.441
W107	BT DH5	0	Rear Face	0	2	1	11	10.09	0.02	0.393	0.173	0.485
W108	BT DH5	0	Rear Face	0	3	1	11	10.09	-0.05	0.369	0.168	0.455
W109	BT DH5	0	Rear Face	0	4	1	11	10.09	0.01	0.379	0.170	0.467

WiFi only

Test No.	Band	Channel	Test Position	Separation Distance (cm)	Battery	Data Rate	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
W52	802.11a	52	Front Face	0	1	6	19	18.85	0.17	3.740	1.170	1.211
W53	802.11a	52	Rear Face	0	1	6	19	18.85	0	4.300	1.140	1.180
W54	802.11a	52	Right Side	0	1	6	19	18.85	0.12	3.610	0.763	0.790
W55	802.11a	52	Top Side	0	1	6	19	18.85	-0.05	12.300	2.520	2.609
W56	802.11a	52	Top Side	0	2	6	19	18.85	0.06	12.060	2.120	2.195
W57	802.11a	52	Top Side	0	3	6	19	18.85	-0.01	12.170	2.391	2.475
W58	802.11a	52	Top Side	0	4	6	19	18.85	0.03	12.230	2.235	2.314
W66	802.11a	108	Front Face	0	1	6	20	18.67	0.03	5.030	1.760	2.391
W67	802.11a	108	Rear Face	0	1	6	20	18.67	0	6.480	1.670	2.268
W68	802.11a	108	Right Side	0	1	6	20	18.67	-0.12	2.010	0.634	0.861
W69	802.11a	108	Top Side	0	1	6	20	18.67	-0.01	9.310	1.940	2.635
W70	802.11a	108	Top Side	0	2	6	20	18.67	0.02	8.890	1.480	2.010
W71	802.11a	108	Top Side	0	3	6	20	18.67	0.04	9.120	1.836	2.494
W72	802.11a	108	Top Side	0	4	6	20	18.67	0.07	9.230	1.870	2.540

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 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 (15mm)	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.

7.3.2 SAR SUMMATION SCENARIO

1. About BT/WIFI and GSM/UMTS/LTE Down 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	0.206	0.122	0.175	0.129	0.118	0.177	0.109	0.294	0.059	0.126	/	0.204
GSM 1900	0.082	0.043	0.079	0.054	0.165	0.345	0.228	0.596	0.112	0.055	/	0.699
UMTS B2	0.172	0.109	0.154	0.141	0.135	0.286	0.207	0.542	0.097	0.030	/	0.629
UMTS B4	0.126	0.078	0.113	0.081	0.117	0.341	0.185	0.644	0.132	0.060	/	0.680
UMTS B5	0.216	0.120	0.172	0.131	0.154	0.251	0.155	0.301	0.090	0.159	/	0.256
LTE B2	0.150	0.117	0.133	0.120	0.145	0.317	0.231	0.563	0.114	0.063	/	0.662
LTE B4	0.119	0.081	0.104	0.094	0.111	0.369	0.224	0.672	0.077	0.070	/	0.798
LTE B5	0.191	0.112	0.175	0.116	0.117	0.210	0.132	0.265	0.086	0.137	/	0.187
LTE B7	0.105	0.056	0.143	0.109	0.144	0.322	0.250	0.532	0.093	0.188	/	0.856
LTE B12	0.127	0.082	0.122	0.085	0.196	0.253	0.204	0.238	0.153	0.168	/	0.174
LTE B17	0.131	0.060	0.120	0.062	0.177	0.250	0.213	0.275	0.173	0.171	/	0.159
LTE B26	0.195	0.124	0.167	0.125	0.152	0.258	0.168	0.278	0.080	0.167	/	0.239
LTE B38	0.067	0.047	0.123	0.081	0.162	0.249	0.216	0.361	0.117	0.167	/	0.622
LTE B41	0.085	0.063	0.161	0.106	0.164	0.211	0.260	0.355	0.167	0.109	/	0.562
LTE B66	0.114	0.089	0.103	0.097	0.115	0.304	0.164	0.478	0.084	0.065	/	0.640
802.11b/g	0.122	0.221	0.434	0.356	0.155	0.175	0.182	0.279	/	0.190	0.162	/
5.2G	/	/	/	/	/	/	0.144	0.161	/	<0.001	0.362	/
5.3G	0.165	0.245	0.305	0.409	0.322	0.427	/	/	/	/	/	/
5.5G	0.151	0.215	0.236	0.467	0.363	0.454	/	/	/	/	/	/
5.8G	0.148	0.200	0.211	0.399	0.346	0.331	0.129	0.143	/	0.036	0.449	/
Bluetooth	0.163	0.169	0.300	0.239	0.027	0.035	/	/	/	/	/	/
Max. SAR Summation	0.381	0.369	0.609	0.608	0.559	0.823	0.442	0.951	0.173	0.378	0.449	0.856

Note: MAX. $\sum SAR_{1g} = 0.951W/Kg < 1.6W/Kg$, so the SAR to peak location separation ratio should not be considered.

2. About BT/WIFI and GSM/UMTS/LTE Up 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	0.479	0.272	0.306	0.228	0.076	0.113	0.158	0.283	0.103	/	0.222	/
GSM 1900	0.399	0.540	0.281	0.346	0.114	0.179	0.279	0.443	0.131	/	0.590	/
UMTS B2	0.550	0.655	0.339	0.455	0.165	0.240	0.286	0.503	0.129	/	0.598	/
UMTS B4	0.623	0.769	0.426	0.461	0.130	0.171	0.254	0.358	0.104	/	0.535	/
UMTS B5	0.676	0.537	0.368	0.414	0.073	0.098	0.095	0.204	0.074	/	0.127	/
LTE B2	0.551	0.683	0.382	0.452	0.173	0.225	0.301	0.428	0.124	/	0.551	/
LTE B4	0.524	0.601	0.373	0.486	0.181	0.304	0.434	0.685	0.169	/	0.788	/
LTE B5	0.782	0.469	0.472	0.383	0.053	0.099	0.110	0.303	0.086	/	0.137	/
LTE B7	0.887	1.029	0.348	0.417	0.090	0.204	0.212	0.567	0.169	/	0.704	/
LTE B12	0.062	0.058	0.038	0.032	0.013	0.015	0.011	0.015	0.024	/	0.013	/
LTE B17	0.075	0.057	0.051	0.049	0.012	0.016	0.010	0.016	0.021	/	0.024	/
LTE B26	0.647	0.348	0.368	0.407	0.053	0.073	0.102	0.191	0.093	/	0.130	/
LTE B38	0.562	0.798	0.234	0.312	0.123	0.293	0.208	0.486	0.183	/	0.704	/
LTE B41	0.607	0.728	0.241	0.284	0.135	0.283	0.191	0.537	0.166	/	0.743	/
LTE B66	0.916	0.947	0.665	0.798	0.131	0.179	0.298	0.475	0.166	/	0.486	/
802.11b/g	0.122	0.221	0.434	0.356	0.155	0.175	0.182	0.279	/	0.190	0.162	/
5.2G	/	/	/	/	/	/	0.144	0.161	/	<0.001	0.362	/
5.3G	0.165	0.245	0.305	0.409	0.322	0.427	/	/	/	/	/	/
5.5G	0.151	0.215	0.236	0.467	0.363	0.454	/	/	/	/	/	/
5.8G	0.148	0.200	0.211	0.399	0.346	0.331	0.129	0.143	/	0.036	0.449	/
Bluetooth	0.163	0.169	0.300	0.239	0.027	0.035	/	/	/	/	/	/
Max. SAR Summation	1.081	1.274	1.099	1.265	0.544	0.758	0.616	0.964	0.183	0.190	1.237	0.000

Note: MAX. $\sum SAR_{1g} = 1.274W/Kg < 1.6W/Kg$, so the SAR to peak location separation ratio should not be considered.

3. About product specific 10g SAR

Position	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 B12	/	/	/	/	/	/
LTE B26	/	/	/	/	/	/
LTE B38	/	/	/	/	/	/
LTE B41	/	/	/	/	/	/
LTE B66	/	/	/	/	/	/
WiFi 2.4G	/	/	/	/	/	/
WiFi 5.2G	/	/	/	/	/	/
WiFi 5.3G	1.211	1.180	/	0.790	2.609	/
WiFi 5.6G	2.391	2.268	/	0.861	2.635	/
WiFi 5.8G	/	/	/	/	/	/
BT	0.453	0.540	/	0.261	0.441	/
Max. SAR Summation	2.391	2.268	0.000	0.861	2.635	0.000

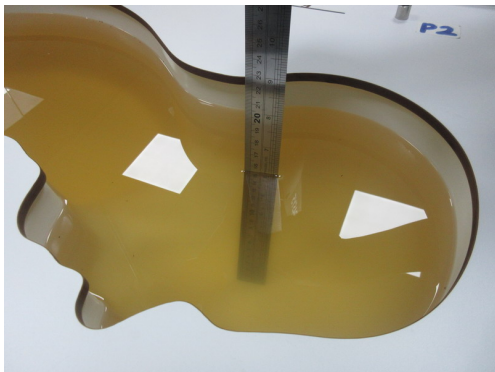
Note:

The Simultaneous SAR of product Specific 10-g SAR is 2.635W/Kg which less than 4.0W/Kg, so the Simultaneous SAR is not required to calculate.

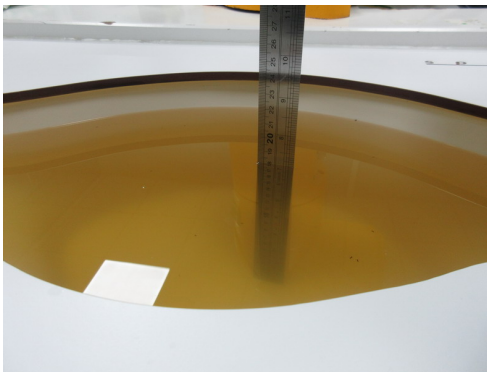
APPENDIX**1. TEST LAYOUT****Specific Absorption Rate Test Layout**

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

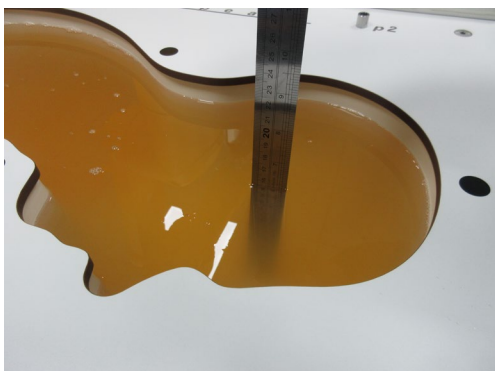
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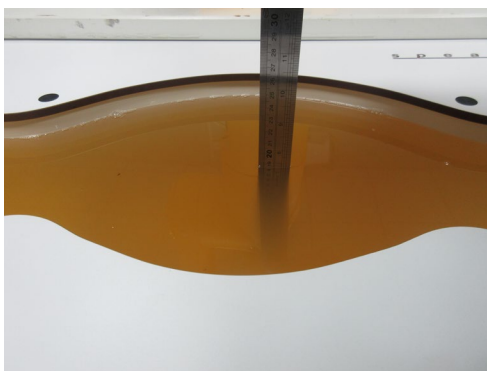
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HSL810-920_Head_15.6cm



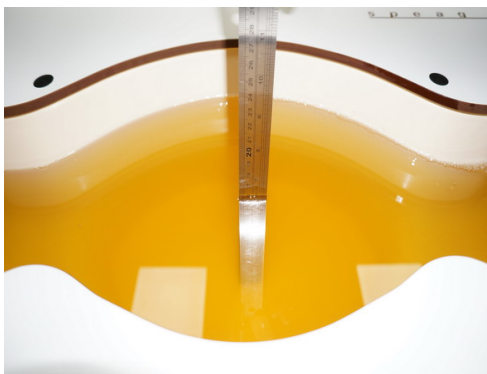
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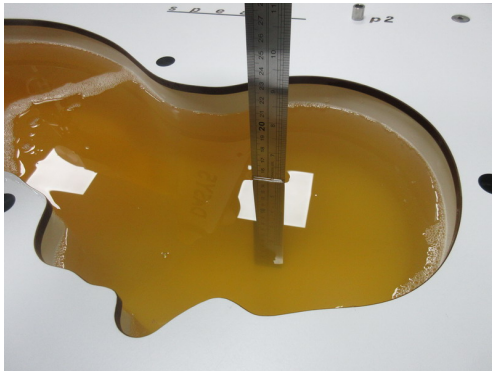
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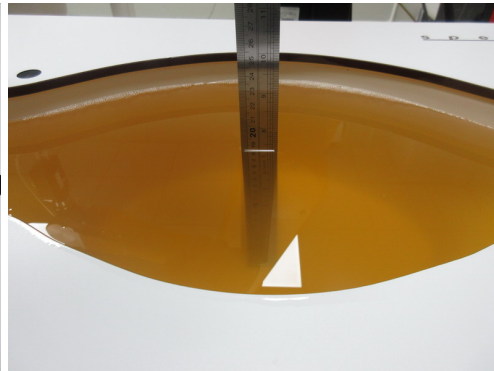
HSL1700-1900_Body_16.2cm



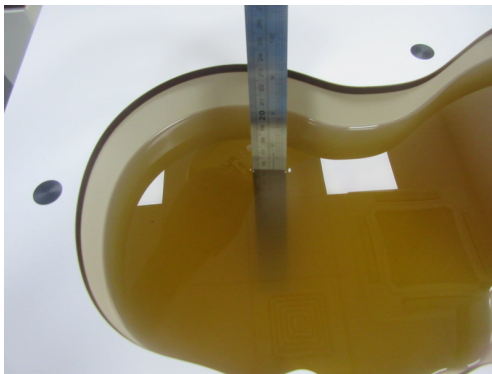
HSL2300-2700_Head_15.35cm



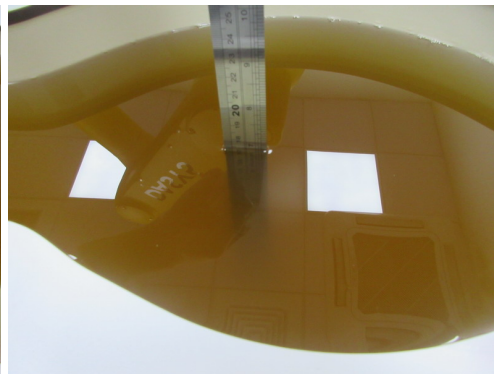
HSL2300-2700_Body_18.5cm



HSL5G_Head_15.6cm



HSL5G_Body_17.5cm



Appendix A. SAR Plots of System Verification

(Pls See BTL-FCC SAR-1-2008C120_Appendix A.)

Appendix B. SAR Plots of SAR Measurement

(Pls See BTL-FCC SAR-1-2008C120_Appendix B.)

Appendix C. Calibration Certificate

(Pls See BTL-FCC SAR-1-2008C120_Appendix C.)

Appendix D. Photographs of the Test Set-Up

(Pls See BTL-FCC SAR-1-2008C120_Appendix D.)

Appendix E. Antenna location

(Pls See BTL-FCC SAR-1-2008C120_Appendix E.)

End of Test Report