Variant SAR Test Report

Report No.	:	**SF180914C21Q**
Applicant	:	**HON HAI Precision Ind. Co., Ltd.**
Address	:	**5F-1, 5 Hsin-An Road Hsinchu, Science-Based Industrial Park, Hsinchu, Taiwan, R.O.C**
Product	:	**LTE M.2 Module**
FCC ID	:	**MCLT77W968-D1**
Brand	:	**FOXCONN**
Model No.	:	**T77W968**
Standards	:	**FCC 47 CFR Part 2 (2.1093), IEEE C95.1:1992, IEEE Std 1528:2013 KDB 865664 D01 v01r04, KDB 865664 D02 v01r02, KDB 248227 D01 v02r02, KDB 447498 D01 v06, KDB 616217 D04 v01r02, KDB 941225 D01 v03r01, KDB 941225 D05 v02r05, KDB 941225 D05A v01r02**
Sample Received Date	:	**Dec. 27, 2019**
Date of Testing	:	**Feb. 01, 2020 ~ Feb. 20, 2020**
Lab Address	:	**No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan**
Test Location	:	**No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City, Taiwan**

CERTIFICATION: The above equipment have been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch–Lin Kou Laboratories**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's SAR characteristics under the conditions specified in this report. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product certification, approval, or endorsement by TAF or any government agencies.

This report is issued as a supplementary report to BV CPS report no.: SA180914C21O. The differences compared with original report is adding new WLAN module (Brand:Intel, Model:AX201NGW) please refer to RF Exposure Lab report no.: SAR.20200209. Additionally, this report is a partial report, only WWAN and co-location were performed for this report.

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FCC Accredited No.: TW0003

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Release Control Record

Report No.	Reason for Change	Date Issued
SF180914C21Q	Initial release	Mar. 25, 2020

1. Summary of Maximum SAR Value

Equipment Class	Mode	Highest SAR-1g Body (W/kg)	
		Tablet PC Mode	Laptop PC Mode
PCB	WCDMA II	0.98	0.98
	WCDMA IV	1.09	1.05
	WCDMA V	0.61	0.57
	LTE 2 & 25	1.12	1.07
	LTE 4 & 66	1.25	1.23
	LTE 5	0.51	0.43
	LTE 7	0.98	0.22
	LTE 12	1.41	0.55
	LTE 13	0.64	0.46
	LTE 14	0.99	0.46
	LTE 17	1.35	0.50
	LTE 26	0.53	0.45
	LTE 30	0.96	0.22
	LTE 38	0.80	0.18
	LTE 41	0.69	0.16

Highest Simultaneous Transmission SAR	Highest SAR-1g Body (W/kg)	
	Tablet PC Mode	Laptop PC Mode
	1.47	1.40

Note:

1. The SAR criteria **(Head & Body: SAR-1g 1.6 W/kg, and Extremity: SAR-10g 4.0 W/kg)** for general population / uncontrolled exposure is specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992.
2. This device supports both LTE band 66 and band 4. The frequency span of LTE band 66 can completely cover LTE band 4, and they has the same tune-up power. SAR was tested for LTE band 66 only.
3. This device supports both LTE band 25 and band 2. The frequency span of LTE band 25 can completely cover LTE band 2, and they has the same tune-up power. SAR was tested for LTE band 25 only.
4. For SAR test result of WLAN / BT module AX201NGW, please refer to RF Exposure Lab report no.: SAR.20200209.

2. Description of Equipment Under Test

EUT Type	LTE M.2 Module
FCC ID	MCLT77W968-D1 (WWAN module0 PD9AX201NG (WLAN module)
Brand Name	FOXCONN
Model Name	T77W968
Tx Frequency Bands (Unit: MHz)	WCDMA Band II : 1852.4 ~ 1907.6 WCDMA Band IV : 1712.4 ~ 1752.6 WCDMA Band V : 826.4 ~ 846.6 LTE Band 2 : 1850.7 ~ 1909.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 4 : 1710.7 ~ 1754.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 5 : 824.7 ~ 848.3 (BW: 1.4M, 3M, 5M, 10M) LTE Band 7 : 2502.5 ~ 2567.5 (BW: 5M, 10M, 15M, 20M) LTE Band 12 : 699.7 ~ 715.3 (BW: 1.4M, 3M, 5M, 10M) LTE Band 13 : 779.5 ~ 784.5 (BW: 5M, 10M) LTE Band 14 : 790.5 ~ 795.5 (BW: 5M, 10M) LTE Band 17 : 706.5 ~ 713.5 (BW: 5M, 10M) LTE Band 25 : 1850.7 ~ 1914.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 26 : 814.7 ~ 848.3 (BW: 1.4M, 3M, 5M, 10M, 15M) LTE Band 30 : 2307.5 ~ 2312.5 (BW: 5M, 10M) LTE Band 38 : 2572.5 ~ 2617.5 (BW: 5M, 10M, 15M, 20M) LTE Band 41 : 2498.5 ~ 2687.5 (BW: 5M, 10M, 15M, 20M) LTE Band 66 : 1710.7 ~ 1779.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) WLAN : 2412 ~ 2462, 5180 ~ 5240, 5260 ~ 5320, 5500 ~ 5720,5745 ~ 5825 Bluetooth : 2402 ~ 2480
Uplink Modulations	WCDMA : QPSK LTE : QPSK, 16QAM, 64QAM 802.11b : DSSS 802.11a/g/n/ac : OFDM 802.11ax : OFDMA Bluetooth : GFSK, π/4-DQPSK, 8-DPSK
Maximum Tune-up Conducted Power (Unit: dBm)	Please refer to section 4.6.1 of this report
Antenna Type	Refer to Note as below
EUT Stage	Mass product

Note:

1. This report is issued as a supplementary report to BV CPS report no.: SA180914C21O. The differences compared with original report are changing LTE Band 7/12/17/30/38/41 target conducted power reduction and adding new WLAN module (Brand:Intel, Model:AX201NGW) please refer to RF Exposure Lab report no.: SAR.20200209. Additionally, this report is a partial report, only WWAN and co-location were performed for this report.
2. The EUT is authorized for use in specific End-product. Please refer to below for more details.

Product	Brand	Model
Portable Computer	DELL	P110G

3. The WLAN modules (Brand: Intel, Model: AX201NGW) were installed in the End-product. The specification is listed as below.

WLAN module	
Tx Frequency Bands (Unit: MHz)	WLAN : 2412 ~ 2472, 5180 ~ 5240, 5260 ~ 5320, 5500 ~ 5700, 5745 ~ 5825 Bluetooth : 2402 ~ 2480
Uplink Modulations	802.11b : DSSS 802.11a/g/n/ac/ax : OFDM Bluetooth : GFSK, π/4-DQPSK, 8-DPSK
Antenna Type	WLAN/BT: PIFA Antenna (Peak Antenna Gain : -3.63 dBi for 2.4GHz, -1.83 dBi for 5GHz)

4. The antenna information is listed as below.

Antenna Type	Manuf.	Parts Number	Antenna Gain (dBi)													
			WCDMA II / LTE 2	WCDMA IV / LTE 4	WCDMA V / LTE 5	LTE 7	LTE 12	LTE 13	LTE 14	LTE 17	LTE 25	LTE 26	LTE 30	LTE 38	LTE 41	LTE 66
PIFA	Hong-Bo	260-24221 (DC330025S0L)	0.68	-0.60	-1.71	0.16	-5.22	-2.53	-2.34	-4.73	0.68	-1.71	-0.34	-0.95	0.16	-0.16

5. The above EUT information is declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.
6. The following power reduction (power reduction) as below does not follow 3GPP MPR, LTE 2, LTE 4, LTE 5, LTE 7, LTE 12, LTE 13, LTE 14, LTE 17, TE 25, LTE 26, LTE30, LTE 38, LTE 41, LTE 66.

List of Accessory:

Battery 1 (6 Cell)	**Brand Name**	Dell
	Model Name	7146W
	Power Rating	11.4V, 6500mAh, 78Wh
	Type	Li-ion
Battery 2 (4 Cell)	**Brand Name**	Dell
	Model Name	NF2MW
	Power Rating	7.6V, 6500mAh, 52Wh
	Type	Li-ion

3. SAR Measurement System

3.1 Definition of Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ).The equation description is as below:

$$\mathbf{SAR} = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\mathbf{dm}}\right) = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\boldsymbol{\rho}\mathbf{dv}}\right)$$

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be related to the electrical field in the tissue by

$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}|\mathbf{E}|^2}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

3.2 SPEAG DASY6 System

DASY6 system consists of high precision robot, probe alignment sensor, phantom, robot controller, controlled measurement server and near-field probe. The robot includes six axes that can move to the precision position of the DASY6 software defined. The DASY6 software can define the area that is detected by the probe. The robot is connected to controlled box. Controlled measurement server is connected to the controlled robot box. The DAE includes amplifier, signal multiplexing, AD converter, offset measurement and surface detection. It is connected to the Electro-optical coupler (ECO). The ECO performs the conversion form the optical into digital electric signal of the DAE and transfers data to the PC.

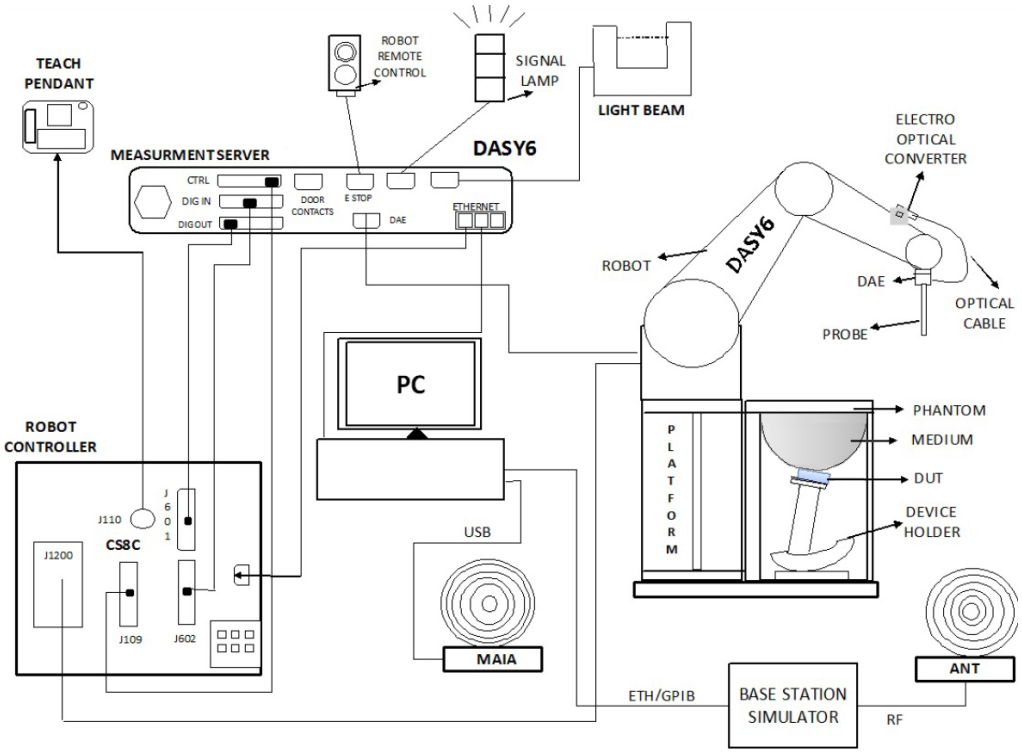


Fig-3.1 SPEAG DASY6 System Setup

3.2.1 Robot

The DASY6 systems use the high precision robots from Stäubli SA (France). For the 6-axis controller system, the robot controller version of CS8c from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability ±0.035 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)

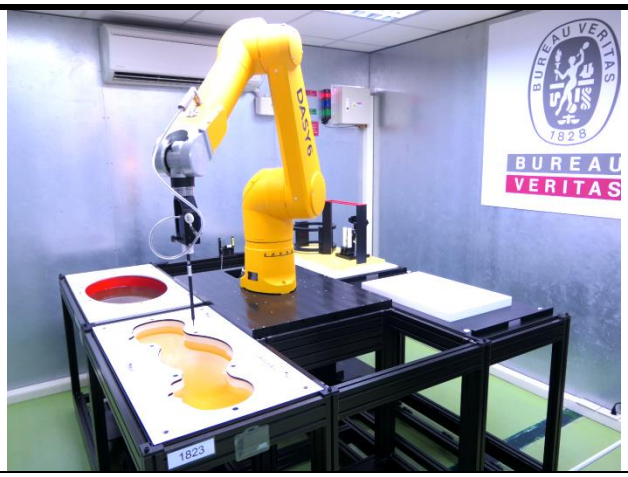


Fig-3.2 SPEAG DASY6 System

3.2.2 Probes

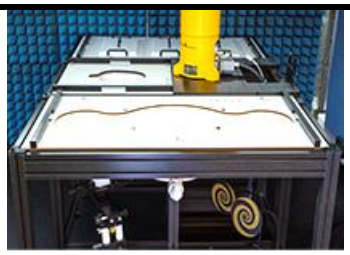
The SAR measurement is conducted with the dosimetric probe. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency.

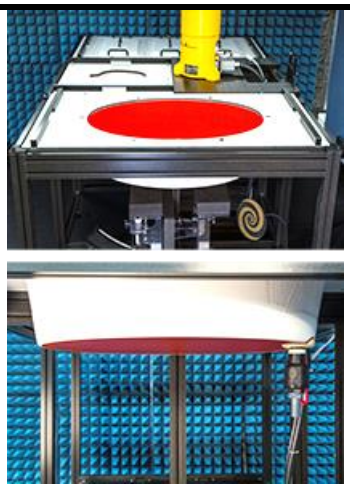
Model	EX3DV4	
Construction	Symmetrical design with triangular core. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE).	
Frequency	4 MHz to 10 GHz Linearity: ± 0.2 dB	
Directivity	± 0.1 dB in TSL (rotation around probe axis) ± 0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 µW/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

3.2.3 Data Acquisition Electronics (DAE)

Model	DAE3, DAE4	
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.	
Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4mV, 400mV)	
Input Offset Voltage	< 5µV (with auto zero)	
Input Bias Current	< 50 fA	
Dimensions	60 x 60 x 68 mm	

3.2.4 Phantoms

Model	SAM-Twin Phantom	
Construction	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE Std 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.	
Material	Vinylester, fiberglass reinforced (VE-GF)	
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)	
Dimensions	Length: 1000 mm Width: 500 mm Height: adjustable feet	
Filling Volume	approx. 25 liters	

Model	ELI	
Construction	The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.	
Material	Vinylester, fiberglass reinforced (VE-GF)	
Shell Thickness	2.0 ± 0.2 mm (bottom plate)	
Dimensions	Major axis: 600 mm Minor axis: 400 mm	
Filling Volume	approx. 30 liters	

3.2.5 Device Holder

Model	MD4HHTV5 - Mounting Device for Hand-Held Transmitters	
Construction	In combination with the Twin SAM or ELI phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat).	
Material	Polyoxymethylene (POM)	

Model	MDA4WTV5 - Mounting Device Adaptor for Ultra Wide Transmitters	
Construction	An upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140 mm.	
Material	Polyoxymethylene (POM)	

Model	MDA4SPV6 - Mounting Device Adaptor for Smart Phones	
Construction	The solid low-density MDA4SPV6 adaptor assuring no impact on the DUT radiation performance and is conform with any DUT design and shape.	
Material	ROHACELL	

Model	MD4LAPV5 - Mounting Device for Laptops and other Body-Worn Transmitters	
Construction	In combination with the Twin SAM or ELI phantoms, the Mounting Device (Body-Worn) enables testing of transmitter devices according to IEC 62209-2 specifications. The device holder can be locked for positioning at a flat phantom section.	
Material	Polyoxymethylene (POM), PET-G, Foam	

3.2.6 System Validation Dipoles

Model	D-Serial	
Construction	Symmetrical dipole with l/4 balun. Enables measurement of feed point impedance with NWA. Matched for use near flat phantoms filled with tissue simulating solutions.	
Frequency	750 MHz to 5800 MHz	
Return Loss	> 20 dB	
Power Capability	> 100 W (f < 1GHz), > 40 W (f > 1GHz)	

3.2.7 Power Source

Model	Powersource1	
Signal Type	Continuous Wave	
Operating Frequencies	600 MHz to 5850 MHz	
Output Power	-5.0 dBm to +17.0 dBm	
Power Supply	5V DC, via USB jack	
Power Consumption	<3 W	
Applications	System performance check and validation with a CW signal.	

3.2.8 Tissue Simulating Liquids

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 10 % are listed in Table-3.1.

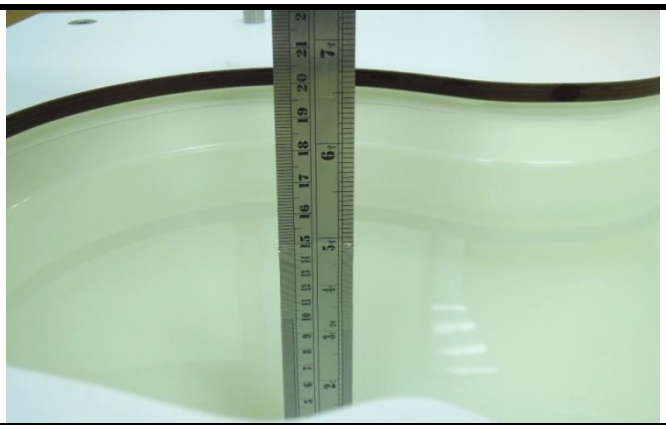


Photo of Liquid Height for Head Position

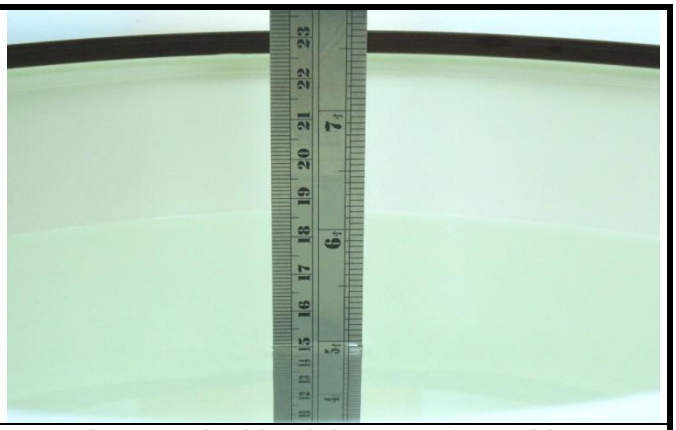


Photo of Liquid Height for Body Position

Table-3.1 Targets of Tissue Simulating Liquid

Frequency (MHz)	Target Permittivity	Range of ±10 %	Target Conductivity	Range of ±10 %
450	43.5	39.2 ~ 47.9	0.87	0.78 ~ 0.96
750	41.9	37.7 ~ 46.1	0.89	0.80 ~ 0.98
835	41.5	37.4 ~ 45.7	0.90	0.81 ~ 0.99
900	41.5	37.4 ~ 45.7	0.97	0.87 ~ 1.07
1450	40.5	36.5 ~ 44.6	1.20	1.08 ~ 1.32
1500	40.4	36.4 ~ 44.4	1.23	1.11 ~ 1.35
1640	40.2	36.2 ~ 44.2	1.31	1.18 ~ 1.44
1750	40.1	36.1 ~ 44.1	1.37	1.23 ~ 1.51
1800	40.0	36.0 ~ 44.0	1.40	1.26 ~ 1.54
1900	40.0	36.0 ~ 44.0	1.40	1.26 ~ 1.54
2000	40.0	36.0 ~ 44.0	1.40	1.26 ~ 1.54
2100	39.8	35.8 ~ 43.8	1.49	1.34 ~ 1.64
2300	39.5	35.6 ~ 43.5	1.67	1.50 ~ 1.84
2450	39.2	35.3 ~ 43.1	1.80	1.62 ~ 1.98
2600	39.0	35.1 ~ 42.9	1.96	1.76 ~ 2.16
3000	38.5	34.7 ~ 42.4	2.40	2.16 ~ 2.64
3500	37.9	34.1 ~ 41.7	2.91	2.62 ~ 3.20
4000	37.4	33.7 ~ 41.1	3.43	3.09 ~ 3.77
4500	36.8	33.1 ~ 40.5	3.94	3.55 ~ 4.33
5000	36.2	32.6 ~ 39.8	4.45	4.01 ~ 4.90
5200	36.0	32.4 ~ 39.6	4.66	4.19 ~ 5.13
5400	35.8	32.2 ~ 39.4	4.86	4.37 ~ 5.35
5600	35.5	32.0 ~ 39.1	5.07	4.56 ~ 5.58
5800	35.3	31.8 ~ 38.8	5.27	4.74 ~ 5.80
6000	35.1	31.6 ~ 38.6	5.48	4.93 ~ 6.03

The dielectric properties of the tissue simulating liquids are defined in IEC 62209-1 and IEC 62209-2. The dielectric properties of the tissue simulating liquids were verified prior to the SAR evaluation using a dielectric assessment kit and a network analyzer.

Since the range of ±10 % of the required target values is used to measure relative permittivity and conductivity, the SAR correction procedure is applied to correct measured SAR for the deviations in permittivity and conductivity. Only positive correction has been used to scale up the measured SAR, and SAR result would not be corrected if the correction △SAR has a negative sign.

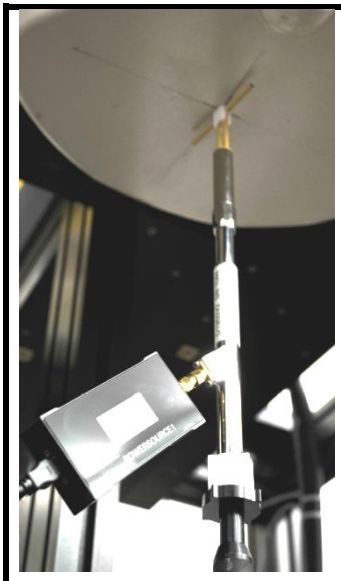
The following table gives the recipes for tissue simulating liquids.

Table-3.2 Recipes of Tissue Simulating Liquid

Tissue Type	Bactericide	DGBE	HEC	NaCl	Sucrose	Triton X-100	Water	Diethylene Glycol Mono-hexylether
H750	0.2	-	0.2	1.5	56.0	-	42.1	-
H835	0.2	-	0.2	1.5	57.0	-	41.1	-
H900	0.2	-	0.2	1.4	58.0	-	40.2	-
H1450	-	43.3	-	0.6	-	-	56.1	-
H1640	-	45.8	-	0.5	-	-	53.7	-
H1750	-	47.0	-	0.4	-	-	52.6	-
H1800	-	44.5	-	0.3	-	-	55.2	-
H1900	-	44.5	-	0.2	-	-	55.3	-
H2000	-	44.5	-	0.1	-	-	55.4	-
H2300	-	44.9	-	0.1	-	-	55.0	-
H2450	-	45.0	-	0.1	-	-	54.9	-
H2600	-	45.1	-	0.1	-	-	54.8	-
H3500	-	8.0	-	0.2	-	20.0	71.8	-
H5G	-	-	-	-	-	17.2	65.5	17.3

3.3 SAR System Verification

The system check verifies that the system operates within its specifications. It is performed daily or before every SAR measurement. The system check uses normal SAR measurements in the flat section of the phantom with a matched dipole at a specified distance. The system verification setup is shown as below.



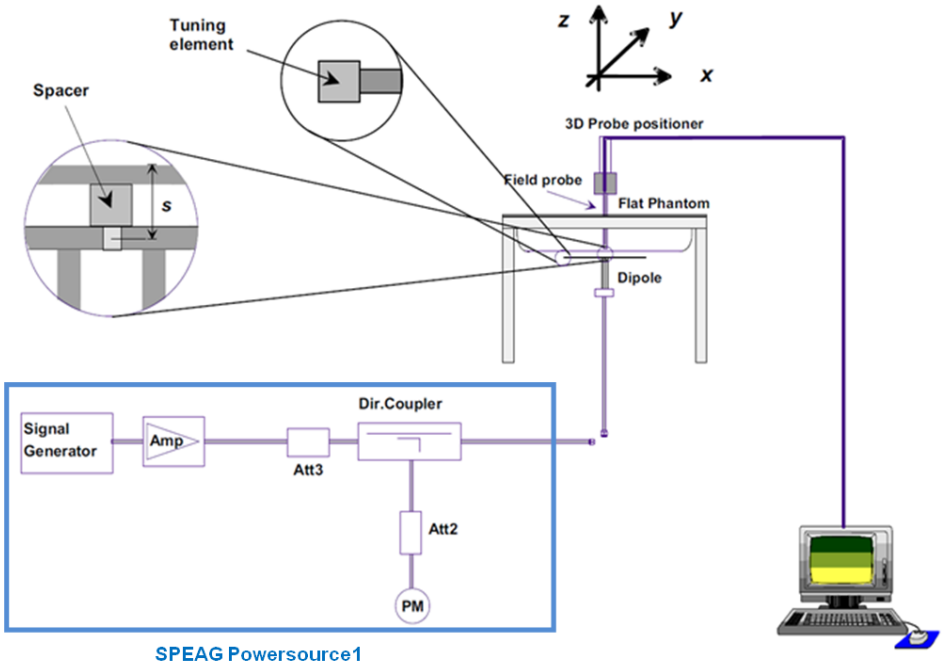


Fig-3.3 System Verification Setup

The SPEAG Powersource1 is a portable and very stable RF source providing a continuous wave (CW) signal. It is designed for conducting SAR system checks and SAR system validation of DASY and is compatible with IEC 62209-1, IEC 62209-2 and IEEE Std 1528 standards. The Powersource1 has been calibrated by SPEAG's ISO/IEC 17025-accredited calibration center. When using Powersource1, the setup can be simplified, as shown in Fig-3.3. The signal purity is warranted by design. Since the Powersource1 is calibrated, no additional equipment is needed and the Powersource1 can directly be connected to the SMA connector of the dipole without a cable as all separate components (signal generator, amplifier, coupler and power meter) are built into the unit.

The validation dipole is placed beneath the flat phantom with the specific spacer in place. The distance spacer is touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The Powersource1 is adjusted for the desired forward power of 17 dBm at the dipole connector and the RF output power would be turned on. After system check testing, the SAR result will be normalized to 1W forward input power and compared with the reference SAR value derived from validation dipole certificate report. The deviation of system check should be within 10 %.

3.4 SAR Measurement Procedure

According to the SAR test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

(a) Power reference measurement
(b) Area scan
(c) Zoom scan
(d) Power drift measurement

The SAR measurement procedures for each of test conditions are as follows:

(a) Make EUT to transmit maximum output power
(b) Measure conducted output power through RF cable
(c) Place the EUT in the specific position of phantom
(d) Perform SAR testing steps on the DASY system
(e) Record the SAR value

3.4.1 Area Scan and Zoom Scan Procedure

First area scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an area scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, zoom scan is required. The zoom scan is performed around the highest E-field value to determine the averaged SAR-distribution.

Measure the local SAR at a test point at 1.4 mm of the inner surface of the phantom recommended by SEPAG. The area scan (two-dimensional SAR distribution) is performed cover at least an area larger than the projection of the EUT or antenna. The measurement resolution and spatial resolution for interpolation shall be chosen to allow identification of the local peak locations to within one-half of the linear dimension of the corresponding side of the zoom scan volume. Following table provides the measurement parameters required for the area scan.

Parameter	$f \leqq$ 3 GHz	3 GHz < $f \leqq$ 6 GHz
Maximum distance from closest measurement point to phantom surface	5 ± 1	δ ln(2)/2 ±0.5
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ±1°	20° ±1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≦2 GHz: ≦15 mm 2 – 3 GHz: ≦12 mm	3 – 4 GHz: ≦12 mm 4 – 6 GHz: ≦10 mm

From the scanned SAR distribution, identify the position of the maximum SAR value, in addition identify the positions of any local maxima with SAR values within 2 dB of the maximum value that will not be within the zoom scan of other peaks. Additional peaks shall be measured only when the primary peak is within 2 dB of the SAR compliance limit (e.g. 1 W/kg for 1.6 W/kg, 1 g limit; or 1.26 W/kg for 2 W/kg, 10 g limit).

The zoom scan (three-dimensional SAR distribution) is performed at the local maxima locations identified in previous area scan procedure. The zoom scan volume must be larger than the required minimum dimensions. When graded grids are used, which only applies in the direction normal to the phantom surface, the initial grid separation closest to the phantom surface and subsequent graded grid increment ratios must satisfy the required protocols. The 1-g SAR averaging volume must be fully contained within the zoom scan measurement volume boundaries; otherwise, the measurement must be repeated by shifting or expanding the zoom scan volume. The similar requirements also apply to 10-g SAR measurements. Following table provides the measurement parameters required for the zoom scan.

Parameter		$f \leqq$ 3 GHz	3 GHz < $f \leqq$ 6 GHz
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}		≦2 GHz: ≦8 mm 2 – 3 GHz: ≦5 mm	3 – 4 GHz: ≦5 mm 4 – 6 GHz: ≦4 mm
Maximum zoom scan spatial resolution, normal to phantom surface	*uniform grid:* $\Delta z_{Zoom}(n)$	≦5 mm	3 – 4 GHz: ≦4 mm 4 – 5 GHz: ≦3 mm 5 – 6 GHz: ≦2 mm
	graded grids: $\Delta z_{Zoom}(1)$	≦4 mm	3 – 4 GHz: ≦3.0 mm 4 – 5 GHz: ≦2.5 mm 5 – 6 GHz: ≦2.0 mm
	$\Delta z_{Zoom}(n>1)$	≦1.5·$\Delta z_{Zoom}(n-1)$ mm	
Minimum zoom scan volume (x, y, z)		≥30 mm	3 – 4 GHz: ≥28 mm 4 – 5 GHz: ≥25 mm 5 – 6 GHz: ≥22 mm

Per IEC 62209-2 AMD1, the successively higher resolution zoom scan is required if the zoom scan measured as defined above complies with both of the following criteria, or if the peak spatial-average SAR is below 0.1 W/kg, no additional measurements are needed:

(1) The smallest horizontal distance from the local SAR peaks to all points 3 dB below the SAR peak shall be larger than the horizontal grid steps in both x and y directions (Δx, Δy). This shall be checked for the measured zoom scan plane conformal to the phantom at the distance zM1.

(2) The ratio of the SAR at the second measured point (M2) to the SAR at the closest measured point (M1) at the x-y location of the measured maximum SAR value shall be at least 30 %.

If one or both of the above criteria are not met, the zoom scan measurement shall be repeated using a finer resolution. New horizontal and vertical grid steps shall be determined from the measured SAR distribution so that the above criteria are met. Compliance with the above two criteria shall be demonstrated for the new measured zoom scan.

3.4.2 Volume Scan Procedure

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

3.4.3 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drift more than 5%, the SAR will be retested.

3.4.4 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

(a) Extraction of the measured data (grid and values) from the Zoom Scan
(b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
(c) Generation of a high-resolution mesh within the measured volume
(d) Interpolation of all measured values form the measurement grid to the high-resolution grid
(e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
(f) Calculation of the averaged SAR within masses of 1g and 10g

3.4.5 SAR Averaged Methods

In DASY, the interpolation and extrapolation are both based on the modified Quadratic Shepard’s method. The interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation.

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5 mm.

4. SAR Measurement Evaluation

4.1 EUT Configuration and Setting

<Considerations Related to Proximity Sensor>

The device supports WWAN, WLAN, and Bluetooth capabilities. It is designed with a proximity sensor which can trigger/not trigger power reduction for WCDMA and LTE on Rear Face and Bottom Side of EUT for SAR compliance. Others RF capability (WLAN and Bluetooth) have no power reduction. The power levels for all wireless technologies and the power reduction please refer to section 4.6 of this report.

Proximity Sensor Triggering Distances (KDB 616217 D04 §6.2)

The proximity sensor triggering distance was determined per KDB 616217 for rear face and applicable edge. Summary for power verification per distance was tabulated in the below table.

Output Power Verification in dBm for EUT Rear Face											
Distance (mm)	12	13	14	15	16	17	18	19	20	21	22
WCDMA II	18.7	18.6	18.6	18.7	19.0	19.0	23.3	23.3	23.7	23.6	23.7
WCDMA IV	18.3	18.1	17.9	17.9	18.1	18.3	23.7	23.6	23.2	23.6	23.4
WCDMA V	19.0	18.9	19.2	19.1	18.8	18.8	23.8	23.8	23.7	23.4	23.4
LTE 2	19.0	19.0	18.7	18.9	18.5	18.8	23.9	23.8	23.6	23.6	24.0
LTE 4	18.1	18.4	18.2	18.4	18.0	18.1	23.8	23.3	23.8	23.5	23.3
LTE 5	19.2	19.5	19.4	19.2	19.2	19.0	23.3	23.4	23.6	23.5	23.4
LTE 7	13.9	13.7	13.5	13.8	13.8	13.5	23.3	23.5	23.3	23.6	23.7
LTE 12	20.7	20.4	20.5	20.5	20.8	20.7	23.3	23.3	23.8	23.8	23.5
LTE 13	19.0	19.3	19.0	19.4	19.1	19.1	23.5	23.4	23.5	23.8	23.8
LTE 14	19.1	19.5	19.3	19.3	19.1	19.4	23.7	23.8	23.3	23.6	23.6
LTE 17	21.0	20.6	20.9	20.6	21.0	20.7	23.6	23.7	23.5	23.9	23.6
LTE 25	19.7	19.5	19.6	19.9	19.8	19.6	23.2	23.4	23.5	23.2	23.7
LTE 26	19.2	19.0	19.0	19.1	19.4	18.9	23.4	23.4	23.8	23.7	23.7
LTE 30	13.9	13.8	13.5	13.6	13.6	13.8	21.7	21.8	21.7	22.1	21.7
LTE 66	19.1	19.1	19.5	19.5	19.2	19.0	23.4	23.5	23.5	23.3	23.3
LTE 38	14.9	15.1	15.2	15.0	15.0	14.9	23.8	23.4	23.8	23.6	23.4
LTE 41	14.9	15.0	15.0	15.0	14.8	14.7	23.8	23.4	23.7	23.8	23.5

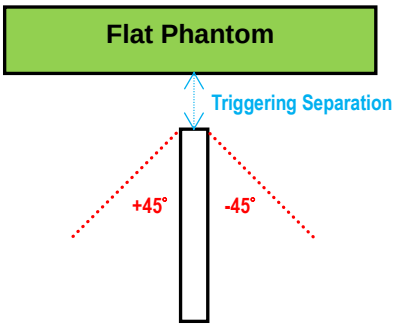
Output Power Verification in dBm for EUT Bottom Edge											
Distance (mm)	13	14	15	16	17	18	19	20	21	22	23
WCDMA II	18.6	19.0	18.6	18.7	19.0	18.5	23.4	23.2	23.3	23.5	23.5
WCDMA IV	17.9	17.9	18.3	18.1	18.0	18.0	23.3	23.3	23.3	23.3	23.7
WCDMA V	19.2	18.8	18.8	18.8	18.8	19.2	23.8	23.9	23.6	23.5	23.6
LTE 2	19.0	18.7	18.8	19.0	19.0	18.5	23.5	23.9	24.0	23.9	23.7
LTE 4	18.0	18.4	18.0	18.4	18.3	18.0	23.3	23.7	23.3	23.8	23.7
LTE 5	19.1	19.1	19.4	19.5	19.1	19.0	23.7	23.3	23.3	23.5	23.4
LTE 7	13.9	13.6	13.9	13.4	13.8	13.8	23.8	23.7	23.8	23.8	23.3
LTE 12	20.8	20.4	20.8	20.7	20.5	20.4	23.6	23.6	23.3	23.6	23.5
LTE 13	19.3	19.4	18.9	19.0	19.1	19.0	23.7	23.6	23.8	23.6	23.5
LTE 14	19.4	19.3	19.4	19.5	19.1	19.3	23.7	23.6	23.4	23.7	23.8
LTE 17	21.0	20.8	20.7	20.5	20.5	20.7	23.9	23.7	23.6	23.7	23.8
LTE 25	19.7	19.9	19.6	19.9	20.0	19.8	23.2	23.2	23.5	23.4	23.6
LTE 26	19.4	19.4	19.1	19.4	19.4	19.1	23.4	23.7	23.6	23.7	23.7
LTE 30	13.9	13.5	14.0	13.8	13.7	13.9	22.0	21.9	21.8	21.9	21.6
LTE 66	19.1	19.2	19.5	19.2	19.2	19.4	23.3	23.6	23.5	23.4	23.4
LTE 38	15.2	15.0	15.1	15.0	15.1	15.2	23.4	23.5	23.8	23.8	23.9
LTE 41	14.5	14.7	14.8	14.8	14.7	14.7	23.8	23.7	23.8	23.5	23.8

Proximity Sensor Coverage (KDB 616217 D04 §6.3)

Since the proximity sensor is collocated with antenna in one component, the procedure for proximity sensor coverage is not required.

Proximity Sensor Tilt Angle Influences (KDB 616217 D04 §6.4)

The proximity sensor tilt angle influence was determined per KDB 616217 for applicable edge. Summary for proximity sensor tilt angle influence is shown in below.



Orientation	Separation Distance (mm)	Tilt Angle										
		-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
Bottom Edge	18	Off	On	On	On	On	On	On	On	On	On	On
	17	Off	On	On	On	On	On	On	On	On	On	On
	16	Off	On	On	On	On	On	On	On	On	On	On
	15	On	On	On	On	On	On	On	On	On	On	On

Summary for Proximity Sensor Triggering Test

According to the procedures noticed in KDB 616217 D04, the proximity sensor triggering distance is 17 mm for EUT Rear Face, and 15 mm for Bottom Side. The separation distance of 15 mm determined by the smallest triggering distance on Bottom Side is used to access the tilt angle influence and the sensor does not release during ±45 degree. Therefore, the smallest separation distance for tilt angle influence is 15 mm for the Bottom Side. The conservation triggering distances based on the separation distance for the sensor trigger / not triggered as EUT with power reduction at 0 mm, and EUT without power reduction at 16 mm for EUT Rear Face, and 14 mm for Bottom Side were used to test SAR.

The power reduction is depends on the proximity sensor input. For a steady SAR test, the power reduction was enabled or disabled manually by engineering software during SAR testing.

<Connections between EUT and System Simulator>

For WWAN SAR testing, the EUT was linked and controlled by base station emulator. Communication between the EUT and the emulator was established by air link. The distance between the EUT and the communicating antenna of the emulator is larger than 50 cm and the output power radiated from the emulator antenna is at least 30 dB smaller than the output power of EUT. The EUT was set from the emulator to radiate maximum output power during SAR testing.

<Considerations Related to WCDMA for Setup and Testing>

Release 5 HSDPA Data Devices

The 3G SAR test reduction procedure is applied to body SAR with 12.2 kbps RMC as the primary mode. Otherwise, body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. HSDPA is configured according to the applicable UE category of a test device. The number of HS-DSCH / HS-PDSCHs, HARQ 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 conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms and a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors (β_c, β_d), and HS-DPCCH power offset parameters (Δ_{ACK}, Δ_{NACK}, Δ_{CQI}) are set according to values indicated in below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

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

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{HS} = 30/15 * β_c.
Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with β_{HS} = 30/15 * β_c, and Δ_{CQI} = 24/15 with β_{HS} = 24/15 * β_c.
Note 3: CM = 1 for β_c/β_d = 12/15, β_{HS}/β_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 4: 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 20ignaled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15.

Release 6 HSUPA Data Devices

The 3G SAR test reduction procedure is applied to body SAR with 12.2 kbps RMC as the primary mode. Otherwise, body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode. Otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing. Due to inner loop power control requirements in HSPA, a communication test set is required for output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA are configured according to the β values indicated in below.

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	β_{HS} (1)	β_{ec}	β_{ed} (4)(5)	β_{ed} (SF)	β_{ed} (Codes)	CM (2) (dB)	MPR (2)(6) (dB)	AG (5) Index	E-TFCI
1	11/15 (3)	15/15 (3)	64	11/15 (3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed}1$: 47/15 $\beta_{ed}2$: 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{HS} = 30/15 * β_c. For sub-test 5, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 5/15 with β_{HS} = 5/15 * β_c.
Note 2: CM = 1 for β_c/β_d = 12/15, β_{HS}/β_c = 24/15. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
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 21ignaled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.
Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.
Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.
Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

HSPA+ SAR Guidance

The 3G SAR test reduction procedure is applied to HSPA+ (uplink) with 12.2 kbps RMC as the primary mode. Otherwise, when SAR is required for Rel. 6 HSPA, SAR is required for Rel. 7 HSPA+. Power is measured for HSPA+ that supports uplink 16QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.

Sub-test	β_c (3)	β_d	β_{HS} (1)	β_{ec}	β_{ed} (4) (2xSF2)	β_{ed} (4) (2xSF4)	CM (2) (dB)	MPR (2) (dB)	AG (4) Index	E-TFCI (5)	E-TFCI (boost)
1	1	0	30/15	30/15	$\beta_{ed}1$: 30/15 $\beta_{ed}2$: 30/15	$\beta_{ed}3$: 24/15 $\beta_{ed}4$: 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{HS} = 30/15 * β_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 β_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 21ignaled to use the extrapolation algorithm.

DC-HSDPA SAR Guidance

The 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Otherwise, when SAR is required for Rel. 5 HSDPA, SAR is required for Rel. 8 DC-HSDPA. 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 secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

<Considerations Related to LTE for Setup and Testing>

This device contains LTE transmitter which follows 3GPP standards, is category 3, supports both QPSK and 16QAM modulations, and supported LTE band and channel bandwidth is listed in below. The output power was tested per 3GPP TS 36.521-1 maximum transmit procedures for both QPSK and 16QAM modulation. The results please refer to section 4.6 of this report.

EUT Supported LTE Band and Channel Bandwidth						
LTE Band	BW 1.4 MHz	BW 3 MHz	BW 5 MHz	BW 10 MHz	BW 15 MHz	BW 20 MHz
2	V	V	V	V	V	V
4	V	V	V	V	V	V
5	V	V	V	V		
7			V	V	V	V
12	V	V	V	V		
13			V	V		
14			V	V		
17			V	V		
25	V	V	V	V	V	V
26	V	V	V	V	V	
30			V	V		
38			V	V	V	V
41			V	V	V	V
66	V	V	V	V	V	V

The LTE maximum power reduction (MPR) in accordance with 3GPP TS 36.101 is active all times during LTE operation. The allowed MPR for the maximum output power is specified in below.

Modulation	Channel Bandwidth / RB Configurations						LTE MPR Setting (dB)
	BW 1.4 MHz	BW 3 MHz	BW 5 MHz	BW 10 MHz	BW 15 MHz	BW 20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16QAM	<= 5	<= 4	<= 8	<= 12	<= 16	<= 18	1
16QAM	> 5	> 4	> 8	> 12	> 16	> 18	2
64QAM	<= 5	<= 4	<= 8	<= 12	<= 16	<= 18	2
64QAM	> 5	> 4	> 8	> 12	> 16	> 18	3

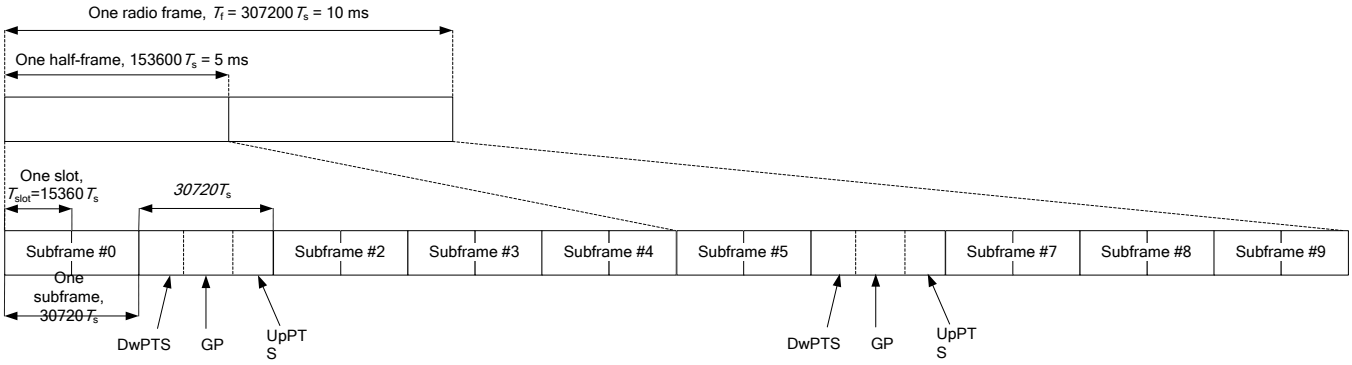
Note: MPR is according to the standard and implemented in the circuit (mandatory).

In addition, the device is compliant with additional maximum power reduction (A-MPR) requirements defined in 3GPP TS 36.101 section 6.2.4 that was disabled for all FCC compliance testing.

During LTE SAR testing, the related parameters of operating band, channel bandwidth, uplink channel number, modulation type, and RB was set in base station simulator. When the EUT has registered and communicated to base station simulator, the simulator set to make EUT transmitting the maximum radiated power.

TDD-LTE Setup Configurations

According to KDB 941225 D05, SAR testing for TDD-LTE device 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 TDD-LTE configurations. The TDD-LTE of this device supports frame structure type 2 defined in 3GPP TS 36.211 section 4.2, and the frame structure configuration can be referred to below.



3GPP TS 36.211 Figure 4.2-1: Frame Structure Type 2

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 • Ts	2192 • Ts	2560 • Ts	7680 • Ts	2192 • Ts	2560 • Ts
1	19760 • Ts			20480 • Ts		
2	21952 • Ts			23040 • Ts		
3	24144 • Ts			25600 • Ts		
4	26336 • Ts			7680 • Ts	4384 • Ts	5120 • Ts
5	6592 • Ts	4384 • Ts	5120 • Ts	20480 • Ts		
6	19760 • Ts			23040 • Ts		
7	21952 • Ts			12800 • Ts		
8	24144 • Ts			-	-	-
9	13168 • Ts			-	-	-

3GPP TS 36.211 Table 4.2-1: Configuration of Special Subframe

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

3GPP TS 36.211 Table 4.2-2: Uplink-Downlink Configurations

The variety of different TD-LTE uplink-downlink configurations allows a network operator to allocate the network's capacity between uplink and downlink traffic to meet the needs of the network. The uplink duty cycle of these seven configurations can readily be computed and shown in below.

UL-DL Configuration	0	1	2	3	4	5	6
Highest Duty-Cycle	63.33%	43.33%	23.33%	31.67%	21.67%	11.67%	53.33%

LTE Downlink Carrier Aggregation (CA) Setup Configurations

LTE Carrier Aggregation (CA) was defined in 3GPP release 10 and higher. The LTE device in CA mode has one Primary Component Carrier (PCC) and one or more Secondary Component Carriers (SCC). PCC acts as the anchor carrier and can optionally cross-schedule data transmission on SCC. The RRC connection is only handled by one cell, the PCC for downlink and uplink communications. After making a data connection to the PCC, the LTE device adds the SCC on the downlink only. All uplink communications and acknowledgements remain identical to release 8 specifications on the PCC. The combinations of downlink carrier aggregation supported by this device are listed in below.

LTE CA Configurations and Bandwidth Combination Sets defined for Intra-Band Contiguous CA

Downlink CA Configuration	Component carriers in order of increasing carrier frequency			Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
	Channel bandwidths for carrier-1 (MHz)	Channel bandwidths for carrier-2 (MHz)	Channel bandwidths for carrier-3 (MHz)		
CA_5B	5, 10	10		20	0
	10	5			
	3	5		8	1
	5	3			
CA_41C	10	20		40	0
	15	15, 20			
	20	10, 15, 20			
	5, 10	20		40	1
	15	15, 20			
	20	5, 10, 15, 20			
	10	15, 20		40	2
	15	10, 15, 20			
	20	10, 15, 20			
	10	20		40	3
	20	20			
CA_66B	5	5, 10, 15		20	0
	10	5, 10			
	15	5			
CA_66C	5	20		40	0
	10	15, 20			
	15	10, 15, 20			
	20	5, 10, 15, 20			

Downlink CA Configuration	Component carriers in order of increasing carrier frequency			Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
	Channel bandwidths for carrier-1 (MHz)	Channel bandwidths for carrier-2 (MHz)	Channel bandwidths for carrier-3 (MHz)		
CA_66D	5	20		60	0
	20	5			
	20	20			
	10	20			
	15	20			
	10, 15, 20	15, 20			
	15, 20	10			
	15	15, 20			
	20	15, 20			
	20	10			

LTE CA Configurations and Bandwidth Combination Sets defined for Intra-Band Non-Contiguous CA

Downlink CA Configuration	Component Carriers in order of Increasing Carrier Frequency			Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
	Channel Bandwidths for Carrier-1 (MHz)	Channel Bandwidths for Carrier-2 (MHz)	Channel Bandwidths for Carrier-3 (MHz)		
CA_2A-2A	5, 10, 15, 20	5, 10, 15, 20		40	0
CA_4A-4A	5, 10, 15, 20	5, 10, 15, 20		40	0
	5, 10	5, 10		20	1
CA_25A-25A	5, 10	5, 10		20	0
	5, 10, 15, 20	5, 10, 15, 20		40	1
CA_66A-66A	5, 10, 15, 20	5, 10, 15, 20		40	0
CA_66A-66B	5, 10, 15, 20	Refer to CA_66B (BCS0)		40	0
	Refer to CA_66B (BCS0)		5, 10, 15, 20		
CA_66A-66C	5, 10, 15, 20	Refer to CA_66C (BCS0)		60	0
	Refer to CA_66C (BCS0)		5, 10, 15, 20		

LTE CA Configurations and Bandwidth Combination Sets defined for Inter-Band CA (Two Bands)

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier (MHz)	Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
CA_2A-4A	2	1.4, 3, 5, 10, 15, 20	40	0
	4	5, 10, 15, 20		
	2	5, 10	20	1
	4	5, 10		
	2	5, 10, 15, 20	40	2
	4	5, 10, 15, 20		
CA_2A-2A-4A	2	Refer to CA_2A-2A (BCS0)	60	0
	4	5, 10, 15, 20		
CA_2A-4A-4A	2	5, 10, 15, 20	60	0
	4	Refer to CA_4A-4A (BCS0)		
CA_2A-5A	2	5, 10, 15, 20	30	0
	5	5, 10		
	2	5, 10	20	1
	5	5, 10		
CA_2A-2A-5A	2	Refer to CA_2A-2A (BCS0)	50	0
	5	5, 10		
CA_2A-5B	2	5, 10, 15, 20	40	0
	5	Refer to CA_5B (BCS0)		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier (MHz)	Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
CA_2A-12A	2	5, 10, 15, 20	30	0
	12	5, 10		
	2	5, 10, 15, 20	30	1
	12	3, 5, 10		
	2	5, 10	20	2
	12	5, 10		
CA_2A-13A	2	5, 10, 15, 20	30	0
	13	10		
	2	5, 10	20	1
	13	10		
CA_2A-2A-13A	2	Refer to CA_2A-2A (BCS0)	50	0
	13	10		
CA_2A-14A	2	5, 10, 15, 20	30	0
	14	5, 10		
CA_2A-29A	2	5, 10	20	0
	29	3, 5, 10		
	2	5, 10	20	1
	29	5, 10		
	2	5, 10, 15, 20	30	2
	29	5, 10		
CA_2A-30A	2	5, 10, 15, 20	30	0
	30	5, 10		
CA_2A-2A-30A	2	Refer to CA_2A-2A (BCS0)	50	0
	30	5, 10		
CA_2A-46A	2	5, 10, 15, 20	40	0
	46	20		
CA_2A-46D	2	5, 10, 15, 20	80	0
	46	Refer to CA_46D (BCS0)		
CA_2A-66A	2	1.4, 3, 5, 10, 15, 20	40	0
	66	5, 10, 15, 20		
	2	5, 10	20	1
	66	5, 10		
	2	5, 10, 15, 20	40	2
	66	5, 10, 15, 20		
CA_2A-66B	2	5, 10, 15, 20	40	0
	66	Refer to CA_66B (BCS0)		
CA_2A-66C	2	5, 10, 15, 20	60	0
	66	Refer to CA_66C (BCS0)		
CA_2A-2A-66A	2	Refer to CA_2A-2A (BCS0)	60	0
	66	5, 10, 15, 20		
CA_2A-2A-66A-66A	2	Refer to CA_2A-2A (BCS0)	80	0
	66	Refer to CA_66A-66A (BCS0)		
CA_2A-66A-66A	2	5, 10, 15, 20	60	0
	66	Refer to CA_66A-66A (BCS0)		
CA_2A-2A-66B	2	Refer to CA_2A-2A (BCS0)	60	0
	66	Refer to CA_66B (BCS0)		
CA_2A-2A-66C	2	Refer to CA_2A-2A (BCS0)	80	0
	66	Refer to CA_66C (BCS0)		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier (MHz)	Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
CA_4A-5A	4	5, 10	20	0
	5	5, 10		
	4	5, 10, 15, 20	30	1
	5	5, 10		
CA_4A-4A-5A	4	Refer to CA_4A-4A (BCS0)	50	0
	5	5, 10		
CA_4A-13A	4	5, 10, 15, 20	30	0
	13	10		
	4	5, 10	20	1
	13	10		
CA_4A-46A	4	5, 10, 15, 20	40	0
	46	20		
CA_5A-30A	5	5, 10	20	0
	30	5, 10		
CA_5B-30A	5	Refer to CA_5B (BCS0)	30	0
	30	5, 10		
CA_5A-66A	5	5, 10	30	0
	66	5, 10, 15, 20		
CA_5A-66A-66A	5	5, 10	50	0
	66	Refer to CA_66A-66A (BCS0)		
CA_5A-66B	5	5, 10	30	0
	66	Refer to CA_66B (BCS0)		
CA_5A-66C	5	5, 10	50	0
	66	Refer to CA_66C (BCS0)		
CA_5B-66A	5	Refer to CA_5B (BCS0)	40	0
	66	5, 10, 15, 20		
CA_5B-66A-66A	5	Refer to CA_5B (BCS0)	60	0
	66	Refer to CA_66A-66A (BCS0)		
CA_5B-66C	5	Refer to CA_5B (BCS0)	60	0
	66	Refer to CA_66C (BCS0)		
CA_12A-30A	12	5, 10	20	0
	30	5, 10		
CA_12A-66A	12	5, 10	20	0
	66	1.4, 3, 5,10		
	12	5, 10	30	1
	66	1.4, 3, 5, 10, 15, 20		
	12	3, 5, 10	30	2
	66	5, 10, 15, 20		
	12	5, 10	20	3
	66	5, 10		
	12	5, 10	30	4
	66	5, 10, 15, 20		
	12	5	20	5
	66	5, 10, 15		
CA_12A-66A-66A	12	5, 10	50	0
	66	Refer to CA_66A-66A (BCS0)		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier (MHz)	Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
CA_13A-46A	13	5, 10	30	0
	46	20		
CA_13A-66A	13	5, 10	30	0
	66	5, 10, 15, 20		
CA_13A-66A-66A	13	5, 10	50	0
	66	Refer to CA_66A-66A (BCS0)		
CA_13A-66B	13	5, 10	30	0
	66	Refer to CA_66B (BCS0)		
CA_13A-66C	13	5, 10	50	0
	66	Refer to CA_66C (BCS0)		
CA_14A-66A	14	5, 10	30	0
	66	5,10,15,20		
CA_14A-66A-66A	14	5, 10	50	0
	66	Refer to CA_66A-66A (BCS0)		
CA_14A-30A	14	5, 10	20	0
	30	5,10		
CA_25A-26A	25	3, 5, 10, 15, 20	35	0
	26	1.4, 3, 5, 10, 15		
	25	3, 5, 10	20	1
	26	3, 5, 10		
	25	5, 10	20	2
	26	5, 10		
CA_29A-30A	29	5, 10	20	0
	30	5, 10		
CA_29A-66A	29	5, 10	30	0
	66	5, 10, 15, 20		
CA_30A-66A	30	5, 10	30	0
	66	5, 10, 15, 20		
CA_30A-66A-66A	30	5, 10	50	0
	66	Refer to CA_66A-66A (BCS0)		
CA_46A-66A	46	20	40	0
	66	5, 10, 15, 20		

LTE CA Configurations and Bandwidth Combination Sets defined for Inter-Band CA (Three Bands)

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier (MHz)	Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
CA_2A-4A-5A	2	5, 10, 15,20	50	0
	4	5, 10, 15,20		
	5	5, 10		
CA_2A-4A-13A	2	5, 10, 15, 20	50	0
	4	5, 10, 15, 20		
	13	10		
CA_2A-2A-5A-66A	2	Refer to CA_2A-2A (BCS0)	70	0
	5	5, 10		
	66	5, 10, 15, 20		
CA_2A-2A-5A-66B	2	Refer to CA_2A-2A (BCS0)	70	0
	5	5, 10		
	66	Refer to CA_66B (BCS0)		
CA_2A-2A-5A-66C	2	Refer to CA_2A-2A (BCS0)	90	0
	5	5, 10		
	66	Refer to CA_66C (BCS0)		
CA_2A-2A-13A-66A	2	Refer to CA_2A-2A (BCS0)	70	0
	13	5, 10		
	66	5, 10, 15, 20		
CA_2A-5A-30A	2	5, 10, 15, 20	40	0
	5	5, 10		
	30	5, 10		
CA_2A-2A-5A-30A	2	Refer to CA_2A-2A (BCS0)	60	0
	5	5, 10		
	30	5, 10		
CA_2A-5B-30A	2	5, 10, 15, 20	50	0
	5	Refer to CA_5B (BCS0)		
	30	5, 10		
CA_2A-5A-66A	2	5, 10, 15, 20	50	0
	5	5, 10		
	66	5, 10, 15, 20		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier (MHz)	Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
CA_2A-5A-66A-66A	2	5, 10, 15, 20	70	0
	5	5, 10		
	66	Refer to CA_66A-66A (BCS0)		
CA_2A-5B-66A-66A	2	5, 10, 15, 20	80	0
	5	Refer to CA_5B (BCS0)		
	66	Refer to CA_66A-66A (BCS0)		
CA_2A-5A-66B	2	5, 10, 15, 20	50	0
	5	5, 10		
	66	Refer to CA_66B (BCS0)		
CA_2A-5A-66C	2	5, 10, 15, 20	70	0
	5	5, 10		
	66	Refer to CA_66C (BCS0)		
CA_2A-5B-66A	2	5, 10, 15, 20	60	0
	5	Refer to CA_5B (BCS0)		
	66	5, 10, 15, 20		
CA_2A-5B-66C	2	5, 10, 15, 20	80	0
	5	Refer to CA_5B (BCS0)		
	66	Refer to CA_66C (BCS0)		
CA_2A-12A-30A	2	5, 10, 15, 20	40	0
	12	5, 10		
	30	5, 10		
CA_2A-2A-12A-30A	2	Refer to CA_2A-2A (BCS0)	60	0
	12	5, 10		
	30	5, 10		
CA_2A-12A-66A	2	5, 10, 15, 20	50	0
	12	5, 10		
	66	5, 10, 15, 20		
	2	5, 10	40	1
	12	5, 10		
	66	5, 10, 15, 20		
CA_2A-2A-12A-66A	2	5, 10,15, 20	70	0
	12	5, 10		
	66	Refer to 66A-66A (BCS0)		
CA_2A-12A-66A-66A	2	5, 10,15, 20	70	0
	12	5, 10		
	66	Refer to 66A-66A (BCS0)		
CA_2A-13A-46D	2	5, 10, 15, 20	90	0
	13	5, 10		
	46	Refer to 46D (BCS0)		
CA_2A-13A-66A	2	5, 10, 15, 20	50	0
	13	5, 10		
	66	5, 10, 15, 20		
CA_2A-13A-66A-66A	2	5, 10, 15, 20	70	0
	13	5, 10		
	66	Refer to CA_66A-66A		
CA_2A-13A-66B	2	5, 10, 15, 20	50	0
	13	5, 10		
	66	Refer to CA_66B (BCS0)		
CA_2A-13A-66C	2	5, 10, 15, 20	70	0
	13	5, 10		
	66	Refer to CA_66C (BCS0)		
CA_2A-14A-30A	2	5, 10, 15, 20	40	0
	14	5, 10		
	30	5, 10		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier (MHz)	Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
CA_2A-2A-30A-66A	2	Refer to CA_2A-2A (BCS0)	70	0
	30	5, 10		
	66	5, 10, 15, 20		
CA_2A-30A-66A-66A	2	5, 10, 15, 20	70	0
	30	5, 10		
	66	Refer to CA_66A-6A (BCS0)		
CA_2A-30A-66A	2	5, 10, 15, 20	50	0
	30	5, 10		
	66	5, 10, 15, 20		
CA_2A-46D-66A	2	5, 10, 15, 20	100	0
	46	Refer to CA_46D (BCS0)		
	66	5, 10, 15, 20		
CA_5A-30A-66A	5	5, 10	40	0
	30	5, 10		
	66	5, 10, 15, 20		
CA_5A-30A-66A-66A	5	5, 10	60	0
	30	5, 10		
	66	Refer to CA_66A-66A (BCS0)		
CA_5B-30A-66A	5	Refer to CA_5B (BCS0)	50	0
	30	5, 10		
	66	5, 10, 15, 20		
CA_5B-30A-66A-66A	5	Refer to CA_5B (BCS0)	70	0
	30	5, 10		
	66	Refer to CA_66A-66A (BCS0)		
CA_12A-30A-66A	12	5, 10	40	0
	30	5, 10		
	66	5, 10, 15, 20		
CA_12A-30A-66A-66A	12	5, 10	60	0
	30	5, 10		
	66	Refer to CA_66A-66A (BCS0)		
CA_13A-46D-66A	13	5, 10	90	0
	46	Refer to CA_46D (BCS0)		
	66	5, 10, 15, 20		

LTE CA Configurations and Bandwidth Combination Sets defined for Inter-Band CA (For Bands)

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier (MHz)	Maximum Aggregated Bandwidth (MHz)	Bandwidth Combination Set
CA_2A-5A-30A-66A	2	5, 10, 15, 20	60	0
	5	5, 10		
	30	5, 10		
	66	5, 10, 15, 20		
CA_2A-5B-30A-66A	2	5, 10, 15, 20	70	0
	5	Refer to CA_5B (BCS0)		
	30	5, 10		
	66	5, 10, 15, 20		
CA_2A-12A-30A-66A	2	5, 10, 15, 20	60	0
	12	5, 10		
	30	5, 10		
	66	5, 10, 15, 20		

<SAR Test Exclusion Evaluations for LTE Downlink CA>

According to Nov 2017 TCB Workshop, SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. The downlink Carrier Aggregation configurations are tabulated in separate columns. DL CA would be listed in the columns corresponding to Intra Band contiguous, Intra Band Non-contiguous, 2bands/2CCs, 2bands/3CCs, 2bands/4CCs, 3bands/3CCs, 3bands/4CCs, 3bands/5CC, 4bands/4CCs and 4bands/5CC. The CA/CC combinations in each columns are sorted so that frequency bands listed in subsequent columns on each row are ascending subsets, as following LTE Downlink CA table and LTE Downlink CA (4*4 MIMO) table ; i.e., columns to the right correspond to increasing number of frequency bands and CCs.

	Intra Band		Inter Band							
	Contiguous	Non-Contiguous	2 Bands / 2CC	2 Bands / 3CC	2 Bands / 4CC	3 Bands / 3CC	3 Bands / 4CC	3 Bands / 5CC	4 Bands / 4CC	4 Bands / 5CC
LTE Downlink CA-Configure	CA_5B	CA_2A-2A	CA_2A-5A	CA_2A-2A-5A		CA_2A-5A-30A	CA_2A-2A-5A-30A		CA_2A-5A-30A-66A	CA_2A-5B-30A-66A
				CA_2A-2A-5B		CA_2A-5A-66A	CA_2A-2A-5A-66A			
			CA_2A-30A	CA_2A-2A-30A			CA_2A-2A-30A-66A			
			CA_2A-66A	CA_2A-2A-66A	CA_2A-2A-66A-66A		CA_2A-5A-66A-66A	CA_2A-5B-66A-66A		
				CA_2A-66B	CA_2A-2A-66B		CA_2A-5A-66B	CA_2A-2A-5A-66B		
				CA_2A-66C	CA_2A-2A-66C		CA_2A-5A-66C	CA_2A-2A-5A-66C		
				CA_2A-5B			CA_2A-5B-30A			
				CA_2A-66A-66A			CA_2A-5B-66A	CA_2A-5B-66C		
	CA_66B	CA_66A-66A		CA_30A-66A-66A		CA_2A-30A-66A	CA_2A-30A-66A-[illegible]			
	CA_66C	CA_66A-66B		CA_5A-66A-66A	CA_5B-66A-66A		CA_5A-30A-66A-[illegible]	CA_5B-30A-66A-66A		
	CA_66D	CA_66A-66C		CA_5A-66B	CA_5B-66C	CA_5A-30A-66A	CA_5B-30A-66A			
			CA_5A-30A	CA_5A-66C						
			CA_5A-66A	CA_5B-30A						
			CA_30A-66A	CA_5B-66A						
			CA_2A-12A	CA_12A-66A-66A		CA_2A-12A-30A	CA_2A-2A-12A-30A		CA_2A-12A-30A-66A	
			CA_12A-30A			CA_2A-12A-66A	CA_2A-2A-12A-66A			
			CA_12A-66A			CA_12A-30A-66A	CA_2A-12A-66A-[illegible]			
							CA_12A-30A-66A-[illegible]			
			CA_2A-13A	CA_2A-2A-13A	CA_2A-46D			CA_2A-13A-46D		
			CA_13A-46A							
			CA_46A-66A					CA_2A-46D-66A		
			CA_13A-66A	CA_13A-66A-66A				CA_13A-46D-66A		
				CA_13A-66B						
				CA_13A-66C						
						CA_2A-13A-66A	CA_2A-2A-13A-66A			
							CA_2A-13A-66A-[illegible]			
							CA_2A-13A-66B			
							CA_2A-13A-66C			
		CA_4A-4A	CA_2A-4A	CA_2A-2A-4A		CA_2A-4A-5A				
				CA_2A-4A-4A						
				CA_4A-4A-5A						
						CA_2A-4A-13A				
			CA_2A-14A			CA_2A-14A-30A				
			CA_14A-30A							
			CA_14A-66A	CA_14A-66A-66A						
			CA_2A-29A							
			CA_2A-46A							
			CA_4A-5A							
			CA_4A-13A							
			CA_4A-46A							
		CA_25A-25A	CA_25A-26A							
			CA_29A-30A							
			CA_29A-66A							
	CA_41C									

• Only yellow highlighted cells need power measurement.

4.2 EUT Testing Position

4.2.1 Body Exposure Conditions

For laptop PC, according to KDB 616217 D04, SAR evaluation is required for the bottom surface of the keyboard. This EUT was tested in the base of EUT directly against the flat phantom. The required minimum test separation distance for incorporating transmitters and antennas into laptop computer display is determined with the display screen opened at an angle of 90° to the keyboard compartment.

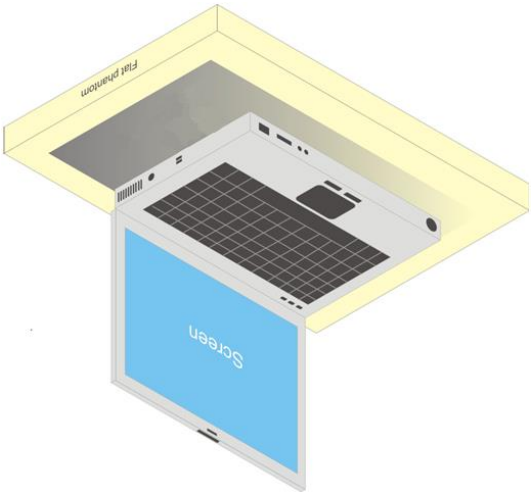


Fig-4.1 Illustration for Laptop Setup

For full-size tablet, according to KDB 616217 D04, SAR evaluation is required for back surface and edges of the devices. The back surface and edges of the tablet are tested with the tablet touching the phantom. Exposures from antennas through the front surface of the display section of a tablet are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary. When voice mode is supported on a tablet and it is limited to speaker mode or headset operations only, additional SAR testing for this type of voice use is not required.

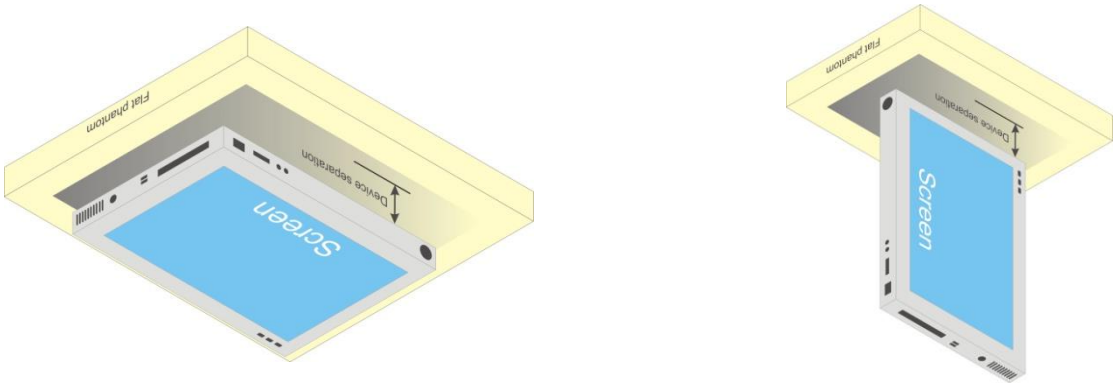
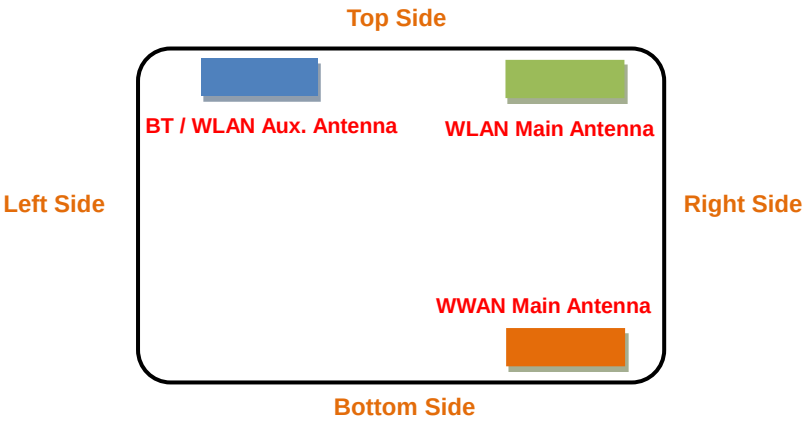


Fig-4.2 Illustration for Tablet Setup

<Antenna Location>

Tablet PC Mode

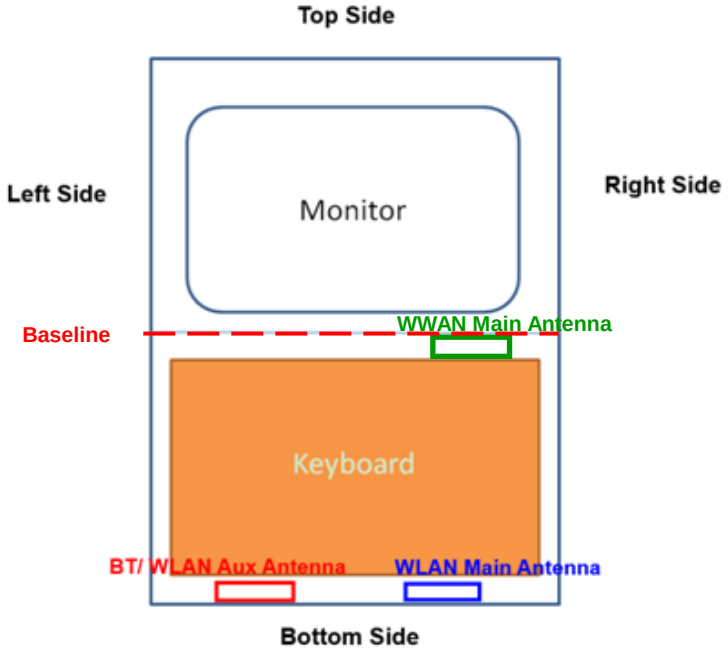


<EUT Front View>

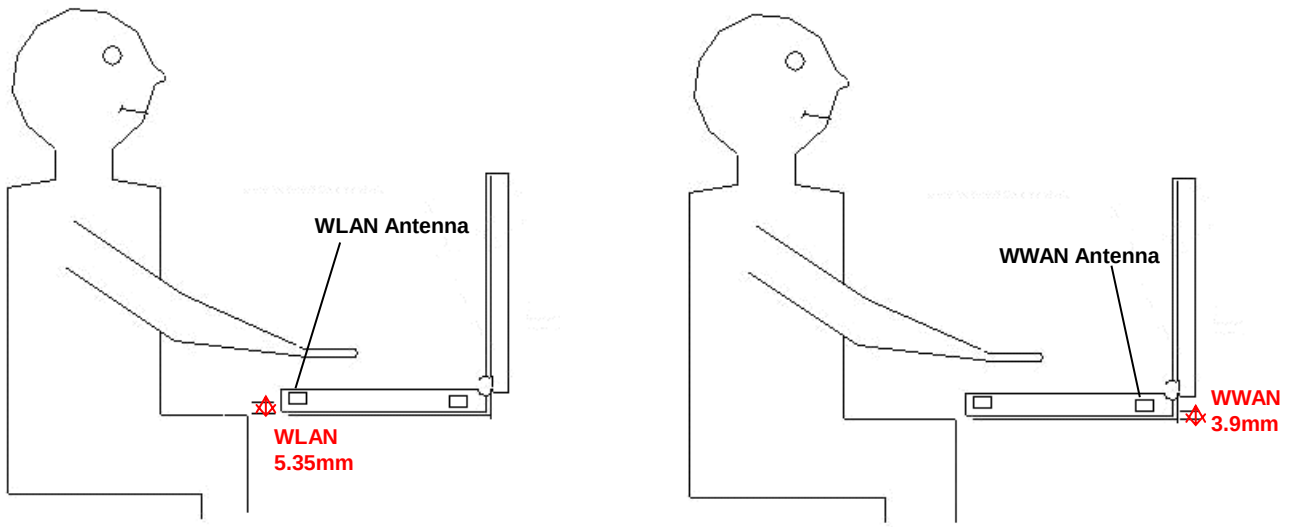
The separation distance for antenna to edge:

Antenna	To Top Side (mm)	To Bottom Side (mm)	To Left Side (mm)	To Right Side (mm)
WLAN Main	2.5	191	192	57
BT/WLAN Aux.	2.5	191	63	185
WWAN Main	192	3	194	56

Laptop PC Mode



<EUT Front View>



<Right Side View>

The separation distance for antenna to edge:

Antenna	To Top Side (mm)	To Baseline Side (mm)	To Left Side (mm)	To Right Side (mm)	To Rear Face (mm)
WLAN Main	191	2.5	192	57	5.35
BT / WLAN Aux	191	2.5	63	185	5.35
WWAN Main	3	192	194	56	3.9

4.3 Tissue Verification

The measuring results for tissue simulating liquid are shown as below.

Frequency (MHz)	Liquid Temp. (℃)	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Target Conductivity (σ)	Target Permittivity (ε_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
750	23.3	0.886	43.449	0.89	41.9	-0.45	3.70	Feb. 13, 2020
750	23.2	0.886	43.435	0.89	41.9	-0.45	3.66	Feb. 14, 2020
750	23.4	0.884	42.847	0.89	41.9	-0.67	2.26	Feb. 17, 2020
750	23.1	0.901	42.724	0.89	41.9	1.24	1.97	Feb. 18, 2020
750	23.3	0.9	42.71	0.89	41.9	1.12	1.93	Feb. 19, 2020
750	23.2	0.885	42.46	0.89	41.9	-0.56	1.34	Feb. 20, 2020
835	23.2	0.927	42.44	0.9	41.5	3.00	2.27	Feb. 14, 2020
835	23.4	0.905	40.721	0.9	41.5	0.56	-1.88	Feb. 17, 2020
1750	23.2	1.334	39.149	1.37	40.1	-2.63	-2.37	Feb. 14, 2020
1750	23.4	1.325	40.815	1.37	40.1	-3.28	1.78	Feb. 17, 2020
1750	23.3	1.325	39.349	1.37	40.1	-3.28	-1.87	Feb. 19, 2020
1750	23.2	1.328	40.495	1.37	40.1	-3.07	0.99	Feb. 20, 2020
1900	23.2	1.459	38.68	1.4	40	4.21	-3.30	Feb. 14, 2020
1900	23.4	1.462	40.291	1.4	40	4.43	0.73	Feb. 17, 2020
1900	23.3	1.46	38.759	1.4	40	4.29	-3.10	Feb. 19, 2020
2300	23.3	1.737	40.494	1.67	39.5	4.01	2.52	Feb. 19, 2020
2300	23.2	1.71	38.995	1.67	39.5	2.40	-1.28	Feb. 20, 2020
2600	23.2	1.978	38.063	1.96	39	0.92	-2.40	Feb. 14, 2020
2600	23.1	2.029	38.611	1.96	39	3.52	-1.00	Feb. 18, 2020
2600	23.3	2.056	39.473	1.96	39	4.90	1.21	Feb. 19, 2020
2600	23.2	2.01	37.965	1.96	39	2.55	-2.65	Feb. 20, 2020

Note:

The dielectric properties of the tissue simulating liquid have been measured within 24 hours before the SAR testing and within ±10 % of the target values. Liquid temperature during the SAR testing has kept within ±2 ℃.

4.4 System Validation

The SAR measurement system was validated according to procedures in KDB 865664 D01. The validation status in tabulated summary is as below.

Test Date	Probe S/N	Calibration Point	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Validation for CW			Validation for Modulation		
					Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR
Feb. 13, 2020	3650	750	0.886	43.449	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 14, 2020	3650	750	0.886	43.435	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 17, 2020	3650	750	0.884	42.847	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 18, 2020	3650	750	0.901	42.724	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 19, 2020	3650	750	0.9	42.71	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 20, 2020	3650	750	0.885	42.46	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 14, 2020	3650	835	0.927	42.44	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 17, 2020	3650	835	0.905	40.721	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 14, 2020	3650	1750	1.334	39.149	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 17, 2020	3650	1750	1.325	40.815	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 19, 2020	3650	1750	1.325	39.349	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 20, 2020	3650	1750	1.328	40.495	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 14, 2020	3650	1900	1.459	38.68	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 17, 2020	3650	1900	1.462	40.291	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 19, 2020	3650	1900	1.46	38.759	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 19, 2020	3650	2300	1.737	40.494	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 20, 2020	3650	2300	1.71	38.995	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 14, 2020	3650	2600	1.978	38.063	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 18, 2020	3820	2600	2.029	38.611	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 19, 2020	3650	2600	2.056	39.473	Pass	Pass	Pass	N/A	N/A	N/A
Feb. 20, 2020	3650	2600	2.01	37.965	Pass	Pass	Pass	N/A	N/A	N/A

4.5 System Verification

The measuring result for system verification is tabulated as below.

Test Date	Frequency (MHz)	1W Target SAR-1g (W/kg)	Measured SAR-1g (W/kg)	Normalized to 1W SAR-1g (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N
Feb. 13, 2020	750	8.56	0.388	7.76	-9.35	1013	3650	861
Feb. 14, 2020	750	8.56	0.392	7.84	-8.41	1013	3650	861
Feb. 17, 2020	750	8.56	0.391	7.82	-8.64	1013	3650	861
Feb. 18, 2020	750	8.56	0.393	7.86	-8.18	1013	3650	861
Feb. 19, 2020	750	8.56	0.389	7.78	-9.11	1013	3650	861
Feb. 20, 2020	750	8.56	0.391	7.82	-8.64	1013	3650	861
Feb. 14, 2020	835	9.61	0.482	9.64	0.31	4d121	3650	861
Feb. 17, 2020	835	9.61	0.468	9.36	-2.60	4d121	3650	861
Feb. 14, 2020	1750	37.00	1.81	36.20	-2.16	1055	3650	861
Feb. 17, 2020	1750	37.00	1.78	35.60	-3.78	1055	3650	861
Feb. 19, 2020	1750	37.00	1.76	35.20	-4.86	1055	3650	861
Feb. 20, 2020	1750	37.00	1.77	35.40	-4.32	1055	3650	861
Feb. 14, 2020	1900	40.30	1.94	38.80	-3.72	5d036	3650	861
Feb. 17, 2020	1900	40.30	1.92	38.40	-4.71	5d036	3650	861
Feb. 19, 2020	1900	40.30	1.9	38.00	-5.71	5d036	3650	861
Feb. 19, 2020	2300	48.80	2.32	46.40	-4.92	1004	3650	861
Feb. 20, 2020	2300	48.80	2.29	45.80	-6.15	1004	3650	861
Feb. 14, 2020	2600	57.30	2.77	55.40	-3.32	1020	3650	861
Feb. 18, 2020	2600	57.30	2.69	53.80	-6.11	1020	3650	861
Feb. 19, 2020	2600	57.30	2.72	54.40	-5.06	1020	3650	861
Feb. 20, 2020	2600	57.30	2.63	52.60	-8.20	1020	3650	861

Note:

Comparing to the reference SAR value provided by SPEAG in dipole calibration certificate, the deviation of system check results is within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots please refer to Appendix A of this report.

4.6 Maximum Output Power

4.6.1 Maximum Target Conducted Power

The maximum conducted average power (Unit: dBm) including tune-up tolerance is shown as below.

Note. Except LTE Band 7/12/17/30/38/41 , Others the verified power values are less than the values in original report. Therefore, Due to no effect on any test item, the original test result was kept.

Mode	WCDMA Band II (without Power Reduction)	WCDMA Band II (with Power Reduction & Laptop Mode)	Power Reduction (dB)
RMC 12.2K	24.5	19.0	5.5
HSDPA / HSUPA / DC-HSDPA	23.0	18.5	4.5

Mode	WCDMA Band IV (without Power Reduction)	WCDMA Band IV (with Power Reduction & Laptop Mode)	Power Reduction (dB)
RMC 12.2K	24.5	18.5	6.0
HSDPA / HSUPA / DC-HSDPA	23.0	18.0	5.0

Mode	WCDMA Band V (without Power Reduction)	WCDMA Band V (with Power Reduction & Laptop Mode)	Power Reduction (dB)
RMC 12.2K	24.5	19.5	5.0
HSDPA / HSUPA / DC-HSDPA	23.0	19.0	4.0

Mode	LTE 2 (without Power Reduction)	LTE 2 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	19.0	5.5

Mode	LTE 4 (without Power Reduction)	LTE 4 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	18.5	6.0

Mode	LTE 5 (without Power Reduction)	LTE 5 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	19.5	5.0

Mode	LTE 7 (without Power Reduction)	LTE 7 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	14.0	10.5

Mode	LTE 12 (without Power Reduction)	LTE 12 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	21.0	3.5

Mode	LTE 13 (without Power Reduction)	LTE 13 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	19.5	5.0

Mode	LTE 14 (without Power Reduction)	LTE 14 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	19.5	5.0

Mode	LTE 17 (without Power Reduction)	LTE 17 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	21.0	3.5

Mode	LTE 25 (without Power Reduction)	LTE 25 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	20.0	4.5

Mode	LTE 26 (without Power Reduction)	LTE 26 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	19.5	5.0

Mode	LTE 30 (without Power Reduction)	LTE 30 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	23.0	14.0	9.0

Mode	LTE 38 (without Power Reduction)	LTE 38 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	15.5	9.0

Mode	LTE 41 (without Power Reduction)	LTE 41 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	15.0	9.5

Mode	LTE 66 (without Power Reduction)	LTE 66 (with Power Reduction & Laptop Mode)	Power Reduction (dB)
Maximum Target Power	24.5	19.5	5.0

4.6.2 Measured Conducted Power Result

The measuring conducted average power (Unit: dBm) is shown as below.

Note. Except LTE Band 7/12/17/30/38/41 , Others the verified power values are less than the values in original report. Therefore, Due to no effect on any test item, the original test result was kept.

Band	WCDMA Band II			WCDMA Band IV			WCDMA Band V			3GPP MPR (dB)
Channel	9262	9400	9538	1312	1413	1513	4132	4182	4233	
Frequency (MHz)	1852.4	1880.0	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6	
EUT without Power Reduction (P-Sensor NOT Triggered)										
RMC 12.2K	22.82	**23.72**	22.84	**23.70**	23.67	23.50	23.84	**23.89**	23.71	-
HSDPA Subtest-1	21.89	22.79	21.91	22.80	22.77	22.60	22.82	22.87	22.69	0
HSDPA Subtest-2	21.96	22.86	21.98	22.70	22.67	22.50	22.91	22.96	22.78	0
HSDPA Subtest-3	21.40	22.30	21.42	22.32	22.29	22.12	22.39	22.44	22.26	0.5
HSDPA Subtest-4	21.45	22.35	21.47	22.30	22.27	22.10	22.38	22.43	22.25	0.5
DC-HSDPA Subtest-1	21.86	22.76	21.88	22.78	22.75	22.58	22.78	22.83	22.65	0
DC-HSDPA Subtest-2	21.93	22.83	21.95	22.68	22.65	22.48	22.87	22.92	22.74	0
DC-HSDPA Subtest-3	21.37	22.27	21.39	22.30	22.27	22.10	22.35	22.40	22.22	0.5
DC-HSDPA Subtest-4	21.42	22.32	21.44	22.28	22.25	22.08	22.34	22.39	22.21	0.5
HSUPA Subtest-1	21.97	22.87	21.99	22.75	22.72	22.60	22.84	22.89	22.71	0
HSUPA Subtest-2	19.95	20.85	19.97	20.75	20.72	20.60	20.89	20.94	20.76	2
HSUPA Subtest-3	20.84	21.74	20.86	21.78	21.75	21.63	21.87	21.92	21.74	1
HSUPA Subtest-4	19.87	20.77	19.89	20.75	20.72	20.60	20.90	20.95	20.77	2
HSUPA Subtest-5	21.80	22.70	21.82	22.73	22.70	22.58	22.85	22.90	22.72	0
EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)										
RMC 12.2K	18.94	**18.98**	18.88	18.42	**18.47**	18.45	19.34	**19.45**	19.33	-
HSDPA Subtest-1	18.28	18.32	18.22	17.66	17.71	17.69	18.78	18.89	18.77	0
HSDPA Subtest-2	18.31	18.35	18.25	17.68	17.73	17.71	18.80	18.91	18.79	0
HSDPA Subtest-3	17.87	17.91	17.81	17.18	17.23	17.21	18.33	18.44	18.32	0.5
HSDPA Subtest-4	17.28	17.32	17.22	17.16	17.21	17.19	18.26	18.37	18.25	0.5
DC-HSDPA Subtest-1	18.25	18.29	18.19	17.63	17.68	17.66	18.74	18.85	18.73	0
DC-HSDPA Subtest-2	18.28	18.32	18.22	17.65	17.70	17.68	18.76	18.87	18.75	0
DC-HSDPA Subtest-3	17.84	17.88	17.78	17.15	17.20	17.18	18.29	18.40	18.28	0.5
DC-HSDPA Subtest-4	17.25	17.29	17.19	17.13	17.18	17.16	18.22	18.33	18.21	0.5
HSUPA Subtest-1	18.31	18.35	18.25	17.69	17.74	17.72	18.83	18.94	18.82	0
HSUPA Subtest-2	16.28	16.32	16.22	15.69	15.74	15.72	16.82	16.93	16.81	2
HSUPA Subtest-3	17.30	17.34	17.24	16.67	16.72	16.70	17.82	17.93	17.81	1
HSUPA Subtest-4	16.29	16.33	16.23	15.65	15.70	15.68	16.84	16.95	16.83	2
HSUPA Subtest-5	18.36	18.40	18.30	17.65	17.70	17.68	18.79	18.90	18.78	0

LTE Band 2

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18700	18900	19100				Channel		18675	18900	19125	
		Frequency (MHz)		1860.0	1880.0	1900.0				Frequency (MHz)		1857.5	1880.0	1902.5	
20M	QPSK	1	0	23.60	23.66	**23.99**	0	15M	QPSK	1	0	23.55	23.56	23.98	0
		1	50	23.46	23.56	23.72	0			1	37	23.44	23.47	23.66	0
		1	99	23.37	23.37	23.59	0			1	74	23.35	23.34	23.51	0
		50	0	22.64	22.72	**22.89**	1			36	0	22.62	22.65	22.89	1
		50	25	22.63	22.61	22.78	1			36	19	22.61	22.60	22.70	1
		50	50	22.41	22.10	22.72	1			36	39	22.32	22.05	22.70	1
		100	0	22.51	22.64	**22.81**	1			75	0	22.48	22.57	22.77	1
	16QAM	1	0	22.50	22.65	22.89	1		16QAM	1	0	22.50	22.58	22.98	1
		1	50	22.40	22.48	22.65	1			1	37	22.32	22.54	22.56	1
		1	99	22.29	22.28	22.52	1			1	74	22.27	22.28	22.54	1
		50	0	21.64	21.67	21.82	2			36	0	21.53	21.56	21.79	2
		50	25	21.53	21.52	21.70	2			36	19	21.57	21.52	21.58	2
		50	50	21.31	21.06	21.72	2			36	39	21.33	20.91	21.65	2
		100	0	21.43	21.60	21.79	2			75	0	21.43	21.54	21.70	2
	64QAM	1	0	21.55	21.62	21.94	2		64QAM	1	0	21.47	21.54	21.90	2
		1	50	21.39	21.50	21.67	2			1	37	21.35	21.54	21.62	2
		1	99	21.35	21.31	21.57	2			1	74	21.26	21.33	21.40	2
		50	0	20.58	20.63	20.79	3			36	0	20.55	20.63	20.72	3
		50	25	20.53	20.56	20.75	3			36	19	20.60	20.42	20.68	3
		50	50	20.34	20.08	20.64	3			36	39	20.39	19.90	20.62	3
		100	0	20.43	20.61	20.75	3			75	0	20.47	20.55	20.71	3
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18650	18900	19150				Channel		18625	18900	19175	
		Frequency (MHz)		1855.0	1880.0	1905.0				Frequency (MHz)		1852.5	1880.0	1907.5	
10M	QPSK	1	0	23.59	23.54	23.84	0	5M	QPSK	1	0	23.48	23.51	23.74	0
		1	24	23.41	23.36	23.62	0			1	12	23.32	23.39	23.54	0
		1	49	23.17	23.28	23.53	0			1	24	23.20	23.32	23.48	0
		25	0	22.55	22.56	22.74	1			12	0	22.53	22.64	22.62	1
		25	12	22.58	22.39	22.60	1			12	6	22.41	22.52	22.57	1
		25	25	22.34	21.98	22.59	1			12	13	22.24	21.96	22.46	1
		50	0	22.34	22.49	22.72	1			25	0	22.38	22.57	22.67	1
	16QAM	1	0	22.39	22.54	22.68	1		16QAM	1	0	22.43	22.51	22.94	1
		1	24	22.32	22.42	22.56	1			1	12	22.24	22.53	22.56	1
		1	49	22.14	22.20	22.41	1			1	24	22.15	22.16	22.34	1
		25	0	21.50	21.62	21.67	2			12	0	21.54	21.49	21.57	2
		25	12	21.50	21.36	21.51	2			12	6	21.56	21.41	21.58	2
		25	25	21.13	20.92	21.57	2			12	13	21.26	20.94	21.53	2
		50	0	21.45	21.49	21.72	2			25	0	21.26	21.48	21.55	2
	64QAM	1	0	21.38	21.58	21.84	2		64QAM	1	0	21.45	21.48	21.91	2
		1	24	21.20	21.34	21.60	2			1	12	21.24	21.37	21.53	2
		1	49	21.25	21.09	21.30	2			1	24	21.20	21.21	21.47	2
		25	0	20.41	20.60	20.66	3			12	0	20.39	20.55	20.64	3
		25	12	20.48	20.36	20.65	3			12	6	20.50	20.42	20.63	3
		25	25	20.27	19.95	20.46	3			12	13	20.29	19.96	20.58	3
		50	0	20.29	20.37	20.73	3			25	0	20.25	20.51	20.76	3
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18615	18900	19185				Channel		18607	18900	19193	
		Frequency (MHz)		1851.5	1880.0	1908.5				Frequency (MHz)		1850.7	1880.0	1909.3	
3M	QPSK	1	0	23.37	23.63	23.81	0	1.4M	QPSK	1	0	23.45	23.59	23.85	0
		1	7	23.39	23.43	23.55	0			1	2	23.43	23.47	23.50	0
		1	14	23.34	23.27	23.47	0			1	5	23.19	23.17	23.44	0
		8	0	22.49	22.61	22.84	1			3	0	23.53	23.61	23.74	0
		8	3	22.44	22.54	22.71	1			3	1	23.47	23.58	23.67	0
		8	7	22.18	21.93	22.52	1			3	3	23.29	22.94	23.50	0
		15	0	22.36	22.52	22.67	1			6	0	22.35	22.60	22.58	1
	16QAM	1	0	22.34	22.42	22.81	1		16QAM	1	0	22.43	22.51	22.93	1
		1	7	22.15	22.32	22.53	1			1	2	22.43	22.43	22.49	1
		1	14	22.15	22.17	22.53	1			1	5	22.18	22.16	22.40	1
		8	0	21.50	21.51	21.80	2			3	0	22.43	22.59	22.68	1
		8	3	21.49	21.38	21.58	2			3	1	22.41	22.43	22.68	1
		8	7	21.11	20.93	21.55	2			3	3	22.26	21.85	22.50	1
		15	0	21.35	21.56	21.69	2			6	0	21.27	21.54	21.58	2
	64QAM	1	0	21.45	21.39	21.88	2		64QAM	1	0	21.39	21.61	21.92	2
		1	7	21.24	21.27	21.45	2			1	2	21.24	21.32	21.58	2
		1	14	21.14	21.13	21.45	2			1	5	21.04	21.18	21.47	2
		8	0	20.45	20.53	20.73	3			3	0	21.59	21.54	21.71	2
		8	3	20.53	20.47	20.66	3			3	1	21.45	21.42	21.64	2
		8	7	20.26	20.02	20.53	3			3	3	21.23	20.99	21.54	2
		15	0	20.40	20.53	20.73	3			6	0	20.32	20.46	20.59	3

LTE Band 2

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18700	18900	19100	
		Frequency (MHz)		1860.0	1880.0	1900.0	
20M	QPSK	1	0	18.55	18.73	**18.95**	0
		1	50	18.41	18.60	18.78	0
		1	99	18.31	18.41	18.66	0
		50	0	18.60	18.77	**18.94**	0
		50	25	18.59	18.70	18.88	0
		50	50	18.47	18.59	18.76	0
		100	0	18.59	18.70	**18.86**	0
	16QAM	1	0	18.47	18.64	18.93	0
		1	50	18.36	18.57	18.68	0
		1	99	18.21	18.37	18.64	0
		50	0	18.51	18.74	18.84	0
		50	25	18.53	18.60	18.79	0
		50	50	18.41	18.53	18.76	0
		100	0	18.59	18.62	18.82	0
	64QAM	1	0	18.47	18.70	18.87	0
		1	50	18.35	18.52	18.76	0
		1	99	18.23	18.34	18.65	0
		50	0	18.60	18.72	18.94	0
		50	25	18.59	18.63	18.88	0
		50	50	18.37	18.56	18.67	0
		100	0	18.52	18.61	18.84	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18675	18900	19125	
		Frequency (MHz)		1857.5	1880.0	1902.5	
15M	QPSK	1	0	18.51	18.72	18.89	0
		1	37	18.40	18.50	18.76	0
		1	74	18.27	18.32	18.61	0
		36	0	18.60	18.77	18.93	0
		36	19	18.49	18.61	18.82	0
		36	39	18.41	18.54	18.69	0
		75	0	18.56	18.62	18.83	0
	16QAM	1	0	18.42	18.57	18.81	0
		1	37	18.33	18.55	18.66	0
		1	74	18.25	18.29	18.60	0
		36	0	18.59	18.61	18.91	0
		36	19	18.51	18.60	18.79	0
		36	39	18.32	18.48	18.58	0
		75	0	18.45	18.53	18.72	0
	64QAM	1	0	18.53	18.56	18.94	0
		1	37	18.33	18.58	18.69	0
		1	74	18.12	18.26	18.56	0
		36	0	18.56	18.65	18.79	0
		36	19	18.41	18.67	18.77	0
		36	39	18.42	18.57	18.73	0
		75	0	18.47	18.63	18.75	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18650	18900	19150	
		Frequency (MHz)		1855.0	1880.0	1905.0	
10M	QPSK	1	0	18.50	18.60	18.78	0
		1	24	18.28	18.41	18.73	0
		1	49	18.29	18.27	18.56	0
		25	0	18.41	18.59	18.74	0
		25	12	18.49	18.51	18.81	0
		25	25	18.26	18.44	18.70	0
		50	0	18.47	18.56	18.71	0
	16QAM	1	0	18.43	18.56	18.85	0
		1	24	18.30	18.44	18.64	0
		1	49	18.19	18.31	18.46	0
		25	0	18.42	18.64	18.86	0
		25	12	18.44	18.51	18.69	0
		25	25	18.28	18.49	18.54	0
		50	0	18.43	18.49	18.59	0
	64QAM	1	0	18.25	18.49	18.83	0
		1	24	18.20	18.50	18.65	0
		1	49	18.22	18.17	18.40	0
		25	0	18.39	18.54	18.74	0
		25	12	18.32	18.52	18.71	0
		25	25	18.17	18.53	18.55	0
		50	0	18.36	18.50	18.60	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18625	18900	19175	
		Frequency (MHz)		1852.5	1880.0	1907.5	
5M	QPSK	1	0	18.48	18.56	18.72	0
		1	12	18.36	18.51	18.53	0
		1	24	18.12	18.18	18.43	0
		12	0	18.51	18.59	18.76	0
		12	6	18.41	18.65	18.61	0
		12	13	18.31	18.47	18.71	0
		25	0	18.39	18.51	18.82	0
	16QAM	1	0	18.31	18.57	18.73	0
		1	12	18.14	18.35	18.49	0
		1	24	18.22	18.30	18.49	0
		12	0	18.34	18.68	18.75	0
		12	6	18.49	18.58	18.76	0
		12	13	18.27	18.38	18.45	0
		25	0	18.47	18.50	18.57	0
	64QAM	1	0	18.34	18.65	18.68	0
		1	12	18.29	18.37	18.57	0
		1	24	18.12	18.20	18.56	0
		12	0	18.48	18.54	18.84	0
		12	6	18.41	18.61	18.73	0
		12	13	18.33	18.44	18.68	0
		25	0	18.46	18.57	18.71	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18615	18900	19185	
		Frequency (MHz)		1851.5	1880.0	1908.5	
3M	QPSK	1	0	18.40	18.64	18.87	0
		1	7	18.23	18.43	18.73	0
		1	14	18.21	18.33	18.55	0
		8	0	18.53	18.68	18.84	0
		8	3	18.48	18.59	18.72	0
		8	7	18.28	18.40	18.59	0
		15	0	18.56	18.62	18.69	0
	16QAM	1	0	18.38	18.58	18.86	0
		1	7	18.34	18.34	18.56	0
		1	14	18.04	18.27	18.37	0
		8	0	18.40	18.62	18.74	0
		8	3	18.41	18.57	18.74	0
		8	7	18.36	18.43	18.57	0
		15	0	18.47	18.52	18.66	0
	64QAM	1	0	18.24	18.49	18.72	0
		1	7	18.25	18.51	18.77	0
		1	14	18.16	18.18	18.52	0
		8	0	18.41	18.56	18.70	0
		8	3	18.39	18.53	18.73	0
		8	7	18.17	18.52	18.62	0
		15	0	18.39	18.52	18.71	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18607	18900	19193	
		Frequency (MHz)		1850.7	1880.0	1909.3	
1.4M	QPSK	1	0	18.46	18.63	18.82	0
		1	2	18.34	18.52	18.71	0
		1	5	18.18	18.29	18.61	0
		3	0	18.55	18.67	18.82	0
		3	1	18.42	18.48	18.74	0
		3	3	18.28	18.45	18.63	0
		6	0	18.48	18.62	18.62	0
	16QAM	1	0	18.47	18.61	18.65	0
		1	2	18.09	18.37	18.59	0
		1	5	18.22	18.15	18.38	0
		3	0	18.40	18.68	18.71	0
		3	1	18.50	18.60	18.75	0
		3	3	18.26	18.54	18.58	0
		6	0	18.45	18.52	18.66	0
	64QAM	1	0	18.53	18.57	18.80	0
		1	2	18.27	18.41	18.56	0
		1	5	18.11	18.18	18.52	0
		3	0	18.43	18.54	18.79	0
		3	1	18.43	18.48	18.73	0
		3	3	18.21	18.32	18.59	0
		6	0	18.39	18.43	18.63	0

LTE Band 4

EUT without Power Reduction (P-Sensor NOT Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20050	20175	20300	
		Frequency (MHz)		1720.0	1732.5	1745.0	
20M	QPSK	1	0	23.72	**23.78**	23.76	0
		1	50	23.55	23.58	23.46	0
		1	99	23.55	23.52	23.34	0
		50	0	22.72	**22.79**	22.72	1
		50	25	22.62	22.68	22.63	1
		50	50	22.63	22.61	22.44	1
		100	0	22.61	**22.66**	22.63	1
	16QAM	1	0	22.65	22.71	22.73	1
		1	50	22.45	22.49	22.40	1
		1	99	22.55	22.48	22.24	1
		50	0	21.68	21.71	21.63	2
		50	25	21.58	21.64	21.58	2
		50	50	21.54	21.61	21.35	2
		100	0	21.54	21.58	21.55	2
	64QAM	1	0	21.69	21.71	21.66	2
		1	50	21.47	21.50	21.46	2
		1	99	21.55	21.42	21.29	2
		50	0	20.67	20.76	20.71	3
		50	25	20.54	20.65	20.59	3
		50	50	20.61	20.58	20.36	3
		100	0	20.56	20.66	20.55	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20025	20175	20325	
		Frequency (MHz)		1717.5	1732.5	1747.5	
15M	QPSK	1	0	23.67	23.68	23.66	0
		1	37	23.45	23.51	23.43	0
		1	74	23.51	23.46	23.28	0
		36	0	22.67	22.75	22.68	1
		36	19	22.62	22.68	22.55	1
		36	39	22.60	22.54	22.35	1
		75	0	22.59	22.62	22.60	1
	16QAM	1	0	22.53	22.78	22.62	1
		1	37	22.43	22.50	22.42	1
		1	74	22.50	22.38	22.26	1
		36	0	21.58	21.64	21.62	2
		36	19	21.55	21.60	21.52	2
		36	39	21.49	21.48	21.35	2
		75	0	21.49	21.53	21.51	2
	64QAM	1	0	21.59	21.72	21.69	2
		1	37	21.45	21.51	21.36	2
		1	74	21.44	21.43	21.31	2
		36	0	20.72	20.68	20.60	3
		36	19	20.49	20.59	20.59	3
		36	39	20.57	20.55	20.33	3
		75	0	20.56	20.65	20.51	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20000	20175	20350	
		Frequency (MHz)		1715.0	1732.5	1750.0	
10M	QPSK	1	0	23.61	23.70	23.73	0
		1	24	23.38	23.39	23.35	0
		1	49	23.40	23.49	23.19	0
		25	0	22.51	22.68	22.60	1
		25	12	22.42	22.55	22.50	1
		25	25	22.43	22.54	22.30	1
		50	0	22.46	22.59	22.44	1
	16QAM	1	0	22.61	22.53	22.65	1
		1	24	22.49	22.33	22.34	1
		1	49	22.42	22.34	22.18	1
		25	0	21.52	21.65	21.59	2
		25	12	21.52	21.49	21.44	2
		25	25	21.45	21.33	21.26	2
		50	0	21.49	21.43	21.45	2
	64QAM	1	0	21.51	21.56	21.52	2
		1	24	21.31	21.44	21.30	2
		1	49	21.31	21.49	21.16	2
		25	0	20.47	20.58	20.54	3
		25	12	20.38	20.51	20.36	3
		25	25	20.46	20.37	20.25	3
		50	0	20.38	20.45	20.52	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		19975	20175	20375	
		Frequency (MHz)		1712.5	1732.5	1752.5	
5M	QPSK	1	0	23.55	23.63	23.49	0
		1	12	23.47	23.48	23.23	0
		1	24	23.33	23.45	23.15	0
		12	0	22.59	22.67	22.54	1
		12	6	22.59	22.53	22.42	1
		12	13	22.49	22.36	22.32	1
		25	0	22.53	22.46	22.38	1
	16QAM	1	0	22.63	22.62	22.57	1
		1	12	22.33	22.40	22.30	1
		1	24	22.36	22.36	22.13	1
		12	0	21.62	21.65	21.53	2
		12	6	21.48	21.49	21.46	2
		12	13	21.50	21.43	21.23	2
		25	0	21.34	21.56	21.49	2
	64QAM	1	0	21.61	21.58	21.52	2
		1	12	21.34	21.38	21.26	2
		1	24	21.38	21.30	21.04	2
		12	0	20.59	20.66	20.48	3
		12	6	20.43	20.58	20.39	3
		12	13	20.38	20.49	20.22	3
		25	0	20.37	20.47	20.50	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		19965	20175	20385	
		Frequency (MHz)		1711.5	1732.5	1753.5	
3M	QPSK	1	0	23.56	23.63	23.61	0
		1	7	23.38	23.54	23.33	0
		1	14	23.47	23.38	23.23	0
		8	0	22.63	22.64	22.63	1
		8	3	22.46	22.59	22.43	1
		8	7	22.45	22.50	22.31	1
		15	0	22.47	22.47	22.45	1
	16QAM	1	0	22.64	22.60	22.62	1
		1	7	22.35	22.44	22.37	1
		1	14	22.38	22.32	22.29	1
		8	0	21.47	21.56	21.48	2
		8	3	21.55	21.48	21.57	2
		8	7	21.34	21.54	21.27	2
		15	0	21.56	21.34	21.38	2
	64QAM	1	0	21.42	21.64	21.69	2
		1	7	21.35	21.44	21.38	2
		1	14	21.30	21.30	21.19	2
		8	0	20.44	20.55	20.57	3
		8	3	20.44	20.50	20.47	3
		8	7	20.54	20.46	20.31	3
		15	0	20.50	20.58	20.48	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		19957	20175	20393	
		Frequency (MHz)		1710.7	1732.5	1754.3	
1.4M	QPSK	1	0	23.54	23.62	23.68	0
		1	2	23.46	23.41	23.39	0
		1	5	23.43	23.42	23.29	0
		3	0	23.63	23.67	23.62	0
		3	1	23.52	23.61	23.52	0
		3	3	23.57	23.46	23.44	0
		6	0	22.58	22.51	22.51	1
	16QAM	1	0	22.42	22.63	22.46	1
		1	2	22.39	22.30	22.27	1
		1	5	22.51	22.45	22.05	1
		3	0	22.50	22.73	22.66	1
		3	1	22.50	22.51	22.45	1
		3	3	22.48	22.47	22.41	1
		6	0	21.54	21.49	21.46	2
	64QAM	1	0	21.49	**21.72**	21.55	2
		1	2	21.35	21.52	21.26	2
		1	5	21.45	21.34	21.21	2
		3	0	21.45	21.64	21.63	2
		3	1	21.39	21.43	21.51	2
		3	3	21.47	21.46	21.28	2
		6	0	20.40	20.43	20.50	3

LTE Band 4

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20050	20175	20300	
		Frequency (MHz)		1720.0	1732.5	1745.0	
20M	QPSK	1	0	18.43	**18.48**	18.45	0
		1	50	18.26	18.29	18.17	0
		1	99	18.28	18.21	18.08	0
		50	0	18.43	**18.45**	18.44	0
		50	25	18.34	18.41	18.34	0
		50	50	18.38	18.34	18.16	0
		100	0	18.35	**18.41**	18.38	0
	16QAM	1	0	18.35	18.40	18.45	0
		1	50	18.20	18.28	18.09	0
		1	99	18.28	18.17	18.07	0
		50	0	18.39	18.37	18.35	0
		50	25	18.29	18.33	18.26	0
		50	50	18.28	18.32	18.08	0
		100	0	18.30	18.41	18.32	0
	64QAM	1	0	18.40	18.38	18.35	0
		1	50	18.17	18.24	18.08	0
		1	99	18.27	18.12	18.01	0
		50	0	18.41	18.35	18.35	0
		50	25	18.29	18.34	18.26	0
		50	50	18.37	18.28	18.15	0
		100	0	18.32	18.33	18.35	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20025	20175	20325	
		Frequency (MHz)		1717.5	1732.5	1747.5	
15M	QPSK	1	0	18.39	18.40	18.41	0
		1	37	18.26	18.20	18.12	0
		1	74	18.25	18.15	18.08	0
		36	0	18.36	18.36	18.37	0
		36	19	18.25	18.38	18.25	0
		36	39	18.28	18.25	18.11	0
		75	0	18.25	18.33	18.32	0
	16QAM	1	0	18.24	18.45	18.26	0
		1	37	18.09	18.28	18.14	0
		1	74	18.09	18.04	18.02	0
		36	0	18.34	18.32	18.38	0
		36	19	18.22	18.29	18.32	0
		36	39	18.29	18.29	18.07	0
		75	0	18.21	18.30	18.32	0
	64QAM	1	0	18.31	18.40	18.35	0
		1	37	18.16	18.20	18.08	0
		1	74	18.23	18.13	17.97	0
		36	0	18.33	18.29	18.29	0
		36	19	18.26	18.32	18.30	0
		36	39	18.18	18.26	18.15	0
		75	0	18.24	18.34	18.24	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20000	20175	20350	
		Frequency (MHz)		1715.0	1732.5	1750.0	
10M	QPSK	1	0	18.35	18.29	18.33	0
		1	24	18.12	18.24	18.10	0
		1	49	18.06	18.01	17.88	0
		25	0	18.34	18.36	18.23	0
		25	12	18.16	18.33	18.17	0
		25	25	18.26	18.22	17.95	0
		50	0	18.20	18.21	18.23	0
	16QAM	1	0	18.36	18.31	18.27	0
		1	24	18.01	18.25	18.06	0
		1	49	18.13	18.00	18.04	0
		25	0	18.23	18.33	18.29	0
		25	12	18.25	18.33	18.15	0
		25	25	18.16	18.20	18.04	0
		50	0	18.15	18.11	18.23	0
	64QAM	1	0	18.27	18.25	18.38	0
		1	24	18.15	18.12	18.06	0
		1	49	18.13	18.05	17.84	0
		25	0	18.37	18.29	18.24	0
		25	12	18.22	18.26	18.19	0
		25	25	18.20	18.16	18.10	0
		50	0	18.10	18.17	18.12	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		19975	20175	20375	
		Frequency (MHz)		1712.5	1732.5	1752.5	
5M	QPSK	1	0	18.32	18.29	18.36	0
		1	12	18.15	18.24	18.00	0
		1	24	18.07	18.05	17.84	0
		12	0	18.31	18.29	18.38	0
		12	6	18.23	18.24	18.18	0
		12	13	18.22	18.15	17.86	0
		25	0	18.21	18.27	18.23	0
	16QAM	1	0	18.20	18.40	18.18	0
		1	12	18.08	18.13	18.00	0
		1	24	18.10	18.09	17.96	0
		12	0	18.25	18.34	18.17	0
		12	6	18.12	18.17	18.17	0
		12	13	18.18	18.10	17.97	0
		25	0	18.05	18.25	18.27	0
	64QAM	1	0	18.32	18.39	18.37	0
		1	12	18.09	18.17	17.96	0
		1	24	18.15	18.08	17.86	0
		12	0	18.21	18.20	18.27	0
		12	6	18.22	18.20	18.20	0
		12	13	18.26	18.16	17.90	0
		25	0	18.17	18.24	18.18	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		19965	20175	20385	
		Frequency (MHz)		1711.5	1732.5	1753.5	
3M	QPSK	1	0	18.34	18.39	18.35	0
		1	7	18.13	18.17	17.94	0
		1	14	18.15	18.01	17.84	0
		8	0	18.26	18.29	18.34	0
		8	3	18.13	18.19	18.14	0
		8	7	18.22	18.24	18.01	0
		15	0	18.26	18.21	18.23	0
	16QAM	1	0	18.24	18.35	18.21	0
		1	7	18.18	18.04	18.00	0
		1	14	18.14	18.09	17.97	0
		8	0	18.21	18.31	18.35	0
		8	3	18.31	18.23	18.21	0
		8	7	18.18	18.21	18.08	0
		15	0	18.11	18.27	18.19	0
	64QAM	1	0	18.33	18.26	18.35	0
		1	7	18.02	18.17	17.98	0
		1	14	18.23	18.02	17.92	0
		8	0	18.28	18.21	18.18	0
		8	3	18.24	18.26	18.19	0
		8	7	18.12	18.18	17.85	0
		15	0	18.20	18.22	18.29	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		19957	20175	20393	
		Frequency (MHz)		1710.7	1732.5	1754.3	
1.4M	QPSK	1	0	18.31	18.34	18.34	0
		1	2	18.12	18.27	18.04	0
		1	5	18.20	18.13	17.89	0
		3	0	18.28	18.26	18.25	0
		3	1	18.25	18.22	18.21	0
		3	3	18.35	18.22	17.92	0
		6	0	18.30	18.29	18.15	0
	16QAM	1	0	18.15	18.43	18.28	0
		1	2	18.17	18.12	18.07	0
		1	5	18.12	18.13	17.97	0
		3	0	18.29	18.38	18.25	0
		3	1	18.21	18.30	18.11	0
		3	3	18.16	18.15	17.86	0
		6	0	18.25	18.23	18.16	0
	64QAM	1	0	18.37	18.24	18.31	0
		1	2	18.05	18.12	18.07	0
		1	5	18.08	18.09	17.86	0
		3	0	18.23	18.27	18.21	0
		3	1	18.14	18.18	18.10	0
		3	3	18.19	18.18	17.97	0
		6	0	18.14	18.32	18.21	0

LTE Band 5

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20450	20525	20600	
		Frequency (MHz)		829.0	836.5	844.0	
10M	QPSK	1	0	23.69	23.69	**23.77**	0
		1	24	23.68	23.68	23.67	0
		1	49	23.67	23.64	23.64	0
		25	0	22.77	22.75	**22.80**	1
		25	12	22.76	22.70	22.76	1
		25	25	22.75	22.62	22.67	1
		50	0	22.72	22.71	**22.75**	1
	16QAM	1	0	22.62	22.65	22.77	1
		1	24	22.64	22.64	22.65	1
		1	49	22.64	22.58	22.61	1
		25	0	21.71	21.75	21.70	2
		25	12	21.67	21.61	21.68	2
		25	25	21.70	21.53	21.58	2
		50	0	21.68	21.66	21.67	2
	64QAM	1	0	21.61	21.62	21.68	2
		1	24	21.66	21.62	21.64	2
		1	49	21.66	21.54	21.64	2
		25	0	20.68	20.73	20.78	3
		25	12	20.70	20.64	20.73	3
		25	25	20.68	20.60	20.65	3
		50	0	20.71	20.62	20.66	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20425	20525	20625	
		Frequency (MHz)		826.5	836.5	846.5	
5M	QPSK	1	0	23.66	23.64	23.70	0
		1	12	23.61	23.59	23.57	0
		1	24	23.64	23.57	23.61	0
		12	0	22.75	22.69	22.75	1
		12	6	22.72	22.60	22.70	1
		12	13	22.75	22.58	22.64	1
		25	0	22.68	22.62	22.67	1
	16QAM	1	0	22.51	22.58	22.65	1
		1	12	22.58	22.61	22.58	1
		1	24	22.48	22.56	22.49	1
		12	0	21.73	21.70	21.70	2
		12	6	21.66	21.68	21.64	2
		12	13	21.61	21.53	21.54	2
		25	0	21.66	21.63	21.71	2
	64QAM	1	0	21.61	21.53	21.73	2
		1	12	21.62	21.59	21.61	2
		1	24	21.59	21.57	21.48	2
		12	0	20.64	20.66	20.70	3
		12	6	20.63	20.62	20.68	3
		12	13	20.58	20.46	20.54	3
		25	0	20.60	20.55	20.67	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20415	20525	20635	
		Frequency (MHz)		825.5	836.5	847.5	
3M	QPSK	1	0	23.58	23.53	23.70	0
		1	7	23.59	23.55	23.63	0
		1	14	23.55	23.60	23.44	0
		8	0	22.65	22.52	22.71	1
		8	3	22.73	22.57	22.67	1
		8	7	22.58	22.58	22.52	1
		15	0	22.62	22.56	22.60	1
	16QAM	1	0	22.50	22.50	22.61	1
		1	7	22.36	22.42	22.45	1
		1	14	22.46	22.40	22.53	1
		8	0	21.51	21.61	21.56	2
		8	3	21.59	21.50	21.53	2
		8	7	21.58	21.40	21.47	2
		15	0	21.47	21.48	21.59	2
	64QAM	1	0	21.47	21.43	21.56	2
		1	7	21.54	21.55	21.57	2
		1	14	21.51	21.47	21.39	2
		8	0	20.63	20.54	20.72	3
		8	3	20.46	20.42	20.60	3
		8	7	20.53	20.44	20.50	3
		15	0	20.54	20.56	20.69	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20407	20525	20643	
		Frequency (MHz)		824.7	836.5	848.3	
1.4M	QPSK	1	0	23.48	23.63	23.58	0
		1	2	23.46	23.57	23.55	0
		1	5	23.53	23.52	23.43	0
		3	0	23.60	23.67	23.67	0
		3	1	23.72	23.57	23.69	0
		3	3	23.59	23.59	23.46	0
		6	0	22.58	22.52	22.70	1
	16QAM	1	0	22.46	22.39	22.62	1
		1	2	22.57	22.59	22.52	1
		1	5	22.39	22.48	22.56	1
		3	0	22.50	22.53	22.74	1
		3	1	22.65	22.46	22.57	1
		3	3	22.53	22.50	22.48	1
		6	0	21.64	21.51	21.64	2
	64QAM	1	0	21.48	21.47	21.58	2
		1	2	21.51	21.58	21.46	2
		1	5	21.47	21.50	21.43	2
		3	0	21.71	21.55	21.59	2
		3	1	21.71	21.55	21.69	2
		3	3	21.66	21.46	21.48	2
		6	0	20.46	20.51	20.54	3

LTE Band 5

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20450	20525	20600	
		Frequency (MHz)		829.0	836.5	844.0	
10M	QPSK	1	0	19.37	19.36	**19.49**	0
		1	24	19.36	19.34	19.37	0
		1	49	19.36	19.33	19.30	0
		25	0	19.45	19.45	**19.47**	0
		25	12	19.43	19.45	19.43	0
		25	25	19.44	19.36	19.35	0
		50	0	19.41	19.41	**19.42**	0
	16QAM	1	0	19.26	19.33	19.40	0
		1	24	19.29	19.24	19.32	0
		1	49	19.31	19.25	19.29	0
		25	0	19.44	19.40	19.37	0
		25	12	19.39	19.35	19.39	0
		25	25	19.40	19.36	19.26	0
		50	0	19.35	19.41	19.32	0
	64QAM	1	0	19.34	19.32	19.42	0
		1	24	19.36	19.27	19.36	0
		1	49	19.30	19.29	19.26	0
		25	0	19.37	19.45	19.45	0
		25	12	19.34	19.35	19.36	0
		25	25	19.36	19.35	19.32	0
		50	0	19.37	19.36	19.36	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20425	20525	20625	
		Frequency (MHz)		826.5	836.5	846.5	
5M	QPSK	1	0	19.29	19.26	19.42	0
		1	12	19.32	19.33	19.36	0
		1	24	19.35	19.27	19.21	0
		12	0	19.44	19.42	19.39	0
		12	6	19.43	19.45	19.40	0
		12	13	19.43	19.26	19.32	0
		25	0	19.38	19.40	19.36	0
	16QAM	1	0	19.25	19.23	19.41	0
		1	12	19.34	19.22	19.32	0
		1	24	19.31	19.23	19.22	0
		12	0	19.31	19.34	19.32	0
		12	6	19.35	19.38	19.30	0
		12	13	19.30	19.24	19.28	0
		25	0	19.36	19.38	19.29	0
	64QAM	1	0	19.23	19.22	19.42	0
		1	12	19.27	19.30	19.24	0
		1	24	19.33	19.22	19.11	0
		12	0	19.44	19.43	19.38	0
		12	6	19.25	19.34	19.36	0
		12	13	19.24	19.27	19.23	0
		25	0	19.31	19.30	19.26	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20415	20525	20635	
		Frequency (MHz)		825.5	836.5	847.5	
3M	QPSK	1	0	19.29	19.19	19.39	0
		1	7	19.17	19.28	19.21	0
		1	14	19.18	19.18	19.26	0
		8	0	19.38	19.32	19.41	0
		8	3	19.34	19.42	19.26	0
		8	7	19.23	19.26	19.26	0
		15	0	19.30	19.22	19.28	0
	16QAM	1	0	19.28	19.13	19.20	0
		1	7	19.15	19.08	19.05	0
		1	14	19.20	19.18	19.21	0
		8	0	19.23	19.27	19.33	0
		8	3	19.26	19.41	19.24	0
		8	7	19.30	19.15	19.28	0
		15	0	19.20	19.23	19.15	0
	64QAM	1	0	19.03	19.17	19.30	0
		1	7	19.25	19.18	19.30	0
		1	14	19.13	19.20	19.09	0
		8	0	19.26	19.28	19.35	0
		8	3	19.28	19.17	19.25	0
		8	7	19.29	19.18	19.14	0
		15	0	19.23	19.17	19.25	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20407	20525	20643	
		Frequency (MHz)		824.7	836.5	848.3	
1.4M	QPSK	1	0	19.30	19.11	19.38	0
		1	2	19.28	19.23	19.24	0
		1	5	19.22	19.25	19.16	0
		3	0	19.42	19.37	19.21	0
		3	1	19.20	19.31	19.14	0
		3	3	19.29	19.16	19.05	0
		6	0	19.25	19.33	19.26	0
	16QAM	1	0	19.29	19.16	19.42	0
		1	2	19.14	19.14	19.14	0
		1	5	19.12	19.10	19.24	0
		3	0	19.34	19.28	19.24	0
		3	1	19.26	19.33	19.19	0
		3	3	19.40	19.13	19.26	0
		6	0	19.24	19.21	19.14	0
	64QAM	1	0	19.14	19.24	19.18	0
		1	2	19.33	19.20	19.25	0
		1	5	19.16	19.26	19.17	0
		3	0	19.22	19.23	19.21	0
		3	1	19.23	19.25	19.41	0
		3	3	19.36	19.11	19.16	0
		6	0	19.36	19.30	19.19	0

LTE Band 7

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20850	21100	21350				Channel		20825	21100	21375	
		Frequency (MHz)		2510.0	2535.0	2560.0				Frequency (MHz)		2507.5	2535.0	2562.5	
20M	QPSK	1	0	23.59	24.03	23.88	0	15M	QPSK	1	0	23.54	23.95	23.79	0
		1	50	23.42	23.86	23.71	0			1	37	23.37	23.78	23.62	0
		1	99	23.20	23.64	23.49	0			1	74	23.19	23.54	23.42	0
		50	0	22.20	22.64	22.49	1			36	0	22.10	22.61	22.45	1
		50	25	22.14	22.58	22.43	1			36	19	22.14	22.54	22.34	1
		50	50	22.11	22.55	22.40	1			36	39	22.07	22.53	22.31	1
		100	0	22.03	22.47	22.32	1			75	0	21.95	22.43	22.31	1
	16QAM	1	0	22.78	23.22	23.07	1		16QAM	1	0	22.74	23.19	23.06	1
		1	50	22.69	23.13	22.98	1			1	37	22.59	23.07	22.94	1
		1	99	22.57	23.01	22.86	1			1	74	22.47	22.99	22.79	1
		50	0	21.53	21.97	21.82	2			36	0	21.52	21.90	21.74	2
		50	25	21.27	21.71	21.56	2			36	19	21.17	21.62	21.53	2
		50	50	21.33	21.77	21.62	2			36	39	21.33	21.73	21.55	2
		100	0	21.29	21.73	21.58	2			75	0	21.26	21.66	21.52	2
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20800	21100	21400				Channel		20775	21100	21425	
		Frequency (MHz)		2505.0	2535.0	2565.0				Frequency (MHz)		2502.5	2535.0	2567.5	
10M	QPSK	1	0	23.41	23.85	23.78	0	5M	QPSK	1	0	23.56	23.80	23.64	0
		1	24	23.31	23.64	23.55	0			1	12	23.29	23.75	23.51	0
		1	49	23.09	23.51	23.35	0			1	24	23.20	23.51	23.22	0
		25	0	22.06	22.48	22.44	1			12	0	22.03	22.53	22.35	1
		25	12	22.10	22.51	22.37	1			12	6	22.03	22.58	22.19	1
		25	25	21.99	22.48	22.22	1			12	13	22.07	22.48	22.14	1
		50	0	21.83	22.36	22.22	1			25	0	21.85	22.33	22.16	1
	16QAM	1	0	22.60	23.09	23.02	1		16QAM	1	0	22.62	23.10	22.95	1
		1	24	22.57	23.08	22.80	1			1	12	22.60	23.09	22.93	1
		1	49	22.46	23.00	22.74	1			1	24	22.52	22.84	22.71	1
		25	0	21.38	21.92	21.74	2			12	0	21.40	21.88	21.71	2
		25	12	21.14	21.65	21.50	2			12	6	21.12	21.51	21.47	2
		25	25	21.22	21.56	21.54	2			12	13	21.21	21.65	21.55	2
		50	0	21.16	21.60	21.50	2			25	0	21.15	21.63	21.43	2

LTE Band 7

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20850	21100	21350				Channel		20825	21100	21375	
		Frequency (MHz)		2510.0	2535.0	2560.0				Frequency (MHz)		2507.5	2535.0	2562.5	
20M	QPSK	1	0	13.66	13.88	13.85	0	15M	QPSK	1	0	13.65	13.80	13.84	0
		1	50	13.63	13.85	13.82	0			1	37	13.59	13.76	13.72	0
		1	99	13.61	13.83	13.80	0			1	74	13.57	13.76	13.75	0
		50	0	13.56	13.78	13.75	0			36	0	13.52	13.77	13.67	0
		50	25	13.53	13.75	13.72	0			36	19	13.50	13.74	13.65	0
		50	50	13.48	13.70	13.67	0			36	39	13.47	13.67	13.65	0
		100	0	13.54	13.76	13.73	0			75	0	13.46	13.67	13.73	0
	16QAM	1	0	13.59	13.88	13.77	0		16QAM	1	0	13.52	13.83	13.79	0
		1	50	13.57	13.85	13.74	0			1	37	13.48	13.76	13.76	0
		1	99	13.51	13.82	13.77	0			1	74	13.50	13.71	13.73	0
		50	0	13.46	13.72	13.75	0			36	0	13.50	13.78	13.64	0
		50	25	13.45	13.69	13.66	0			36	19	13.43	13.56	13.60	0
		50	50	13.44	13.62	13.57	0			36	39	13.37	13.51	13.51	0
		100	0	13.52	13.72	13.64	0			75	0	13.43	13.62	13.65	0
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20800	21100	21400				Channel		20775	21100	21425	
		Frequency (MHz)		2505.0	2535.0	2565.0				Frequency (MHz)		2502.5	2535.0	2567.5	
10M	QPSK	1	0	13.52	13.75	13.76	0	5M	QPSK	1	0	13.58	13.79	13.63	0
		1	24	13.58	13.74	13.65	0			1	12	13.43	13.74	13.71	0
		1	49	13.43	13.66	13.65	0			1	24	13.43	13.66	13.69	0
		25	0	13.47	13.68	13.63	0			12	0	13.38	13.63	13.46	0
		25	12	13.33	13.59	13.60	0			12	6	13.42	13.60	13.59	0
		25	25	13.41	13.55	13.48	0			12	13	13.33	13.59	13.52	0
		50	0	13.44	13.59	13.52	0			25	0	13.36	13.60	13.63	0
	16QAM	1	0	13.54	13.72	13.70	0		16QAM	1	0	13.50	13.77	13.68	0
		1	24	13.50	13.59	13.54	0			1	12	13.39	13.63	13.63	0
		1	49	13.42	13.56	13.67	0			1	24	13.46	13.72	13.58	0
		25	0	13.48	13.65	13.58	0			12	0	13.45	13.65	13.61	0
		25	12	13.33	13.52	13.65	0			12	6	13.31	13.73	13.61	0
		25	25	13.35	13.62	13.48	0			12	13	13.27	13.47	13.54	0
		50	0	13.26	13.45	13.51	0			25	0	13.38	13.64	13.60	0

LTE Band 12

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		23060	23095	23130				Channel		23035	23095	23155	
		Frequency (MHz)		704.0	707.5	711.0				Frequency (MHz)		701.5	707.5	713.5	
10M	QPSK	1	0	23.94	24.14	24.11	0	5M	QPSK	1	0	23.91	24.09	24.07	0
		1	24	23.85	24.05	24.02	0			1	12	23.80	24.04	24.02	0
		1	49	23.76	23.96	23.93	0			1	24	23.70	23.96	23.88	0
		25	0	23.01	23.21	23.18	1			12	0	22.92	23.14	23.10	1
		25	12	22.96	23.16	23.13	1			12	6	22.96	23.06	23.13	1
		25	25	22.84	23.04	23.01	1			12	13	22.77	22.99	22.94	1
		50	0	22.92	23.12	23.09	1			25	0	22.83	23.04	23.09	1
	16QAM	1	0	23.06	23.26	23.23	1		16QAM	1	0	23.03	23.19	23.16	1
		1	24	22.75	22.95	22.92	1			1	12	22.74	22.88	22.89	1
		1	49	23.05	23.25	23.22	1			1	24	23.03	23.15	23.17	1
		25	0	22.04	22.24	22.21	2			12	0	21.96	22.15	22.19	2
		25	12	22.03	22.23	22.20	2			12	6	22.03	22.23	22.18	2
		25	25	21.95	22.15	22.12	2			12	13	21.90	22.11	22.07	2
		50	0	22.01	22.21	22.18	2			25	0	21.97	22.13	22.09	2
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		23025	23095	23165				Channel		23017	23095	23173	
		Frequency (MHz)		700.5	707.5	714.5				Frequency (MHz)		699.7	707.5	715.3	
3M	QPSK	1	0	23.87	23.99	24.02	0	1.4M	QPSK	1	0	23.76	24.03	23.99	0
		1	7	23.72	23.84	23.85	0			1	2	23.75	23.96	23.89	0
		1	14	23.59	23.79	23.82	0			1	5	23.73	23.78	23.90	0
		8	0	22.84	23.07	23.06	1			3	0	23.93	23.97	24.04	0
		8	3	22.89	22.99	22.98	1			3	1	23.75	24.04	23.92	0
		8	7	22.72	22.96	22.79	1			3	3	23.74	23.95	23.92	0
		15	0	22.78	23.09	22.93	1			6	0	22.71	23.03	22.98	1
	16QAM	1	0	22.93	23.09	23.14	1		16QAM	1	0	22.82	23.20	23.16	1
		1	7	22.68	22.88	22.81	1			1	2	22.59	22.88	22.79	1
		1	14	22.83	23.20	23.19	1			1	5	22.90	23.07	23.01	1
		8	0	21.97	22.10	22.03	2			3	0	22.92	23.13	23.07	1
		8	3	21.98	22.07	22.05	2			3	1	22.82	23.06	23.10	1
		8	7	21.86	22.01	21.96	2			3	3	22.83	22.92	23.05	1
		15	0	21.78	22.21	22.01	2			6	0	21.85	21.99	21.97	2

LTE Band 12

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		23060	23095	23130				Channel		23035	23095	23155	
		Frequency (MHz)		704.0	707.5	711.0				Frequency (MHz)		701.5	707.5	713.5	
10M	QPSK	1	0	20.83	20.89	20.81	0	5M	QPSK	1	0	20.73	20.75	20.50	0
		1	24	20.85	20.87	20.79	0			1	12	20.74	20.70	20.64	0
		1	49	20.83	20.85	20.77	0			1	24	20.71	20.67	20.51	0
		25	0	20.86	20.88	20.80	0			12	0	20.82	20.72	20.58	0
		25	12	20.84	20.86	20.78	0			12	6	20.83	20.66	20.65	0
		25	25	20.82	20.84	20.76	0			12	13	20.62	20.72	20.57	0
		50	0	20.82	20.84	20.76	0			25	0	20.70	20.77	20.52	0
	16QAM	1	0	20.78	20.87	20.75	0		16QAM	1	0	20.63	20.68	20.64	0
		1	24	20.82	20.83	20.75	0			1	12	20.70	20.78	20.62	0
		1	49	20.79	20.75	20.69	0			1	24	20.71	20.69	20.61	0
		25	0	20.77	20.87	20.75	0			12	0	20.72	20.71	20.67	0
		25	12	20.74	20.84	20.71	0			12	6	20.66	20.76	20.64	0
		25	25	20.81	20.78	20.72	0			12	13	20.64	20.72	20.48	0
		50	0	20.78	20.78	20.68	0			25	0	20.52	20.58	20.64	0
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		23025	23095	23165				Channel		23017	23095	23173	
		Frequency (MHz)		700.5	707.5	714.5				Frequency (MHz)		699.7	707.5	715.3	
3M	QPSK	1	0	20.71	20.75	20.76	0	1.4M	QPSK	1	0	20.69	20.73	20.70	0
		1	7	20.70	20.79	20.59	0			1	2	20.76	20.73	20.67	0
		1	14	20.64	20.63	20.64	0			1	5	20.74	20.80	20.73	0
		8	0	20.76	20.68	20.72	0			3	0	20.68	20.76	20.64	0
		8	3	20.70	20.79	20.56	0			3	1	20.76	20.72	20.72	0
		8	7	20.66	20.76	20.53	0			3	3	20.71	20.75	20.60	0
		15	0	20.76	20.63	20.61	0			6	0	20.76	20.69	20.55	0
	16QAM	1	0	20.74	20.84	20.61	0		16QAM	1	0	20.61	20.73	20.62	0
		1	7	20.69	20.71	20.70	0			1	2	20.68	20.61	20.62	0
		1	14	20.52	20.66	20.53	0			1	5	20.54	20.68	20.57	0
		8	0	20.76	20.72	20.52	0			3	0	20.66	20.72	20.72	0
		8	3	20.72	20.67	20.67	0			3	1	20.56	20.70	20.54	0
		8	7	20.65	20.76	20.63	0			3	3	20.63	20.73	20.56	0
		15	0	20.67	20.63	20.64	0			6	0	20.77	20.55	20.51	0

LTE Band 13															
EUT without Power Reduction (P-Sensor NOT Triggered)															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel			23230					Channel		23205	23230	23225	
		Frequency (MHz)			782.0					Frequency (MHz)		779.5	782.0	784.5	
10M	QPSK	1	0		23.67		0	5M	QPSK	1	0	23.52	23.58	23.52	0
		1	24		**23.83**		0			1	12	23.69	23.80	23.65	0
		1	49		23.42		0			1	24	23.29	23.41	23.34	0
		25	0		22.81		1			12	0	22.71	22.72	22.79	1
		25	12		**22.91**		1			12	6	22.81	22.85	22.80	1
		25	25		22.86		1			12	13	22.63	22.85	22.80	1
		50	0		**22.88**		1			25	0	22.87	22.88	22.78	1
	16QAM	1	0		22.66		1		16QAM	1	0	22.48	22.60	22.41	1
		1	24		22.77		1			1	12	22.59	22.69	22.74	1
		1	49		22.42		1			1	24	22.12	22.31	22.14	1
		25	0		21.75		2			12	0	21.60	21.68	21.66	2
		25	12		21.83		2			12	6	21.61	21.79	21.68	2
		25	25		21.79		2			12	13	21.71	21.78	21.71	2
		50	0		21.85		2			25	0	21.76	21.81	21.74	2
	64QAM	1	0		21.67		2		64QAM	1	0	21.54	21.54	21.52	2
		1	24		21.74		2			1	12	21.67	21.68	21.65	2
		1	49		21.37		2			1	24	21.27	21.27	21.31	2
		25	0		20.73		3			12	0	20.71	20.69	20.75	3
		25	12		20.86		3			12	6	20.72	20.87	20.69	3
		25	25		20.82		3			12	13	20.62	20.78	20.65	3
		50	0		20.79		3			25	0	20.77	20.81	20.63	3

LTE Band 13															
EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel			23230					Channel		23205	23230	23225	
		Frequency (MHz)			782.0					Frequency (MHz)		779.5	782.0	784.5	
10M	QPSK	1	0		**19.46**		0	5M	QPSK	1	0	19.35	19.42	19.22	0
		1	24		19.41		0			1	12	19.31	19.38	19.29	0
		1	49		19.44		0			1	24	19.20	19.39	19.30	0
		25	0		19.39		0			12	0	19.28	19.33	19.36	0
		25	12		**19.45**		0			12	6	19.32	19.35	19.42	0
		25	25		19.39		0			12	13	19.24	19.34	19.28	0
		50	0		**19.45**		0			25	0	19.24	19.45	19.37	0
	16QAM	1	0		19.40		0		16QAM	1	0	19.33	19.37	19.39	0
		1	24		19.41		0			1	12	19.18	19.29	19.27	0
		1	49		19.39		0			1	24	19.20	19.41	19.20	0
		25	0		19.30		0			12	0	19.20	19.33	19.18	0
		25	12		19.35		0			12	6	19.21	19.25	19.40	0
		25	25		19.38		0			12	13	19.14	19.29	19.17	0
		50	0		19.42		0			25	0	19.28	19.31	19.21	0
	64QAM	1	0		19.41		0		64QAM	1	0	19.14	19.28	19.34	0
		1	24		19.37		0			1	12	19.26	19.32	19.31	0
		1	49		19.44		0			1	24	19.24	19.44	19.31	0
		25	0		19.37		0			12	0	19.26	19.30	19.15	0
		25	12		19.44		0			12	6	19.27	19.32	19.19	0
		25	25		19.38		0			12	13	19.12	19.28	19.20	0
		50	0		19.42		0			25	0	19.37	19.36	19.25	0

LTE Band 14

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel			23330					Channel		23305	23330	23355	
		Frequency (MHz)			793.0					Frequency (MHz)		790.5	793.0	795.5	
10M	QPSK	1	0		**23.81**		0	5M	QPSK	1	0	23.77	23.80	23.72	0
		1	24		23.77		0			1	12	23.71	23.70	23.67	0
		1	49		23.64		0			1	24	23.57	23.62	23.55	0
		25	0		**22.82**		1			12	0	22.76	22.74	22.72	1
		25	12		**22.82**		1			12	6	22.74	22.74	22.80	1
		25	25		22.75		1			12	13	22.71	22.71	22.73	1
		50	0		**22.80**		1			25	0	22.70	22.70	22.70	1
	16QAM	1	0		22.73		1		16QAM	1	0	22.73	22.72	22.74	1
		1	24		22.77		1			1	12	22.59	22.69	22.65	1
		1	49		22.64		1			1	24	22.55	22.49	22.55	1
		25	0		21.81		2			12	0	21.66	21.66	21.67	2
		25	12		21.81		2			12	6	21.77	21.72	21.81	2
		25	25		21.69		2			12	13	21.57	21.61	21.66	2
		50	0		21.78		2			25	0	21.71	21.78	21.68	2
	64QAM	1	0		21.79		2		64QAM	1	0	21.72	21.69	21.79	2
		1	24		21.67		2			1	12	21.72	21.74	21.64	2
		1	49		21.59		2			1	24	21.58	21.48	21.55	2
		25	0		20.76		3			12	0	20.79	20.65	20.76	3
		25	12		20.78		3			12	6	20.63	20.69	20.73	3
		25	25		20.75		3			12	13	20.67	20.58	20.70	3
		50	0		20.73		3			25	0	20.69	20.70	20.72	3

LTE Band 14

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel			23330					Channel		23305	23330	23355	
		Frequency (MHz)			793.0					Frequency (MHz)		790.5	793.0	795.5	
10M	QPSK	1	0		**19.47**		0	5M	QPSK	1	0	19.25	19.37	19.40	0
		1	24		19.44		0			1	12	19.35	19.39	19.24	0
		1	49		19.33		0			1	24	19.18	19.23	19.25	0
		25	0		**19.45**		0			12	0	19.23	19.41	19.41	0
		25	12		19.44		0			12	6	19.34	19.44	19.25	0
		25	25		19.42		0			12	13	19.26	19.37	19.26	0
		50	0		**19.43**		0			25	0	19.35	19.33	19.38	0
	16QAM	1	0		19.46		0		16QAM	1	0	19.42	19.31	19.25	0
		1	24		19.44		0			1	12	19.21	19.30	19.20	0
		1	49		19.26		0			1	24	19.01	19.29	19.10	0
		25	0		19.41		0			12	0	19.25	19.44	19.20	0
		25	12		19.43		0			12	6	19.29	19.28	19.21	0
		25	25		19.42		0			12	13	19.31	19.34	19.16	0
		50	0		19.35		0			25	0	19.11	19.41	19.21	0
	64QAM	1	0		19.39		0		64QAM	1	0	19.31	19.31	19.25	0
		1	24		19.36		0			1	12	19.25	19.35	19.20	0
		1	49		19.24		0			1	24	19.12	19.24	19.16	0
		25	0		19.45		0			12	0	19.35	19.37	19.13	0
		25	12		19.43		0			12	6	19.35	19.31	19.31	0
		25	25		19.35		0			12	13	19.19	19.34	19.32	0
		50	0		19.42		0			25	0	19.36	19.30	19.22	0

LTE Band 17															
EUT without Power Reduction (P-Sensor NOT Triggered)															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		23780	23790	23800				Channel		23755	23790	23825	
		Frequency (MHz)		709.0	710.0	711.0				Frequency (MHz)		706.5	710.0	713.5	
10M	QPSK	1	0	24.26	24.27	24.22	0	5M	QPSK	1	0	24.17	24.20	23.94	0
		1	24	24.04	24.05	24.00	0			1	12	24.01	23.96	23.75	0
		1	49	23.90	23.91	23.86	0			1	24	23.70	23.77	23.71	0
		25	0	23.18	23.19	23.14	1			12	0	23.09	23.03	22.82	1
		25	12	23.12	23.13	23.08	1			12	6	23.00	23.03	22.81	1
		25	25	23.06	23.07	23.02	1			12	13	22.91	22.97	22.72	1
		50	0	23.10	23.11	23.06	1			25	0	22.98	22.92	22.83	1
	16QAM	1	0	23.44	23.45	23.40	1		16QAM	1	0	23.34	23.43	23.31	1
		1	24	23.40	23.41	23.36	1			1	12	23.22	23.24	23.25	1
		1	49	23.36	23.37	23.32	1			1	24	23.24	23.23	23.14	1
		25	0	22.25	22.26	22.21	2			12	0	22.05	22.19	22.09	2
		25	12	22.20	22.21	22.16	2			12	6	22.16	22.06	22.04	2
		25	25	22.22	22.23	22.18	2			12	13	22.13	22.08	22.16	2
		50	0	22.20	22.21	22.16	2			25	0	22.09	22.18	21.99	2

LTE Band 17															
EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		23780	23790	23800				Channel		23755	23790	23825	
		Frequency (MHz)		709.0	710.0	711.0				Frequency (MHz)		706.5	710.0	713.5	
10M	QPSK	1	0	20.92	20.99	20.93	0	5M	QPSK	1	0	20.78	20.89	20.69	0
		1	24	20.86	20.93	20.87	0			1	12	20.69	20.93	20.75	0
		1	49	20.79	20.86	20.80	0			1	24	20.69	20.64	20.63	0
		25	0	20.86	20.93	20.87	0			12	0	20.76	20.81	20.63	0
		25	12	20.84	20.91	20.85	0			12	6	20.70	20.81	20.75	0
		25	25	20.87	20.94	20.88	0			12	13	20.71	20.81	20.79	0
		50	0	20.85	20.92	20.86	0			25	0	20.65	20.74	20.73	0
	16QAM	1	0	20.85	20.97	20.86	0		16QAM	1	0	20.81	20.72	20.71	0
		1	24	20.85	20.83	20.85	0			1	12	20.62	20.74	20.70	0
		1	49	20.72	20.85	20.71	0			1	24	20.59	20.65	20.68	0
		25	0	20.86	20.87	20.87	0			12	0	20.69	20.73	20.66	0
		25	12	20.82	20.90	20.85	0			12	6	20.75	20.77	20.69	0
		25	25	20.84	20.91	20.79	0			12	13	20.73	20.70	20.75	0
		50	0	20.82	20.91	20.83	0			25	0	20.71	20.74	20.72	0

LTE Band 25

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26140	26365	26590				Channel		26115	26365	26615	
		Frequency (MHz)		1860.0	1882.5	1905.0				Frequency (MHz)		1857.5	1882.5	1907.5	
20M	QPSK	1	0	**23.72**	23.64	23.62	0	15M	QPSK	1	0	23.65	23.55	23.58	0
		1	50	23.54	23.48	23.43	0			1	37	23.52	23.45	23.37	0
		1	99	23.44	23.24	23.43	0			1	74	23.41	23.18	23.39	0
		50	0	**22.71**	22.67	22.62	1			36	0	22.63	22.57	22.56	1
		50	25	22.61	22.56	22.51	1			36	19	22.54	22.56	22.50	1
		50	50	22.50	22.46	22.46	1			36	39	22.46	22.41	22.40	1
		100	0	**22.61**	22.54	22.59	1			75	0	22.59	22.51	22.53	1
	16QAM	1	0	22.63	22.58	22.53	1		16QAM	1	0	22.57	22.50	22.54	1
		1	50	22.45	22.48	22.41	1			1	37	22.43	22.29	22.32	1
		1	99	22.40	22.16	22.38	1			1	74	22.27	22.16	22.32	1
		50	0	21.62	21.62	21.61	2			36	0	21.55	21.49	21.50	2
		50	25	21.55	21.51	21.46	2			36	19	21.44	21.54	21.44	2
		50	50	21.43	21.43	21.43	2			36	39	21.43	21.38	21.37	2
		100	0	21.54	21.51	21.55	2			75	0	21.50	21.47	21.47	2
	64QAM	1	0	21.64	21.63	21.59	2		64QAM	1	0	21.56	21.54	21.51	2
		1	50	21.48	21.38	21.34	2			1	37	21.38	21.42	21.37	2
		1	99	21.39	21.20	21.43	2			1	74	21.27	21.11	21.38	2
		50	0	20.65	20.57	20.53	3			36	0	20.64	20.51	20.52	3
		50	25	20.57	20.51	20.42	3			36	19	20.54	20.54	20.48	3
		50	50	20.50	20.39	20.38	3			36	39	20.41	20.35	20.37	3
		100	0	20.53	20.51	20.49	3			75	0	20.55	20.50	20.56	3
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26090	26365	26640				Channel		26065	26365	26665	
		Frequency (MHz)		1855.0	1882.5	1910.0				Frequency (MHz)		1852.5	1882.5	1912.5	
10M	QPSK	1	0	23.69	23.52	23.48	0	5M	QPSK	1	0	23.61	23.55	23.47	0
		1	24	23.29	23.35	23.40	0			1	12	23.40	23.36	23.15	0
		1	49	23.32	23.10	23.42	0			1	24	23.30	23.01	23.19	0
		25	0	22.57	22.56	22.55	1			12	0	22.48	22.50	22.42	1
		25	12	22.47	22.43	22.42	1			12	6	22.48	22.56	22.26	1
		25	25	22.34	22.30	22.36	1			12	13	22.33	22.31	22.27	1
		50	0	22.43	22.45	22.47	1			25	0	22.47	22.34	22.35	1
	16QAM	1	0	22.50	22.51	22.37	1		16QAM	1	0	22.53	22.46	22.43	1
		1	24	22.28	22.25	22.36	1			1	12	22.34	22.19	22.09	1
		1	49	22.28	22.11	22.34	1			1	24	22.37	22.06	22.34	1
		25	0	21.46	21.58	21.48	2			12	0	21.61	21.57	21.40	2
		25	12	21.40	21.32	21.32	2			12	6	21.48	21.31	21.39	2
		25	25	21.43	21.36	21.20	2			12	13	21.22	21.25	21.25	2
		50	0	21.47	21.36	21.38	2			25	0	21.39	21.30	21.44	2
	64QAM	1	0	21.43	21.41	21.42	2		64QAM	1	0	21.48	21.38	21.54	2
		1	24	21.44	21.31	21.18	2			1	12	21.34	21.24	21.11	2
		1	49	21.26	21.03	21.27	2			1	24	21.30	21.10	21.35	2
		25	0	20.49	20.45	20.53	3			12	0	20.59	20.50	20.41	3
		25	12	20.46	20.31	20.43	3			12	6	20.38	20.37	20.27	3
		25	25	20.29	20.18	20.35	3			12	13	20.42	20.19	20.21	3
		50	0	20.51	20.30	20.52	3			25	0	20.35	20.43	20.40	3
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26055	26365	26675				Channel		26047	26365	26683	
		Frequency (MHz)		1851.5	1882.5	1913.5				Frequency (MHz)		1850.7	1882.5	1914.3	
3M	QPSK	1	0	23.60	23.51	23.55	0	1.4M	QPSK	1	0	23.64	23.51	23.54	0
		1	7	23.41	23.33	23.34	0			1	2	23.37	23.32	23.26	0
		1	14	23.33	23.15	23.35	0			1	5	23.31	23.18	23.22	0
		8	0	22.58	22.54	22.50	1			3	0	23.66	23.61	23.59	0
		8	3	22.53	22.43	22.37	1			3	1	23.54	23.54	23.31	0
		8	7	22.40	22.33	22.38	1			3	3	23.40	23.29	23.39	0
		15	0	22.47	22.44	22.39	1			6	0	22.42	22.47	22.52	1
	16QAM	1	0	22.49	22.41	22.41	1		16QAM	1	0	22.60	22.54	22.55	1
		1	7	22.28	22.26	22.17	1			1	2	22.32	22.27	22.39	1
		1	14	22.34	22.10	22.22	1			1	5	22.36	21.95	22.37	1
		8	0	21.57	21.55	21.55	2			3	0	22.58	22.47	22.44	1
		8	3	21.40	21.31	21.37	2			3	1	22.35	22.40	22.44	1
		8	7	21.41	21.22	21.29	2			3	3	22.19	22.31	22.31	1
		15	0	21.38	21.32	21.45	2			6	0	21.40	21.40	21.43	2
	64QAM	1	0	21.56	21.57	21.46	2		64QAM	1	0	21.48	21.53	21.51	2
		1	7	21.42	21.36	21.34	2			1	2	21.33	21.23	21.21	2
		1	14	21.24	21.00	21.19	2			1	5	21.26	21.03	21.32	2
		8	0	20.52	20.40	20.38	3			3	0	21.60	21.48	21.41	2
		8	3	20.40	20.43	20.34	3			3	1	21.40	21.38	21.38	2
		8	7	20.27	20.37	20.31	3			3	3	21.41	21.26	21.24	2
		15	0	20.39	20.30	20.32	3			6	0	20.42	20.28	20.40	3

LTE Band 25

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26140	26365	26590	
		Frequency (MHz)		1860.0	1882.5	1905.0	
20M	QPSK	1	0	**19.99**	19.93	19.91	0
		1	50	19.81	19.78	19.69	0
		1	99	19.65	19.51	19.70	0
		50	0	**19.98**	19.92	19.86	0
		50	25	19.86	19.84	19.75	0
		50	50	19.78	19.70	19.71	0
		100	0	**19.93**	19.83	19.92	0
	16QAM	1	0	19.98	19.89	19.91	0
		1	50	19.74	19.70	19.62	0
		1	99	19.57	19.47	19.63	0
		50	0	19.88	19.83	19.82	0
		50	25	19.76	19.76	19.66	0
		50	50	19.68	19.66	19.70	0
		100	0	19.89	19.83	19.84	0
	64QAM	1	0	19.98	19.87	19.91	0
		1	50	19.71	19.70	19.66	0
		1	99	19.61	19.51	19.61	0
		50	0	19.94	19.85	19.81	0
		50	25	19.86	19.80	19.67	0
		50	50	19.72	19.63	19.66	0
		100	0	19.85	19.78	19.83	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26115	26365	26615	
		Frequency (MHz)		1857.5	1882.5	1907.5	
15M	QPSK	1	0	19.93	19.91	19.88	0
		1	37	19.80	19.76	19.63	0
		1	74	19.64	19.46	19.63	0
		36	0	19.94	19.91	19.80	0
		36	19	19.78	19.84	19.71	0
		36	39	19.69	19.61	19.68	0
		75	0	19.91	19.74	19.82	0
	16QAM	1	0	19.88	19.76	19.84	0
		1	37	19.70	19.70	19.54	0
		1	74	19.53	19.41	19.68	0
		36	0	19.84	19.84	19.85	0
		36	19	19.84	19.78	19.70	0
		36	39	19.68	19.50	19.68	0
		75	0	19.90	19.70	19.85	0
	64QAM	1	0	19.82	19.81	19.90	0
		1	37	19.68	19.67	19.56	0
		1	74	19.59	19.43	19.61	0
		36	0	19.88	19.83	19.71	0
		36	19	19.70	19.74	19.65	0
		36	39	19.65	19.68	19.61	0
		75	0	19.87	19.74	19.83	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26090	26365	26640	
		Frequency (MHz)		1855.0	1882.5	1910.0	
10M	QPSK	1	0	19.83	19.85	19.70	0
		1	24	19.63	19.72	19.54	0
		1	49	19.58	19.43	19.63	0
		25	0	19.80	19.86	19.81	0
		25	12	19.65	19.77	19.64	0
		25	25	19.61	19.51	19.56	0
		50	0	19.89	19.80	19.78	0
	16QAM	1	0	19.83	19.71	19.61	0
		1	24	19.56	19.65	19.48	0
		1	49	19.40	19.32	19.61	0
		25	0	19.70	19.72	19.74	0
		25	12	19.73	19.64	19.63	0
		25	25	19.54	19.65	19.58	0
		50	0	19.74	19.70	19.78	0
	64QAM	1	0	19.81	19.83	19.83	0
		1	24	19.58	19.53	19.61	0
		1	49	19.59	19.41	19.57	0
		25	0	19.92	19.71	19.73	0
		25	12	19.81	19.61	19.52	0
		25	25	19.58	19.62	19.57	0
		50	0	19.84	19.67	19.70	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26065	26365	26665	
		Frequency (MHz)		1852.5	1882.5	1912.5	
5M	QPSK	1	0	19.87	19.77	19.60	0
		1	12	19.64	19.66	19.56	0
		1	24	19.55	19.31	19.52	0
		12	0	19.94	19.87	19.71	0
		12	6	19.74	19.79	19.67	0
		12	13	19.68	19.58	19.39	0
		25	0	19.86	19.74	19.82	0
	16QAM	1	0	19.94	19.79	19.72	0
		1	12	19.52	19.72	19.48	0
		1	24	19.48	19.25	19.52	0
		12	0	19.89	19.79	19.74	0
		12	6	19.71	19.79	19.59	0
		12	13	19.65	19.45	19.52	0
		25	0	19.76	19.61	19.85	0
	64QAM	1	0	19.76	19.77	19.84	0
		1	12	19.66	19.61	19.45	0
		1	24	19.50	19.34	19.55	0
		12	0	19.84	19.72	19.77	0
		12	6	19.73	19.65	19.65	0
		12	13	19.66	19.56	19.41	0
		25	0	19.73	19.68	19.82	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26055	26365	26675	
		Frequency (MHz)		1851.5	1882.5	1913.5	
3M	QPSK	1	0	19.87	19.75	19.86	0
		1	7	19.72	19.57	19.52	0
		1	14	19.64	19.46	19.55	0
		8	0	19.87	19.70	19.74	0
		8	3	19.84	19.62	19.66	0
		8	7	19.71	19.55	19.60	0
		15	0	19.82	19.69	19.69	0
	16QAM	1	0	19.88	19.88	19.86	0
		1	7	19.56	19.64	19.41	0
		1	14	19.50	19.32	19.58	0
		8	0	19.73	19.64	19.82	0
		8	3	19.82	19.52	19.51	0
		8	7	19.55	19.47	19.57	0
		15	0	19.85	19.70	19.87	0
	64QAM	1	0	19.86	19.72	19.76	0
		1	7	19.53	19.67	19.40	0
		1	14	19.44	19.34	19.60	0
		8	0	19.83	19.87	19.60	0
		8	3	19.73	19.71	19.50	0
		8	7	19.62	19.51	19.54	0
		15	0	19.79	19.57	19.67	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26047	26365	26683	
		Frequency (MHz)		1850.7	1882.5	1914.3	
1.4M	QPSK	v	0	19.83	19.80	19.79	0
		1	2	19.68	19.61	19.53	0
		1	5	19.44	19.34	19.57	0
		3	0	19.86	19.71	19.80	0
		3	1	19.74	19.77	19.65	0
		3	3	19.75	19.53	19.60	0
		6	0	19.92	19.68	19.89	0
	16QAM	1	0	19.66	19.74	19.74	0
		1	2	19.62	19.73	19.59	0
		1	5	19.60	19.38	19.57	0
		3	0	19.89	19.79	19.77	0
		3	1	19.73	19.61	19.70	0
		3	3	19.65	19.53	19.52	0
		6	0	19.84	19.77	19.73	0
	64QAM	1	0	19.87	19.76	19.82	0
		1	2	19.57	19.64	19.52	0
		1	5	19.40	19.37	19.57	0
		3	0	19.70	19.79	19.75	0
		3	1	19.54	19.71	19.52	0
		3	3	19.68	19.50	19.55	0
		6	0	19.61	19.74	19.76	0

LTE Band 26

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26765	26865	26965	
		Frequency (MHz)		821.5	831.5	841.5	
15M	QPSK	1	0	23.83	**23.93**	23.90	0
		1	37	23.82	23.86	23.89	0
		1	74	23.79	23.75	23.69	0
		36	0	22.93	**22.97**	22.91	1
		36	19	22.92	22.93	22.88	1
		36	39	22.88	22.82	22.86	1
		75	0	22.85	**22.91**	22.84	1
	16QAM	1	0	22.58	22.87	22.80	1
		1	37	22.75	22.81	22.82	1
		1	74	22.71	22.65	22.69	1
		36	0	21.76	21.92	21.83	2
		36	19	21.86	21.90	21.82	2
		36	39	21.87	21.80	21.84	2
		75	0	21.85	21.89	21.80	2
	64QAM	1	0	21.61	21.86	21.82	2
		1	37	21.75	21.78	21.85	2
		1	74	21.75	21.65	21.63	2
		36	0	20.81	20.92	20.83	3
		36	19	20.83	20.91	20.86	3
		36	39	20.79	20.79	20.82	3
		75	0	20.80	20.88	20.76	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26740	26865	26990	
		Frequency (MHz)		819.0	831.5	844.0	
10M	QPSK	1	0	23.47	23.80	23.70	0
		1	24	23.78	23.65	23.78	0
		1	49	23.65	23.66	23.49	0
		25	0	22.66	22.87	22.74	1
		25	12	22.86	22.81	22.65	1
		25	25	22.87	22.72	22.82	1
		50	0	22.71	22.80	22.72	1
	16QAM	1	0	22.41	22.73	22.59	1
		1	24	22.69	22.76	22.67	1
		1	49	22.57	22.62	22.43	1
		25	0	21.65	21.73	21.69	2
		25	12	21.70	21.70	21.60	2
		25	25	21.65	21.57	21.65	2
		50	0	21.60	21.75	21.55	2
	64QAM	1	0	21.39	21.89	21.82	2
		1	24	21.70	21.69	21.66	2
		1	49	21.58	21.52	21.56	2
		25	0	20.66	20.67	20.69	3
		25	12	20.78	20.73	20.87	3
		25	25	20.62	20.57	20.68	3
		50	0	20.61	20.88	20.64	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26715	26865	27015	
		Frequency (MHz)		816.5	831.5	846.5	
5M	QPSK	1	0	23.43	23.82	23.59	0
		1	12	23.74	23.80	23.70	0
		1	24	23.71	23.65	23.52	0
		12	0	22.73	22.83	22.77	1
		12	6	22.77	22.79	22.67	1
		12	13	22.81	22.68	22.68	1
		25	0	22.76	22.81	22.60	1
	16QAM	1	0	22.42	22.68	22.65	1
		1	12	22.54	22.71	22.76	1
		1	24	22.74	22.54	22.51	1
		12	0	21.56	21.75	21.76	2
		12	6	21.87	21.85	21.67	2
		12	13	21.69	21.63	21.61	2
		25	0	21.62	21.70	21.64	2
	64QAM	1	0	21.55	21.83	21.67	2
		1	12	21.70	21.66	21.73	2
		1	24	21.66	21.48	21.57	2
		12	0	20.54	20.72	20.74	3
		12	6	20.78	20.71	20.71	3
		12	13	20.69	20.70	20.59	3
		25	0	20.62	20.80	20.60	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26705	26865	27025	
		Frequency (MHz)		815.5	831.5	847.5	
3M	QPSK	1	0	23.44	23.76	23.69	0
		1	7	23.75	23.80	23.77	0
		1	14	23.74	23.54	23.59	0
		8	0	22.61	22.80	22.80	1
		8	3	22.81	22.84	22.72	1
		8	7	22.76	22.70	22.79	1
		15	0	22.72	22.83	22.66	1
	16QAM	1	0	22.46	22.79	22.59	1
		1	7	22.63	22.70	22.69	1
		1	14	22.59	22.55	22.55	1
		8	0	21.66	21.79	21.69	2
		8	3	21.72	21.76	21.77	2
		8	7	21.66	21.69	21.62	2
		15	0	21.62	21.76	21.66	2
	64QAM	1	0	21.55	21.84	21.73	2
		1	7	21.65	21.70	21.63	2
		1	14	21.53	21.65	21.54	2
		8	0	20.70	20.75	20.77	3
		8	3	20.65	20.71	20.75	3
		8	7	20.71	20.56	20.63	3
		15	0	20.59	20.65	20.66	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26697	26865	27033	
		Frequency (MHz)		814.7	831.5	848.3	
1.4M	QPSK	1	0	23.45	23.82	23.69	0
		1	2	23.75	23.66	23.74	0
		1	5	23.62	23.67	23.53	0
		3	0	23.61	23.86	23.69	0
		3	1	23.73	23.77	23.88	0
		3	3	23.67	23.65	23.83	0
		6	0	22.78	22.77	22.70	1
	16QAM	1	0	22.53	22.82	22.58	1
		1	2	22.70	22.67	22.72	1
		1	5	22.65	22.52	22.55	1
		3	0	22.58	22.71	22.81	1
		3	1	22.74	22.71	22.67	1
		3	3	22.71	22.60	22.63	1
		6	0	21.68	21.76	21.67	2
	64QAM	1	0	21.44	21.74	21.69	2
		1	2	21.70	21.72	21.73	2
		1	5	21.64	21.63	21.53	2
		3	0	21.56	21.80	21.64	2
		3	1	21.77	21.81	21.66	2
		3	3	21.76	21.77	21.63	2
		6	0	20.58	20.82	20.66	3

LTE Band 26

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26765	26865	26965	
		Frequency (MHz)		821.5	831.5	841.5	
15M	QPSK	1	0	19.48	19.41	**19.49**	0
		1	37	19.43	19.39	19.44	0
		1	74	19.47	19.31	19.24	0
		36	0	19.42	19.45	**19.48**	0
		36	19	19.38	19.46	19.39	0
		36	39	19.42	19.32	19.37	0
		75	0	19.39	19.42	**19.43**	0
	16QAM	1	0	19.17	19.39	19.47	0
		1	37	19.34	19.39	19.36	0
		1	74	19.46	19.24	19.24	0
		36	0	19.33	19.36	19.43	0
		36	19	19.32	19.44	19.30	0
		36	39	19.35	19.24	19.33	0
		75	0	19.35	19.39	19.36	0
	64QAM	1	0	19.23	19.38	19.46	0
		1	37	19.40	19.30	19.35	0
		1	74	19.38	19.26	19.16	0
		36	0	19.36	19.35	19.47	0
		36	19	19.32	19.40	19.29	0
		36	39	19.33	19.22	19.32	0
		75	0	19.38	19.32	19.40	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26740	26865	26990	
		Frequency (MHz)		819.0	831.5	844.0	
10M	QPSK	1	0	19.18	19.41	19.47	0
		1	24	19.35	19.32	19.41	0
		1	49	19.43	19.23	19.20	0
		25	0	19.35	19.39	19.48	0
		25	12	19.28	19.37	19.32	0
		25	25	19.32	19.29	19.31	0
		50	0	19.39	19.38	19.36	0
	16QAM	1	0	19.11	19.29	19.35	0
		1	24	19.30	19.25	19.36	0
		1	49	19.34	19.22	19.15	0
		25	0	19.36	19.34	19.43	0
		25	12	19.35	19.37	19.21	0
		25	25	19.32	19.26	19.28	0
		50	0	19.30	19.33	19.31	0
	64QAM	1	0	19.16	19.24	19.39	0
		1	24	19.34	19.31	19.37	0
		1	49	19.32	19.21	19.17	0
		25	0	19.36	19.29	19.33	0
		25	12	19.22	19.34	19.28	0
		25	25	19.36	19.17	19.27	0
		50	0	19.30	19.35	19.30	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26715	26865	27015	
		Frequency (MHz)		816.5	831.5	846.5	
5M	QPSK	1	0	19.12	19.30	19.37	0
		1	12	19.36	19.31	19.35	0
		1	24	19.39	19.26	19.03	0
		12	0	19.31	19.39	19.35	0
		12	6	19.25	19.37	19.20	0
		12	13	19.24	19.18	19.31	0
		25	0	19.30	19.29	19.29	0
	16QAM	1	0	18.96	19.24	19.31	0
		1	12	19.30	19.22	19.27	0
		1	24	19.17	19.18	19.13	0
		12	0	19.23	19.32	19.33	0
		12	6	19.28	19.26	19.18	0
		12	13	19.29	19.12	19.17	0
		25	0	19.11	19.18	19.23	0
	64QAM	1	0	19.12	19.17	19.39	0
		1	12	19.18	19.17	19.29	0
		1	24	19.20	19.23	19.10	0
		12	0	19.12	19.25	19.35	0
		12	6	19.25	19.38	19.18	0
		12	13	19.29	19.09	19.14	0
		25	0	19.32	19.15	19.36	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26705	26865	27025	
		Frequency (MHz)		815.5	831.5	847.5	
3M	QPSK	1	0	19.15	19.33	19.21	0
		1	7	19.32	19.24	19.29	0
		1	14	19.25	19.17	19.07	0
		8	0	19.30	19.33	19.18	0
		8	3	19.26	19.25	19.06	0
		8	7	19.33	19.12	19.16	0
		15	0	19.35	19.33	19.16	0
	16QAM	1	0	19.00	19.21	19.30	0
		1	7	19.23	19.16	19.25	0
		1	14	19.37	19.13	19.13	0
		8	0	19.15	19.30	19.25	0
		8	3	19.23	19.30	19.16	0
		8	7	19.34	19.01	19.17	0
		15	0	19.23	19.22	19.20	0
	64QAM	1	0	19.11	19.11	19.31	0
		1	7	19.27	19.11	19.30	0
		1	14	19.19	19.11	19.10	0
		8	0	19.36	19.41	19.26	0
		8	3	19.27	19.23	19.16	0
		8	7	19.28	19.10	19.15	0
		15	0	19.20	19.18	19.16	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26697	26865	27033	
		Frequency (MHz)		814.7	831.5	848.3	
1.4M	QPSK	1	0	19.13	19.32	19.42	0
		1	2	19.33	19.23	19.30	0
		1	5	19.28	19.23	19.16	0
		3	0	19.35	19.37	19.37	0
		3	1	19.32	19.40	19.32	0
		3	3	19.27	19.22	19.14	0
		6	0	19.34	19.25	19.32	0
	16QAM	1	0	19.08	19.17	19.25	0
		1	2	19.34	19.23	19.23	0
		1	5	19.23	19.10	19.01	0
		3	0	19.24	19.31	19.37	0
		3	1	19.15	19.24	19.27	0
		3	3	19.34	19.11	19.30	0
		6	0	19.27	19.09	19.10	0
	64QAM	1	0	19.07	19.29	19.42	0
		1	2	19.29	19.32	19.30	0
		1	5	19.30	19.22	19.08	0
		3	0	19.34	19.29	19.29	0
		3	1	19.15	19.39	19.24	0
		3	3	19.25	19.12	19.23	0
		6	0	19.25	19.30	19.29	0

LTE Band 30

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset		Mid		3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel			27710					Channel		27685	27710	27735	
		Frequency (MHz)			2310.0					Frequency (MHz)		2307.5	2310.0	2312.5	
10M	QPSK	1	0		22.46		0	5M	QPSK	1	0	22.43	22.41	22.41	0
		1	24		22.25		0			1	12	22.22	22.23	22.18	0
		1	49		22.03		0			1	24	22.00	22.01	21.96	0
		25	0		21.38		1			12	0	21.35	21.36	21.31	1
		25	12		21.33		1			12	6	21.29	21.30	21.25	1
		25	25		21.26		1			12	13	21.24	21.25	21.20	1
		50	0		21.35		1			25	0	21.30	21.31	21.26	1
	16QAM	1	0		21.88		1		16QAM	1	0	21.86	21.87	21.82	1
		1	24		21.76		1			1	12	21.73	21.74	21.69	1
		1	49		21.77		1			1	24	21.70	21.71	21.66	1
		25	0		20.46		2			12	0	20.42	20.43	20.38	2
		25	12		20.43		2			12	6	20.48	20.49	20.44	2
		25	25		20.41		2			12	13	20.47	20.48	20.43	2
		50	0		20.51		2			25	0	20.43	20.44	20.39	2

LTE Band 30

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset		Mid		3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel			27710					Channel		27685	27710	27735	
		Frequency (MHz)			2310.0					Frequency (MHz)		2307.5	2310.0	2312.5	
10M	QPSK	1	0		13.96		0	5M	QPSK	1	0	13.93	13.82	13.94	0
		1	24		13.74		0			1	12	13.68	13.65	13.65	0
		1	49		13.55		0			1	24	13.50	13.53	13.38	0
		25	0		13.75		0			12	0	13.71	13.66	13.72	0
		25	12		13.95		0			12	6	13.94	13.86	13.84	0
		25	25		13.80		0			12	13	13.73	13.67	13.61	0
		50	0		13.75		0			25	0	13.65	13.58	13.58	0
	16QAM	1	0		13.87		0		16QAM	1	0	13.70	13.81	13.87	0
		1	24		13.74		0			1	12	13.53	13.50	13.69	0
		1	49		13.50		0			1	24	13.30	13.24	13.44	0
		25	0		13.72		0			12	0	13.57	13.61	13.63	0
		25	12		13.94		0			12	6	13.80	13.81	13.84	0
		25	25		13.70		0			12	13	13.64	13.64	13.74	0
		50	0		13.65		0			25	0	13.60	13.63	13.59	0

LTE Band 38

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		37850	38000	38150				Channel		37825	38000	38175	
		Frequency (MHz)		2580	2595	2610				Frequency (MHz)		2577.5	2595	2612.5	
20M	QPSK	1	0	23.63	**23.84**	23.75	0	15M	QPSK	1	0	23.54	**23.84**	23.71	0
		1	50	23.41	23.62	23.53	0			1	37	23.36	23.52	23.48	0
		1	99	23.25	23.46	23.37	0			1	74	23.19	23.37	23.28	0
		50	0	22.52	**22.73**	22.64	1			36	0	22.46	22.71	22.57	1
		50	25	22.48	22.69	22.60	1			36	19	22.44	22.68	22.58	1
		50	50	22.31	22.52	22.43	1			36	39	22.30	22.44	22.33	1
		100	0	22.40	**22.61**	22.52	1			75	0	22.31	22.51	22.45	1
	16QAM	1	0	22.74	22.95	22.86	1		16QAM	1	0	22.64	22.91	22.77	1
		1	50	22.47	22.68	22.59	1			1	37	22.40	22.66	22.57	1
		1	99	22.35	22.56	22.47	1			1	74	22.25	22.51	22.47	1
		50	0	21.61	21.82	21.73	2			36	0	21.52	21.82	21.67	2
		50	25	21.57	21.78	21.69	2			36	19	21.55	21.71	21.62	2
		50	50	21.45	21.66	21.57	2			36	39	21.41	21.60	21.47	2
		100	0	21.56	21.77	21.68	2			75	0	21.47	21.72	21.65	2
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		37800	38000	38200				Channel		37775	38000	38225	
		Frequency (MHz)		2575	2595	2615				Frequency (MHz)		2572.5	2595	2617.5	
10M	QPSK	1	0	23.59	23.68	23.62	0	5M	QPSK	1	0	23.59	23.65	23.42	0
		1	24	23.33	23.48	23.40	0			1	12	23.34	23.53	23.38	0
		1	49	23.15	23.36	23.34	0			1	24	23.12	23.35	23.07	0
		25	0	22.45	22.71	22.45	1			12	0	22.41	22.56	22.41	1
		25	12	22.29	22.63	22.42	1			12	6	22.36	22.50	22.44	1
		25	25	22.18	22.29	22.37	1			12	13	22.21	22.35	22.38	1
		50	0	22.27	22.51	22.36	1			25	0	22.27	22.47	22.26	1
	16QAM	1	0	22.58	22.86	22.66	1		16QAM	1	0	22.51	22.93	22.74	1
		1	24	22.33	22.59	22.49	1			1	12	22.39	22.60	22.51	1
		1	49	22.32	22.46	22.35	1			1	24	22.33	22.40	22.28	1
		25	0	21.53	21.72	21.54	2			12	0	21.44	21.72	21.61	2
		25	12	21.47	21.68	21.54	2			12	6	21.50	21.61	21.61	2
		25	25	21.30	21.62	21.44	2			12	13	21.27	21.53	21.46	2
		50	0	21.49	21.68	21.56	2			25	0	21.47	21.57	21.52	2

LTE Band 38

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		37850	38000	38150				Channel		37825	38000	38175	
		Frequency (MHz)		2580	2595	2610				Frequency (MHz)		2577.5	2595	2612.5	
20M	QPSK	1	0	15.23	**15.44**	15.36	0	15M	QPSK	1	0	15.21	15.41	15.28	0
		1	50	15.03	15.24	15.18	0			1	37	14.95	15.21	15.18	0
		1	99	14.86	15.07	15.01	0			1	74	14.76	14.99	14.91	0
		50	0	14.98	**15.19**	15.13	0			36	0	14.95	15.17	15.13	0
		50	25	14.94	15.15	15.09	0			36	19	14.90	15.13	15.08	0
		50	50	14.78	14.99	14.93	0			36	39	14.70	14.89	14.86	0
		100	0	14.93	**15.14**	15.08	0			75	0	14.87	15.08	15.03	0
	16QAM	1	0	15.20	15.40	15.32	0		16QAM	1	0	15.14	15.26	15.31	0
		1	50	14.96	15.22	15.08	0			1	37	14.91	15.09	15.10	0
		1	99	14.86	15.02	14.94	0			1	74	14.81	14.97	14.88	0
		50	0	14.96	15.12	15.03	0			36	0	14.85	15.03	15.04	0
		50	25	14.89	15.11	15.05	0			36	19	14.88	15.04	14.95	0
		50	50	14.74	14.95	14.90	0			36	39	14.69	14.87	14.87	0
		100	0	14.84	15.09	15.02	0			75	0	14.80	15.02	14.98	0
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		37800	38000	38200				Channel		37775	38000	38225	
		Frequency (MHz)		2575	2595	2615				Frequency (MHz)		2572.5	2595	2617.5	
10M	QPSK	1	0	15.15	15.27	15.22	0	5M	QPSK	1	0	15.14	15.38	15.05	0
		1	24	14.92	15.11	15.03	0			1	12	14.94	15.17	15.01	0
		1	49	14.78	14.94	14.94	0			1	24	14.65	14.88	14.86	0
		25	0	14.92	15.01	15.03	0			12	0	14.84	14.98	14.84	0
		25	12	14.86	15.12	15.01	0			12	6	14.82	15.11	14.91	0
		25	25	14.64	14.91	14.74	0			12	13	14.68	14.82	14.69	0
		50	0	14.73	15.04	14.95	0			25	0	14.82	14.93	14.91	0
	16QAM	1	0	15.09	15.19	15.24	0		16QAM	1	0	14.95	15.23	15.24	0
		1	24	14.95	15.01	14.97	0			1	12	14.86	15.04	15.03	0
		1	49	14.59	14.89	14.87	0			1	24	14.63	14.93	14.85	0
		25	0	14.73	15.05	14.97	0			12	0	14.70	15.00	14.96	0
		25	12	14.69	14.99	14.92	0			12	6	14.80	14.91	14.92	0
		25	25	14.53	14.79	14.71	0			12	13	14.57	14.91	14.70	0
		50	0	14.84	15.00	14.86	0			25	0	14.73	15.01	14.93	0

LTE Band 41

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	Mid	Mid	High	3GPP MPR (dB)
		Channel		39750	40185	40620	41055	41490	
		Frequency (MHz)		2506.0	2549.5	2593.0	2636.5	2680.0	
20M	QPSK	1	0	23.55	23.91	**23.99**	23.77	23.95	0
		1	50	23.19	23.55	23.63	23.41	23.59	0
		1	99	22.94	23.30	23.38	23.16	23.34	0
		50	0	22.35	22.71	**22.79**	22.57	22.75	1
		50	25	22.22	22.58	22.66	22.44	22.62	1
		50	50	22.01	22.37	22.45	22.23	22.41	1
		100	0	22.22	22.58	**22.66**	22.44	22.62	1
	16QAM	1	0	22.66	23.02	23.10	22.88	23.06	1
		1	50	22.29	22.65	22.73	22.51	22.69	1
		1	99	22.09	22.45	22.53	22.31	22.49	1
		50	0	21.43	21.79	21.87	21.65	21.83	2
		50	25	21.32	21.68	21.76	21.54	21.72	2
		50	50	21.17	21.53	21.61	21.39	21.57	2
		100	0	21.28	21.64	21.72	21.50	21.68	2

BW	MCS Index	RB Size	RB Offset	Low	Mid	Mid	Mid	High	3GPP MPR (dB)
		Channel		39725	40173	40620	41068	41515	
		Frequency (MHz)		2503.5	2548.3	2593.0	2637.8	2682.5	
15M	QPSK	1	0	23.52	23.86	23.94	23.77	23.92	0
		1	37	23.11	23.55	23.60	23.33	23.49	0
		1	74	22.93	23.22	23.33	23.10	23.33	0
		36	0	22.28	22.68	22.75	22.51	22.67	1
		36	19	22.17	22.57	22.59	22.35	22.62	1
		36	39	21.96	22.32	22.42	22.20	22.32	1
		75	0	22.14	22.57	22.62	22.44	22.53	1
	16QAM	1	0	22.46	22.87	22.98	22.72	22.94	1
		1	37	22.15	22.45	22.63	22.33	22.52	1
		1	74	21.91	22.20	22.38	22.09	22.28	1
		36	0	21.28	21.66	21.73	21.47	21.70	2
		36	19	21.22	21.54	21.65	21.39	21.58	2
		36	39	20.92	21.32	21.41	21.16	21.39	2
		75	0	21.17	21.51	21.65	21.34	21.55	2

BW	MCS Index	RB Size	RB Offset	Low	Mid	Mid	Mid	High	3GPP MPR (dB)
		Channel		39700	40160	40620	41080	41540	
		Frequency (MHz)		2501.0	2547.0	2593.0	2639.0	2685.0	
10M	QPSK	1	0	23.41	23.87	23.95	23.69	23.84	0
		1	24	22.99	23.45	23.43	23.36	23.50	0
		1	49	22.84	23.18	23.34	23.11	23.31	0
		25	0	22.18	22.61	22.65	22.51	22.56	1
		25	12	22.12	22.48	22.64	22.38	22.45	1
		25	25	21.88	22.26	22.33	22.14	22.34	1
		50	0	22.12	22.52	22.49	22.34	22.55	1
	16QAM	1	0	22.39	22.86	22.95	22.76	22.86	1
		1	24	22.04	22.48	22.50	22.34	22.42	1
		1	49	21.84	22.18	22.31	22.07	22.31	1
		25	0	21.20	21.70	21.68	21.50	21.58	2
		25	12	21.03	21.46	21.65	21.39	21.46	2
		25	25	20.85	21.21	21.34	21.22	21.31	2
		50	0	21.19	21.51	21.49	21.33	21.56	2

BW	MCS Index	RB Size	RB Offset	Low	Mid	Mid	Mid	High	3GPP MPR (dB)
		Channel		39675	40148	40620	41093	41565	
		Frequency (MHz)		2498.5	2545.8	2593.0	2640.3	2687.5	
5M	QPSK	1	0	23.54	23.79	23.91	23.72	23.81	0
		1	12	23.04	23.47	23.55	23.37	23.50	0
		1	24	22.85	23.27	23.24	23.05	23.21	0
		12	0	22.25	22.64	22.73	22.40	22.63	1
		12	6	22.07	22.47	22.56	22.38	22.50	1
		12	13	21.87	22.23	22.25	22.13	22.30	1
		25	0	22.11	22.50	22.63	22.31	22.50	1
	16QAM	1	0	22.49	22.75	22.86	22.65	22.83	1
		1	12	22.05	22.43	22.57	22.33	22.43	1
		1	24	21.82	22.27	22.26	22.03	22.25	1
		12	0	21.18	21.68	21.70	21.44	21.57	2
		12	6	21.13	21.44	21.55	21.42	21.53	2
		12	13	20.89	21.22	21.32	21.15	21.30	2
		25	0	21.08	21.48	21.66	21.31	21.57	2

LTE Band 41

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	Mid	Mid	High	3GPP MPR (dB)
		Channel		39750	40185	40620	41055	41490	
		Frequency (MHz)		2506.0	2549.5	2593.0	2636.5	2680.0	
20M	QPSK	1	0	14.74	14.98	**14.99**	14.65	14.96	0
		1	50	14.46	14.70	14.71	14.37	14.68	0
		1	99	14.28	14.52	14.53	14.19	14.50	0
		50	0	14.53	14.77	**14.78**	14.44	14.75	0
		50	25	14.38	14.62	14.63	14.29	14.60	0
		50	50	14.23	14.47	14.48	14.14	14.45	0
		100	0	14.39	14.63	**14.64**	14.30	14.61	0
	16QAM	1	0	14.74	14.91	14.94	14.60	14.91	0
		1	50	14.40	14.69	14.67	14.37	14.64	0
		1	99	14.26	14.45	14.51	14.19	14.45	0
		50	0	14.45	14.69	14.71	14.39	14.66	0
		50	25	14.29	14.53	14.56	14.24	14.51	0
		50	50	14.18	14.41	14.45	14.10	14.38	0
		100	0	14.36	14.63	14.57	14.22	14.60	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	Mid	Mid	High	3GPP MPR (dB)
		Channel		39725	40173	40620	41068	41515	
		Frequency (MHz)		2503.5	2548.3	2593.0	2637.8	2682.5	
15M	QPSK	1	0	14.64	14.96	14.98	14.55	14.90	0
		1	37	14.44	14.70	14.62	14.37	14.67	0
		1	74	14.24	14.48	14.50	14.19	14.46	0
		36	0	14.50	14.68	14.71	14.41	14.66	0
		36	19	14.28	14.56	14.60	14.26	14.52	0
		36	39	14.23	14.40	14.48	14.12	14.38	0
		75	0	14.36	14.63	14.64	14.27	14.53	0
	16QAM	1	0	14.73	14.94	14.94	14.61	14.94	0
		1	37	14.39	14.60	14.71	14.36	14.59	0
		1	74	14.22	14.50	14.45	14.09	14.41	0
		36	0	14.53	14.73	14.77	14.34	14.69	0
		36	19	14.34	14.53	14.56	14.19	14.53	0
		36	39	14.19	14.39	14.43	14.13	14.41	0
		75	0	14.31	14.57	14.61	14.29	14.53	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	Mid	Mid	High	3GPP MPR (dB)
		Channel		39700	40160	40620	41080	41540	
		Frequency (MHz)		2501.0	2547.0	2593.0	2639.0	2685.0	
10M	QPSK	1	0	14.64	14.85	14.89	14.52	14.90	0
		1	24	14.29	14.61	14.61	14.25	14.50	0
		1	49	14.21	14.35	14.42	14.06	14.43	0
		25	0	14.41	14.66	14.69	14.32	14.75	0
		25	12	14.23	14.48	14.54	14.19	14.49	0
		25	25	14.12	14.40	14.45	14.07	14.38	0
		50	0	14.37	14.47	14.54	14.19	14.55	0
	16QAM	1	0	14.63	14.87	14.88	14.55	14.91	0
		1	24	14.29	14.55	14.54	14.33	14.56	0
		1	49	14.15	14.33	14.36	14.08	14.45	0
		25	0	14.40	14.62	14.74	14.26	14.74	0
		25	12	14.19	14.45	14.55	14.23	14.52	0
		25	25	14.08	14.41	14.46	14.10	14.36	0
		50	0	14.36	14.44	14.61	14.15	14.53	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	Mid	Mid	High	3GPP MPR (dB)
		Channel		39675	40148	40620	41093	41565	
		Frequency (MHz)		2498.5	2545.8	2593.0	2640.3	2687.5	
5M	QPSK	1	0	14.60	14.86	14.88	14.49	14.86	0
		1	12	14.40	14.63	14.64	14.27	14.58	0
		1	24	14.17	14.49	14.33	14.17	14.47	0
		12	0	14.39	14.63	14.58	14.41	14.61	0
		12	6	14.25	14.54	14.48	14.19	14.47	0
		12	13	14.13	14.33	14.39	14.06	14.32	0
		25	0	14.32	14.49	14.49	14.19	14.49	0
	16QAM	1	0	14.70	14.84	14.90	14.54	14.90	0
		1	12	14.38	14.63	14.65	14.17	14.65	0
		1	24	14.19	14.44	14.35	14.09	14.49	0
		12	0	14.38	14.60	14.60	14.39	14.60	0
		12	6	14.25	14.51	14.53	14.24	14.52	0
		12	13	14.15	14.40	14.40	14.09	14.33	0
		25	0	14.26	14.44	14.48	14.24	14.52	0

LTE Band 66

EUT without Power Reduction (P-Sensor NOT Triggered)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		132072	132322	132572				Channel		132047	132322	132597	
		Frequency (MHz)		1720.0	1745.0	1770.0				Frequency (MHz)		1717.5	1745.0	1772.5	
20M	QPSK	1	0	23.69	**23.75**	23.72	0	15M	QPSK	1	0	23.60	23.65	23.69	0
		1	50	23.49	23.54	23.44	0			1	37	23.40	23.48	23.40	0
		1	99	23.50	23.67	23.46	0			1	74	23.44	23.62	23.40	0
		50	0	22.57	**22.67**	22.60	1			36	0	22.51	22.59	22.57	1
		50	25	22.48	22.58	22.54	1			36	19	22.44	22.56	22.51	1
		50	50	22.51	22.49	22.39	1			36	39	22.43	22.47	22.30	1
		100	0	22.47	**22.59**	22.57	1			75	0	22.45	22.55	22.50	1
	16QAM	1	0	22.59	22.67	22.70	1		16QAM	1	0	22.51	22.63	22.63	1
		1	50	22.42	22.50	22.34	1			1	37	22.34	22.39	22.34	1
		1	99	22.46	22.61	22.39	1			1	74	22.36	22.65	22.37	1
		50	0	21.50	21.67	21.51	2			36	0	21.45	21.62	21.56	2
		50	25	21.42	21.48	21.48	2			36	19	21.39	21.51	21.44	2
		50	50	21.51	21.47	21.34	2			36	39	21.41	21.36	21.31	2
		100	0	21.41	21.57	21.57	2			75	0	21.36	21.45	21.47	2
	64QAM	1	0	21.69	21.70	21.66	2		64QAM	1	0	21.64	21.72	21.59	2
		1	50	21.45	21.54	21.39	2			1	37	21.30	21.43	21.36	2
		1	99	21.48	21.58	21.41	2			1	74	21.37	21.53	21.40	2
		50	0	20.57	20.67	20.59	3			36	0	20.44	20.52	20.52	3
		50	25	20.39	20.58	20.52	3			36	19	20.29	20.45	20.48	3
		50	50	20.45	20.46	20.35	3			36	39	20.44	20.34	20.26	3
		100	0	20.44	20.51	20.56	3			75	0	20.44	20.45	20.40	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		132022	132322	132622				Channel		131997	132322	132647	
		Frequency (MHz)		1715.0	1745.0	1775.0				Frequency (MHz)		1712.5	1745.0	1777.5	
10M	QPSK	1	0	23.52	23.68	23.55	0	5M	QPSK	1	0	23.60	23.64	23.53	0
		1	24	23.32	23.39	23.25	0			1	12	23.36	23.40	23.08	0
		1	49	23.33	23.49	23.41	0			1	24	23.41	23.57	23.24	0
		25	0	22.48	22.58	22.40	1			12	0	22.39	22.61	22.47	1
		25	12	22.28	22.43	22.40	1			12	6	22.37	22.49	22.43	1
		25	25	22.35	22.30	22.27	1			12	13	22.29	22.35	22.17	1
		50	0	22.39	22.43	22.35	1			25	0	22.30	22.48	22.42	1
	16QAM	1	0	22.43	22.69	22.68	1		16QAM	1	0	22.53	22.64	22.55	1
		1	24	22.39	22.38	22.37	1			1	12	22.20	22.36	22.34	1
		1	49	22.35	22.43	22.13	1			1	24	22.33	22.47	22.27	1
		25	0	21.40	21.61	21.35	2			12	0	21.48	21.42	21.48	2
		25	12	21.37	21.40	21.42	2			12	6	21.31	21.54	21.32	2
		25	25	21.25	21.38	21.23	2			12	13	21.41	21.31	21.23	2
		50	0	21.18	21.47	21.43	2			25	0	21.28	21.37	21.48	2
	64QAM	1	0	21.58	21.47	21.63	2		64QAM	1	0	21.63	21.55	21.58	2
		1	24	21.33	21.31	21.40	2			1	12	21.26	21.42	21.19	2
		1	49	21.32	21.45	21.18	2			1	24	21.32	21.57	21.34	2
		25	0	20.43	20.59	20.41	3			12	0	20.52	20.45	20.40	3
		25	12	20.35	20.43	20.47	3			12	6	20.29	20.35	20.42	3
		25	25	20.29	20.30	20.23	3			12	13	20.40	20.34	20.20	3
		50	0	20.33	20.41	20.29	3			25	0	20.28	20.42	20.36	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		131987	132322	132657				Channel		131979	132322	132665	
		Frequency (MHz)		1711.5	1745.5	1778.5				Frequency (MHz)		1710.7	1745.0	1779.3	
3M	QPSK	1	0	23.52	23.56	23.47	0	1.4M	QPSK	1	0	23.47	23.66	23.63	0
		1	7	23.32	23.36	23.32	0			1	2	23.29	23.39	23.39	0
		1	14	23.35	23.60	23.30	0			1	5	23.34	23.47	23.28	0
		8	0	22.45	22.61	22.44	1			3	0	23.43	23.50	23.58	0
		8	3	22.29	22.41	22.44	1			3	1	23.36	23.51	23.45	0
		8	7	22.29	22.43	22.32	1			3	3	23.40	23.34	23.27	0
		15	0	22.36	22.45	22.50	1			6	0	22.42	22.40	22.52	1
	16QAM	1	0	22.48	22.53	22.48	1		16QAM	1	0	22.54	22.57	22.57	1
		1	7	22.43	22.34	22.24	1			1	2	22.25	22.31	22.27	1
		1	14	22.20	22.43	22.25	1			1	5	22.30	22.57	22.17	1
		8	0	21.37	21.47	21.44	2			3	0	22.54	22.46	22.37	1
		8	3	21.27	21.35	21.35	2			3	1	22.26	22.55	22.33	1
		8	7	21.40	21.34	21.29	2			3	3	22.37	22.32	22.19	1
		15	0	21.23	21.44	21.40	2			6	0	21.30	21.49	21.54	2
	64QAM	1	0	21.54	21.53	21.50	2		64QAM	1	0	21.48	21.49	21.54	2
		1	7	21.31	21.40	21.34	2			1	2	21.28	21.34	21.31	2
		1	14	21.42	21.41	21.33	2			1	5	21.24	21.55	21.29	2
		8	0	20.41	20.41	20.32	3			3	0	21.43	21.47	21.51	2
		8	3	20.42	20.35	20.47	3			3	1	21.30	21.47	21.41	2
		8	7	20.41	20.28	20.18	3			3	3	21.39	21.34	21.31	2
		15	0	20.31	20.39	20.42	3			6	0	20.36	20.39	20.35	3

LTE Band 66

EUT with Power Reduction (P-Sensor Triggered & Laptop Mode)

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		132072	132322	132572	
		Frequency (MHz)		1720.0	1745.0	1770.0	
20M	QPSK	1	0	19.29	19.45	**19.48**	0
		1	50	19.26	19.04	19.20	0
		1	99	19.16	19.29	19.35	0
		50	0	19.33	19.28	**19.41**	0
		50	25	19.36	19.22	19.27	0
		50	50	19.37	19.19	19.26	0
		100	0	19.33	19.20	**19.37**	0
	16QAM	1	0	19.22	19.41	19.47	0
		1	50	19.21	19.00	19.10	0
		1	99	19.15	19.24	19.29	0
		50	0	19.23	19.24	19.39	0
		50	25	19.28	19.19	19.21	0
		50	50	19.29	19.10	19.19	0
		100	0	19.26	19.14	19.35	0
	64QAM	1	0	19.22	19.37	19.46	0
		1	50	19.26	18.98	19.18	0
		1	99	19.14	19.27	19.34	0
		50	0	19.29	19.20	19.31	0
		50	25	19.32	19.15	19.24	0
		50	50	19.29	19.10	19.25	0
		100	0	19.30	19.10	19.32	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		132047	132322	132597	
		Frequency (MHz)		1717.5	1745.0	1772.5	
15M	QPSK	1	0	19.27	19.35	19.38	0
		1	37	19.16	18.95	19.18	0
		1	74	19.07	19.19	19.29	0
		36	0	19.28	19.24	19.31	0
		36	19	19.30	19.12	19.17	0
		36	39	19.35	19.11	19.22	0
		75	0	19.32	19.12	19.33	0
	16QAM	1	0	19.17	19.38	19.34	0
		1	37	19.10	18.96	19.14	0
		1	74	19.10	19.22	19.25	0
		36	0	19.26	19.18	19.35	0
		36	19	19.25	19.14	19.09	0
		36	39	19.19	19.13	19.12	0
		75	0	19.18	19.04	19.28	0
	64QAM	1	0	19.14	19.25	19.34	0
		1	37	19.18	18.97	19.09	0
		1	74	19.10	19.19	19.27	0
		36	0	19.27	19.19	19.31	0
		36	19	19.27	19.20	19.21	0
		36	39	19.26	19.09	19.15	0
		75	0	19.20	19.07	19.28	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		132022	132322	132622	
		Frequency (MHz)		1715.0	1745.0	1775.0	
10M	QPSK	1	0	19.26	19.32	19.26	0
		1	24	19.10	19.03	19.03	0
		1	49	19.09	19.21	19.13	0
		25	0	19.26	19.23	19.36	0
		25	12	19.30	19.20	19.09	0
		25	25	19.27	18.99	19.02	0
		50	0	19.15	19.10	19.27	0
	16QAM	1	0	19.10	19.25	19.39	0
		1	24	19.10	18.96	19.00	0
		1	49	18.94	19.06	19.09	0
		25	0	19.13	19.14	19.21	0
		25	12	19.17	19.05	19.21	0
		25	25	19.23	18.99	19.05	0
		50	0	19.11	19.09	19.13	0
	64QAM	1	0	19.20	19.25	19.40	0
		1	24	19.13	18.82	19.15	0
		1	49	18.97	19.01	19.16	0
		25	0	19.13	19.13	19.27	0
		25	12	19.34	19.10	19.14	0
		25	25	19.23	19.01	19.04	0
		50	0	19.11	19.09	19.17	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		131997	132322	132647	
		Frequency (MHz)		1712.5	1745.0	1777.5	
5M	QPSK	1	0	19.18	19.38	19.27	0
		1	12	19.13	18.95	18.90	0
		1	24	19.00	19.08	19.16	0
		12	0	19.27	19.21	19.10	0
		12	6	19.23	19.15	19.03	0
		12	13	19.31	18.97	18.99	0
		25	0	19.17	18.98	19.20	0
	16QAM	1	0	19.13	19.34	19.25	0
		1	12	18.98	18.96	19.15	0
		1	24	18.92	19.08	19.21	0
		12	0	19.13	19.13	19.14	0
		12	6	19.27	19.07	19.02	0
		12	13	19.23	18.99	18.95	0
		25	0	19.16	19.07	19.19	0
	64QAM	1	0	19.04	19.40	19.23	0
		1	12	19.26	18.97	19.01	0
		1	24	19.15	19.17	19.11	0
		12	0	19.04	19.17	19.39	0
		12	6	19.15	18.96	19.07	0
		12	13	19.27	19.05	19.13	0
		25	0	19.19	19.08	19.22	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		131987	132322	132657	
		Frequency (MHz)		1711.5	1745.5	1778.5	
3M	QPSK	1	0	19.19	19.27	19.35	0
		1	7	19.22	18.88	19.07	0
		1	14	19.10	19.25	19.21	0
		8	0	19.17	19.19	19.36	0
		8	3	19.19	19.17	19.15	0
		8	7	19.24	19.10	19.22	0
		15	0	19.31	19.10	19.22	0
	16QAM	1	0	19.13	19.28	19.33	0
		1	7	19.12	18.80	19.03	0
		1	14	19.07	19.17	19.15	0
		8	0	19.21	19.11	19.19	0
		8	3	19.22	19.06	19.13	0
		8	7	19.17	19.01	19.03	0
		15	0	19.23	18.96	19.21	0
	64QAM	1	0	19.10	19.19	19.40	0
		1	7	19.08	18.85	19.03	0
		1	14	18.94	19.10	19.19	0
		8	0	19.05	19.22	19.24	0
		8	3	19.14	19.02	18.95	0
		8	7	19.24	19.01	19.11	0
		15	0	19.24	19.07	19.28	0

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		131979	132322	132665	
		Frequency (MHz)		1710.7	1745.0	1779.3	
1.4M	QPSK	1	0	19.26	19.30	19.29	0
		1	2	19.14	18.87	19.12	0
		1	5	19.08	19.06	19.16	0
		3	0	19.23	19.15	19.28	0
		3	1	19.18	19.06	19.22	0
		3	3	19.17	19.08	19.12	0
		6	0	19.26	19.13	19.15	0
	16QAM	1	0	19.18	19.17	19.39	0
		1	2	19.08	18.94	19.05	0
		1	5	18.87	19.07	19.25	0
		3	0	19.11	19.15	19.18	0
		3	1	19.20	19.15	19.05	0
		3	3	19.08	19.13	18.99	0
		6	0	19.17	18.92	19.16	0
	64QAM	1	0	19.15	19.29	19.33	0
		1	2	19.12	18.86	19.08	0
		1	5	19.00	19.11	19.15	0
		3	0	19.09	19.12	19.11	0
		3	1	19.25	19.00	19.11	0
		3	3	19.13	18.96	19.07	0
		6	0	19.27	18.96	19.17	0

4.7 SAR Testing Results

4.7.1 SAR Test Reduction Considerations

<KDB 447498 D01, General RF Exposure Guidance>

Testing of other required channels within the operating mode of a frequency band is not required when the reported SAR for the mid-band or highest output power channel is:

(1) ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz

(2) ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz

(3) ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

When SAR is not measured at the maximum power level allowed for production units, the measured SAR will be scaled to the maximum tune-up tolerance limit to determine compliance. The scaling factor for the tune-up power is defined as maximum tune-up limit (mW) / measured conducted power (mW). The reported SAR would be calculated by measured SAR x tune-up power scaling factor.

The SAR has been measured with highest transmission duty factor supported by the test mode tools for WLAN and/or Bluetooth. When the transmission duty factor could not achieve 100%, the reported SAR will be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up power. The scaling factor for the duty factor is defined as 100% / transmission duty cycle (%). The reported SAR would be calculated by measured SAR x tune-up power scaling factor x duty cycle scaling factor.

<KDB 941225 D01, 3G SAR Measurement Procedures>

The mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ 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.

<KDB 941225 D05, SAR Evaluation Considerations for LTE Devices>

(1) QPSK with 1 RB and 50% RB allocation

Start with the largest channel bandwidth and measure SAR, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required; 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.

(2) 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 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.

(3) Higher order modulations

SAR is required only when the highest maximum output power for the configuration in the higher order modulation is >1/2 dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

(4) Other channel bandwidth

SAR is required when the highest maximum output power of the smaller channel bandwidth is >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.

<Power Confirmation for SAR Test Exclusion for LTE Downlink CA>

According to KDB 941225 D05A, the uplink maximum output power below was measured with downlink CA active on the channel with highest measured maximum output power when downlink CA is inactive. The downlink SCC channel was paired with the uplink channel as normal operation. For intra-band contiguous CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing per section 5.4.1A of 3GPP TS36.521. For intra-band non-contiguous CA, the downlink channel spacing between the component carriers was set to maximum separation from PCC and remain fully within the downlink transmission band. For Inter-band CA, the SCC downlink channel was set to near the middle of its transmission band.

Power Measurements for Intra-Band Contiguous Downlink CA

CA Combination	PCC								SCC1				Power	
	LTE Band	BW (MHz)	UL Channel	UL Freq. (MHz)	RB Size	RB Offset	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	Tx Power with DL-CA Active (dBm)	Single Carrier Tx Power (dBm)
EUT without Power Reduction (P-Sensor NOT Triggered)														
CA_41C	41	20	40620	2593	1	0	40620	2593	41	20	40818	2612.8	23.87	23.99

CA Combination	PCC								SCC1				Power	
	LTE Band	BW (MHz)	UL Channel	UL Freq. (MHz)	RB Size	RB Offset	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	Tx Power with DL-CA Active (dBm)	Single Carrier Tx Power (dBm)
EUT with Power Reduction (P-Sensor Triggered)														
CA_41C	41	20	40620	2593	1	0	40620	2593	41	20	40818	2612.8	14.89	14.99

Power Measurements for Inter-Band Downlink CA

CA Combination	PCC								SCC1				SCC2				SCC3				SCC4				SCC2	
	LTE Band	BW (MHz)	LTE Band	LTE Band	LTE Band	LTE Band	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	Tx Power with DL-CA Active (dBm)	Single Carrier Tx Power (dBm)
EUT without Power Reduction (P-Sensor NOT Triggered)																										
CA_2A-29A	2	20	19100	1900	1	0	1100	1980	29	10	9715	722.5													23.66	23.99
CA_2A-46A	2	20	19100	1900	1	0	1100	1980	46	20	50665	5537.5													23.71	23.99
CA_4A-5A	4	20	20175	1732.5	1	0	2175	2132.5	5	10	2525	881.5													23.44	23.78
CA_4A-13A	4	20	20175	1732.5	1	0	2175	2132.5	13	10	5230	751													23.51	23.78
CA_4A-46A	4	20	20175	1732.5	1	0	2175	2132.5	46	20	50665	5537.5													23.25	23.78
CA_25A-26A	25	20	26140	1860	1	0	8140	1940	26	15	8865	876.5													23.68	23.72
CA_29A-30A	30	10	27710	2310	1	0	9820	2355	29	10	9715	722.5													21.86	22.13
CA_29A-66A	66	20	132322	1745	1	0	66786	2145	29	10	9715	722.5													23.57	23.75
CA_14A-66A-66A	14	10	23330	793	1	0	5330	763	66	20	66786	2145	66	20	67036	2170									23.62	23.81
CA_2A-4A-5A	2	20	19100	1900	1	0	1100	1980	4	20	2175	2132.5	5	10	2525	881.5									23.57	23.99
CA_2A-4A-13A	2	20	19100	1900	1	0	1100	1980	4	20	2175	2132.5	13	10	5230	751									23.65	23.99
CA_2A-14A-30A	2	20	19100	1900	1	0	1100	1980	14	10	5330	763	30	10	9820	2355									23.47	23.99
CA_2A-2A-13A-66A	2	20	19100	1900	1	0	1100	1980	2	20	900	1960	13	10	5230	751	66	20	66786	2145					23.72	23.99
CA_2A-13A-66A-66A	2	20	19100	1900	1	0	1100	1980	13	10	5230	751	66	20	66786	2145	66	20	67036	2170					23.53	23.99
CA_2A-13A-66B	2	20	19100	1900	1	0	1100	1980	13	10	5230	751	66	15	66786	2145	66	5	66879	2154.3					23.60	23.99
CA_2A-13A-66C	2	20	19100	1900	1	0	1100	1980	13	10	5230	751	66	20	66786	2145	66	20	66984	2164.8					23.63	23.99
CA_2A-13A-46D	2	20	19100	1900	1	0	1100	1980	13	10	5230	751	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	23.69	23.99
CA_2A-46D-66A	2	20	19100	1900	1	0	1100	1980	66	20	66786	2145	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	23.58	23.99
CA_13A-46D-66A	13	10	23230	782	1	24	5230	751	66	20	66786	2145	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	23.71	23.83
CA_2A-12A-30A-66A	2	20	19100	1900	1	0	1100	1980	12	10	5095	737.5	30	10	9820	2355	66	20	66786	2145					23.68	23.99
CA_2A-5B-30A-66A	2	20	19100	1900	1	0	1100	1980	66	20	66786	2145	30	10	9820	2355	5	10	2450	874	5	10	2549	883.9	23.49	23.99

CA Combination	PCC								SCC1				SCC2				SCC3				SCC4				SCC2	
	LTE Band	BW (MHz)	LTE Band	LTE Band	LTE Band	LTE Band	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Channel	DL Freq. (MHz)	Tx Power with DL-CA Active (dBm)	Single Carrier Tx Power (dBm)
EUT with Power Reduction (P-Sensor Triggered)																										
CA_2A-29A	2	20	19100	1900	1	0	1100	1980	29	10	9715	722.5													18.81	18.95
CA_2A-46A	2	20	19100	1900	1	0	1100	1980	46	20	50665	5537.5													18.87	18.95
CA_4A-5A	4	20	20175	1732.5	1	0	2175	2132.5	5	10	2525	881.5													18.38	18.48
CA_4A-13A	4	20	20175	1732.5	1	0	2175	2132.5	13	10	5230	751													18.34	18.48
CA_4A-46A	4	20	20175	1732.5	1	0	2175	2132.5	46	20	50665	5537.5													18.43	18.48
CA_25A-26A	25	20	26140	1860	1	0	8140	1940	26	15	8865	876.5													19.81	19.99
CA_29A-30A	30	10	27710	2310	1	0	9820	2355	29	10	9715	722.5													16.72	16.95
CA_29A-66A	66	20	132572	1770	1	0	67036	2170	29	10	9715	722.5													19.33	19.48
CA_14A-66A-66A	14	10	23330	793	1	0	5330	763	66	20	66786	2145	66	20	67036	2170									19.29	19.47
CA_2A-4A-5A	2	20	19100	1900	1	0	1100	1980	4	20	2175	2132.5	5	10	2525	881.5									18.81	18.95
CA_2A-4A-13A	2	20	19100	1900	1	0	1100	1980	4	20	2175	2132.5	13	10	5230	751									18.79	18.95
CA_2A-14A-30A	2	20	19100	1900	1	0	1100	1980	14	10	5330	763	30	10	9820	2355									18.84	18.95
CA_2A-2A-13A-66A	2	20	19100	1900	1	0	1100	1980	2	20	900	1960	13	10	5230	751	66	20	66786	2145					18.82	18.95
CA_2A-13A-66A-66A	2	20	19100	1900	1	0	1100	1980	13	10	5230	751	66	20	66786	2145	66	20	67036	2170					18.91	18.95
CA_2A-13A-66B	2	20	19100	1900	1	0	1100	1980	13	10	5230	751	66	15	66786	2145	66	5	66879	2154.3					18.83	18.95
CA_2A-13A-66C	2	20	19100	1900	1	0	1100	1980	13	10	5230	751	66	20	66786	2145	66	20	66984	2164.8					18.79	18.95
CA_2A-13A-46D	2	20	19100	1900	1	0	1100	1980	13	10	5230	751	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	18.92	18.95
CA_2A-46D-66A	2	20	19100	1900	1	0	1100	1980	66	20	66786	2145	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	18.83	18.95
CA_13A-46D-66A	13	10	23230	782	1	0	5230	751	66	20	66786	2145	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	19.42	19.46
CA_2A-12A-30A-66A	2	20	19100	1900	1	0	1100	1980	12	10	5095	737.5	30	10	9820	2355	66	20	66786	2145					18.78	18.95
CA_2A-5B-30A-66A	2	20	19100	1900	1	0	1100	1980	66	20	66786	2145	30	10	9820	2355	5	10	2450	874	5	10	2549	883.9	18.87	18.95

Summary for SAR Test Exclusion for LTE Downlink CA

Per power confirmation results in above, the uplink maximum output power with downlink CA active remains within the specified tune-up tolerance and not more than 0.25 dB higher than the maximum output power with downlink CA inactive. According to KDB 941225 D05A, the SAR test exclusion applies to LTE downlink CA operation.

4.7.2 SAR Results for Body Exposure Condition

Tablet PC Mode

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Battery	Power Reduction	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	WCDMA II	RMC12.2K	Rear Face	0	9538	1	w/	19.00	18.88	1.03	-0.19	0.943	0.97
	WCDMA II	RMC12.2K	Rear Face	0	9262	1	w/	19.00	18.94	1.01	0.07	0.899	0.91
01	WCDMA II	RMC12.2K	Rear Face	0	9400	1	w/	19.00	18.98	1.00	0.16	0.983	**0.98**
	WCDMA II	RMC12.2K	Rear Face	0	9400	1	w/	19.00	18.98	1.00	0.06	0.946	0.95
	WCDMA IV	RMC12.2K	Rear Face	16	1312	1	w/o	24.50	23.70	1.20	0.13	0.236	0.28
	WCDMA IV	RMC12.2K	Left Side	0	1312	1	w/o	24.50	23.70	1.20	-0.11	0.615	0.74
	WCDMA IV	RMC12.2K	Right Side	0	1312	1	w/o	24.50	23.70	1.20	0.11	0.566	0.68
	WCDMA IV	RMC12.2K	Top Side	0	1312	1	w/o	24.50	23.70	1.20	0.15	0.093	0.11
	WCDMA IV	RMC12.2K	Bottom Side	14	1312	1	w/o	24.50	23.70	1.20	-0.13	0.245	0.29
	WCDMA IV	RMC12.2K	Rear Face	0	1413	1	w/	18.50	18.47	1.01	0.02	1.01	1.02
	WCDMA IV	RMC12.2K	Bottom Side	0	1413	1	w/	18.50	18.47	1.01	0.09	0.347	0.35
02	WCDMA IV	RMC12.2K	Rear Face	0	1312	1	w/	18.50	18.42	1.02	-0.12	1.07	**1.09**
	WCDMA IV	RMC12.2K	Rear Face	0	1513	1	w/	18.50	18.45	1.01	0.12	0.891	0.90
	WCDMA IV	RMC12.2K	Rear Face	0	1312	2	w/	18.50	18.42	1.02	0.11	1.05	1.07
	WCDMA IV	RMC12.2K	Rear Face	0	1413	2	w/	18.50	18.47	1.01	0.12	0.971	0.98
	WCDMA IV	RMC12.2K	Rear Face	0	1513	2	w/	18.50	18.45	1.01	0.16	0.874	0.88
	WCDMA IV	RMC12.2K	Rear Face	0	1312	1	w/	18.50	18.42	1.02	-0.12	1.03	1.05
03	WCDMA V	RMC12.2K	Rear Face	0	4132	1	w/	19.50	19.34	1.04	0.16	0.589	**0.61**

Note. The SAR testing above was verified based on the worst case of original reoport.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Battery	Power Reduction	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
04	LTE 5	QPSK10M	Rear Face	0	20450	1	0	1	w/	19.50	19.37	1.03	-0.08	0.495	**0.51**
	LTE 7	QPSK20M	Rear Face	16	21100	1	0	1	w/o	24.50	24.03	1.11	0.09	0.404	0.45
	LTE 7	QPSK20M	Left Side	0	21100	1	0	1	w/o	24.50	24.03	1.11	-0.03	0.097	0.11
	LTE 7	QPSK20M	Right Side	0	21100	1	0	1	w/o	24.50	24.03	1.11	-0.02	0.369	0.41
	LTE 7	QPSK20M	Top Side	0	21100	1	0	1	w/o	24.50	24.03	1.11	0.11	0.203	0.23
	LTE 7	QPSK20M	Bottom Side	14	21100	1	0	1	w/o	24.50	24.03	1.11	-0.07	0.39	0.43
	LTE 7	QPSK20M	Rear Face	16	21100	50	0	1	w/o	23.50	22.64	1.22	-0.15	0.259	0.32
	LTE 7	QPSK20M	Left Side	0	21100	50	0	1	w/o	23.50	22.64	1.22	-0.11	0.062	0.08
	LTE 7	QPSK20M	Right Side	0	21100	50	0	1	w/o	23.50	22.64	1.22	-0.09	0.254	0.31
	LTE 7	QPSK20M	Top Side	0	21100	50	0	1	w/o	23.50	22.64	1.22	0.16	0.127	0.15
	LTE 7	QPSK20M	Bottom Side	14	21100	50	0	1	w/o	23.50	22.64	1.22	0.16	0.249	0.30
05	LTE 7	QPSK20M	Rear Face	0	21100	1	0	1	w/	14.00	13.88	1.03	-0.09	0.947	**0.98**
	LTE 7	QPSK20M	Bottom Side	0	21100	1	0	1	w/	14.00	13.88	1.03	-0.12	0.623	0.64
	LTE 7	QPSK20M	Rear Face	0	21100	50	0	1	w/	14.00	13.78	1.05	0.04	0.878	0.92
	LTE 7	QPSK20M	Bottom Side	0	21100	50	0	1	w/	14.00	13.78	1.05	-0.06	0.584	0.61
	LTE 7	QPSK20M	Rear Face	0	20850	1	0	1	w/	14.00	13.66	1.08	-0.15	0.818	0.88
	LTE 7	QPSK20M	Rear Face	0	21350	1	0	1	w/	14.00	13.85	1.04	-0.13	0.895	0.93
	LTE 7	QPSK20M	Rear Face	0	20850	50	0	1	w/	14.00	13.56	1.11	0.12	0.792	0.88
	LTE 7	QPSK20M	Rear Face	0	21350	50	0	1	w/	14.00	13.75	1.06	0.07	0.861	0.91
	LTE 7	QPSK20M	Rear Face	0	21100	100	0	1	w/	14.00	13.76	1.06	-0.05	0.878	0.93
	LTE 7	QPSK20M	Rear Face	0	21100	1	0	2	w/	14.00	13.88	1.03	-0.08	0.87	0.90
	LTE 7	QPSK20M	Rear Face	0	20850	1	0	2	w/	14.00	13.66	1.08	-0.17	0.779	0.84
	LTE 7	QPSK20M	Rear Face	0	21350	1	0	2	w/	14.00	13.85	1.04	0.02	0.861	0.90
	LTE 7	QPSK20M	Rear Face	0	21100	1	0	1	w/	14.00	13.88	1.03	0.12	0.912	0.94

Note. The SAR testing above was verified based on the worst case of original reoport.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Battery	Power Reduction	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 12	QPSK10M	Rear Face	16	23095	1	0	1	w/o	24.50	24.14	1.09	0.05	0.054	0.06
	LTE 12	QPSK10M	Left Side	0	23095	1	0	1	w/o	24.50	24.14	1.09	0	<0.001	0.00
	LTE 12	QPSK10M	Right Side	0	23095	1	0	1	w/o	24.50	24.14	1.09	0	<0.001	0.00
	LTE 12	QPSK10M	Top Side	0	23095	1	0	1	w/o	24.50	24.14	1.09	0	<0.001	0.00
	LTE 12	QPSK10M	Bottom Side	14	23095	1	0	1	w/o	24.50	24.14	1.09	-0.01	0.099	0.11
	LTE 12	QPSK10M	Rear Face	16	23095	25	0	1	w/o	23.50	23.21	1.07	0.15	0.041	0.04
	LTE 12	QPSK10M	Left Side	0	23095	25	0	1	w/o	23.50	23.21	1.07	0.05	<0.001	0.00
	LTE 12	QPSK10M	Right Side	0	23095	25	0	1	w/o	23.50	23.21	1.07	0.17	<0.001	0.00
	LTE 12	QPSK10M	Top Side	0	23095	25	0	1	w/o	23.50	23.21	1.07	0.18	<0.001	0.00
	LTE 12	QPSK10M	Bottom Side	14	23095	25	0	1	w/o	23.50	23.21	1.07	0.19	0.052	0.06
	LTE 12	QPSK10M	Rear Face	0	23095	1	0	1	w/	21.00	20.89	1.03	-0.02	1.28	1.32
	LTE 12	QPSK10M	Bottom Side	0	23095	1	0	1	w/	21.00	20.89	1.03	-0.17	0.626	0.64
	LTE 12	QPSK10M	Rear Face	0	23095	25	0	1	w/	21.00	20.88	1.03	0.09	1.03	1.06
	LTE 12	QPSK10M	Bottom Side	0	23095	25	0	1	w/	21.00	20.88	1.03	0.12	0.647	0.67
	LTE 12	QPSK10M	Rear Face	0	23095	50	0	1	w/	21.00	20.84	1.04	-0.15	0.995	1.03
	LTE 12	QPSK10M	Rear Face	0	23060	1	0	1	w/	21.00	20.83	1.04	-0.14	1.25	1.30
06	LTE 12	QPSK10M	Rear Face	0	23130	1	0	1	w/	21.00	20.81	1.04	-0.15	1.36	**1.41**
	LTE 12	QPSK10M	Rear Face	0	23060	25	0	1	w/	21.00	20.86	1.03	0.04	1.04	1.07
	LTE 12	QPSK10M	Rear Face	0	23130	25	0	1	w/	21.00	20.80	1.05	-0.12	1.07	1.12
	LTE 12	QPSK10M	Rear Face	0	23130	1	0	2	w/	21.00	20.81	1.04	0.02	1.02	1.06
	LTE 12	QPSK10M	Rear Face	0	23060	1	0	2	w/	21.00	20.83	1.04	0.12	0.984	1.02
	LTE 12	QPSK10M	Rear Face	0	23095	1	0	2	w/	21.00	20.89	1.03	0.13	1	1.03
	LTE 12	QPSK10M	Rear Face	0	23130	1	0	1	w/	21.00	20.81	1.04	0.06	1.32	1.37
07	LTE 13	QPSK10M	Rear Face	0	23230	1	0	1	w/	19.50	19.46	1.01	-0.07	0.630	**0.64**
08	LTE 14	QPSK10M	Rear Face	0	23330	1	0	1	w/	19.50	19.47	1.01	-0.03	0.985	**0.99**
	LTE 14	QPSK10M	Rear Face	0	23330	1	0	1	w/	19.50	19.47	1.01	0.18	0.981	0.99
	LTE 17	QPSK10M	Rear Face	16	23790	1	0	1	w/o	24.50	24.27	1.05	0.01	0.093	0.10
	LTE 17	QPSK10M	Left Side	0	23790	1	0	1	w/o	24.50	24.27	1.05	0	<0.001	0.00
	LTE 17	QPSK10M	Right Side	0	23790	1	0	1	w/o	24.50	24.27	1.05	0	<0.001	0.00
	LTE 17	QPSK10M	Top Side	0	23790	1	0	1	w/o	24.50	24.27	1.05	0	<0.001	0.00
	LTE 17	QPSK10M	Bottom Side	14	23790	1	0	1	w/o	24.50	24.27	1.05	-0.04	0.105	0.11
	LTE 17	QPSK10M	Rear Face	16	23790	25	0	1	w/o	23.50	23.19	1.07	0.12	0.081	0.09
	LTE 17	QPSK10M	Left Side	0	23790	25	0	1	w/o	23.50	23.19	1.07	0	<0.001	0.00
	LTE 17	QPSK10M	Right Side	0	23790	25	0	1	w/o	23.50	23.19	1.07	0	<0.001	0.00
	LTE 17	QPSK10M	Top Side	0	23790	25	0	1	w/o	23.50	23.19	1.07	0	<0.001	0.00
	LTE 17	QPSK10M	Bottom Side	14	23790	25	0	1	w/o	23.50	23.19	1.07	0.03	0.085	0.09
	LTE 17	QPSK10M	Rear Face	0	23790	1	0	1	w/	21.00	20.99	1.00	-0.09	1.27	1.27
	LTE 17	QPSK10M	Bottom Side	0	23790	1	0	1	w/	21.00	20.99	1.00	0.17	0.717	0.72
	LTE 17	QPSK10M	Rear Face	0	23790	25	25	1	w/	21.00	20.94	1.01	-0.05	0.995	1.00
	LTE 17	QPSK10M	Bottom Side	0	23790	25	25	1	w/	21.00	20.94	1.01	0.03	0.726	0.73
	LTE 17	QPSK10M	Rear Face	0	23790	50	0	1	w/	21.00	20.92	1.02	-0.17	1.03	1.05
09	LTE 17	QPSK10M	Rear Face	0	23780	1	0	1	w/	21.00	20.92	1.02	-0.05	1.32	**1.35**
	LTE 17	QPSK10M	Rear Face	0	23800	1	0	1	w/	21.00	20.93	1.02	-0.05	1.29	1.32
	LTE 17	QPSK10M	Rear Face	0	23780	25	25	1	w/	21.00	20.87	1.03	0.08	1.02	1.05
	LTE 17	QPSK10M	Rear Face	0	23800	25	25	1	w/	21.00	20.88	1.03	-0.07	1.01	1.04
	LTE 17	QPSK10M	Rear Face	0	23780	1	0	2	w/	21.00	20.92	1.02	-0.08	0.966	0.99
	LTE 17	QPSK10M	Rear Face	0	23790	1	0	2	w/	21.00	20.99	1.00	0.03	1.02	1.02
	LTE 17	QPSK10M	Rear Face	0	23800	1	0	2	w/	21.00	20.93	1.02	0.04	0.995	1.01
	LTE 17	QPSK10M	Rear Face	0	23780	1	0	1	w/	21.00	20.92	1.02	-0.15	1.28	1.31

Note.

1. The SAR testing above was verified based on the worst case of original reoport.

2. Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Battery	Power Reduction	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 25	QPSK20M	Rear Face	16	26140	1	0	1	w/o	24.50	23.72	1.20	0.12	0.159	0.19
	LTE 25	QPSK20M	Left Side	0	26140	1	0	1	w/o	24.50	23.72	1.20	0.06	0.375	0.45
	LTE 25	QPSK20M	Right Side	0	26140	1	0	1	w/o	24.50	23.72	1.20	-0.03	0.764	0.92
	LTE 25	QPSK20M	Top Side	0	26140	1	0	1	w/o	24.50	23.72	1.20	0.02	0.204	0.24
	LTE 25	QPSK20M	Bottom Side	14	26140	1	0	1	w/o	24.50	23.72	1.20	0.15	0.105	0.13
	LTE 25	QPSK20M	Rear Face	16	26140	50	0	1	w/o	23.50	22.71	1.20	0.05	0.125	0.15
	LTE 25	QPSK20M	Left Side	0	26140	50	0	1	w/o	23.50	22.71	1.20	-0.12	0.284	0.34
	LTE 25	QPSK20M	Right Side	0	26140	50	0	1	w/o	23.50	22.71	1.20	-0.08	0.609	0.73
	LTE 25	QPSK20M	Top Side	0	26140	50	0	1	w/o	23.50	22.71	1.20	-0.06	0.132	0.16
	LTE 25	QPSK20M	Bottom Side	14	26140	50	0	1	w/o	23.50	22.71	1.20	-0.15	0.047	0.06
	LTE 25	QPSK20M	Right Side	0	26140	100	0	1	w/o	23.50	22.61	1.23	-0.14	0.702	0.86
	LTE 25	QPSK20M	Rear Face	0	26140	1	0	1	w/	20.00	19.99	1.00	0.08	1.01	1.01
	LTE 25	QPSK20M	Bottom Side	0	26140	1	0	1	w/	20.00	19.99	1.00	0.11	0.264	0.26
10	LTE 25	QPSK20M	Rear Face	0	26140	50	0	1	w/	20.00	19.98	1.00	-0.08	1.12	**1.12**
	LTE 25	QPSK20M	Bottom Side	0	26140	50	0	1	w/	20.00	19.98	1.00	0.02	0.223	0.22
	LTE 25	QPSK20M	Rear Face	0	26140	100	0	1	w/	20.00	19.93	1.02	0.06	1.04	1.06
	LTE 25	QPSK20M	Right Side	0	26365	1	0	1	w/o	24.50	23.64	1.22	-0.18	0.742	0.91
	LTE 25	QPSK20M	Right Side	0	26590	1	0	1	w/o	24.50	23.62	1.22	-0.06	0.724	0.88
	LTE 25	QPSK20M	Rear Face	0	26365	1	0	1	w/	20.00	19.93	1.02	0.17	1.09	1.11
	LTE 25	QPSK20M	Rear Face	0	26590	1	0	1	w/	20.00	19.91	1.02	-0.02	1.07	1.09
	LTE 25	QPSK20M	Rear Face	0	26365	50	0	1	w/	20.00	19.92	1.02	-0.08	0.974	0.99
	LTE 25	QPSK20M	Rear Face	0	26590	50	0	1	w/	20.00	19.86	1.03	0.01	1.05	1.08
	LTE 25	QPSK20M	Rear Face	0	26140	50	0	2	w/	20.00	19.98	1.00	0.08	1.06	1.06
	LTE 25	QPSK20M	Rear Face	0	26365	50	0	2	w/	20.00	19.92	1.02	0.17	0.975	0.99
	LTE 25	QPSK20M	Rear Face	0	26590	50	0	2	w/	20.00	19.86	1.03	0.16	1.09	1.12
	LTE 25	QPSK20M	Rear Face	0	26140	50	0	1	w/	20.00	19.98	1.00	-0.03	1.07	1.07
11	LTE 26	QPSK15M	Rear Face	0	26865	1	0	1	w/	19.50	19.41	1.02	-0.08	0.518	**0.53**
	LTE 30	QPSK10M	Rear Face	16	27710	1	0	1	w/o	23.00	22.46	1.13	0.05	0.104	0.12
	LTE 30	QPSK10M	Left Side	0	27710	1	0	1	w/o	23.00	22.46	1.13	-0.12	0.398	0.45
	LTE 30	QPSK10M	Right Side	0	27710	1	0	1	w/o	23.00	22.46	1.13	-0.08	0.286	0.32
	LTE 30	QPSK10M	Top Side	0	27710	1	0	1	w/o	23.00	22.46	1.13	-0.06	0.153	0.17
	LTE 30	QPSK10M	Bottom Side	14	27710	1	0	1	w/o	23.00	22.46	1.13	-0.15	0.152	0.17
	LTE 30	QPSK10M	Rear Face	16	27710	25	0	1	w/o	22.00	21.38	1.15	-0.02	0.077	0.09
	LTE 30	QPSK10M	Left Side	0	27710	25	0	1	w/o	22.00	21.38	1.15	-0.14	0.297	0.34
	LTE 30	QPSK10M	Right Side	0	27710	25	0	1	w/o	22.00	21.38	1.15	0.01	0.235	0.27
	LTE 30	QPSK10M	Top Side	0	27710	25	0	1	w/o	22.00	21.38	1.15	0.06	0.133	0.15
	LTE 30	QPSK10M	Bottom Side	14	27710	25	0	1	w/o	22.00	21.38	1.15	-0.19	0.113	0.13
12	LTE 30	QPSK10M	Rear Face	0	27710	1	0	1	w/	14.00	13.96	1.01	-0.12	0.948	**0.96**
	LTE 30	QPSK10M	Bottom Side	0	27710	1	0	1	w/	14.00	13.96	1.01	0.02	0.476	0.48
	LTE 30	QPSK10M	Rear Face	0	27710	25	12	1	w/	14.00	13.95	1.01	0.17	0.918	0.93
	LTE 30	QPSK10M	Bottom Side	0	27710	25	12	1	w/	14.00	13.95	1.01	-0.13	0.462	0.47
	LTE 30	QPSK10M	Rear Face	0	27710	50	0	1	w/	14.00	13.75	1.06	-0.06	0.892	0.95
	LTE 30	QPSK10M	Rear Face	0	27710	1	0	2	w/	14.00	13.96	1.01	0.15	0.934	0.94
	LTE 30	QPSK10M	Rear Face	0	27710	1	0	1	w/	14.00	13.96	1.01	0.05	0.916	0.93
	LTE 38	QPSK20M	Rear Face	16	38000	1	0	1	w/o	24.50	23.84	1.16	0.19	0.172	0.20
	LTE 38	QPSK20M	Left Side	0	38000	1	0	1	w/o	24.50	23.84	1.16	0.01	0.081	0.09
	LTE 38	QPSK20M	Right Side	0	38000	1	0	1	w/o	24.50	23.84	1.16	-0.17	0.225	0.26
	LTE 38	QPSK20M	Top Side	0	38000	1	0	1	w/o	24.50	23.84	1.16	-0.02	0.087	0.10
	LTE 38	QPSK20M	Bottom Side	14	38000	1	0	1	w/o	24.50	23.84	1.16	0.18	0.2	0.23
	LTE 38	QPSK20M	Rear Face	16	38000	50	0	1	w/o	23.50	22.73	1.19	0.18	0.14	0.17
	LTE 38	QPSK20M	Left Side	0	38000	50	0	1	w/o	23.50	22.73	1.19	0.01	0.066	0.08
	LTE 38	QPSK20M	Right Side	0	38000	50	0	1	w/o	23.50	22.73	1.19	-0.16	0.176	0.21
	LTE 38	QPSK20M	Top Side	0	38000	50	0	1	w/o	23.50	22.73	1.19	-0.18	0.071	0.08
	LTE 38	QPSK20M	Bottom Side	14	38000	50	0	1	w/o	23.50	22.73	1.19	-0.09	0.164	0.20
	LTE 38	QPSK20M	Rear Face	0	38000	1	0	1	w/	15.50	15.44	1.01	0.12	0.753	0.76
	LTE 38	QPSK20M	Bottom Side	0	38000	1	0	1	w/	15.50	15.44	1.01	-0.17	0.542	0.55
	LTE 38	QPSK20M	Rear Face	0	38000	50	0	1	w/	15.50	15.19	1.07	0.18	0.664	0.71
	LTE 38	QPSK20M	Bottom Side	0	38000	50	0	1	w/	15.50	15.19	1.07	-0.07	0.538	0.58
	LTE 38	QPSK20M	Rear Face	0	38000	100	0	1	w/	15.50	15.14	1.09	0.18	0.634	0.69
	LTE 38	QPSK20M	Rear Face	0	37850	1	0	1	w/	15.50	15.23	1.06	-0.05	0.705	0.75
13	LTE 38	QPSK20M	Rear Face	0	38150	1	0	1	w/	15.50	15.36	1.03	-0.19	0.775	**0.80**
	LTE 38	QPSK20M	Rear Face	0	38150	1	0	2	w/	15.50	15.36	1.03	0.06	0.715	0.74

Note. The SAR testing above was verified based on the worst case of original reoport.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Battery	Power Reduction	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 41	QPSK20M	Rear Face	16	40620	1	0	1	w/o	24.50	23.99	1.12	-0.10	0.191	0.21
	LTE 41	QPSK20M	Left Side	0	40620	1	0	1	w/o	24.50	23.99	1.12	-0.03	0.089	0.10
	LTE 41	QPSK20M	Right Side	0	40620	1	0	1	w/o	24.50	23.99	1.12	-0.07	0.233	0.26
	LTE 41	QPSK20M	Top Side	0	40620	1	0	1	w/o	24.50	23.99	1.12	-0.12	0.091	0.10
	LTE 41	QPSK20M	Bottom Side	14	40620	1	0	1	w/o	24.50	23.99	1.12	-0.18	0.23	0.26
	LTE 41	QPSK20M	Rear Face	16	40620	50	0	1	w/o	23.50	22.79	1.18	-0.06	0.15	0.18
	LTE 41	QPSK20M	Left Side	0	40620	50	0	1	w/o	23.50	22.79	1.18	0.04	0.071	0.08
	LTE 41	QPSK20M	Right Side	0	40620	50	0	1	w/o	23.50	22.79	1.18	-0.03	0.164	0.19
	LTE 41	QPSK20M	Top Side	0	40620	50	0	1	w/o	23.50	22.79	1.18	0.06	0.071	0.08
	LTE 41	QPSK20M	Bottom Side	14	40620	50	0	1	w/o	23.50	22.79	1.18	0.05	0.184	0.22
	LTE 41	QPSK20M	Rear Face	0	40620	1	0	1	w/	15.00	14.99	1.00	-0.08	0.670	0.67
	LTE 41	QPSK20M	Bottom Side	0	40620	1	0	1	w/	15.00	14.99	1.00	0.17	0.495	0.50
	LTE 41	QPSK20M	Rear Face	0	40620	50	0	1	w/	15.00	14.78	1.05	-0.1	0.569	0.60
	LTE 41	QPSK20M	Bottom Side	0	40620	50	0	1	w/	15.00	14.78	1.05	-0.18	0.480	0.50
	LTE 41	QPSK20M	Rear Face	0	39750	1	0	1	w/	15.00	14.74	1.06	-0.08	0.627	0.66
14	LTE 41	QPSK20M	Rear Face	0	40185	1	0	1	w/	15.00	14.98	1.00	-0.15	0.685	**0.69**
	LTE 41	QPSK20M	Rear Face	0	41055	1	0	1	w/	15.00	14.65	1.08	0.14	0.578	0.62
	LTE 41	QPSK20M	Rear Face	0	41490	1	0	1	w/	15.00	14.96	1.01	-0.05	0.53	0.54
	LTE 41	QPSK20M	Rear Face	0	40185	1	0	2	w/	15.00	14.98	1.00	-0.04	0.598	0.60
	LTE 66	QPSK20M	Rear Face	16	132322	1	0	1	w/o	24.50	23.75	1.19	-0.05	0.214	0.25
	LTE 66	QPSK20M	Left Side	0	132322	1	0	1	w/o	24.50	23.75	1.19	0.02	0.595	0.71
	LTE 66	QPSK20M	Right Side	0	132322	1	0	1	w/o	24.50	23.75	1.19	0.06	0.407	0.48
	LTE 66	QPSK20M	Top Side	0	132322	1	0	1	w/o	24.50	23.75	1.19	-0.18	0.104	0.12
	LTE 66	QPSK20M	Bottom Side	14	132322	1	0	1	w/o	24.50	23.75	1.19	-0.04	0.086	0.10
	LTE 66	QPSK20M	Rear Face	16	132322	50	0	1	w/o	23.50	22.67	1.21	0.07	0.158	0.19
	LTE 66	QPSK20M	Left Side	0	132322	50	0	1	w/o	23.50	22.67	1.21	0.14	0.461	0.56
	LTE 66	QPSK20M	Right Side	0	132322	50	0	1	w/o	23.50	22.67	1.21	-0.05	0.319	0.39
	LTE 66	QPSK20M	Top Side	0	132322	50	0	1	w/o	23.50	22.67	1.21	-0.12	0.071	0.09
	LTE 66	QPSK20M	Bottom Side	14	132322	50	0	1	w/o	23.50	22.67	1.21	0.09	0.064	0.08
	LTE 66	QPSK20M	Rear Face	0	132572	1	0	1	w/	19.50	19.48	1.00	0.13	0.954	0.95
	LTE 66	QPSK20M	Bottom Side	0	132572	1	0	1	w/	19.50	19.48	1.00	0.05	0.334	0.33
	LTE 66	QPSK20M	Rear Face	0	132572	50	0	1	w/	19.50	19.41	1.02	-0.08	0.849	0.87
	LTE 66	QPSK20M	Bottom Side	0	132572	50	0	1	w/	19.50	19.41	1.02	0.06	0.307	0.31
	LTE 66	QPSK20M	Rear Face	0	132572	100	0	1	w/	19.50	19.37	1.03	-0.08	0.866	0.89
15	LTE 66	QPSK20M	Rear Face	0	132072	1	0	1	w/	19.50	19.29	1.05	-0.14	1.19	**1.25**
	LTE 66	QPSK20M	Rear Face	0	132322	1	0	1	w/	19.50	19.45	1.01	0.13	0.841	0.85
	LTE 66	QPSK20M	Rear Face	0	132072	50	50	1	w/	19.50	19.37	1.03	-0.02	1.07	1.10
	LTE 66	QPSK20M	Rear Face	0	132322	50	0	1	w/	19.50	19.28	1.05	0.06	0.816	0.86
	LTE 66	QPSK20M	Rear Face	0	132072	1	0	2	w/	19.50	19.29	1.05	0.14	1.11	1.17
	LTE 66	QPSK20M	Rear Face	0	132322	1	0	2	w/	19.50	19.45	1.01	0.18	0.918	0.93
	LTE 66	QPSK20M	Rear Face	0	132572	1	0	2	w/	19.50	19.48	1.00	0.19	0.835	0.84
	LTE 66	QPSK20M	Rear Face	0	132072	1	0	1	w/	19.50	19.29	1.05	0.03	1.13	1.19

Note. The SAR testing above was verified based on the worst case of original reoport.

Laptop PC Mode

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Battery	Power Reduction	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
16	WCDMA II	RMC12.2K	Bottom	0	9400	1	w/	19.00	18.98	1.00	0.01	0.979	**0.98**
	WCDMA II	RMC12.2K	Bottom	0	9262	1	w/	19.00	18.94	1.01	-0.05	0.945	0.95
	WCDMA II	RMC12.2K	Bottom	0	9538	1	w/	19.00	18.88	1.03	-0.12	0.911	0.94
	WCDMA II	RMC12.2K	Bottom	0	9400	1	w/	19.00	18.98	1.00	0.01	0.951	0.95
	WCDMA IV	RMC12.2K	Bottom	0	1312	1	w/	18.50	18.42	1.02	-0.08	1.01	1.03
17	WCDMA IV	RMC12.2K	Bottom	0	1413	1	w/	18.50	18.47	1.01	0	1.04	**1.05**
	WCDMA IV	RMC12.2K	Bottom	0	1513	1	w/	18.50	18.45	1.01	0.16	0.962	0.97
	WCDMA IV	RMC12.2K	Bottom	0	1413	1	w/	18.50	18.47	1.01	0.03	1.01	1.02
18	WCDMA V	RMC12.2K	Bottom	0	4132	1	w/	19.50	19.34	1.04	-0.07	0.546	**0.57**
	WCDMA V	RMC12.2K	Bottom	0	4182	1	w/	19.50	19.45	1.01	-0.06	0.536	0.54
	WCDMA V	RMC12.2K	Bottom	0	4233	1	w/	19.50	19.33	1.04	0.03	0.509	0.53
	WCDMA V	RMC12.2K	Bottom	0	4182	2	w/	19.50	19.45	1.01	-0.10	0.544	0.55

Note. The SAR testing above was verified based on the worst case of original reoport.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Battery	Power Reduction	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
19	LTE 5	QPSK10M	Bottom	0	20450	1	0	1	w/	19.50	19.37	1.03	-0.02	0.418	**0.43**
	LTE 7	QPSK20M	Bottom	0	21100	1	0	1	w/	14.00	13.88	1.03	-0.18	0.198	0.20
	LTE 7	QPSK20M	Bottom	0	21100	50	0	1	w/	14.00	13.78	1.05	0.03	0.182	0.19
20	LTE 7	QPSK20M	Bottom	0	20850	1	0	1	w/	14.00	13.66	1.08	-0.05	0.200	**0.22**
	LTE 7	QPSK20M	Bottom	0	21350	1	0	1	w/	14.00	13.85	1.04	-0.19	0.18	0.19
	LTE 7	QPSK20M	Bottom	0	20850	1	0	2	w/	14.00	13.66	1.08	0.15	0.189	0.20
21	LTE 12	QPSK10M	Bottom	0	23095	1	0	1	w/	21.00	20.89	1.03	-0.05	0.530	**0.55**
	LTE 12	QPSK10M	Bottom	0	23095	25	0	1	w/	21.00	20.88	1.03	-0.03	0.491	0.51
	LTE 12	QPSK10M	Bottom	0	23060	1	0	1	w/	21.00	20.83	1.04	-0.07	0.482	0.50
	LTE 12	QPSK10M	Bottom	0	23130	1	0	1	w/	21.00	20.81	1.04	-0.02	0.499	0.52
	LTE 12	QPSK10M	Bottom	0	23095	1	0	2	w/	21.00	20.89	1.03	0.14	0.513	0.53
22	LTE 13	QPSK10M	Bottom	0	23230	1	0	1	w/	19.50	19.46	1.01	0.03	0.459	**0.46**
22	LTE 14	QPSK10M	Bottom	0	23330	1	0	1	w/	19.50	19.47	1.01	-0.04	0.453	**0.46**
24	LTE 17	QPSK10M	Bottom	0	23790	1	0	1	w/	21.00	20.99	1.00	-0.01	0.501	**0.50**
	LTE 17	QPSK10M	Bottom	0	23790	25	25	1	w/	21.00	20.94	1.01	0.02	0.472	0.48
	LTE 17	QPSK10M	Bottom	0	23780	1	0	1	w/	21.00	20.92	1.02	0.06	0.479	0.49
	LTE 17	QPSK10M	Bottom	0	23800	1	0	1	w/	21.00	20.93	1.02	-0.08	0.477	0.49
	LTE 17	QPSK10M	Bottom	0	23790	1	0	2	w/	21.00	20.99	1.00	0.05	0.477	0.48
	LTE 25	QPSK20M	Bottom	0	26590	1	0	1	w/	20.00	19.91	1.02	-0.08	1.04	1.06
25	LTE 25	QPSK20M	Bottom	0	26140	1	0	1	w/	20.00	19.99	1.00	-0.01	1.07	**1.07**
	LTE 25	QPSK20M	Bottom	0	26365	1	0	1	w/	20.00	19.93	1.02	0.07	1.03	1.05
	LTE 25	QPSK20M	Bottom	0	26140	1	0	1	w/	20.00	19.99	1.00	-0.05	1.02	1.02
26	LTE 26	QPSK15M	Bottom	0	26865	1	0	1	w/	19.50	19.41	1.02	-0.05	0.438	**0.45**
27	LTE 30	QPSK10M	Bottom	0	27710	1	0	1	w/	14.00	13.96	1.01	-0.09	0.222	**0.22**
	LTE 30	QPSK10M	Bottom	0	27710	25	12	1	w/	14.00	13.95	1.01	0.03	0.206	0.21
	LTE 30	QPSK10M	Bottom	0	27710	1	0	2	w/	14.00	13.96	1.01	-0.01	0.205	0.21
	LTE 38	QPSK20M	Bottom	0	38000	1	0	1	w/	15.50	15.44	1.01	0.09	0.159	0.16
	LTE 38	QPSK20M	Bottom	0	38000	50	0	1	w/	15.50	15.19	1.07	0.13	0.150	0.16
	LTE 38	QPSK20M	Bottom	0	37850	1	0	1	w/	15.50	15.23	1.06	0.18	0.147	0.16
28	LTE 38	QPSK20M	Bottom	0	38150	1	0	1	w/	15.50	15.36	1.03	-0.09	0.172	**0.18**
	LTE 38	QPSK20M	Bottom	0	38150	1	0	2	w/	15.50	15.36	1.03	0.05	0.161	0.17
29	LTE 41	QPSK20M	Bottom	0	40620	1	0	1	w/	15.00	14.99	1.00	0	0.162	**0.16**
	LTE 41	QPSK20M	Bottom	0	40620	50	0	1	w/	15.00	14.78	1.05	0.07	0.139	0.15
	LTE 41	QPSK20M	Bottom	0	39750	1	0	1	w/	15.00	14.74	1.06	0.00	0.145	0.15
	LTE 41	QPSK20M	Bottom	0	40185	1	0	1	w/	15.00	14.98	1.00	-0.15	0.142	0.14
	LTE 41	QPSK20M	Bottom	0	41055	1	0	1	w/	15.00	14.65	1.08	-0.07	0.138	0.15
	LTE 41	QPSK20M	Bottom	0	41490	1	0	1	w/	15.00	14.96	1.01	-0.03	0.149	0.15
	LTE 41	QPSK20M	Bottom	0	40620	1	0	2	w/	15.00	14.99	1.00	0.06	0.152	0.15

Note. The SAR testing above was verified based on the worst case of original reoport.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Battery	Power Reduction	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 66	QPSK20M	Bottom	0	132572	1	0	1	w/	19.50	19.48	1.00	0.02	1.11	1.11
	LTE 66	QPSK20M	Bottom	0	132572	50	0	1	w/	19.50	19.41	1.02	0.16	1.07	1.09
	LTE 66	QPSK20M	Bottom	0	132572	100	0	1	w/	19.50	19.37	1.03	0.12	1.06	1.09
30	LTE 66	QPSK20M	Bottom	0	132072	1	0	1	w/	19.50	19.29	1.05	-0.13	1.17	**1.23**
	LTE 66	QPSK20M	Bottom	0	132322	1	0	1	w/	19.50	19.45	1.01	-0.05	1.09	1.10
	LTE 66	QPSK20M	Bottom	0	132072	50	0	1	w/	19.50	19.33	1.04	-0.17	1.10	1.14
	LTE 66	QPSK20M	Bottom	0	132322	50	0	1	w/	19.50	19.28	1.05	-0.01	1.08	1.13
	LTE 66	QPSK20M	Bottom	0	132072	1	0	2	w/	19.50	19.29	1.05	0.04	1.0	1.05
	LTE 66	QPSK20M	Bottom	0	132322	1	0	2	w/	19.50	19.45	1.01	-0.05	0.974	0.98
	LTE 66	QPSK20M	Bottom	0	132572	1	0	2	w/	19.50	19.48	1.00	-0.12	0.963	0.96
	LTE 66	QPSK20M	Bottom	0	132072	1	0	1	w/	19.50	19.29	1.05	0.05	1.12	1.18

Note. The SAR testing above was verified based on the worst case of original reoport.

4.7.3 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are ≤ 1.45 W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is ≤ 1.10, the highest SAR configuration for either head or body tissue-equivalent medium maybe used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is < 0.80 W/kg, repeated measurement is not required.
2. When the highest measured SAR is >= 0.80 W/kg, repeat that measurement once.
3. 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, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20, and the original, first or second repeated measurement is >= 1.5 W/kg, perform a third repeated measurement.

Band	Mode	Test Position	Ch.	Original Measured SAR-1g (W/kg)	1st Repeated SAR-1g (W/kg)	L/S Ratio	2nd Repeated SAR-1g (W/kg)	L/S Ratio	3rd Repeated SAR-1g (W/kg)	L/S Ratio
WCDMA II	RMC12.2K	Rear Face	9400	0.983	0.946	1.04	N/A	N/A	N/A	N/A
WCDMA IV	RMC12.2K	Rear Face	1312	1.07	1.03	1.04	N/A	N/A	N/A	N/A
LTE 7	QPSK20M	Rear Face	21100	0.947	0.912	1.04	N/A	N/A	N/A	N/A
LTE 12	QPSK10M	Rear Face	23130	1.36	1.32	1.03	N/A	N/A	N/A	N/A
LTE 14	QPSK10M	Rear Face	23330	0.985	0.981	1.00	N/A	N/A	N/A	N/A
LTE 17	QPSK10M	Rear Face	23780	1.32	1.28	1.03	N/A	N/A	N/A	N/A
LTE 25	QPSK20M	Rear Face	26140	1.12	1.07	1.05	N/A	N/A	N/A	N/A
LTE 30	QPSK10M	Rear Face	27710	0.948	0.916	1.03	N/A	N/A	N/A	N/A
LTE 66	QPSK20M	Rear Face	132072	1.19	1.13	1.05	N/A	N/A	N/A	N/A
WCDMA II	RMC12.2K	Bottom	9400	0.979	0.951	1.03	N/A	N/A	N/A	N/A
WCDMA IV	RMC12.2K	Bottom	1413	1.04	1.01	1.03	N/A	N/A	N/A	N/A
LTE 25	QPSK20M	Bottom	26140	1.07	1.02	1.05	N/A	N/A	N/A	N/A
LTE 66	QPSK20M	Bottom	132072	1.17	1.12	1.04	N/A	N/A	N/A	N/A

4.7.4 Simultaneous Multi-band Transmission Evaluation

<Possibilities of Simultaneous Transmission>

The simultaneous transmission possibilities for this device are listed as below.

<T77W968 + AX201NGW>

Simultaneous TX Combination	Capable Transmit Configurations	Body Exposure Condition
1	WWAN + WLAN 2.4G	Yes
2	WWAN + WLAN 5G	Yes
3	WWAN + BT	Yes
4	WWAN + WLAN 2.4G Main + WLAN 2.4G Aux.	Yes
5	WWAN + WLAN 5G Main + WLAN 5G Aux.	Yes
6	WWAN + WLAN 2.4G Main + BT Aux.	Yes
7	WWAN + WLAN 5G Main + BT Aux.	Yes
8	WWAN + WLAN 5G Main + WLAN 5G Aux. + BT Aux.	Yes

Note:

1. The WLAN 2.4G and WLAN 5G cannot transmit simultaneously.
2. Condition 1 is covered by condition 4.
3. Condition 2, 3, 5, and 7 are covered by condition 8.

<SAR Summation Analysis>

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR_{1g} of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit(SAR_{1g} 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR_{1g} is greater than the SAR limit (SAR_{1g} 1.6 W/kg), SAR test exclusion is determined by the SPLSR.

Tablet PC Mode

Band	Position	1g SAR W/kg					Summimg result 1g SAR W/kg		
		1	2	3	4	5			
		Max WWAN	WLAN 2.4GHz Ant 0	WLAN 2.4GHz Ant 0+1	WLAN 5GHz Ant 0+1	BT Ant 1	1+3	1+2+5	1+4+5
WCDMA II	Rear Face	0.98	1.20	1.20+0.72= 1.92	0.91+0.85= 1.76	0.16	**2.90**	**2.34**	**2.90**
	Left Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Right Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top Side	0.00	0.73	1.23	1.24+1.08= 2.32	0.10	1.23	0.83	**2.42**
	Bottom Side	0.35	0.00	0.00	0.00	0.00	0.35	0.35	0.35
WCDMA IV	Rear Face	1.09	1.20	1.92	1.76	0.16	**3.01**	**2.45**	**3.01**
	Left Side	0.74	0.00	0.00	0.00	0.00	0.74	0.74	0.74
	Right Side	0.68	0.00	0.00	0.00	0.00	0.68	0.68	0.68
	Top Side	0.11	0.73	1.23	2.32	0.10	1.34	0.94	**2.53**
	Bottom Side	0.35	0.00	0.00	0.00	0.00	0.35	0.35	0.35
WCDMA V	Rear Face	0.61	1.20	1.92	1.76	0.16	**2.53**	**1.97**	**2.53**
	Left Side	0.06	0.00	0.00	0.00	0.00	0.06	0.06	0.06
	Right Side	0.13	0.00	0.00	0.00	0.00	0.13	0.13	0.13
	Top Side	0.00	0.73	1.23	2.32	0.10	1.23	0.83	**2.42**
	Bottom Side	0.36	0.00	0.00	0.00	0.00	0.36	0.36	0.36
LTE 5	Rear Face	0.51	1.20	1.92	1.76	0.16	**2.43**	**1.87**	**2.43**
	Left Side	0.03	0.00	0.00	0.00	0.00	0.03	0.03	0.03
	Right Side	0.12	0.00	0.00	0.00	0.00	0.12	0.12	0.12
	Top Side	0.00	0.73	1.23	2.32	0.10	1.23	0.83	**2.42**
	Bottom Side	0.62	0.00	0.00	0.00	0.00	0.62	0.62	0.62
LTE 7	Rear Face	0.98	1.20	1.92	1.76	0.16	**2.90**	**2.34**	**2.90**
	Left Side	0.11	0.00	0.00	0.00	0.00	0.11	0.11	0.11
	Right Side	0.41	0.00	0.00	0.00	0.00	0.41	0.41	0.41
	Top Side	0.23	0.73	1.23	2.32	0.10	1.46	1.06	**2.65**
	Bottom Side	0.64	0.00	0.00	0.00	0.00	0.64	0.64	0.64

Band	Position	1g SAR W/kg					Summimg result 1g SAR W/kg		
		1	2	3	4	5			
		Max WWAN	WLAN 2.4GHz Ant 0	WLAN 2.4GHz Ant 0+1	WLAN 5GHz Ant 0+1	BT Ant 1	1+3	1+2+5	1+4+5
LTE 12	Rear Face	1.41	1.20	1.92	1.76	0.16	**3.33**	**2.77**	**3.33**
	Left Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Right Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top Side	0.00	0.73	1.23	2.32	0.10	1.23	0.83	**2.42**
	Bottom Side	0.67	0.00	0.00	0.00	0.00	0.67	0.67	0.67
LTE 13	Rear Face	0.64	1.20	1.92	1.76	0.16	**2.56**	**2.00**	**2.56**
	Left Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Right Side	0.05	0.00	0.00	0.00	0.00	0.05	0.05	0.05
	Top Side	0.00	0.73	1.23	2.32	0.10	1.23	0.83	**2.42**
	Bottom Side	0.74	0.00	0.00	0.00	0.00	0.74	0.74	0.74
LTE 14	Rear Face	0.99	1.20	1.92	1.76	0.16	**2.91**	**2.35**	**2.91**
	Left Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Right Side	0.06	0.00	0.00	0.00	0.00	0.06	0.06	0.06
	Top Side	0.00	0.73	1.23	2.32	0.10	1.23	0.83	**2.42**
	Bottom Side	0.86	0.00	0.00	0.00	0.00	0.86	0.86	0.86
LTE 17	Rear Face	1.35	1.20	1.92	1.76	0.16	**3.27**	**2.71**	**3.27**
	Left Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Right Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top Side	0.00	0.73	1.23	2.32	0.10	1.23	0.83	**2.42**
	Bottom Side	0.73	0.00	0.00	0.00	0.00	0.73	0.73	0.73
LTE 25	Rear Face	1.12	1.20	1.92	1.76	0.16	**3.04**	**2.48**	**3.04**
	Left Side	0.45	0.00	0.00	0.00	0.00	0.45	0.45	0.45
	Right Side	0.92	0.00	0.00	0.00	0.00	0.92	0.92	0.92
	Top Side	0.24	0.73	1.23	2.32	0.10	1.47	1.07	**2.66**
	Bottom Side	0.26	0.00	0.00	0.00	0.00	0.26	0.26	0.26
LTE 26	Rear Face	0.53	1.20	1.92	1.76	0.16	**2.45**	**1.89**	**2.45**
	Left Side	0.04	0.00	0.00	0.00	0.00	0.04	0.04	0.04
	Right Side	0.18	0.00	0.00	0.00	0.00	0.18	0.18	0.18
	Top Side	0.00	0.73	1.23	2.32	0.10	1.23	0.83	**2.42**
	Bottom Side	0.69	0.00	0.00	0.00	0.00	0.69	0.69	0.69

Band	Position	1g SAR W/kg					Summimg result 1g SAR W/kg		
		1	2	3	4	5			
		Max WWAN	WLAN 2.4GHz Ant 0	WLAN 2.4GHz Ant 0+1	WLAN 5GHz Ant 0+1	BT Ant 1	1+3	1+2+5	1+4+5
LTE 30	Rear Face	0.96	1.20	1.92	1.76	0.16	**2.88**	**2.32**	**2.88**
	Left Side	0.45	0.00	0.00	0.00	0.00	0.45	0.45	0.45
	Right Side	0.32	0.00	0.00	0.00	0.00	0.32	0.32	0.32
	Top Side	0.17	0.73	1.23	2.32	0.10	1.40	1.00	**2.59**
	Bottom Side	0.48	0.00	0.00	0.00	0.00	0.48	0.48	0.48
LTE 38	Rear Face	0.80	1.20	1.92	1.76	0.16	**2.72**	**2.16**	**2.72**
	Left Side	0.09	0.00	0.00	0.00	0.00	0.09	0.09	0.09
	Right Side	0.26	0.00	0.00	0.00	0.00	0.26	0.26	0.26
	Top Side	0.10	0.73	1.23	2.32	0.10	1.33	0.93	**2.52**
	Bottom Side	0.58	0.00	0.00	0.00	0.00	0.58	0.58	0.58
LTE 41	Rear Face	0.69	1.20	1.92	1.76	0.16	**2.61**	**2.05**	**2.61**
	Left Side	0.10	0.00	0.00	0.00	0.00	0.10	0.10	0.10
	Right Side	0.26	0.00	0.00	0.00	0.00	0.26	0.26	0.26
	Top Side	0.10	0.73	1.23	2.32	0.10	1.33	0.93	**2.52**
	Bottom Side	0.50	0.00	0.00	0.00	0.00	0.50	0.50	0.50
LTE 66	Rear Face	1.25	1.20	1.92	1.76	0.16	**3.17**	**2.61**	**3.17**
	Left Side	0.71	0.00	0.00	0.00	0.00	0.71	0.71	0.71
	Right Side	0.48	0.00	0.00	0.00	0.00	0.48	0.48	0.48
	Top Side	0.12	0.73	1.23	2.32	0.10	1.35	0.95	**2.54**
	Bottom Side	0.33	0.00	0.00	0.00	0.00	0.33	0.33	0.33

Laptop PC Mode

Band	Position	1g SAR W/kg					Summimg result 1g SAR W/kg		
		1	2	3	4	5			
		Max WWAN	WLAN 2.4GHz Ant 0	WLAN 2.4GHz Ant 0+1	WLAN 5GHz Ant 0+1	BT Ant 1	1+3	1+2+5	1+4+5
WCDMA II	Bottom	0.98	0.65	0.65+0.53= 1.18	1.14+1.19= 2.33	0.11	**2.16**	**1.74**	**3.42**
WCDMA IV	Bottom	1.05	0.65	1.18	2.33	0.11	**2.23**	**1.81**	**3.49**
WCDMA V	Bottom	0.57	0.65	1.18	2.33	0.11	**1.75**	1.33	**3.01**
LTE 5	Bottom	0.43	0.65	1.18	2.33	0.11	**1.61**	1.19	**2.87**
LTE 7	Bottom	0.22	0.65	1.18	2.33	0.11	1.40	0.98	**2.66**
LTE 12	Bottom	0.55	0.65	1.18	2.33	0.11	**1.73**	1.31	**2.99**
LTE 13	Bottom	0.46	0.65	1.18	2.33	0.11	**1.64**	1.22	**2.90**
LTE 14	Bottom	0.46	0.65	1.18	2.33	0.11	**1.64**	1.22	**2.90**
LTE 17	Bottom	0.50	0.65	1.18	2.33	0.11	**1.68**	1.26	**2.94**
LTE 25	Bottom	1.07	0.65	1.18	2.33	0.11	**2.25**	**1.83**	**3.51**
LTE 26	Bottom	0.45	0.65	1.18	2.33	0.11	**1.63**	1.21	**2.89**
LTE 30	Bottom	0.22	0.65	1.18	2.33	0.11	1.40	0.98	**2.66**
LTE 38	Bottom	0.18	0.65	1.18	2.33	0.11	1.36	0.94	**2.62**
LTE 41	Bottom	0.16	0.65	1.18	2.33	0.11	1.34	0.92	**2.60**
LTE 66	Bottom	1.23	0.65	1.18	2.33	0.11	**2.41**	**1.99**	**3.67**

<SAR to Peak Location Separation Ratio Analysis>

The simultaneous transmitting antennas in each operating mode and exposure condition combination are considered one pair at a time to determine the SPLSR. When SAR is measured for both antennas in the pair, the peak location separation distance is computed by the following formula.

$$\text{Peak Location Separation Distance} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}$$

Where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates of the extrapolated peak SAR locations in the area or zoom scans.

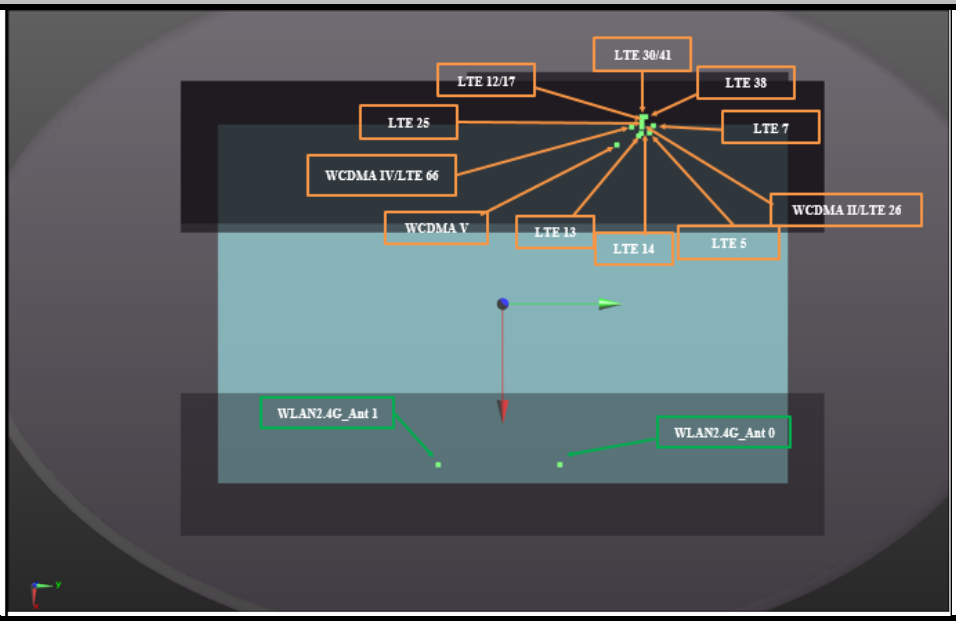
When standalone test exclusion applies, SAR is estimated; the peak location is assumed to be at the feed-point or geometric center of the antenna. Due to curvatures on the SAM phantom, when SAR is estimated for one of the antennas in an antenna pair, the measured peak SAR location will be translated onto the test device to determine the peak location separation for the antenna pair.

The SPLSR is determined by the following formula.

$$\text{SPLSR} = \frac{(\text{SAR}_1 + \text{SAR}_2)^{1.5}}{R_i}$$

Where SAR_1 and SAR_2 are the highest reported or estimated SAR for each antenna in the pair, and R_i is the separation distance between the peak SAR locations for the antenna pair in mm.

When the SPLSR is <= 0.04, the simultaneous transmission SAR is not required. Otherwise, the enlarged zoom scan and volume scan post-processing procedures will be performed.

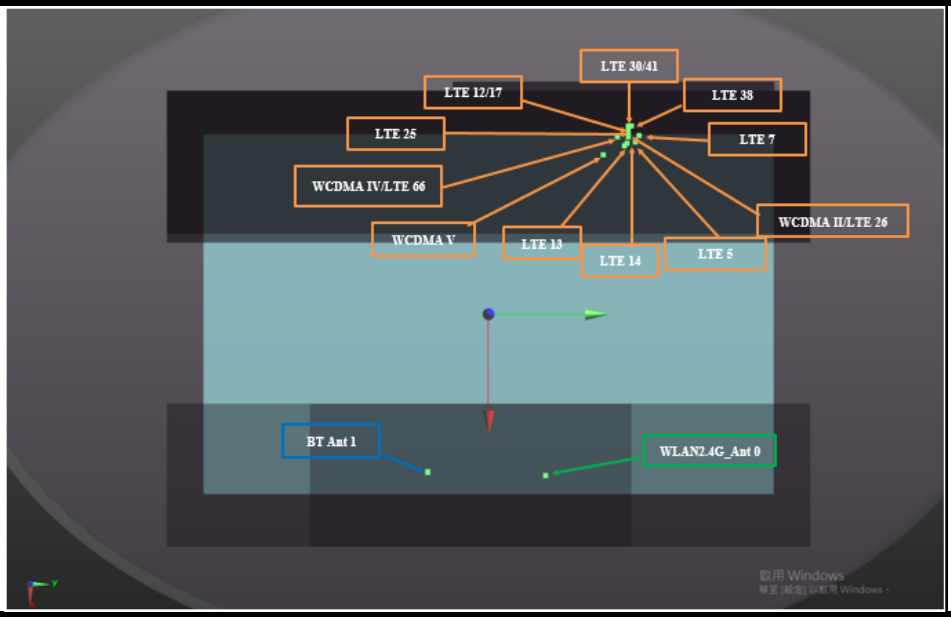
Tablet Mode			
NO.1 ~ NO.15	WWAN + WLAN2.4G Ant0+1		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.1	WCDMA II_RMC12.2K_Ch9400	Body	Rear Face	0.98	-90.6	60	0.52	188.9	0.02
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	WCDMA II_RMC12.2K_Ch9400	Body	Rear Face	0.98	-90.6	60	0.52	214.0	0.01
	WLAN2.4G_802.11b_Ch6_ Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.2	WCDMA IV_RMC12.2K_Ch1312	Body	Rear Face	1.09	-94.2	62.4	-0.03	192.8	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	WCDMA IV_RMC12.2K_Ch1312	Body	Rear Face	1.09	-94.2	62.4	-0.03	218.3	0.01
	WLAN2.4G_802.11b_Ch6_ Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.3	WCDMA V_RMC12.2K_Ch4132	Body	Rear Face	0.61	-92.2	64	0.44	191.0	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	WCDMA V_RMC12.2K_Ch4132	Body	Rear Face	0.61	-92.2	64	0.44	217.3	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.4	LTE 5_QPSK10M_Ch20450	Body	Rear Face	0.51	-90.8	68	1.01	190.3	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 5_QPSK10M_Ch20450	Body	Rear Face	0.51	-90.8	68	1.01	218.1	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.5	LTE 7_QPSK20M_Ch21100	Body	Rear Face	0.98	-97	84.8	1.23	200.1	0.02
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 7_QPSK20M_Ch21100	Body	Rear Face	0.98	-97	84.8	1.23	232.4	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.6	LTE 12_QPSK10M_Ch23130	Body	Rear Face	1.41	-101.4	84.4	1.12	204.2	0.02
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 12_QPSK10M_Ch23130	Body	Rear Face	1.41	-101.4	84.4	1.12	235.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.7	LTE 13_QPSK10M_Ch23230	Body	Rear Face	0.64	-94	92	1.02	199.2	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 13_QPSK10M_Ch23230	Body	Rear Face	0.64	-94	92	1.02	234.0	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
No.8	LTE 14_QPSK10M_Ch23330	Body	Rear Face	0.99	-93.9	83.9	1.26	196.8	0.02
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 14_QPSK10M_Ch23330	Body	Rear Face	0.99	-93.9	83.9	1.26	229.3	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.9	LTE 17_QPSK10M_Ch23780	Body	Rear Face	1.2	96.4	33.6	-0.11	203.1	0.02
	WLAN2.4G_802.11b_Ch6_Ant 0			0.72	96.4	-44	0.19		
	LTE 17_QPSK10M_Ch23780	Body	Rear Face	1.35	-100.6	82.8	1.18	234.3	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			1.2	96.4	33.6	-0.11		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.35	-100.6	82.8	1.18	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.10	LTE 25_QPSK20M_Ch26140	Body	Rear Face	1.12	-99.4	70	0.07	199.2	0.02
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 25_QPSK20M_Ch26140	Body	Rear Face	1.12	-99.4	70	0.07	226.6	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.11	LTE 26_QPSK15M_Ch26865	Body	Rear Face	0.53	-90.8	68	0.97	190.3	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 26_QPSK15M_Ch26865	Body	Rear Face	0.53	-90.8	68	0.97	218.1	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.12	LTE 30_QPSK10M_Ch27710	Body	Rear Face	0.96	-105	80	1.48	206.7	0.02
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 30_QPSK10M_Ch27710	Body	Rear Face	0.96	-105	80	1.48	236.5	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
No.13	LTE 38_QPSK20M_Ch38150	Body	Rear Face	0.8	-105	84	1.49	207.6	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 38_QPSK20M_Ch38150	Body	Rear Face	0.8	-105	84	1.49	238.6	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.14	LTE 41_QPSK10M_Ch40185	Body	Rear Face	0.69	-105	81	1.17	206.9	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 41_QPSK10M_Ch40185	Body	Rear Face	0.69	-105	81	1.17	237.0	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
No.15	LTE 66_QPSK20M_Ch132072	Body	Rear Face	1.25	-94.2	62.4	-0.03	192.8	0.02
	WLAN2.4G_802.11b_Ch6_Ant 0			1.2	96.4	33.6	-0.11		
	LTE 66_QPSK20M_Ch132072	Body	Rear Face	1.25	-94.2	62.4	-0.03	218.3	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	77.6	0.03
	WLAN2.4G_802.11b_Ch6_Ant 1			0.72	96.4	-44	0.19		

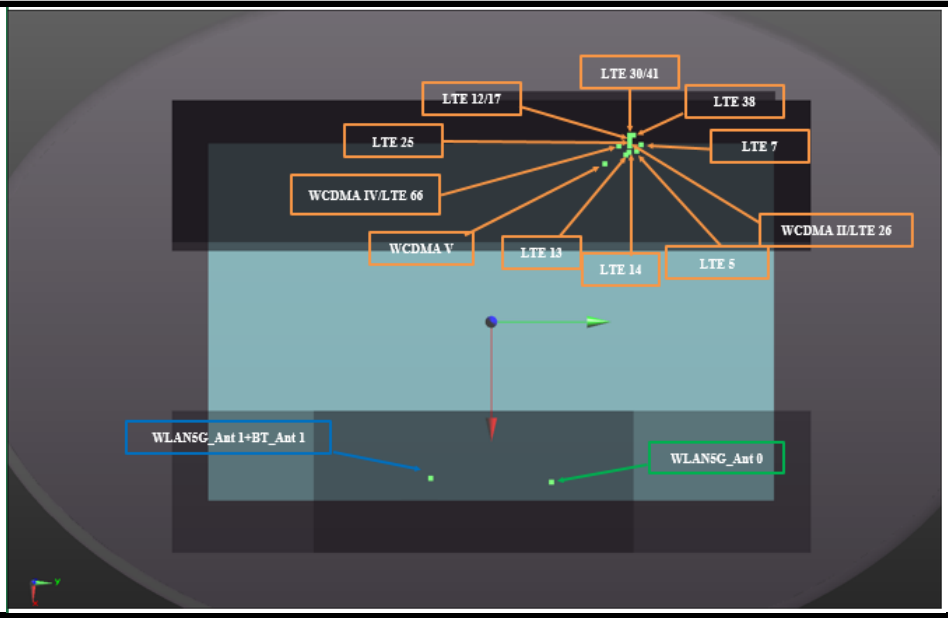
Tablet Mode			
NO.16 ~ NO.30	WWAN + WLAN2.4G Ant0 + BT Ant1		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.16	WCDMA II_RMC12.2K_Ch9400	Body	Rear Face	0.98	-90.6	60	0.52	188.9	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	WCDMA II_RMC12.2K_Ch9400	Body	Rear Face	0.98	-90.6	60	0.52	211.3	0.01
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.17	WCDMA IV_RMC12.2K_Ch1312	Body	Rear Face	1.09	-94.2	62.4	-0.03	192.8	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	WCDMA IV_RMC12.2K_Ch1312	Body	Rear Face	1.09	-94.2	62.4	-0.03	215.6	0.01
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.18	WCDMA V_RMC12.2K_Ch4132	Body	Rear Face	0.61	-92.2	64	0.44	191.0	0.01
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	WCDMA V_RMC12.2K_Ch4132	Body	Rear Face	0.61	-92.2	64	0.44	214.6	0.00
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.19	LTE 5_QPSK10M_Ch20450	Body	Rear Face	0.51	-90.8	68	1.01	190.3	0.01
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 5_QPSK10M_Ch20450	Body	Rear Face	0.51	-90.8	68	1.01	215.4	0.00
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.20	LTE 7_QPSK20M_Ch21100	Body	Rear Face	0.98	-97	84.8	1.23	200.1	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 7_QPSK20M_Ch21100	Body	Rear Face	0.98	-97	84.8	1.23	229.6	0.01
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.21	LTE 12_QPSK10M_Ch23130	Body	Rear Face	1.41	-101.4	84.4	1.12	204.2	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 12_QPSK10M_Ch23130	Body	Rear Face	1.41	-101.4	84.4	1.12	233.1	0.01
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.22	LTE 13_QPSK10M_Ch23230	Body	Rear Face	0.64	-94	92	1.02	199.2	0.01
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 13_QPSK10M_Ch23230	Body	Rear Face	0.64	-94	92	1.02	231.2	0.00
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.23	LTE 14_QPSK10M_Ch23330	Body	Rear Face	0.99	-93.9	83.9	1.26	196.8	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 14_QPSK10M_Ch23330	Body	Rear Face	0.99	-93.9	83.9	1.26	226.5	0.01
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.24	LTE 17_QPSK10M_Ch23780	Body	Rear Face	1.35	-100.6	82.8	1.18	203.1	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 17_QPSK10M_Ch23780	Body	Rear Face	1.35	-100.6	82.8	1.18	231.5	0.01
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.25	LTE 25_QPSK20M_Ch26140	Body	Rear Face	1.12	-99.4	70	0.07	199.2	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 25_QPSK20M_Ch26140	Body	Rear Face	1.12	-99.4	70	0.07	223.8	0.01
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.26	LTE 26_QPSK15M_Ch26865	Body	Rear Face	0.53	-90.8	68	0.97	190.3	0.01
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 26_QPSK15M_Ch26865	Body	Rear Face	0.53	-90.8	68	0.97	215.4	0.00
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.27	LTE 30_QPSK10M_Ch27710	Body	Rear Face	0.96	-105	80	1.48	206.7	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 30_QPSK10M_Ch27710	Body	Rear Face	0.96	-105	80	1.48	233.8	0.01
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.28	LTE 38_QPSK20M_Ch38150	Body	Rear Face	0.8	-105	84	1.49	207.6	0.01
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 38_QPSK20M_Ch38150	Body	Rear Face	0.8	-105	84	1.49	235.9	0.00
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.29	LTE 41_QPSK10M_Ch40185	Body	Rear Face	0.69	-105	81	1.17	206.9	0.01
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 41_QPSK10M_Ch40185	Body	Rear Face	0.69	-105	81	1.17	234.3	0.00
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
No.30	LTE 66_QPSK20M_Ch132072	Body	Rear Face	1.25	-94.2	62.4	-0.03	192.8	0.02
	WLAN2.4G_802.11b_Ch6_ Ant 0			1.2	96.4	33.6	-0.11		
	LTE 66_QPSK20M_Ch132072	Body	Rear Face	1.25	-94.2	62.4	-0.03	215.6	0.01
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		
	WLAN2.4G_802.11b_Ch6_ Ant 0	Body	Rear Face	1.2	96.4	33.6	-0.11	75.6	0.02
	BT_DH5_Ch39_Ant 1			0.16	94.4	-42	-0.33		

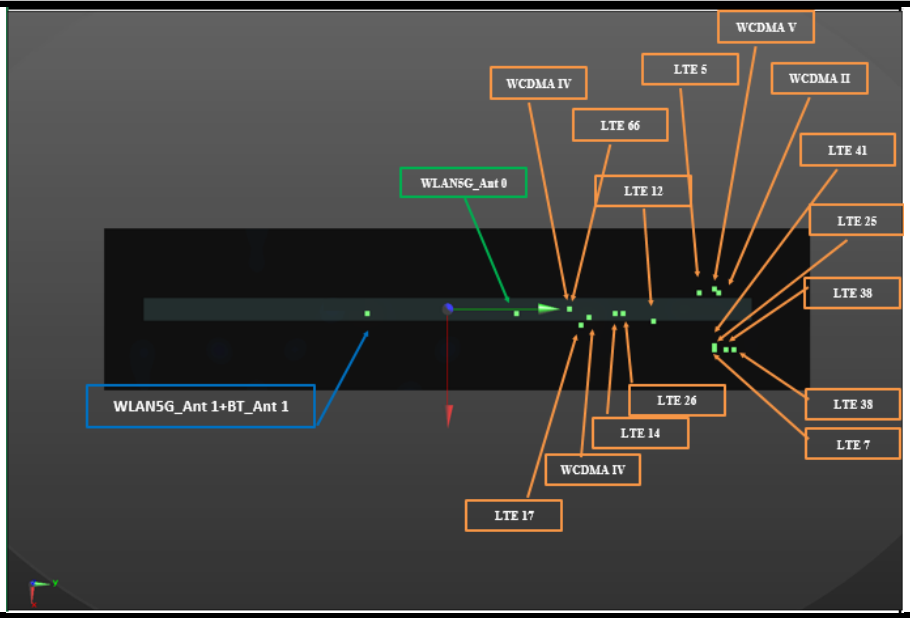
Tablet Mode			
NO.31 ~ NO.45	WWAN + WLAN5G Ant0+1 + BT Ant1		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.31	WCDMA II_RMC12.2K_Ch9400	Body	Rear Face	0.98	-90.6	60	0.52	187.0	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 0			0.91	94.8	35.6	-0.26		
	WCDMA II_RMC12.2K_Ch9400	Body	Rear Face	0.98	-90.6	60	0.52	214.8	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_ Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.32	WCDMA IV_RMC12.2K_Ch1312	Body	Rear Face	1.09	-94.2	62.4	-0.03	190.9	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 0			0.91	94.8	35.6	-0.26		
	WCDMA IV_RMC12.2K_Ch1312	Body	Rear Face	1.09	-94.2	62.4	-0.03	219.1	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_ Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.33	WCDMA V_RMC12.2K_Ch4132	Body	Rear Face	0.61	-92.2	64	0.44	189.1	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 0			0.91	94.8	35.6	-0.26		
	WCDMA V_RMC12.2K_Ch4132	Body	Rear Face	0.61	-92.2	64	0.44	218.2	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_ Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.34	LTE 5_QPSK10M_Ch20450	Body	Rear Face	0.51	-90.8	68	1.01	188.4	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 0			0.91	94.8	35.6	-0.26		
	LTE 5_QPSK10M_Ch20450	Body	Rear Face	0.51	-90.8	68	1.01	219.1	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_ Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.35	LTE 7_QPSK20M_Ch21100	Body	Rear Face	0.98	-97	84.8	1.23	198.0	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 0			0.91	94.8	35.6	-0.26		
	LTE 7_QPSK20M_Ch21100	Body	Rear Face	0.98	-97	84.8	1.23	233.4	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_ Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.36	LTE 12_QPSK10M_Ch23130	Body	Rear Face	1.41	-101.4	84.4	1.12	202.2	0.02
	WLAN5.3G_802.11a_Ch60_ Ant 0			0.91	94.8	35.6	-0.26		
	LTE 12_QPSK10M_Ch23130	Body	Rear Face	1.41	-101.4	84.4	1.12	236.8	0.02
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_ Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.37	LTE 13_QPSK10M_Ch23230	Body	Rear Face	0.64	-94	92	1.02	197.0	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 0			0.91	94.8	35.6	-0.26		
	LTE 13_QPSK10M_Ch23230	Body	Rear Face	0.64	-94	92	1.02	235.1	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_ Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.38	LTE 14_QPSK10M_Ch23330	Body	Rear Face	0.99	-93.9	83.9	1.26	194.8	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 0			0.91	94.8	35.6	-0.26		
	LTE 14_QPSK10M_Ch23330	Body	Rear Face	0.99	-93.9	83.9	1.26	230.3	0.01
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_ Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_ Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.39	LTE 17_QPSK10M_Ch23780	Body	Rear Face	1.35	-100.6	82.8	1.18	201.0	0.02
	WLAN5.3G_802.11a_Ch60_Ant 0			0.91	94.8	35.6	-0.26		
	LTE 17_QPSK10M_Ch23780	Body	Rear Face	1.35	-100.6	82.8	1.18	235.3	0.02
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.40	LTE 25_QPSK20M_Ch26140	Body	Rear Face	1.12	-99.4	70	0.07	197.2	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			0.91	94.8	35.6	-0.26		
	LTE 25_QPSK20M_Ch26140	Body	Rear Face	1.12	-99.4	70	0.07	227.4	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.41	LTE 26_QPSK15M_Ch26865	Body	Rear Face	0.53	-90.8	68	0.97	188.4	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			0.91	94.8	35.6	-0.26		
	LTE 26_QPSK15M_Ch26865	Body	Rear Face	0.53	-90.8	68	0.97	219.1	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.42	LTE 30_QPSK10M_Ch27710	Body	Rear Face	0.96	-105	80	1.48	204.7	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			0.91	94.8	35.6	-0.26		
	LTE 30_QPSK10M_Ch27710	Body	Rear Face	0.96	-105	80	1.48	237.4	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.43	LTE 38_QPSK20M_Ch38150	Body	Rear Face	0.8	-105	84	1.49	205.6	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			0.91	94.8	35.6	-0.26		
	LTE 38_QPSK20M_Ch38150	Body	Rear Face	0.8	-105	84	1.49	239.6	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.44	LTE 41_QPSK10M_Ch40185	Body	Rear Face	0.69	-105	81	1.17	204.9	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			0.91	94.8	35.6	-0.26		
	LTE 41_QPSK10M_Ch40185	Body	Rear Face	0.69	-105	81	1.17	238.0	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
No.45	LTE 66_QPSK20M_Ch132072	Body	Rear Face	1.25	-94.2	62.4	-0.03	190.9	0.02
	WLAN5.3G_802.11a_Ch60_Ant 0			0.91	94.8	35.6	-0.26		
	LTE 66_QPSK20M_Ch132072	Body	Rear Face	1.25	-94.2	62.4	-0.03	219.1	0.02
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Rear Face	0.91	94.8	35.6	-0.26	82.0	0.03
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.01	96	-46.4	-0.36		

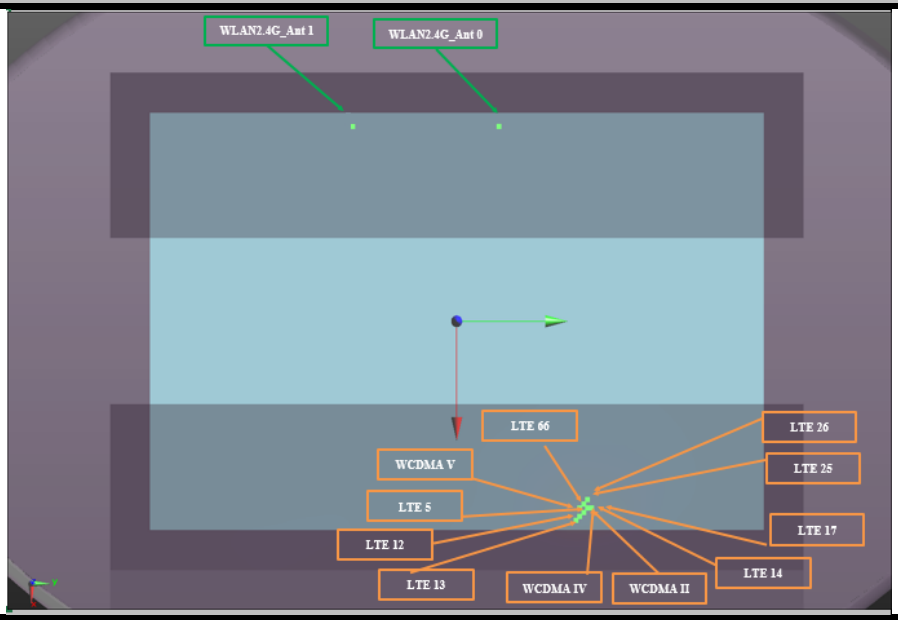
Tablet Mode				
NO.46 ~ NO.60	WWAN + WLAN5G Ant0+1 + BT Ant1			

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.46	WCDMA II_RMC12.2K_Ch9400	Body	Top Side	0	-14.8	146.4	-2.03	112.8	0.01
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	WCDMA II_RMC12.2K_Ch9400	Body	Top Side	0	-14.8	146.4	-2.03	196.5	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.47	WCDMA IV_RMC12.2K_Ch1413	Body	Top Side	0.11	-6.4	80	-2.16	46.0	0.03
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	WCDMA IV_RMC12.2K_Ch1413	Body	Top Side	0.11	-6.4	80	-2.16	129.7	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.48	WCDMA V_RMC12.2K_Ch4182	Body	Top Side	0	-14.4	126	-2.09	92.7	0.01
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	WCDMA V_RMC12.2K_Ch4182	Body	Top Side	0	-14.4	126	-2.09	176.2	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.49	LTE 5_QPSK10M_Ch20600	Body	Top Side	0	-12.8	124	-2.09	90.4	0.02
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 5_QPSK10M_Ch20600	Body	Top Side	0	-12.8	124	-2.09	174.1	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.50	LTE 7_QPSK20M_Ch21100	Body	Top Side	0.23	6	155	-0.51	119.9	0.01
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 7_QPSK20M_Ch21100	Body	Top Side	0.23	6	155	-0.51	204.2	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.51	LTE 12_QPSK10M_Ch23060	Body	Top Side	0	-0.4	100	-2.2	65.0	0.02
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 12_QPSK10M_Ch23060	Body	Top Side	0	-0.4	100	-2.2	149.3	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.52	LTE 13_QPSK10M_Ch23230	Body	Top Side	0	-12	65	-2.16	33.7	0.04
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 13_QPSK10M_Ch23230	Body	Top Side	0	-12	65	-2.16	115.4	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.53	LTE 14_QPSK10M_Ch23330	Body	Top Side	0	-14	84	-2.13	52.0	0.03
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 14_QPSK10M_Ch23330	Body	Top Side	0	-14	84	-2.13	134.5	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.54	LTE 17_QPSK10M_Ch23780	Body	Top Side	0	1.6	78	-2.24	42.9	0.03
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 17_QPSK10M_Ch23780	Body	Top Side	0	1.6	78	-2.24	127.2	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.55	LTE 25_QPSK20M_Ch26140	Body	Top Side	0.24	14.8	140	-0.55	105.5	0.02
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 25_QPSK20M_Ch26140	Body	Top Side	0.24	14.8	140	-0.55	189.5	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		

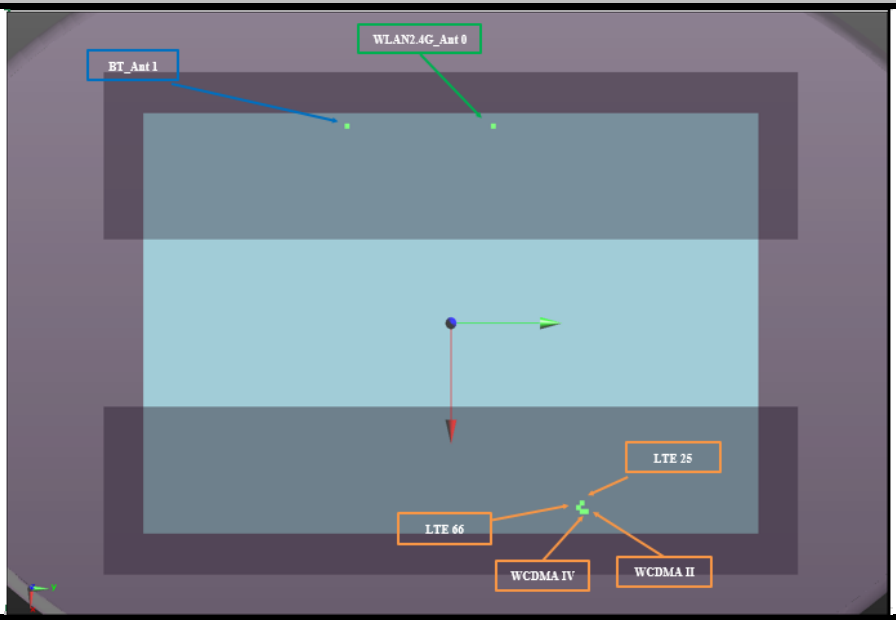
No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.56	LTE 26_QPSK15M_Ch26865	Body	Top Side	0	-12.4	96	-2.15	63.0	0.02
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 26_QPSK15M_Ch26865	Body	Top Side	0	-12.4	96	-2.15	146.2	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.57	LTE 30_QPSK10M_Ch27710	Body	Top Side	0.17	10	153	-0.55	118.1	0.01
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 30_QPSK10M_Ch27710	Body	Top Side	0.17	10	153	-0.55	202.3	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.58	LTE 38_QPSK20M_Ch38000	Body	Top Side	0.1	15	143	-0.56	108.5	0.01
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 38_QPSK20M_Ch38000	Body	Top Side	0.1	15	143	-0.56	192.5	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.59	LTE 41_QPSK20M_Ch40620	Body	Top Side	0.1	13	141	-0.57	106.3	0.01
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 41_QPSK20M_Ch40620	Body	Top Side	0.1	13	141	-0.57	190.4	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
No.60	LTE 66_QPSK20M_Ch132322	Body	Top Side	0.12	-4.8	80	-2.21	45.7	0.03
	WLAN5.6G_802.11a_Ch124_Ant 0			1.24	3.6	35.1	-1.77		
	LTE 66_QPSK20M_Ch132322	Body	Top Side	0.12	-4.8	80	-2.21	129.5	0.01
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		
	WLAN5.6G_802.11a_Ch124_Ant 0	Body	Top Side	1.24	3.6	35.1	-1.77	84.3	0.04
	WLAN5.6G_802.11a_Ch124_Ant 1+BT Ant1			1.18	4.4	-49.2	-1.6		

Laptop PC Mode			
NO.61 ~ NO.71	WWAN + WLAN2.4G Ant0+1		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.61	WCDMA II_RMC12.2K_Ch9400	Body	Bottom	0.98	88.4	63.6	2.53	187.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	WCDMA II_RMC12.2K_Ch9400	Body	Bottom	0.98	88.4	63.6	2.53	217.9	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
No.62	WCDMA IV_RMC12.2K_Ch1413	Body	Bottom	1.05	88.4	63.2	2.52	187.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	WCDMA IV_RMC12.2K_Ch1413	Body	Bottom	1.05	88.4	63.2	2.52	217.7	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		

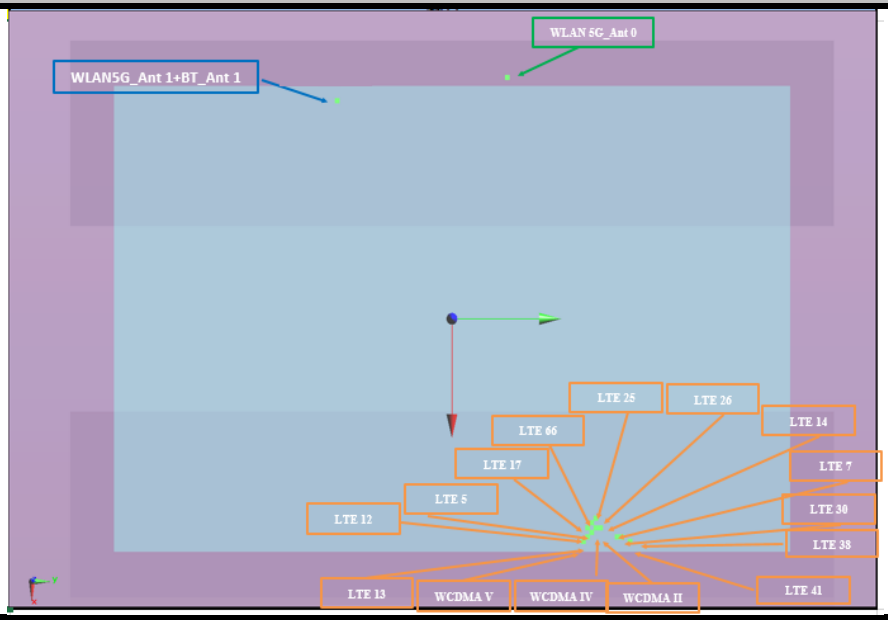
No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.63	WCDMA V_RMC12.2K_Ch4132	Body	Bottom	0.57	96	63.6	2.59	195.3	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	WCDMA V_RMC12.2K_Ch4132	Body	Bottom	0.57	96	63.6	2.59	224.3	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
No.64	LTE 5_QPSK10M_Ch20450	Body	Bottom	0.43	92	66	1.27	191.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 5_QPSK10M_Ch20450	Body	Bottom	0.43	92	66	1.27	222.2	0.00
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
No.65	LTE 12_QPSK10M_Ch23095	Body	Bottom	0.55	92.4	64	2.34	191.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 12_QPSK10M_Ch23095	Body	Bottom	0.55	92.4	64	2.34	221.5	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
No.66	LTE 13_QPSK10M_Ch23230	Body	Bottom	0.46	92	66	1.28	191.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 13_QPSK10M_Ch23230	Body	Bottom	0.46	92	66	1.28	222.2	0.00
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
No.67	LTE 14_QPSK10M_Ch23330	Body	Bottom	0.46	92	66	1.28	191.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 14_QPSK10M_Ch23330	Body	Bottom	0.46	92	66	1.28	222.2	0.00
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.68	LTE 17_QPSK10M_Ch23790	Body	Bottom	0.5	90	65.6	1	189.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 17_QPSK10M_Ch23790	Body	Bottom	0.5	90	65.6	1	220.3	0.00
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
No.69	LTE 25_QPSK20M_Ch26140	Body	Bottom	1.07	86	63.2	1.18	185.4	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 25_QPSK20M_Ch26140	Body	Bottom	1.07	86	63.2	1.18	215.6	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
No.70	LTE 26_QPSK15M_Ch26865	Body	Bottom	0.45	92	66	1.27	191.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 26_QPSK15M_Ch26865	Body	Bottom	0.45	92	66	1.27	222.2	0.00
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
No.71	LTE 66_QPSK20M_Ch132072	Body	Bottom	1.23	89.6	61.2	1	188.6	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 66_QPSK20M_Ch132072	Body	Bottom	1.23	89.6	61.2	1	217.6	0.01
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	82.0	0.02
	WLAN2.4G_802.11b_Ch6_Ant 1			0.53	-95	-54	-1.51		

Laptop PC Mode				
NO.72 ~ NO.75	WWAN + WLAN2.4G Ant0 + BT Ant1			

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.72	WCDMA II_RMC12.2K_Ch9400	Body	Bottom	0.98	88.4	63.6	2.53	187.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	WCDMA II_RMC12.2K_Ch9400	Body	Bottom	0.98	88.4	63.6	2.53	216.5	0.01
	BT_DH5_Ch39_Ant 1			0.11	-94	-53	-1.31		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	81.0	0.01
	BT_DH5_Ch39_Ant 1			0.11	-94	-53	-1.31		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.73	WCDMA IV_RMC12.2K_Ch1413	Body	Bottom	1.05	88.4	63.2	2.52	187.8	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	WCDMA IV_RMC12.2K_Ch1413	Body	Bottom	1.05	88.4	63.2	2.52	216.3	0.01
	BT_DH5_Ch39_Ant 1			0.11	-94	-53	-1.31		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	81.0	0.01
	BT_DH5_Ch39_Ant 1			0.11	-94	-53	-1.31		
No.74	LTE 25_QPSK20M_Ch26140	Body	Bottom	1.07	86	63.2	1.18	185.4	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 25_QPSK20M_Ch26140	Body	Bottom	1.07	86	63.2	1.18	214.3	0.01
	BT_DH5_Ch39_Ant 1			0.11	-94	-53	-1.31		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	81.0	0.01
	BT_DH5_Ch39_Ant 1			0.11	-94	-53	-1.31		
No.75	LTE 66_QPSK20M_Ch132072	Body	Bottom	1.23	89.6	61.2	1	188.6	0.01
	WLAN2.4G_802.11b_Ch6_Ant 0			0.65	-96	28	-1.57		
	LTE 66_QPSK20M_Ch132072	Body	Bottom	1.23	89.6	61.2	1	216.2	0.01
	BT_DH5_Ch39_Ant 1			0.11	-94	-53	-1.31		
	WLAN2.4G_802.11b_Ch6_Ant 0	Body	Bottom	0.65	-96	28	-1.57	81.0	0.01
	BT_DH5_Ch39_Ant 1			0.11	-94	-53	-1.31		

Laptop PC Mode		
NO.76 ~ NO.90	WWAN + WLAN5G Ant0+1 + BT Ant1	

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.76	WCDMA II_RMC12.2K_Ch9400	Body	Bottom	0.98	88.4	63.6	2.53	192.5	0.02
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	WCDMA II_RMC12.2K_Ch9400	Body	Bottom	0.98	88.4	63.6	2.53	217.8	0.02
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.77	WCDMA IV_RMC12.2K_Ch1413	Body	Bottom	1.05	88.4	63.2	2.52	192.4	0.02
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	WCDMA IV_RMC12.2K_Ch1413	Body	Bottom	1.05	88.4	63.2	2.52	217.6	0.02
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.78	WCDMA V_RMC12.2K_Ch4132	Body	Bottom	0.57	96	63.6	2.59	200.0	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	WCDMA V_RMC12.2K_Ch4132	Body	Bottom	0.57	96	63.6	2.59	224.2	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.79	LTE 5_QPSK10M_Ch20450	Body	Bottom	0.43	92	66	1.27	196.4	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 5_QPSK10M_Ch20450	Body	Bottom	0.43	92	66	1.27	222.1	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.80	LTE 7_QPSK20M_Ch20850	Body	Bottom	0.22	93	79	1.15	200.3	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 7_QPSK20M_Ch20850	Body	Bottom	0.22	93	79	1.15	230.3	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.81	LTE 12_QPSK10M_Ch23095	Body	Bottom	0.55	92.4	64	2.34	196.5	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 12_QPSK10M_Ch23095	Body	Bottom	0.55	92.4	64	2.34	221.4	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.82	LTE 13_QPSK10M_Ch23230	Body	Bottom	0.46	92	66	1.28	196.4	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 13_QPSK10M_Ch23230	Body	Bottom	0.46	92	66	1.28	222.1	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.83	LTE 14_QPSK10M_Ch23330	Body	Bottom	0.46	92	66	1.28	196.4	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 14_QPSK10M_Ch23330	Body	Bottom	0.46	92	66	1.28	222.1	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.84	LTE 17_QPSK10M_Ch23790	Body	Bottom	0.5	90	65.6	1	194.4	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 17_QPSK10M_Ch23790	Body	Bottom	0.5	90	65.6	1	220.2	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.85	LTE 25_QPSK20M_Ch26140	Body	Bottom	1.07	86	63.2	1.18	190.0	0.02
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 25_QPSK20M_Ch26140	Body	Bottom	1.07	86	63.2	1.18	215.6	0.02
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.86	LTE 26_QPSK15M_Ch26865	Body	Bottom	0.45	92	66	1.27	196.4	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 26_QPSK15M_Ch26865	Body	Bottom	0.45	92	66	1.27	222.1	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		

No.	Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (Ri, mm)	SPLSR
					x	y	z		
No.87	LTE 30_QPSK10M_Ch27710	Body	Bottom	0.22	95	83	1.18	203.3	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 30_QPSK10M_Ch27710	Body	Bottom	0.22	95	83	1.18	234.3	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.88	LTE 38_QPSK20M_Ch38150	Body	Bottom	0.18	94	85	1.17	202.9	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 38_QPSK20M_Ch38150	Body	Bottom	0.18	94	85	1.17	234.7	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.89	LTE 41_QPSK20M_Ch40620	Body	Bottom	0.16	94	81	1.15	201.8	0.01
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 41_QPSK20M_Ch40620	Body	Bottom	0.16	94	81	1.15	232.3	0.01
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
No.90	LTE 66_QPSK20M_Ch132072	Body	Bottom	1.23	89.6	61.2	1	193.2	0.02
	WLAN5.3G_802.11a_Ch60_Ant 0			1.14	-100.8	28.4	-1.1		
	LTE 66_QPSK20M_Ch132072	Body	Bottom	1.23	89.6	61.2	1	217.5	0.02
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		
	WLAN5.3G_802.11a_Ch60_Ant 0	Body	Bottom	1.14	-100.8	28.4	-1.1	84.7	0.04
	WLAN5.3G_802.11a_Ch60_Ant 1+BT Ant1			1.3	-93.6	-56	-1.54		

Test Engineer： Sam Onn, and Zeke Wang

5. Calibration of Test Equipment

Equipment	Manufacturer	Model	SN	Cal. Date	Cal. Interval
System Validation Dipole	SPEAG	D750V3	1013	Aug. 23, 2019	1 Year
System Validation Dipole	SPEAG	D835V2	4d121	Aug. 23, 2019	1 Year
System Validation Dipole	SPEAG	D1750V2	1055	Aug. 23, 2019	1 Year
System Validation Dipole	SPEAG	D1900V2	5d036	Jan. 21, 2020	1 Year
System Validation Dipole	SPEAG	D2300V2	1004	Jan. 21, 2020	1 Year
System Validation Dipole	SPEAG	D2450V2	737	Aug. 26, 2019	1 Year
System Validation Dipole	SPEAG	D2600V2	1020	Aug. 26, 2019	1 Year
System Validation Dipole	SPEAG	D5GHzV2	1019	Mar. 21, 2019	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3650	May. 20, 2019	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3820	Jun. 25, 2019	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3898	Jun. 27, 2019	1 Year
Data Acquisition Electronics	SPEAG	DAE4	914	Jun. 20, 2019	1 Year
Data Acquisition Electronics	SPEAG	DAE4	916	Dec. 17, 2019	1 Year
Data Acquisition Electronics	SPEAG	DAE4	861	May. 08, 2019	1 Year
Radio Communication Analyzer	Anritsu	MT8821C	6201381727	Jun. 14, 2019	1 Year
Spectrum Analyzer	R&S	FSL6	102006	Mar. 26, 2019	1 Year
ENA Series Network Analyzer	Agilent	E5071C	MY46214281	Jun. 17, 2019	1 Year
MXG Analong Signal Generator	Agilent	N5181A	MY50143868	Jun. 27, 2019	1 Year
Power Meter	Anritsu	ML2495A	1218009	Jun. 28, 2019	1 Year
Power Sensor	Anritsu	MA2411B	1207252	Jun. 28, 2019	1 Year
Thermometer	YFE	YF-160A	130504591	Mar. 22, 2019	1 Year
Power Amplifier	AR	5S1G4	0339656	Sep. 05, 2019	1 Year
Attenuator	MTJ	MTJ6001-03	N/A	Sep. 05, 2019	1 Year
Directional Coupler	Woken	0110A05602O-10	11122702	Sep. 05, 2019	1 Year
Powersource1	SPEAG	SE_UMS_160 BA	4010	Aug. 21, 2019	1 Year

6. Measurement Uncertainty

According to KDB 865664 D01, SAR measurement uncertainty analysis is required in SAR reports only when the highest measured SAR in a frequency band is ≥ 1.5 W/kg for 1-g SAR, and ≥ 3.75 W/kg for 10-g SAR. The procedures described in IEEE Std 1528-2013should be applied. The expanded SAR measurement uncertainty must be ≤ 30%,for a confidence interval of k = 2. When the highest measured SAR within a frequency band is < 1.5 W/kg for 1-g and < 3.75 W/kg for 10-g, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. Hence, the measurement uncertainty analysis is not required in this SAR report because the test result met the condition.

7. Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Web Site: https://ee.bureauveritas.com.tw/BVInternet/Default

The road map of all our labs can be found in our web site also.

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Appendix A. SAR Plots of System Verification

The plots for system verification with largest deviation for each SAR system combination are shown as follows.

System Check_H750_200213

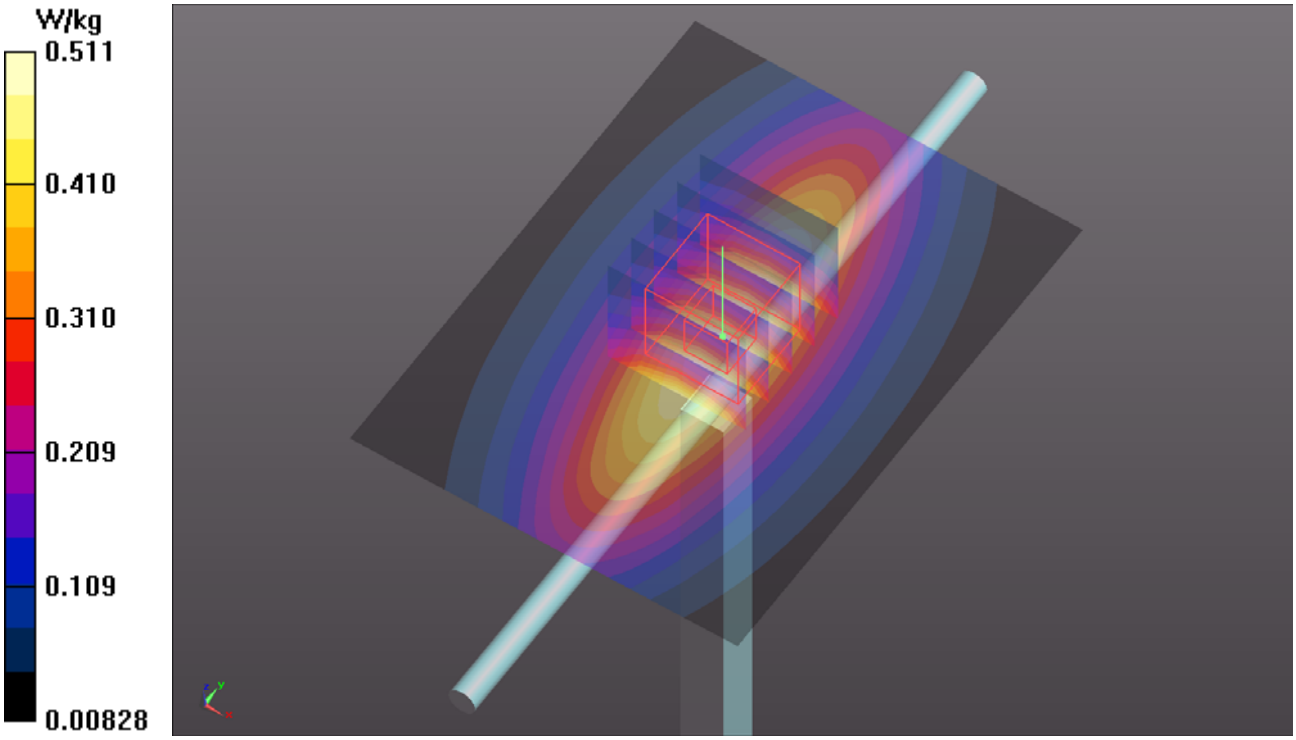
DUT: Dipole 750 MHz; Type: D750V3; SN: 1013

Communication System: CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N3_0213 Medium parameters used: f = 750 MHz; σ = 0.886 S/m; ε_r = 43.449; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ; Liquid Temperature：23.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3650; ConvF(10.06, 10.06, 10.06); Calibrated: 2019/05/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2019/05/08
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.511 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.18 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.581 W/kg
SAR(1 g) = 0.388 W/kg; SAR(10 g) = 0.253 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.516 W/kg



System Check_H835_200217

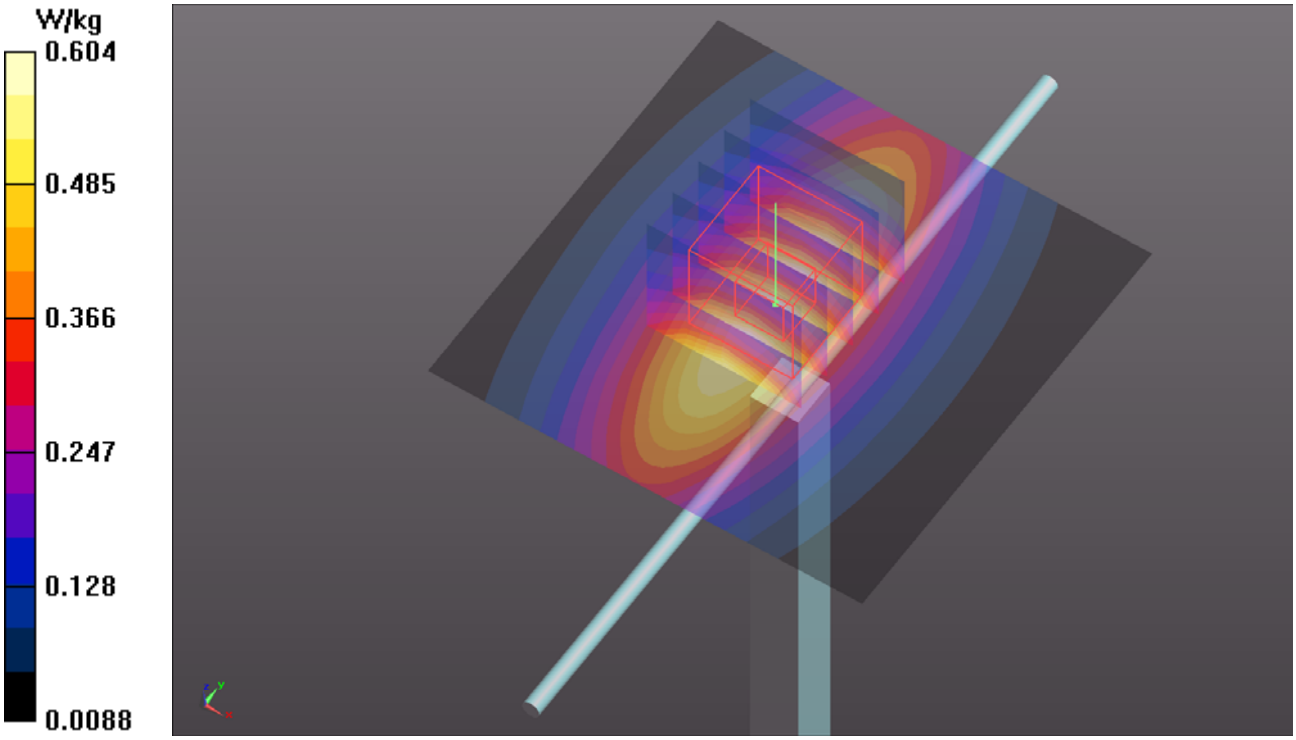
DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: H07T10N3_0217 Medium parameters used: f = 835 MHz; σ = 0.905 S/m; ε_r = 40.721; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ; Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3650; ConvF(9.82, 9.82, 9.82); Calibrated: 2019/05/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2019/05/08
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.604 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.94 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.702 W/kg
SAR(1 g) = 0.468 W/kg; SAR(10 g) = 0.308 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.625 W/kg



System Check_H1750_200219

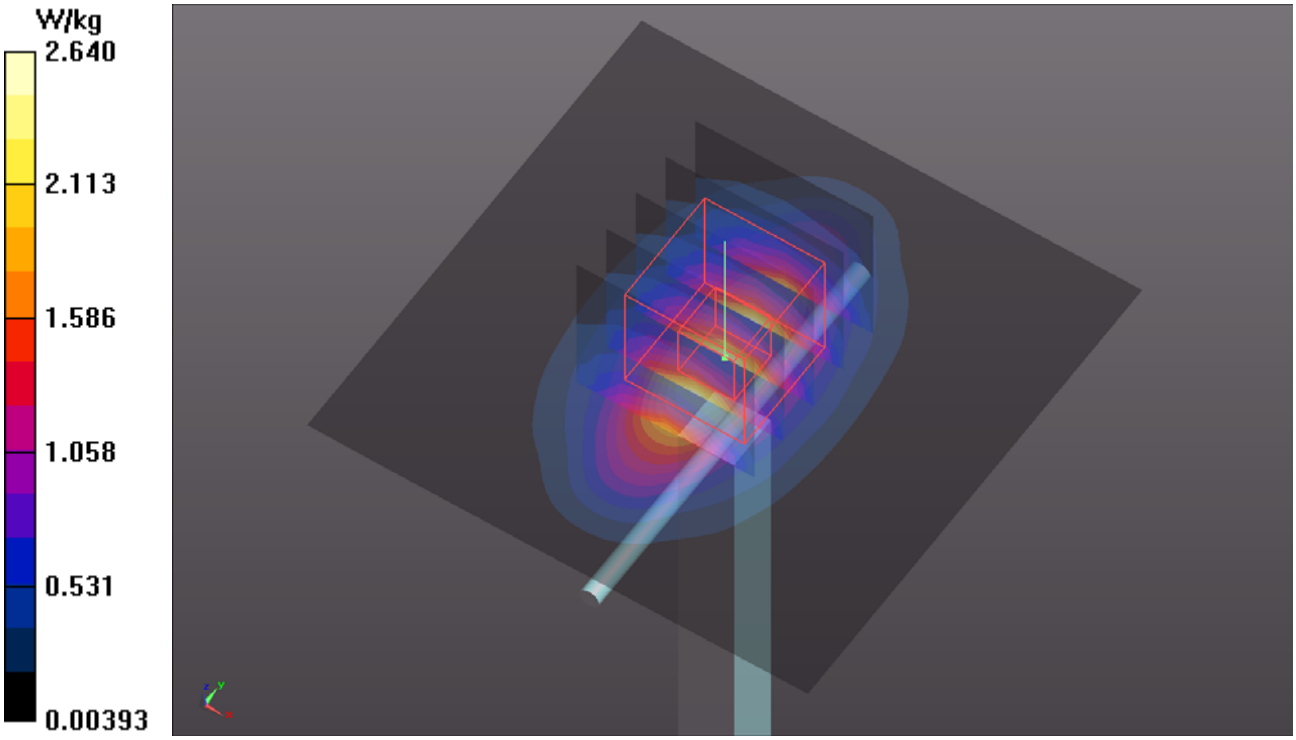
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N3_0219 Medium parameters used: f = 1750 MHz; σ = 1.325 S/m; ε_r = 39.349; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ; Liquid Temperature：23.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3650; ConvF(8.44, 8.44, 8.44); Calibrated: 2019/05/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2019/05/08
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.64 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.58 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 3.14 W/kg
SAR(1 g) = 1.76 W/kg; SAR(10 g) = 0.931 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.66 W/kg



System Check_H1900_200219

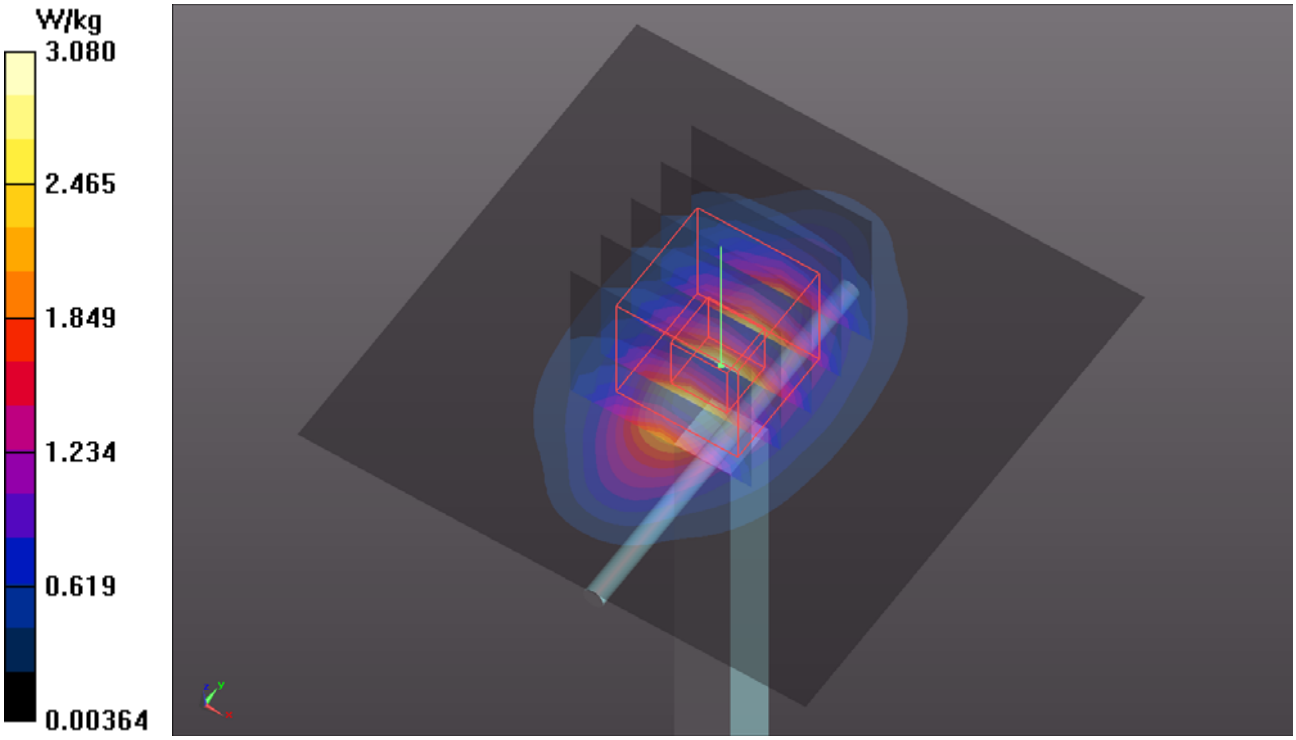
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N3_0219 Medium parameters used: f = 1900 MHz; σ = 1.46 S/m; ε_r = 38.759; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ; Liquid Temperature：23.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3650; ConvF(8.25, 8.25, 8.25); Calibrated: 2019/05/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2019/05/08
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.08 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.47 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 3.68 W/kg
SAR(1 g) = 1.9 W/kg; SAR(10 g) = 1 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.09 W/kg



System Check_H2300_200220

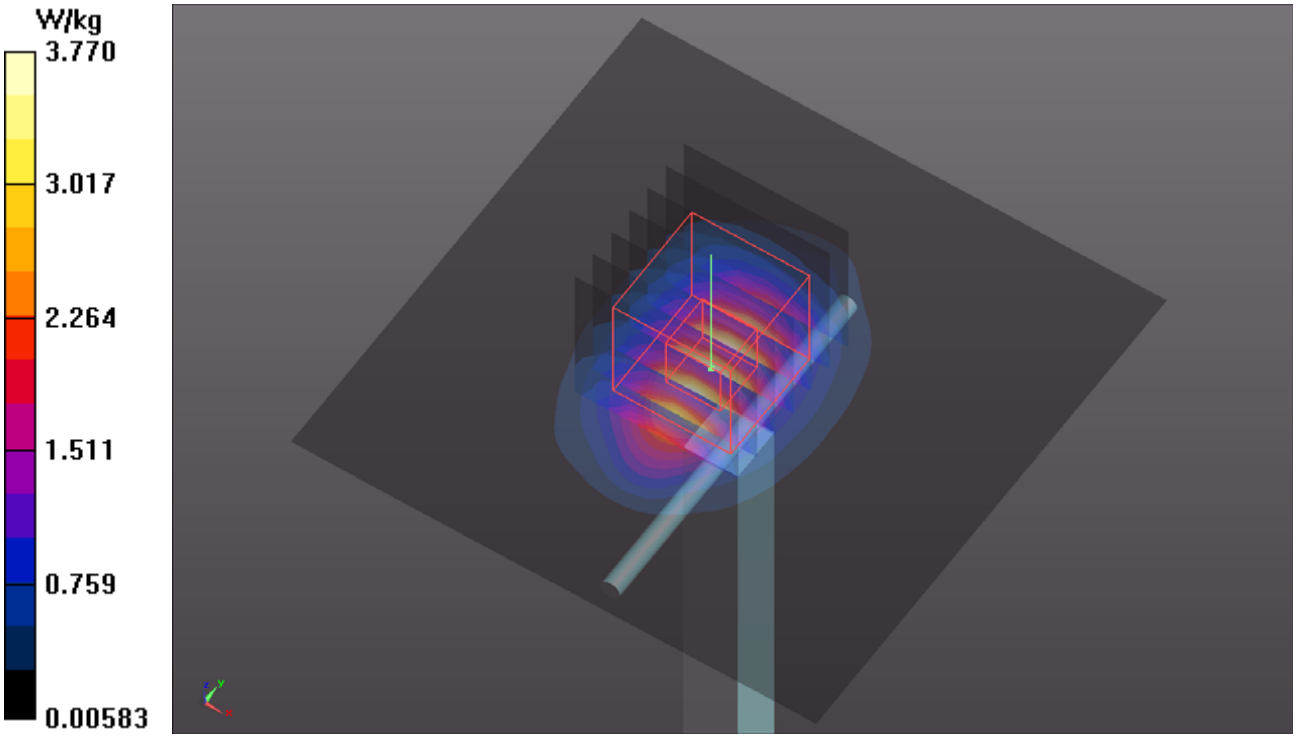
DUT: Dipole 2300 MHz; Type: D2300V2; SN: 1004

Communication System: CW; Frequency: 2300 MHz;Duty Cycle: 1:1
Medium: H19T27N3_0220 Medium parameters used: f = 2300 MHz; σ = 1.71 S/m; ε_r = 38.995; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ; Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3650; ConvF(8, 8, 8); Calibrated: 2019/05/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2019/05/08
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 3.77 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 47.56 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 4.75 W/kg
SAR(1 g) = 2.29 W/kg; SAR(10 g) = 1.1 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.86 W/kg

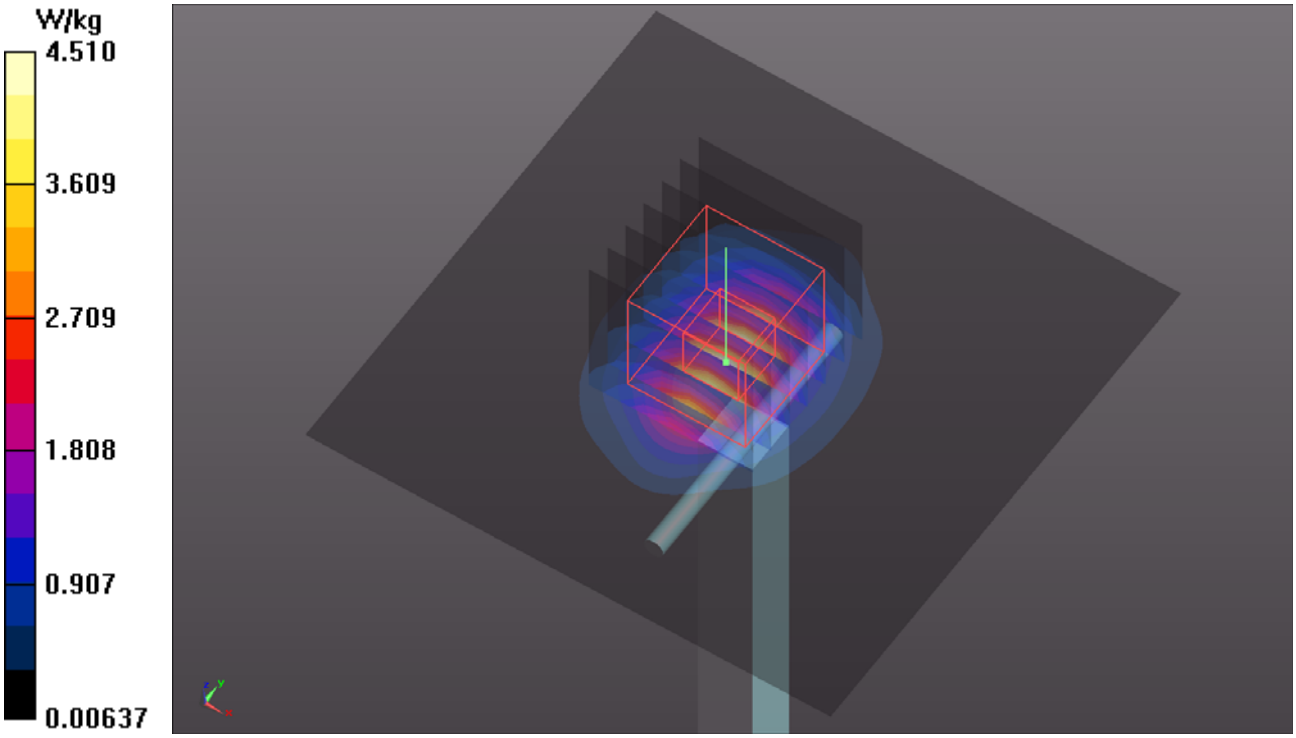


System Check_H2600_200220

DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N3_0220 Medium parameters used: f = 2600 MHz; σ = 2.01 S/m; ε_r = 37.965; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ; Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3650; ConvF(7.5, 7.5, 7.5); Calibrated: 2019/05/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2019/05/08
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.51 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 48.97 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 5.60 W/kg
SAR(1 g) = 2.63 W/kg; SAR(10 g) = 1.2 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.54 W/kg