FCC SAR Test Report

Report No.	:	**SA171013C04B**
Applicant	:	**ASUSTek COMPUTER INC.**
Address	:	**4F, No. 150, LI-TE Rd., PEITOU, TAIPEI 112, TAIWAN**
Product	:	**Notebook PC**
FCC ID	:	**MSQTP370QL**
Brand	:	**ASUS**
Model No.	:	**TP370QL**
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**
Sample Received Date	:	**Oct. 13, 2017**
Date of Testing	:	**Dec. 14, 2017 ~ Jan. 30, 2018**
Lab Address	:	**No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.**
Test Location	:	**No. 19, Hwa Ya 2nd Rd, Wen Hwa Vil, Kwei Shan Dist., Taoyuan City 33383, Taiwan (R.O.C)**

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.

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Release Control Record

Report No.	Reason for Change	Date Issued
SA171013C04B	Initial release	Mar. 06, 2018

1. Summary of Maximum SAR Value

Equipment Class	Mode	Highest SAR-1g Body (W/kg)	
		Laptop PC	Tablet PC
PCB	WCDMA II	0.40	0.81
	WCDMA IV	0.50	0.79
	WCDMA V	0.83	1.08
	LTE 2	0.41	0.94
	LTE 4 & 66	0.49	0.95
	LTE 5	0.83	1.09
	LTE 7	0.36	0.64
	LTE 12 & 17	0.95	1.12
	LTE 13	0.92	0.94
	LTE 25	0.48	1.08
	LTE 26	0.82	0.96
	LTE 30	0.44	1.09
	LTE 38 & 41	0.43	0.92
DTS	2.4G WLAN	1.06	0.93
NII	5.3G WLAN	0.65	0.97
	5.6G WLAN	0.73	0.93
	5.8G WLAN	1.01	1.08
DSS	Bluetooth	0.11	0.17
Highest Simultaneous Transmission SAR		Body	
		1.57	1.57

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 12 and band 17. The frequency span of LTE band 12 can completely cover LTE band 17, and they has the same tune-up power. SAR was tested for LTE band 12 only.
4. This device supports both LTE band 41 and band 38. The frequency span of LTE band 41 can completely cover LTE band 38, and they has the same tune-up power. SAR was tested for LTE band 41 only.

2. Description of Equipment Under Test

EUT Type	Notebook PC
FCC ID	MSQTP370QL
Brand Name	ASUS
Model Name	TP370QL
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 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 29 : 717 ~ 728 (Rx only) 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 46 : 5150 ~ 5925 (Rx only) LTE Band 66 : 1710.7 ~ 1779.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) WLAN : 2412 ~ 2462, 5180 ~ 5240, 5260 ~ 5320, 5500 ~ 5700, 5745 ~ 5825 Bluetooth : 2402 ~ 2480
Uplink Modulations	WCDMA : QPSK LTE : QPSK, 16QAM, 64QAM 802.11b : DSSS 802.11a/g/n/ac : OFDM 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	WWAN: Fixed Internal Antenna WLAN: PCB Antenna (Peak Antenna Gain : 0.94 dBi for 2.4GHz, 1.12 dBi for 5GHz)
EUT Stage	Production Unit

Note:

1. 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.

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 DASY52 System

DASY52 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 DASY52 software defined. The DASY52 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.

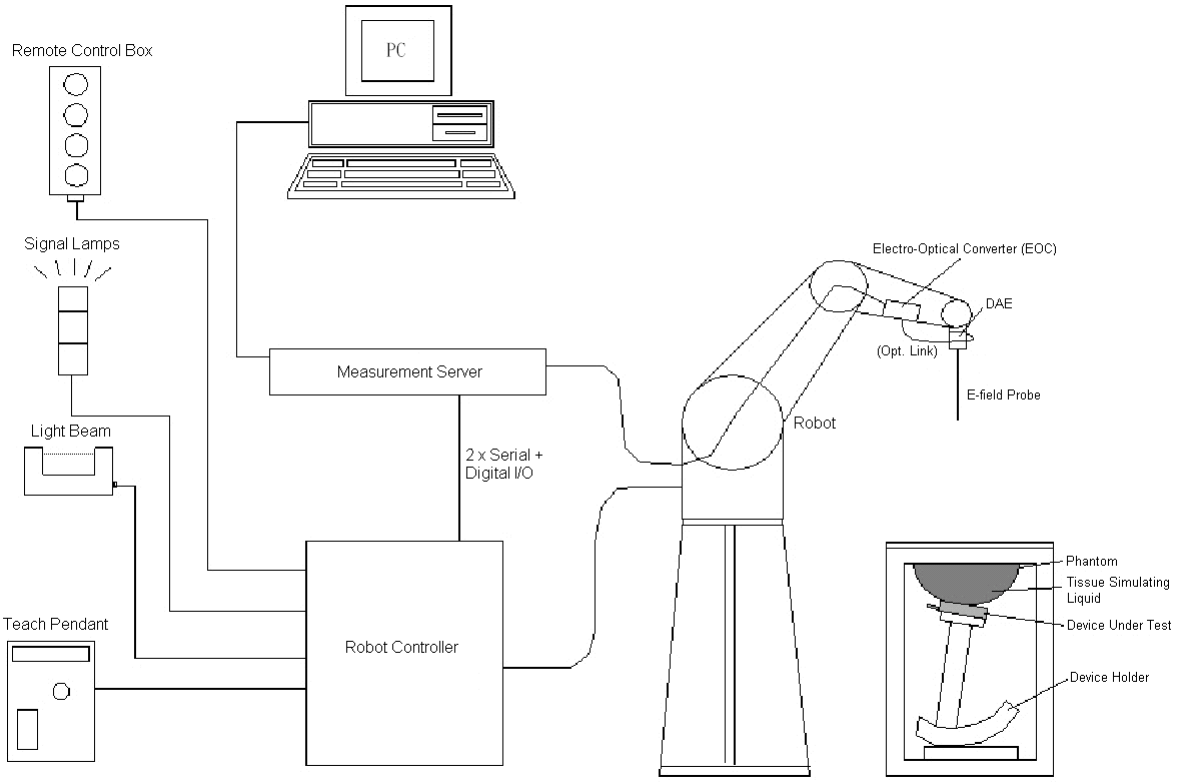


Fig-3.1 SPEAG DASY52 System Setup

3.2.1 Robot

The DASY52 system uses 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 DASY52 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	10 MHz to 6 GHz Linearity: ± 0.2 dB	
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (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	

Model	ES3DV3	
Construction	Symmetrical design with triangular core. Interleaved sensors. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE).	
Frequency	10 MHz to 4 GHz Linearity: ± 0.2 dB	
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.3 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	5 µW/g to 100 mW/g Linearity: ± 0.2 dB	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 3.9 mm (Body: 12 mm) Distance from probe tip to dipole centers: 2.0 mm	

Model	ET3DV6	
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz to 2.3 GHz; Linearity: ± 0.2 dB	
Directivity	± 0.2 dB in TSL (rotation around probe axis) ± 0.4 dB in TSL (rotation normal to probe axis)	
Dynamic Range	5 µW/g to 100 mW/g; Linearity: ± 0.2 dB	
Dimensions	Overall length: 337 mm (Tip: 16 mm) Tip diameter: 6.8 mm (Body: 12 mm) Distance from probe tip to dipole centers: 2.7 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

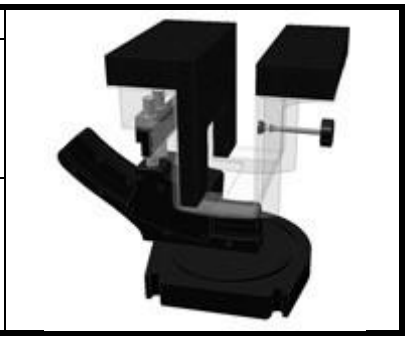
3.2.4 Phantoms

Model	Twin SAM
Construction	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.
Material	Vinylester, glass fiber 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	Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. 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, glass fiber 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	Mounting Device	
Construction	In combination with the Twin SAM Phantom or ELI4, the Mounting Device enables the rotation of the mounted transmitter device in spherical coordinates. Rotation point is the ear opening point. Transmitter devices can be easily and accurately positioned according to IEC, IEEE, FCC or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat).	
Material	POM	

Model	Laptop Extensions Kit	
Construction	Simple but effective and easy-to-use extension for Mounting Device that facilitates the testing of larger devices according to IEC 62209-2 (e.g., laptops, cameras, etc.). It is lightweight and fits easily on the upper part of the Mounting Device in place of the phone positioner.	
Material	POM, Acrylic glass, 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 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 5% are listed in Table-3.1.

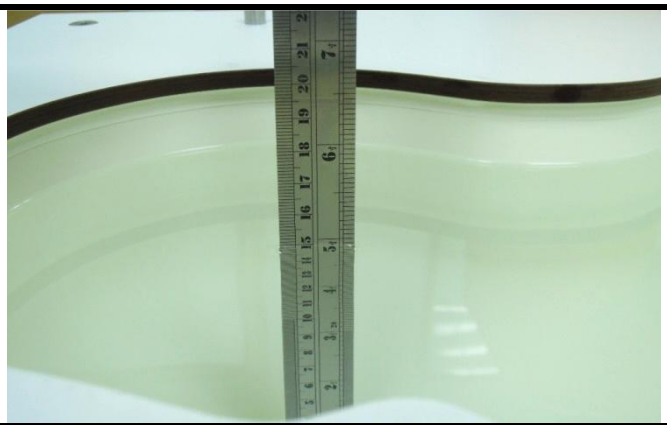
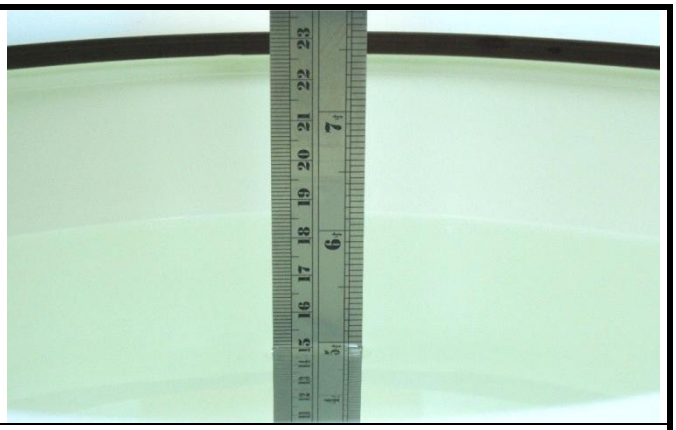
	

Photo of Liquid Height for Head Position	**Photo of Liquid Height for Body Position**

The dielectric properties of the head tissue simulating liquids are defined in IEEE 1528 and IEC 62209-1. For the body tissue simulating liquids, the dielectric properties are defined in RSS-102 Annex D 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.

Table-3.1 Targets of Tissue Simulating Liquid

Frequency (MHz)	Target Permittivity	Range of ±5%	Target Conductivity	Range of ±5%
For Head				
750	41.9	39.8 ~ 44.0	0.89	0.85 ~ 0.93
835	41.5	39.4 ~ 43.6	0.90	0.86 ~ 0.95
900	41.5	39.4 ~ 43.6	0.97	0.92 ~ 1.02
1450	40.5	38.5 ~ 42.5	1.20	1.14 ~ 1.26
1640	40.3	38.3 ~ 42.3	1.29	1.23 ~ 1.35
1750	40.1	38.1 ~ 42.1	1.37	1.30 ~ 1.44
1800	40.0	38.0 ~ 42.0	1.40	1.33 ~ 1.47
1900	40.0	38.0 ~ 42.0	1.40	1.33 ~ 1.47
2000	40.0	38.0 ~ 42.0	1.40	1.33 ~ 1.47
2300	39.5	37.5 ~ 41.5	1.67	1.59 ~ 1.75
2450	39.2	37.2 ~ 41.2	1.80	1.71 ~ 1.89
2600	39.0	37.1 ~ 41.0	1.96	1.86 ~ 2.06
3500	37.9	36.0 ~ 39.8	2.91	2.76 ~ 3.06
5200	36.0	34.2 ~ 37.8	4.66	4.43 ~ 4.89
5300	35.9	34.1 ~ 37.7	4.76	4.52 ~ 5.00
5500	35.6	33.8 ~ 37.4	4.96	4.71 ~ 5.21
5600	35.5	33.7 ~ 37.3	5.07	4.82 ~ 5.32
5800	35.3	33.5 ~ 37.1	5.27	5.01 ~ 5.53
For Body				
750	55.5	52.7 ~ 58.3	0.96	0.91 ~ 1.01
835	55.2	52.4 ~ 58.0	0.97	0.92 ~ 1.02
900	55.0	52.3 ~ 57.8	1.05	1.00 ~ 1.10
1450	54.0	51.3 ~ 56.7	1.30	1.24 ~ 1.37
1640	53.8	51.1 ~ 56.5	1.40	1.33 ~ 1.47
1750	53.4	50.7 ~ 56.1	1.49	1.42 ~ 1.56
1800	53.3	50.6 ~ 56.0	1.52	1.44 ~ 1.60
1900	53.3	50.6 ~ 56.0	1.52	1.44 ~ 1.60
2000	53.3	50.6 ~ 56.0	1.52	1.44 ~ 1.60
2300	52.9	50.3 ~ 55.5	1.81	1.72 ~ 1.90
2450	52.7	50.1 ~ 55.3	1.95	1.85 ~ 2.05
2600	52.5	49.9 ~ 55.1	2.16	2.05 ~ 2.27
3500	51.3	48.7 ~ 53.9	3.31	3.14 ~ 3.48
5200	49.0	46.6 ~ 51.5	5.30	5.04 ~ 5.57
5300	48.9	46.5 ~ 51.3	5.42	5.15 ~ 5.69
5500	48.6	46.2 ~ 51.0	5.65	5.37 ~ 5.93
5600	48.5	46.1 ~ 50.9	5.77	5.48 ~ 6.06
5800	48.2	45.8 ~ 50.6	6.00	5.70 ~ 6.30

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
B750	0.2	-	0.2	0.8	48.8	-	50.0	-
B835	0.2	-	0.2	0.9	48.5	-	50.2	-
B900	0.2	-	0.2	0.9	48.2	-	50.5	-
B1450	-	34.0	-	0.3	-	-	65.7	-
B1640	-	32.5	-	0.3	-	-	67.2	-
B1750	-	31.0	-	0.2	-	-	68.8	-
B1800	-	29.5	-	0.4	-	-	70.1	-
B1900	-	29.5	-	0.3	-	-	70.2	-
B2000	-	30.0	-	0.2	-	-	69.8	-
B2300	-	31.0	-	0.1	-	-	68.9	-
B2450	-	31.4	-	0.1	-	-	68.5	-
B2600	-	31.8	-	0.1	-	-	68.1	-
B3500	-	28.8	-	0.1	-	-	71.1	-
B5G	-	-	-	-	-	10.7	78.6	10.7

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.

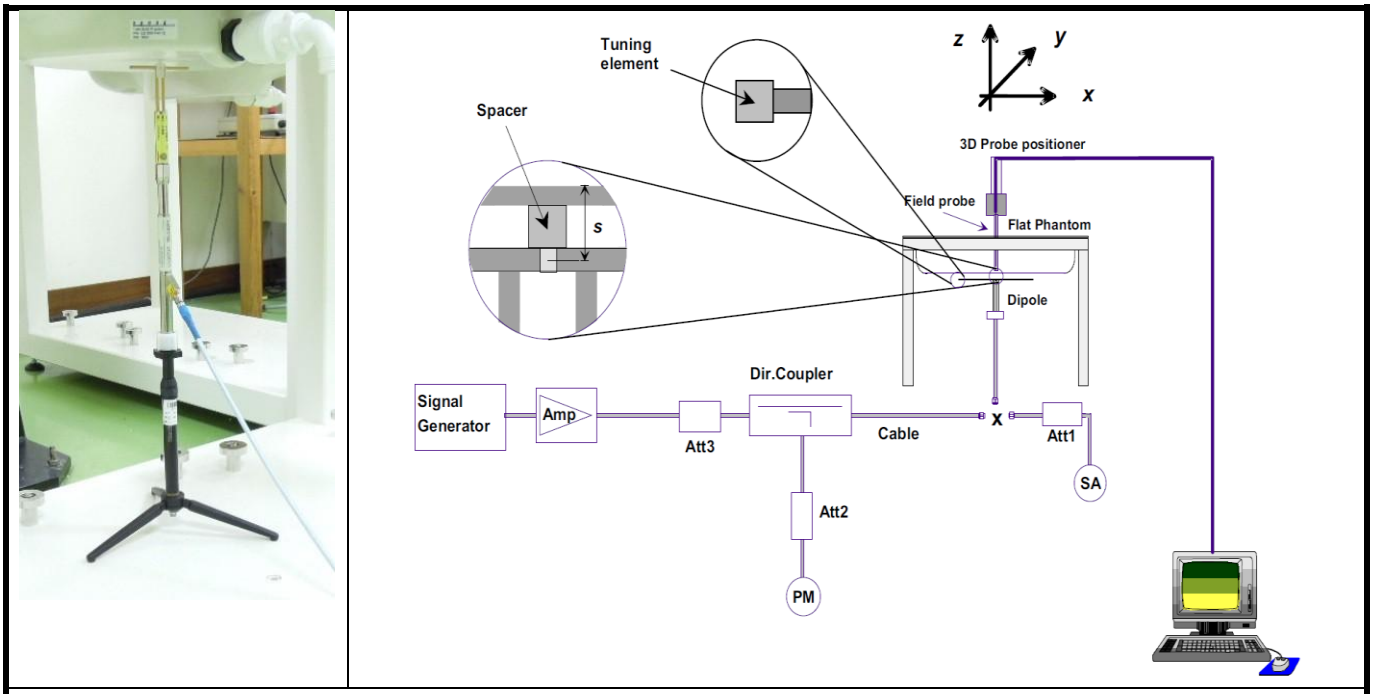


Fig-3.3 System Verification Setup

The 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 spectrum analyzer measures the forward power at the location of the system check dipole connector. The signal generator is adjusted for the desired forward power (250 mW is used for 700 MHz to 3 GHz, 100 mW is used for 3.5 GHz to 6 GHz) at the dipole connector and the power meter is read at that level. After connecting the cable to the dipole, the signal generator is readjusted for the same reading at power meter.

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 & 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 over 10 g. According to KDB 865664 D01, the resolution for Area and Zoom scan is specified in the table below.

Items	<= 2 GHz	2-3 GHz	3-4 GHz	4-5 GHz	5-6 GHz
Area Scan (Δx, Δy)	<= 15 mm	<= 12 mm	<= 12 mm	<= 10 mm	<= 10 mm
Zoom Scan (Δx, Δy)	<= 8 mm	<= 5 mm	<= 5 mm	<= 4 mm	<= 4 mm
Zoom Scan (Δz)	<= 5 mm	<= 5 mm	<= 4 mm	<= 3 mm	<= 2 mm
Zoom Scan Volume	>= 30 mm	>= 30 mm	>= 28 mm	>= 25 mm	>= 22 mm

Note:

When zoom scan is required and report SAR is <= 1.4 W/kg, the zoom scan resolution of Δx / Δy (2-3GHz: <= 8 mm, 3-4GHz: <= 7 mm, 4-6GHz: <= 5 mm) may be applied.

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 capabilities. It is designed with a proximity sensor which can trigger/not trigger power reduction for WCDMA and LTE on Rear Face and Right 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)

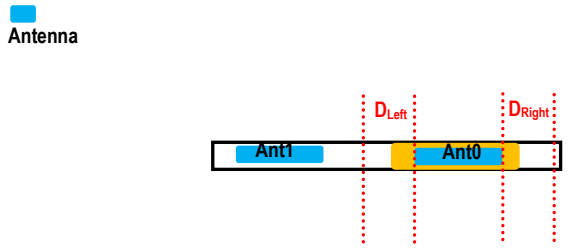
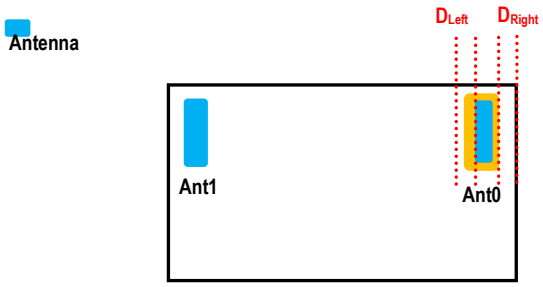
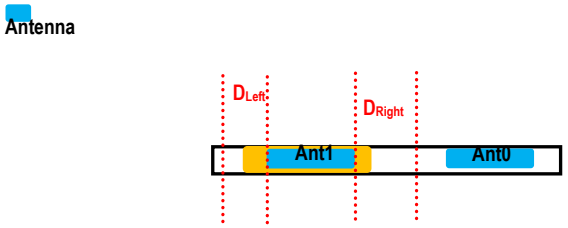
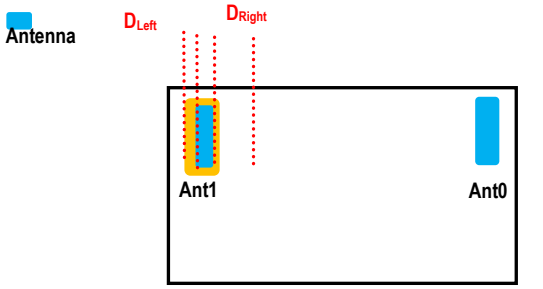
The proximity sensor triggering distance was determined per KDB 616217 for rear face and applicable edge. Summary for power verification per distance was tabulated in the below table.

Output Power Verification in dBm for EUT Rear Face											
Distance (mm)	30	31	32	33	34	35	36	37	38	39	40
WCDMA II	14.3	14.1	14.4	13.9	14.2	14.2	23.6	23.5	23.3	23.7	23.6
WCDMA IV	14.7	14.5	14.6	14.7	14.7	14.3	22.9	22.7	22.9	22.8	22.9
WCDMA V	18.9	19.0	19.4	19.0	19.4	18.9	23.4	23.7	23.7	23.6	23.4
LTE 2	14.1	14.1	13.8	14.1	14.1	14.0	23.7	23.5	23.3	23.4	23.4
LTE 4	14.4	14.6	14.7	14.4	14.6	14.8	23.2	23.2	23.2	23.4	23.3
LTE 5	19.0	19.0	18.7	18.7	18.8	18.8	22.5	22.8	22.9	22.5	22.6
LTE 7	12.7	12.8	12.8	12.7	12.6	12.7	23.7	23.8	23.8	23.6	23.7
LTE 12	20.4	20.3	20.6	20.6	20.5	20.5	23.4	23.0	23.2	23.2	23.1
LTE 13	19.0	19.1	19.0	19.4	19.1	19.3	23.3	23.1	23.0	23.1	22.9
LTE 17	20.1	20.2	20.2	20.5	20.0	20.0	23.1	23.4	23.3	23.2	23.0
LTE 25	14.7	14.9	14.7	14.9	14.7	14.7	23.3	23.1	22.8	23.2	23.3
LTE 26	18.2	18.5	18.2	18.7	18.6	18.2	23.6	23.6	23.6	23.5	23.4
LTE 30	11.0	11.3	11.0	11.2	11.3	11.5	23.5	23.2	23.3	23.1	23.5
LTE 38	14.3	14.3	14.2	14.0	14.0	14.4	23.3	23.2	23.4	23.2	23.2
LTE 41	14.5	14.3	14.5	14.3	14.1	14.0	23.2	23.7	23.6	23.3	23.7
LTE 66	15.0	15.0	15.2	15.5	15.5	15.2	23.5	23.2	23.1	23.6	23.3

Output Power Verification in dBm for EUT Right Edge											
Distance (mm)	19	20	21	22	23	24	25	26	27	28	29
WCDMA V	18.9	18.9	19.2	19.0	19.3	19.3	23.6	23.3	23.4	23.6	23.4
LTE 5	18.9	19.2	18.9	18.7	18.9	19.1	22.6	22.7	23.0	22.5	22.7
LTE 7	12.9	12.9	12.6	12.4	12.4	12.8	23.5	23.4	23.3	23.3	23.8
LTE 12	20.1	20.1	20.5	20.6	20.1	20.5	23.2	23.2	23.0	23.3	23.4
LTE 13	19.1	19.2	19.4	19.0	18.9	19.1	23.1	23.2	23.0	23.2	23.4
LTE 17	20.5	20.5	20.3	20.5	20.1	20.3	23.2	23.2	23.1	23.4	23.5
LTE 25	14.8	14.9	14.8	14.7	14.4	14.6	23.2	23.0	22.8	22.8	22.8
LTE 26	18.2	18.7	18.3	18.3	18.5	18.6	23.5	23.3	23.3	23.5	23.3
LTE 30	11.2	11.4	11.4	11.5	11.1	11.4	23.1	23.4	23.2	23.3	23.5
LTE 38	14.0	14.3	14.5	14.5	14.2	14.2	23.4	23.2	23.2	23.4	23.0
LTE 41	14.2	14.0	14.1	14.0	14.1	14.4	23.3	23.7	23.5	23.7	23.5
LTE 66	15.1	15.2	15.3	15.1	15.3	15.1	23.4	23.6	23.6	23.4	23.5

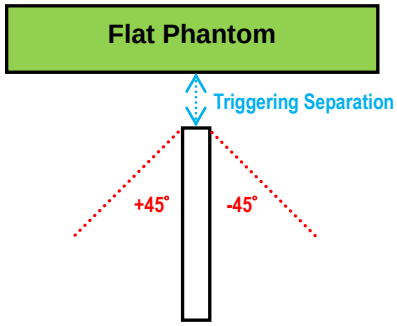
Proximity Sensor Coverage (KDB 616217 D04 §6.3)

The proximity sensor coverage was determined per KDB 616217 for rear face and applicable edge. Summary for proximity sensor active region is illustrated in below.

	
P-sensor Coverage for Rear Face: D_{Left} is 5 mm, D_{Right} is 9 mm	**P-sensor Coverage for Right Edge:** D_{Left} is 3 mm, D_{Right} is 9 mm
	
P-sensor Coverage for Rear Face: D_{Left} is 6 mm, D_{Right} is 11 mm	**P-sensor Coverage for Left Edge:** D_{Left} is 4 mm, D_{Right} is 7 mm

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°
Right Edge	24	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 35 mm for EUT Rear Face, and 24 mm for Right Side. The separation distance of 24 mm determined by the smallest triggering distance on Right 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 24 mm for the Right 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 20 mm for EUT Rear Face, and 15 mm for Right 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>

Handsets with Release 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body-worn configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures in the “Release 5 HSDPA Data Devices”, for the highest reported SAR body-worn exposure configuration in 12.2 kbps RMC. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

Handsets with Release 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body-worn configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures in the “Release 6 HSPA Data Devices”, for the highest reported body-worn exposure SAR configuration in 12.2 kbps RMC. When VOIP is applicable for next to the ear head exposure in HSPA, the 3G SAR test reduction procedure is applied to HSPA with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body-worn measurements is tested for next to the ear head exposure.

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 signalled 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	β_{ed}1: 47/15 β_{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 signalled 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.

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**		
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

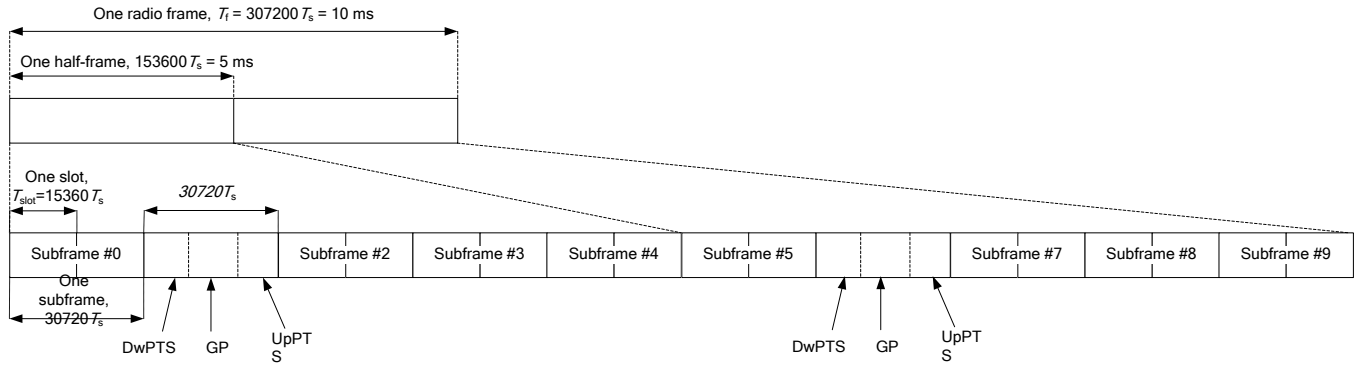
Note: MPR is according to the standard and implemented in the circuit (mandatory).

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%

Considering the highest transmission duty cycle, TDD-LTE was tested using Uplink-Downlink Configuration 0 with 6 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 7 using extended cyclic prefix uplink. Therefore, SAR testing for TDD-LTE was performed at the maximum output power with highest transmission duty cycle of 63.33%.

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]	Channel bandwidths for carrier-4 [MHz]		
CA_2C	5	20			40	0
	10	15, 20				
	15	10, 15, 20				
	20	5, 10, 15, 20				
CA_5B	5, 10	10			20	0
	10	5				
	3	5			8	1
	5	3				
CA_7B	15	5			20	0
CA_7C	15	15			40	0
	20	20				
	10	20			40	1
	15	15, 20				
	20	10, 15, 20				
	15	10, 15			40	2
	20	15, 20				
CA_12B	5	5, 10			15	0
CA_38C	15	15			40	0
	20	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]	Channel bandwidths for carrier-4 [MHz]		
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_41D	10	20	15		60	0
	10	15, 20	20			
	15	20	10, 15			
	15	10, 15, 20	20			
	20	15, 20	10			
	20	10, 15, 20	15, 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				

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]	Channel Bandwidths for Carrier-4 [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_7A-7A	5	15			40	0
	10	10, 15				
	15	15, 20				
	20	20				
	5, 10, 15, 20	5, 10, 15, 20			40	1
	5, 10, 15, 20	5, 10			30	2
	10, 15, 20	10, 15, 20			40	3
CA_41A-41A	10, 15, 20	10, 15, 20			40	0
	5, 10, 15, 20	5, 10, 15, 20			40	1
CA_41A-41C	5, 10, 15, 20	Refer to CA_41C (BCS1)			60	0
	Refer to CA_41C (BCS1)		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]	Channel Bandwidths for Carrier-4 [MHz]		
CA_41A-41D	5, 10, 15, 20	Refer to CA_41D (BCS0)			80	0
	Refer to CA_41D (BCS0)			5, 10, 15, 20		
CA_41C-41C	Refer to CA_41C (BCS0)		Refer to CA_41C (BCS0)		80	0
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-2A-4A-4A	2	Refer to CA_2A-2A (BCS0)	80	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_2C-5A	2	Refer to CA_2C (BCS0)	50	0
	5	5, 10		
CA_2A-7A	2	5, 10, 15, 20	40	0
	7	5, 10, 15, 20		
CA_2A-7A-7A	2	5, 10, 15, 20	60	0
	7	Refer to CA_7A-7A (BCS1)		
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-2A-12A	2	Refer to CA_2A-2A (BCS0)	50	0
	12	5, 10		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_2A-12B	2	5, 10, 15, 20	35	0
	12	Refer to CA_12B (BCS0)		
CA_2C-12A	2	Refer to CA_2C (BCS0)	50	0
	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-17A	2	5, 10	20	0
	17	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_2C-29A	2	Refer to CA_2C (BCS0)	50	0
	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_2C-30A	2	Refer to CA_2C (BCS0)	50	0
	30	5, 10		
CA_2A-46A	2	5, 10, 15, 20	40	0
	46	20		
CA_2A-46A-46C	2	5, 10, 15, 20	80	0
	46	Refer to CA_46A-46C (BCS0)		
CA_2A-46C	2	5, 10, 15, 20	60	0
	46	Refer to CA_46C (BCS0)		
CA_2A-46D	2	5, 10, 15, 20	80	0
	46	Refer to CA_46D (BCS0)		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_2A-46A-46A	2	5, 10, 15, 20	60	0
	46	Refer to CA_46A-46A (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_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-7A	4	5, 10	30	0
	7	5, 10, 15, 20		
	4	5, 10, 15, 20	40	1
	7	5, 10, 15, 20		
CA_4A-4A-7A	4	5, 10	40	0
	4	5, 10		
	7	5, 10, 15, 20		
	4	5, 10, 15, 20	60	1
	4	5, 10, 15, 20		
	7	5, 10, 15, 20		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_4A-7A-7A	4	5, 10, 15, 20	60	0
	7	Refer to the CA_7A-7A (BCS1)		
CA_4A-12A	4	1.4, 3, 5, 10	20	0
	12	5, 10		
	4	1.4, 3, 5, 10, 15, 20	30	1
	12	5, 10		
	4	5, 10, 15, 20	30	2
	12	3, 5, 10		
	4	5, 10	20	3
	12	5, 10		
	4	5, 10, 15, 20	30	4
	12	5, 10		
	4	5, 10, 15	20	5
	12	5		
CA_4A-4A-12A	4	Refer to CA_4A-4A (BCS0)	50	0
	12	5, 10		
CA_4A-12B	4	5, 10, 15, 20	35	0
	12	Refer to CA_12B (BCS0)		
CA_4A-13A	4	5, 10, 15, 20	30	0
	13	10		
	4	5, 10	20	1
	13	10		
CA_4A-4A-13A	4	Refer to CA_4A-4A (BCS0)	50	0
	13	10		
CA_4A-17A	4	5, 10	20	0
	17	5, 10		
CA_4A-29A	4	5, 10	20	0
	29	3, 5, 10		
	4	5, 10	20	1
	29	5, 10		
	4	5, 10, 15, 20	30	2
	29	5, 10		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_4A-4A-29A	4	Refer to CA_4A-4A (BCS0)	50	0
	29	5, 10		
CA_4A-30A	4	5, 10, 15, 20	30	0
	30	5, 10		
CA_4A-4A-30A	4	Refer to CA_4A-4A (BCS0)	50	0
	30	5, 10		
CA_4A-46A	4	5, 10, 15, 20	40	0
	46	20		
CA_4A-46A-46A	4	5, 10, 15, 20	60	0
	46	Refer to CA_46A-46A (BCS0)		
CA_4A-46A-46C	4	5, 10, 15, 20	80	0
	46	Refer to CA_46A-46C (BCS0)		
CA_4A-46C	4	5, 10, 15, 20	60	0
	46	Refer to CA_46C (BCS0)		
CA_4A-46D	4	5, 10, 15, 20	80	0
	46	Refer to CA_46D (BCS0)		
CA_5A-7A	5	1.4, 3, 5, 10	30	0
	7	10, 15, 20		
	5	5, 10	30	1
	7	10, 15, 20		
CA_5A-7A-7A	5	5, 10	50	0
	7	Refer to CA_7A-7A (BCS3)		
CA_5A-25A	5	5, 10	30	0
	25	5, 10, 15, 20		
CA_5A-30A	5	5, 10	20	0
	30	5, 10		
CA_5A-40A	5	5, 10	30	0
	40	5, 10, 15, 20		
	5	3, 5, 10	30	1
	40	5, 10, 15, 20		
CA_5A-40C	5	5, 10	50	0
	40	Refer to CA_40C (BCS1)		
	5	3, 5, 10	50	1
	40	Refer to CA_40C (BCS1)		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_5A-46A	5	5, 10	30	0
	46	20		
	5	3, 5, 10	30	1
	46	10, 20		
CA_5A-46C	5	5, 10	50	0
	46	Refer to CA_46C (BCS0)		
	5	5, 10	50	1
	46	Refer to CA_46C (BCS1)		
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_7A-12A	7	5, 10, 15, 20	30	0
	12	5, 10		
CA_7A-46A	7	5, 10, 15, 20	40	0
	46	20		
	7	5, 10, 15, 20	40	1
	46	10, 20		
CA_7A-46C	7	5, 10, 15, 20	60	0
	46	Refer to CA_46C (BCS0)		
	7	5, 10, 15, 20	60	1
	46	Refer to CA_46C (BCS1)		
CA_7A-46D	7	5, 10, 15, 20	80	0
	46	Refer to CA_46D (BCS0)		
	7	5, 10, 15, 20	80	1
	46	Refer to CA_46D (BCS1)		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_12A-25A	12	5, 10	30	0
	25	5, 10, 15, 20		
CA_12A-30A	12	5, 10	20	0
	30	5, 10		
CA_12A-46A	12	5, 10	30	0
	46	20		
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)		
CA_12A-66C	12	5, 10	50	0
	66	Refer to CA_66C (BCS0)		
CA_13A-46A	13	5, 10	30	0
	46	20		
CA_13A-46C	13	5, 10	50	0
	46	Refer to CA_46C (BCS0)		
CA_13A-46D	13	5, 10	70	0
	46	Refer to CA_46D (BCS0)		
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)		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_13A-66C	13	5, 10	50	0
	66	Refer to CA_66C (BCS0)		
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_25A-41A	25	5, 10, 15, 20	40	0
	41	5, 10, 15, 20		
CA_25A-41C	25	5, 10, 15, 20	60	0
	41	Refer to CA_41C (BCS0)		
CA_25A-41D	25	5, 10, 15, 20	80	0
	41	Refer to CA_41D (BCS0)		
CA_26A-41A	26	5, 10, 15	35	0
	41	5, 10, 15, 20		
CA_26A-41C	26	5, 10, 15	55	0
	41	Refer to CA_41C (BCS1)		
CA_30A-29A	29	5, 10	20	0
	30	5, 10		
CA_66A-29A	29	5, 10	30	0
	66	5, 10, 15, 20		
CA_29A-66A-66A	29	5, 10	50	0
	66	Refer to CA_66A-66A (BCS0)		
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)		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_41A-46A	41	5, 10, 15, 20	40	0
	46	20		
CA_46A-46C-66A	46	Refer to CA_46A-46C (BCS0)	80	0
	66	5, 10, 15, 20		
CA_46C-66A	46	Refer to CA_46C (BCS0)	60	0
	66	5, 10, 15, 20		
CA_46A-66A	46	20	40	0
	66	5, 10, 15, 20		
CA_46D-66A	46	Refer to CA_46D (BCS0)	80	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-7A	2	5, 10, 15,20	60	0
	4	5, 10, 15,20		
	7	5, 10, 15,20		
CA_2A-4A-12A	2	5, 10, 15, 20	50	0
	4	5, 10, 15, 20		
	12	5, 10		
CA_2A-2A-4A-12A	2	Refer to CA_2A-2A (BCS0)	70	0
	4	5, 10, 15, 20		
	12	5, 10		
CA_2A-4A-4A-12A	2	5, 10, 15, 20	70	0
	4	Refer to CA_4A-4A (BCS0)		
	12	5, 10		
CA_2A-4A-13A	2	5, 10, 15, 20	50	0
	4	5, 10, 15, 20		
	13	10		
CA_2A-4A-29A	2	5, 10, 15, 20	50	0
	4	5, 10, 15, 20		
	29	5, 10		
CA_2A-4A-30A	2	5, 10, 15, 20	50	0
	4	5, 10, 15, 20		
	30	5, 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-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		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_2C-5A-30A	2	Refer to CA_2C (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		
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	2	5, 10, 15, 20	60	0
	5	Refer to CA_5B (BCS0)		
	66	5, 10, 15, 20		
CA_2A-7A-12A	2	5, 10, 15, 20	50	0
	7	5, 10, 15, 20		
	12	5, 10		
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_2C-12A-30A	2	Refer to CA_2C (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		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_2A-2A-12A-66A	2	Refer to CA_2A-2A (BCS0)	70	0
	12	5, 10		
	66	5, 10, 15, 20		
CA_2A-12A-66A-66A	2	5, 10,15, 20	70	0
	12	5, 10		
	66	Refer to 66A-66A (BCS0)		
CA_2A-13A-66A	2	5, 10, 15, 20	50	0
	13	5, 10		
	66	5, 10, 15, 20		
CA_2A-29A-30A	2	5, 10, 15, 20	40	0
	29	5, 10		
	30	5, 10		
CA_2A-2A-29A-30A	2	Refer to CA_2A-2A (BCS0)	60	0
	29	5, 10		
	30	5, 10		
CA_2C-29A-30A	2	Refer to CA_2C (BCS0)	60	0
	29	5, 10		
	30	5, 10		
CA_2A-29A-66A	2	5, 10, 15, 20	50	0
	29	5, 10		
	66	5, 10, 15, 20		
CA_4A-5A-30A	4	5, 10, 15, 20	40	0
	5	5, 10		
	30	5, 10		
CA_4A-4A-5A-30A	4	Refer to CA_4A-4A (BCS0)	60	0
	5	5, 10		
	30	5, 10		
CA_4A-7A-12A	4	5, 10	40	0
	7	5, 10, 15, 20		
	12	5, 10		
	4	5, 10, 15, 20	50	1
	7	5, 10, 15, 20		
	12	5, 10		

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_4A-12A-30A	4	5, 10, 15, 20	40	0
	12	5, 10		
	30	5, 10		
CA_4A-4A-12A-30A	4	Refer to CA_4A-4A (BCS0)	60	0
	12	5, 10		
	30	5, 10		
CA_4A-29A-30A	4	5, 10, 15, 20	40	0
	29	5, 10		
	30	5, 10		
CA_4A-4A-29A-30A	4	Refer to CA_4A-4A (BCS0)	60	0
	29	5, 10		
	30	5, 10		
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_12A-66B	12	5, 10	30	0
	66	Refer to CA_66B (BCS0)		
CA_12A-46C	12	5, 10	50	0
	46	Refer to CA_46C		
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_29A-30A-66A	29	5, 10	40	0
	30	5, 10		
	66	5, 10, 15, 20		

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

Downlink CA Configuration	LTE Bands	Channel Bandwidths for Carrier [MHz]	Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
CA_2A-4A-7A-7A	2	5, 10, 15, 20	80	0
	4	5, 10, 15, 20		
	7	Refer to CA_7A-7A (BCS0)		
CA_2A-29A-30A-66A	2	5, 10, 15, 20	60	0
	29	5, 10		
	30	5, 10		
	66	5, 10, 15, 20		
CA_2A-4A-5A-30A	2	5, 10, 15, 20	60	0
	4	5, 10, 15, 20		
	5	5, 10		
	30	5, 10		
CA_2A-4A-7A-12A	2	5, 10, 15, 20	70	0
	4	5, 10, 15, 20		
	7	5, 10, 15, 20		
	12	5, 10		
CA_2A-4A-12A-30A	2	5, 10, 15, 20	60	0
	4	5, 10, 15, 20		
	12	5, 10		
	30	5, 10		
CA_2A-4A-29A-30A	2	5, 10, 15, 20	60	0
	4	5, 10, 15, 20		
	29	5, 10		
	30	5, 10		
CA_2A-5A-30A-66A	2	5, 10, 15, 20	60	0
	5	5, 10		
	30	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-12A-30A-66A	2	5, 10, 15, 20	60	0
	12	5, 10		
	30	5, 10		
	66	5, 10, 15, 20		
CA_66A-66A-29A-30A	66	Refer to CA_66A-66A (BCS0)	60	0
	29	5, 10		
	30	5, 10		

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, 4bands/4CCs. The CA/CC combinations in each columns are sorted so that frequency bands listed in subsequent columns on each row are ascending subsets, as illustrated below; i.e., columns to the right correspond to increasing number of frequency bands and CCs.

Configure	Intra Band		Inter Band					
	Contiguous	Non-Contiguous	2 Bands / 2CC	2 Bands / 3CC	2 Bands / 4CC	3 Bands / 3CC	3 Bands / 4CC	4 Bands / 4CC
		2A-2A	2A-4A	2A-2A-4A	2A-2A-4A-4A	2A-4A-5A		2A-4A-5A-30A
		4A-4A		2A-4A-4A		2A-4A-30A		
			2A-5A	2A-2A-5A		2A-5A-30A	2A-2A-5A-30A	
			2A-30A	2A-2A-30A				
			4A-5A	4A-4A-5A		4A-5A-30A	4A-4A-5A-30A	
			4A-30A	4A-4A-30A				
			5A-30A					
		7A-7A	2A-7A	2A-7A-7A		2A-4A-7A	2A-4A-7A-7A	2A-4A-7A-12A
			2A-12A	2A-2A-12A		2A-4A-12A	2A-2A-4A-12A	
			4A-7A	4A-4A-7A				
			4A-12A	4A-4A-12A			2A-4A-4A-12A	
				4A-7A-7A		4A-7A-12A		
			7A-12A			2A-7A-12A		
			12A-30A			2A-12A-30A	2A-2A-12A-30A	2A-4A-12A-30A
						4A-12A-30A	4A-4A-12A-30A	
			2A-29A			2A-29A-30A	2A-2A-29A-30A	2A-4A-29A-30A
						2A-4A-29A		
			4A-29A	4A-4A-29A		4A-29A-30A	4A-4A-29A-30A	
			2A-66A	2A-2A-66A	2A-2A-66A-66A			2A-5A-30A-66A
						2A-5A-66A	2A-2A-5A-66A	
				2A-66A-66A			2A-5A-66A-66A	
			5A-66A	5A-66A-66A				
			30A-66A	30A-66A-66A		5A-30A-66A	5A-30A-66A-66A	
			12A-66A	12A-66A-66A		2A-12A-66A	2A-2A-12A-66A	2A-12A-30A-66A
							2A-12A-66A-66A	
						12A-30A-66A	12A-30A-66A-66A	
			30A-29A			66A-30A-29A	66A-66A-29A-30A	2A-29A-30A-66A
		66A-66A	66A-29A	66A-66A-29A		2A-29A-66A		
	2C			2C-5A			2C-5A-30A	
							2A-5B-30A	
							2A-5B-66A	
			2C-12A				2C-12A-30A	
			2C-30A					
			2C-29A				2C-29A-30A	
	5B		5B-66A	5B-66A-66A			5B-30A-66A	

	Intra Band		Inter Band					
	Contiguous	Non-Contiguous	2 Bands / 2CC	2 Bands / 3CC	2 Bands / 4CC	3 Bands / 3CC	3 Bands / 4CC	4 Bands / 4CC
Configure			2A-13A	2A-2A-13A		2A-4A-13A		
			4A-13A	4A-4A-13A				
			13A-66A	13A-66A-66A		2A-13A-66A		
			2A-46A	2A-46A-46A	2A-46A-46C			
				2A-46C				
					2A-46D			
				4A-46C	4A-46A-46C			
					4A-46D			
					7A-46D			
					13A-46D			
	41D				25A-41D			
			66A-46A		66A-46A-46C			
				66A-46C				
					66A-46D			
	12B			2A-12B				
				2A-66B				
				2A-66C				
				4A-12B				
			4A-46A	4A-46A-46A				
			5A-7A	5A-7A-7A				
				5A-46C				
				5A-66B				
				5A-66C				
				7A-46C				
				12A-66B				
				12A-66C				
				12A-46C				
				13A-46C				
				13A-66B				
				13A-66C				
	41C	41C-41C		25A-41C				
				26A-41C				

Configure	Intra Band		Inter Band					
	Contiguous	Non-Contiguous	2 Bands / 2CC	2 Bands / 3CC	2 Bands / 4CC	3 Bands / 3CC	3 Bands / 4CC	4 Bands / 4CC
			2A-17A					
			4A-17A					
			5A-25A					
			5A-46A					
			7A-46A					
			12A-25A					
			12A-46A					
			13A-46A					
			25A-26A					
			25A-41A					
			26A-41A					
			41A-46A					
		41A-41A						
		41A-41C						
		41A-41D						
	66B	66A-66B						
	66C	66A-66C						
	7B							
	7C							
	38C							

LTE CA Configurations and Bandwidth Combination Sets defined for Inter-Band CA (4*4 MIMO)

2CA 4x4 MIMO						
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]	Channel bandwidths for carrier-4 [MHz]		
CA_2C	5	20			40	0
	10	15, 20				
	15	10, 15, 20				
	20	5, 10, 15, 20				
CA_7C	15	15			40	0
	20	20				
	10	20			40	1
	15	15, 20				
	20	10, 15, 20				
	15	10, 15			40	2
	20	15, 20				
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				

3CA 4x4 MIMO						
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]	Channel bandwidths for carrier-4 [MHz]		
CA_41D	10	20	15		60	0
	10	15, 20	20			
	15	20	10, 15			
	15	10, 15, 20	20			
	20	15, 20	10			
	20	10, 15, 20	15, 20			

LTE Uplink Carrier Aggregation (CA) Setup Configurations

This device supports LTE uplink CA with a maximum of two 20 MHz carrier components in the uplink. The maximum output power for uplink intra-band contiguous CA specified in Table 6.2.2A-1 of 3GPP TS 36.101 is the same as single carrier specified in Table 6.2.2-1 of 3GPP TS 36.101. In Table 6.2.3A-1 of 3GPP TS 36.101, the MPR (maximum power reduction) for several dB is allowed due to modulation and contiguously aggregated transmit bandwidth configuration. All the RF parameters in this device have followed above 3GPP criteria.

Uplink CA Configurations	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]	Channel bandwidths for carrier-4 [MHz]		
CA_7C	15	15			40	0
	20	20				
	10	20			40	1
	15	15, 20				
	20	10, 15, 20				
	15	10, 15			40	2
	20	15, 20				
CA_38C	15	15			40	0
	20	20				

Uplink CA Configurations	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]	Channel bandwidths for carrier-4 [MHz]		
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				

This device does not support full CA (Carrier Aggregation) features on 3GPP release 12. Its capability for LTE CA is supported configuration is shown in above. For network enhancement features, it does not support Wi-Fi Offloading, Enhanced SC-FDMA, Uplink MIMO, CoMP, HetNet, Relay, SON, Cross-Carrier Scheduling, eICIC, Enhanced Downlink MIMO, MBMS, M2M/D2D. All other uplink communications are identical to the LTE Release 8 specifications.

<Considerations Related to WLAN for Setup and Testing>

In general, various vendor specific external test software and chipset based internal test modes are typically used for SAR measurement. These chipset based test mode utilities are generally hardware and manufacturer dependent, and often include substantial flexibility to reconfigure or reprogram a device. A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement. The test frequencies established using test mode must correspond to the actual channel frequencies. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. In addition, a periodic transmission duty factor is required for current generation SAR systems to measure SAR correctly. The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

According to KDB 248227 D01, this device has installed WLAN engineering testing software which can provide continuous transmitting RF signal. During WLAN SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.

Initial Test Configuration

An initial test configuration is determined for OFDM transmission modes in 2.4 GHz and 5 GHz bands according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Subsequent Test Configuration

SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units. Additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. When the highest reported SAR for the initial test configuration according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.

SAR Test Configuration and Channel Selection

When multiple channel bandwidth configurations in a frequency band have the same specified maximum output power, the initial test configuration is using largest channel bandwidth, lowest order modulation, lowest data rate, and lowest order 802.11 mode (i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n). After an initial test configuration is determined, if multiple test channels have the same measured maximum output power, the channel chosen for SAR measurement is determined according to the following.

1) The channel closest to mid-band frequency is selected for SAR measurement.

2) For channels with equal separation from mid-band frequency; for example, high and low channels or two mid-band channels, the higher frequency (number) channel is selected for SAR measurement.

Test Reduction for U-NII-1 (5.2 GHz) and U-NII-2A (5.3 GHz) Bands

For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following.

1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition).

2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration.

<Considerations Related to Bluetooth for Setup and Testing>

This device has installed Bluetooth engineering testing software which can provide continuous transmitting RF signal. During Bluetooth SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.

4.2 EUT Testing Position

4.2.1 Body Exposure Conditions

For laptop PC with antennas built-in on display screen, according to RSS-102 Supplementary procedures (SPR-001), IC requires SAR measurements to be performed with the side/edge of the display screen containing the built-in antenna pointing towards the flat phantom, unless the side/edge of the laptop computer containing the built-in antenna was already tested against the flat phantom to account for the user requirements (e.g. antenna in the laptop base). The separation distance shall not exceed 25 mm between the device and the flat phantom to show compliance for bystanders. Additional configurations regarding SAR testing for laptop computer are not required if the separation distance of 25 mm for bystanders represents the worst-case configuration.

The bystander SAR measurement procedure is as following.

1. If the integrated antenna is located in the back side of the display screen, the back side shall be facing towards the flat phantom at a distance not exceeding 25 mm.
2. If the integrated antenna is installed along the edge of the display screen, the edge shall be facing towards the flat phantom at a distance not exceeding 25 mm.
3. If the integrated antenna is installed at the corner of the display, both edges, as well as back side shall be tested to ensure that the worst-case configuration is captured.

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.

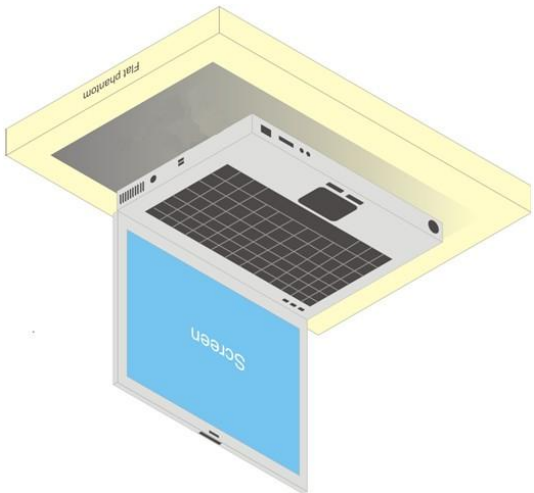


Fig-4.1 Illustration for Laptop Setup

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.

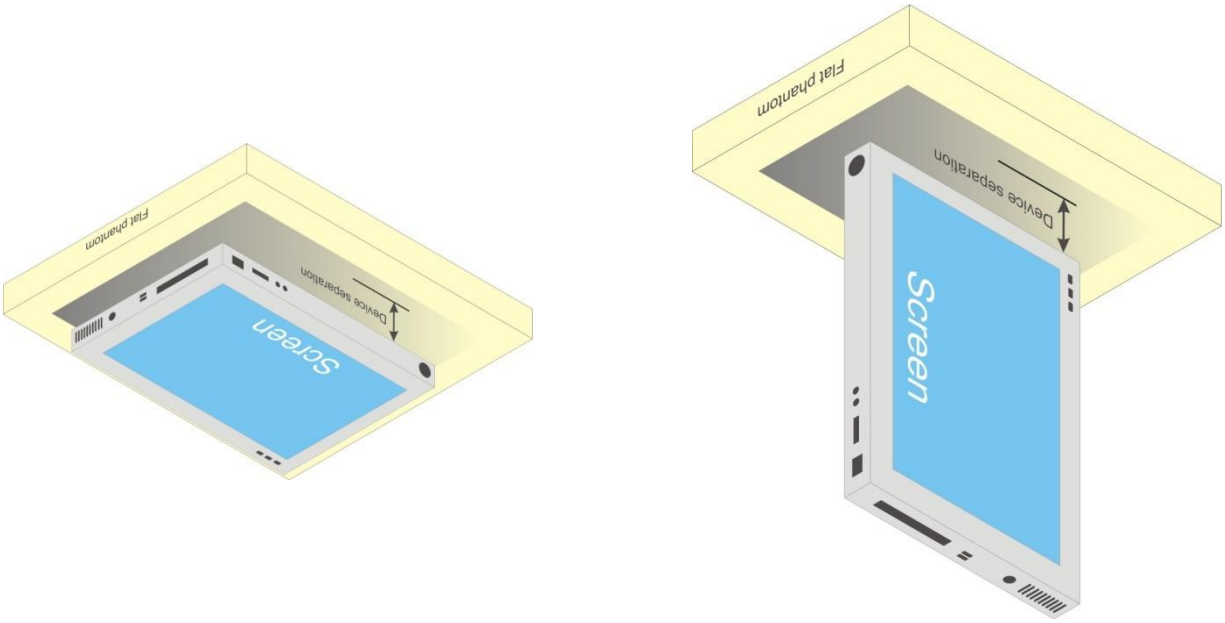


Fig-4.2 Illustration for Tablet Setup

4.2.2 SAR Test Exclusion Evaluations

According to KDB 447498 D01, the SAR test exclusion condition is based on source-based time-averaged maximum conducted output power, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions. The SAR exclusion threshold is determined by the following formula.

1. For the test separation distance <= 50 mm

$$\frac{\textbf{Max. Tune up Power}_{(mW)}}{\textbf{Min. Test Separation Distance}_{(mm)}} \times \sqrt{f_{(GHz)}} \leq \textbf{3.0 for SAR-1g, ≤ 7.5 for SAR-10g}$$

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2. For the test separation distance > 50 mm, and the frequency at 100 MHz to 1500 MHz

$$\left[(\text{Threshold at 50 mm in Step 1}) + (\text{Test Separation Distance} - 50\text{ mm}) \times \left(\frac{f_{(MHz)}}{150}\right)\right]_{(mW)}$$

3. For the test separation distance > 50 mm, and the frequency at > 1500 MHz to 6 GHz

$$[(\text{Threshold at 50 mm in Step 1}) + (\text{Test Separation Distance} - 50\text{ mm}) \times 10]_{(mW)}$$

<For WWAN Ant-0>

Mode	Max. Tune-up Power (dBm)	Max. Tune-up Power (mW)	Rear Face			Left Side			Right Side			Top Side			Bottom Side		
			Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?
WCDMA V	24.0	251	5	46.19	**Yes**	290.5	1520 mw	No	5	46.19	**Yes**	17	13.59	**Yes**	150.1	728 mw	No
LTE 5	24.0	251	5	46.25	**Yes**	290.5	1524 mw	No	5	46.25	**Yes**	17	13.6	**Yes**	150.1	729 mw	No
LTE 7	24.0	251	5	80.48	**Yes**	290.5	2499 mw	No	5	80.48	**Yes**	17	23.67	**Yes**	150.1	1095 mw	No
LTE 12	24.0	251	5	42.48	**Yes**	290.5	1325 mw	No	5	42.48	**Yes**	17	12.49	**Yes**	150.1	655 mw	No
LTE 13	24.0	251	5	44.53	**Yes**	290.5	1431 mw	No	5	44.53	**Yes**	17	13.1	**Yes**	150.1	694 mw	No
LTE 17	24.0	251	5	42.48	**Yes**	290.5	1325 mw	No	5	42.48	**Yes**	17	12.49	**Yes**	150.1	655 mw	No
LTE 26	24.0	251	5	46.25	**Yes**	290.5	1524 mw	No	5	46.25	**Yes**	17	13.6	**Yes**	150.1	729 mw	No
LTE 30	24.0	251	5	76.38	**Yes**	290.5	2504 mw	No	5	76.38	**Yes**	17	22.46	**Yes**	150.1	1100 mw	No
LTE 38	24.0	251	5	81.26	**Yes**	290.5	2498 mw	No	5	81.26	**Yes**	17	23.9	**Yes**	150.1	1094 mw	No
LTE 41	24.0	251	5	82.33	**Yes**	290.5	2496 mw	No	5	82.33	**Yes**	17	24.22	**Yes**	150.1	1092 mw	No

<For WWAN Ant-1>

Mode	Max. Tune-up Power (dBm)	Max. Tune-up Power (mW)	Rear Face			Left Side			Right Side			Top Side			Bottom Side		
			Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?
WCDMA II	24.0	251	5	69.33	**Yes**	5	69.33	**Yes**	292	2529 mw	No	17	20.39	**Yes**	151.6	1125 mw	No
WCDMA IV	24.0	251	5	66.46	**Yes**	5	66.46	**Yes**	292	2533 mw	No	17	19.55	**Yes**	151.6	1129 mw	No
LTE 2	24.0	251	5	69.38	**Yes**	5	69.38	**Yes**	292	2529 mw	No	17	20.41	**Yes**	151.6	1125 mw	No
LTE 4	24.0	251	5	66.5	**Yes**	5	66.5	**Yes**	292	2533 mw	No	17	19.56	**Yes**	151.6	1129 mw	No
LTE 25	24.0	251	5	69.51	**Yes**	5	69.51	**Yes**	292	2528 mw	No	17	20.44	**Yes**	151.6	1124 mw	No
LTE 66	24.0	251	5	66.98	**Yes**	5	66.98	**Yes**	292	2532 mw	No	17	19.7	**Yes**	151.6	1128 mw	No

<For WLAN Ant-0>

Mode	Max. Tune-up Power (dBm)	Max. Tune-up Power (mW)	Rear Face			Left Side			Right Side			Top Side			Bottom Side		
			Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?
WLAN 2.4G	15.0	32	5	10.04	**Yes**	203	1626 mw	No	72	316 mw	No	206.2	1658 mw	No	5	10.04	**Yes**
WLAN 5.2G	13.0	20	5	9.16	**Yes**	203	1596 mw	No	72	286 mw	No	206.2	1628 mw	No	5	9.16	**Yes**
WLAN 5.3G	13.0	20	5	9.23	**Yes**	203	1595 mw	No	72	285 mw	No	206.2	1627 mw	No	5	9.23	**Yes**
WLAN 5.6G	13.5	22	5	10.5	**Yes**	203	1593 mw	No	72	283 mw	No	206.2	1625 mw	No	5	10.5	**Yes**
WLAN 5.8G	14.0	25	5	12.07	**Yes**	203	1592 mw	No	72	282 mw	No	206.2	1624 mw	No	5	12.07	**Yes**
BT	6.0	4	5	1.26	**No**	203	1625 mw	No	72	315 mw	No	206.2	1657 mw	No	5	1.26	No

<For WLAN Ant-1>

Mode	Max. Tune-up Power (dBm)	Max. Tune-up Power (mW)	Rear Face			Left Side			Right Side			Top Side			Bottom Side		
			Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?
WLAN 2.4G	15.5	35	5	10.98	**Yes**	68	276 mw	No	210	1696 mw	No	206.2	1658 mw	No	5	10.98	**Yes**
WLAN 5.2G	14.0	25	5	11.45	**Yes**	68	246 mw	No	210	1666 mw	No	206.2	1628 mw	No	5	11.45	**Yes**
WLAN 5.3G	14.0	25	5	11.53	**Yes**	68	245 mw	No	210	1665 mw	No	206.2	1627 mw	No	5	11.53	**Yes**
WLAN 5.6G	14.5	28	5	13.37	**Yes**	68	243 mw	No	210	1663 mw	No	206.2	1625 mw	No	5	13.37	**Yes**
WLAN 5.8G	15.0	32	5	15.45	**Yes**	68	242 mw	No	210	1662 mw	No	206.2	1624 mw	No	5	15.45	**Yes**

<For WLAN Ant-0 + Ant-1>

Mode	Max. Tune-up Power (dBm)	Max. Tune-up Power (mW)	Rear Face			Left Side			Right Side			Top Side			Bottom Side		
			Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?	Ant. to Surface (mm)	Calculated Result	Require SAR Testing?
WLAN 2.4G	16.0	40	5	12.55	**Yes**	68	276 mw	No	72	316 mw	No	206.2	1658 mw	No	5	12.55	**Yes**
WLAN 5.2G	16.5	45	5	20.6	**Yes**	68	246 mw	No	72	286 mw	No	206.2	1628 mw	No	5	20.6	**Yes**
WLAN 5.3G	16.5	45	5	20.76	**Yes**	68	245 mw	No	72	285 mw	No	206.2	1627 mw	No	5	20.76	**Yes**
WLAN 5.6G	17.0	50	5	23.87	**Yes**	68	243 mw	No	72	283 mw	No	206.2	1625 mw	No	5	23.87	**Yes**
WLAN 5.8G	17.5	56	5	27.03	**Yes**	68	242 mw	No	72	282 mw	No	206.2	1624 mw	No	5	27.03	**Yes**

Note:

1. When separation distance <= 50 mm and the calculated result shown in above table is <= 3.0 for SAR-1g exposure condition, or <= 7.5 for SAR-10g exposure condition, the SAR testing exclusion is applied.
2. When separation distance > 50 mm and the device output power is less than the calculated result (power threshold, mW) shown in above table, the SAR testing exclusion is applied.

4.3 Tissue Verification

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

Test Date	Tissue Type	Frequency (MHz)	Liquid Temp. (℃)	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Target Conductivity (σ)	Target Permittivity (ε_r)	Conductivity Deviation (%)	Permittivity Deviation (%)
Dec. 14, 2017	Body	750	23.3	0.960	56.407	0.96	55.5	0.00	1.63
Dec. 15, 2017	Body	750	23.3	0.972	54.323	0.96	55.5	1.25	-2.12
Dec. 23, 2017	Body	750	23.4	0.968	53.810	0.96	55.5	0.83	-3.05
Dec. 14, 2017	Body	835	23.2	1.012	56.700	0.97	55.2	4.33	2.72
Dec. 15, 2017	Body	835	23.4	1.017	56.626	0.97	55.2	4.85	2.58
Dec. 23, 2017	Body	835	23.4	0.967	57.032	0.97	55.2	-0.31	3.32
Dec. 15, 2017	Body	1750	23.4	1.442	51.719	1.49	53.4	-3.22	-3.15
Dec. 15, 2017	Body	1750	23.3	1.440	51.498	1.49	53.4	-3.36	-3.47
Dec. 22, 2017	Body	1750	23.4	1.430	51.432	1.49	53.4	-4.03	-3.69
Dec. 23, 2017	Body	1750	23.4	1.446	51.639	1.49	53.4	-2.95	-3.30
Dec. 15, 2017	Body	1900	23.4	1.556	51.469	1.52	53.3	2.37	-3.44
Dec. 23, 2017	Body	1900	23.4	1.587	51.337	1.52	53.3	4.41	-3.68
Dec. 22, 2017	Body	1900	23.2	1.563	50.973	1.52	53.3	2.83	-4.37
Jan. 30, 2018	Body	1900	23.2	1.581	51.565	1.52	53.3	4.01	-3.26
Dec. 14, 2017	Body	2300	23.5	1.849	51.976	1.81	52.9	2.15	-1.75
Dec. 15, 2017	Body	2300	23.3	1.835	51.876	1.81	52.9	1.38	-1.94
Dec. 21, 2017	Body	2300	23.3	1.859	50.932	1.81	52.9	2.71	-3.72
Dec. 21, 2017	Body	2300	23.3	1.849	51.976	1.81	52.9	2.15	-1.75
Dec. 22, 2017	Body	2300	23.3	1.836	51.635	1.81	52.9	1.44	-2.39
Dec. 25, 2017	Body	2450	23.6	2.016	51.096	1.95	52.7	3.38	-3.04
Jan. 23, 2018	Body	2450	23.3	2.039	50.819	1.95	52.7	4.56	-3.57
Dec. 14, 2017	Body	2600	23.5	2.191	51.187	2.16	52.5	1.44	-2.50
Dec. 15, 2017	Body	2600	23.4	2.169	51.108	2.16	52.5	0.42	-2.65
Dec. 22, 2017	Body	2600	23.3	2.168	50.864	2.16	52.5	0.37	-3.12
Dec. 25, 2017	Body	5250	23.1	5.233	50.915	5.36	48.9	-2.37	4.12
Dec. 25, 2017	Body	5600	23.1	5.817	50.304	5.77	48.5	0.81	3.72
Dec. 25, 2017	Body	5800	23.1	6.115	49.816	6.00	48.2	1.92	3.35

Note:

The dielectric properties of the tissue simulating liquid must be measured within 24 hours before the SAR testing and within ±5% of the target values. Liquid temperature during the SAR testing must be 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
Dec. 14, 2017	3650	Body	750	0.960	56.407	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 15, 2017	3650	Body	750	0.972	54.323	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 23, 2017	3971	Body	750	0.968	53.810	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 14, 2017	3650	Body	835	1.012	56.700	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 15, 2017	3650	Body	835	1.017	56.626	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 23, 2017	3971	Body	835	0.967	57.032	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 15, 2017	3650	Body	1750	1.442	51.719	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 15, 2017	3971	Body	1750	1.440	51.498	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 22, 2017	7346	Body	1750	1.430	51.432	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 23, 2017	3971	Body	1750	1.446	51.639	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 15, 2017	3650	Body	1900	1.556	51.469	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 23, 2017	3971	Body	1900	1.587	51.337	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 22, 2017	7346	Body	1900	1.563	50.973	Pass	Pass	Pass	N/A	N/A	N/A
Jan. 30, 2018	3971	Body	1900	1.581	51.565	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 14, 2017	3650	Body	2300	1.849	51.976	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 15, 2017	3971	Body	2300	1.835	51.876	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 21, 2017	3650	Body	2300	1.859	50.932	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 21, 2017	3650	Body	2300	1.849	51.976	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 22, 2017	7346	Body	2300	1.836	51.635	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 25, 2017	3650	Body	2450	2.016	51.096	Pass	Pass	Pass	OFDM	N/A	Pass
Jan. 23, 2018	3650	Body	2450	2.039	50.819	Pass	Pass	Pass	OFDM	N/A	Pass
Dec. 14, 2017	3650	Body	2600	2.191	51.187	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 15, 2017	3971	Body	2600	2.169	51.108	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 22, 2017	7346	Body	2600	2.168	50.864	Pass	Pass	Pass	N/A	N/A	N/A
Dec. 25, 2017	3650	Body	5250	5.233	50.915	Pass	Pass	Pass	OFDM	N/A	Pass
Dec. 25, 2017	3650	Body	5600	5.817	50.304	Pass	Pass	Pass	OFDM	N/A	Pass
Dec. 25, 2017	3650	Body	5800	6.115	49.816	Pass	Pass	Pass	OFDM	N/A	Pass

4.5 System Verification

The measuring result for system verification is tabulated as below.

Test Date	Mode	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
Dec. 14, 2017	Body	750	8.72	2.10	8.40	-3.67	1013	3650	1431
Dec. 15, 2017	Body	750	8.72	2.14	8.56	-1.83	1013	3650	1431
Dec. 23, 2017	Body	750	8.72	2.09	8.36	-4.13	1013	3971	861
Dec. 14, 2017	Body	835	9.61	2.29	9.16	-4.68	4d121	3650	1431
Dec. 15, 2017	Body	835	9.61	2.32	9.28	-3.43	4d121	3650	1431
Dec. 23, 2017	Body	835	9.61	2.30	9.20	-4.27	4d121	3971	861
Dec. 15, 2017	Body	1750	37.10	8.94	35.76	-3.61	1055	3650	1431
Dec. 15, 2017	Body	1750	37.10	9.56	38.24	3.07	1055	3971	861
Dec. 22, 2017	Body	1750	37.10	9.44	37.76	1.78	1055	7346	679
Dec. 23, 2017	Body	1750	37.10	9.35	37.40	0.81	1055	3971	861
Dec. 15, 2017	Body	1900	40.10	9.47	37.88	-5.54	5d036	3650	1431
Dec. 23, 2017	Body	1900	40.10	9.95	39.80	-0.75	5d036	3971	861
Dec. 22, 2017	Body	1900	40.10	9.85	39.40	-1.75	5d036	7346	679
Jan. 30, 2018	Body	1900	40.60	9.97	39.88	-1.77	5d036	3971	861
Dec. 14, 2017	Body	2300	48.30	11.80	47.20	-2.28	1004	3650	1431
Dec. 15, 2017	Body	2300	48.30	12.00	48.00	-0.62	1004	3971	861
Dec. 21, 2017	Body	2300	48.30	12.30	49.20	1.86	1004	3650	1431
Dec. 21, 2017	Body	2300	48.30	12.90	51.60	6.83	1004	3650	1431
Dec. 22, 2017	Body	2300	48.30	12.00	48.00	-0.62	1004	7346	679
Dec. 25, 2017	Body	2450	49.70	11.80	47.20	-5.03	737	3650	1431
Jan. 23, 2018	Body	2450	49.70	12.20	48.80	-1.81	737	3650	1431
Dec. 14, 2017	Body	2600	54.30	13.00	52.00	-4.24	1020	3650	1431
Dec. 15, 2017	Body	2600	54.30	13.20	52.80	-2.76	1020	3971	861
Dec. 22, 2017	Body	2600	54.30	13.20	52.80	-2.76	1020	7346	679
Dec. 25, 2017	Body	5250	76.50	7.18	71.80	-6.14	1019	3650	1431
Dec. 25, 2017	Body	5600	79.70	7.87	78.70	-1.25	1019	3650	1431
Dec. 25, 2017	Body	5800	76.90	7.61	76.10	-1.04	1019	3650	1431

Note:

Comparing to the reference SAR value provided by SPEAG, the validation data should be within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots can be referred 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.

Mode	WCDMA Band II (without Power Reduction)	WCDMA Band II (with Power Reduction)	Power Reduction (dB)
RMC 12.2K	24.0	14.5	9.5
HSDPA / HSUPA / DC-HSDPA	23.0	13.5	9.5

Mode	WCDMA Band IV (without Power Reduction)	WCDMA Band IV (with Power Reduction)	Power Reduction (dB)
RMC 12.2K	24.0	15.0	9.0
HSDPA / HSUPA / DC-HSDPA	23.0	14.0	9.0

Mode	WCDMA Band V (without Power Reduction)	WCDMA Band V (with Power Reduction)	Power Reduction (dB)
RMC 12.2K	24.0	19.5	4.5
HSDPA / HSUPA / DC-HSDPA	23.0	18.5	4.5

Mode	LTE 2 (without Power Reduction)	LTE 2 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	14.5	9.5

Mode	LTE 4 (without Power Reduction)	LTE 4 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	15.0	9.0

Mode	LTE 5 (without Power Reduction)	LTE 5 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	19.5	4.5

Mode	LTE 7 (without Power Reduction)	LTE 7 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	13.0	11.0

Mode	LTE 12 (without Power Reduction)	LTE 12 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	21.0	3.0

Mode	LTE 13 (without Power Reduction)	LTE 13 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	19.5	4.5

Mode	LTE 17 (without Power Reduction)	LTE 17 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	20.5	3.5

Mode	LTE 25 (without Power Reduction)	LTE 25 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	15.0	9.0

Mode	LTE 26 (without Power Reduction)	LTE 26 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	19.0	5.0

Mode	LTE 30 (without Power Reduction)	LTE 30 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	12.0	12.0

Mode	LTE 38 (without Power Reduction)	LTE 38 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	14.5	9.5

Mode	LTE 41 (without Power Reduction)	LTE 41 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	14.5	9.5

Mode	LTE 66 (without Power Reduction)	LTE 66 (with Power Reduction)	Power Reduction (dB)
Maximum Target Power	24.0	15.5	8.5

Mode	2.4G WLAN	5.2G WLAN	5.3G WLAN	5.6G WLAN	5.8G WLAN
802.11b	Ant0: 15.0 Ant1: Not Support	N/A	N/A	N/A	N/A
802.11g	Ant0: 14.5 Ant1: Not Support	N/A	N/A	N/A	N/A
802.11a	N/A	Ant0: 12.5 Ant1: 13.0	Ant0: 12.5 Ant1: 13.0	Ant0: 13.5 Ant1: 14.5	Ant0: 13.5 Ant1: 15.0
802.11n HT20	Ant0: 13.5 Ant1: 15.0 Ant0+1: 16.0	Ant0: 12.0 Ant1: 13.0 Ant0+1: 15.5	Ant0: 12.0 Ant1: 13.0 Ant0+1: 15.5	Ant0: 13.0 Ant1: 13.0 Ant0+1: 16.0	Ant0: 13.5 Ant1: 14.5 Ant0+1: 17.0
802.11n HT40	Ant0: 14.5 Ant1: 15.5 Ant0+1: 14.0	Ant0: 13.0 Ant1: 14.0 Ant0+1: 16.5	Ant0: 13.0 Ant1: 14.0 Ant0+1: 16.5	Ant0: 13.5 Ant1: 14.5 Ant0+1: 17.0	Ant0: 14.0 Ant1: 15.0 Ant0+1: 17.5
802.11ac VHT80	N/A	Ant0: 11.0 Ant1: 11.5 Ant0+1: 12.5	Ant0: 11.0 Ant1: 11.5 Ant0+1: 12.5	Ant0: 11.0 Ant1: 11.5 Ant0+1: 12.0	Ant0: 11.0 Ant1: 11.5 Ant0+1: 14.5

Mode	2.4G Bluetooth
Bluetooth DH	6.0

4.6.2 Measured Conducted Power Result

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

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	22.68	23.23	**23.77**	23.10	23.10	**23.19**	23.07	23.31	**23.69**	-
HSDPA Subtest-1	21.70	22.12	22.61	22.13	22.05	22.14	21.99	22.32	22.70	0
HSDPA Subtest-2	21.69	22.14	22.45	22.19	22.04	22.19	22.02	22.37	22.68	0
HSDPA Subtest-3	21.19	21.68	22.17	21.62	21.48	21.63	21.40	21.86	22.21	0.5
HSDPA Subtest-4	21.15	21.49	21.63	21.61	21.49	21.44	21.48	21.94	22.17	0.5
DC-HSDPA Subtest-1	21.57	21.99	22.48	21.97	21.89	21.98	21.82	22.15	22.53	0
DC-HSDPA Subtest-2	21.56	22.01	22.32	22.03	21.88	22.03	21.85	22.20	22.51	0
DC-HSDPA Subtest-3	21.06	21.55	22.04	21.46	21.32	21.47	21.23	21.69	22.04	0.5
DC-HSDPA Subtest-4	21.02	21.36	21.50	21.45	21.33	21.28	21.31	21.77	22.00	0.5
HSUPA Subtest-1	21.80	21.82	22.00	22.03	21.50	21.83	22.07	22.37	22.67	0
HSUPA Subtest-2	19.58	19.73	19.83	19.73	19.52	19.46	19.99	20.40	20.80	2
HSUPA Subtest-3	20.44	21.13	20.97	20.36	20.40	20.43	21.03	21.43	21.63	1
HSUPA Subtest-4	19.84	19.03	19.78	19.41	19.43	19.42	20.04	20.41	20.65	2
HSUPA Subtest-5	21.60	21.60	22.10	22.00	21.30	21.30	21.90	22.30	22.50	0
EUT with Power Reduction (P-Sensor Triggered)										
RMC 12.2K	13.75	14.17	**14.43**	14.72	**14.78**	14.62	19.18	19.33	**19.39**	-
HSDPA Subtest-1	12.70	13.12	13.38	13.75	13.81	13.65	18.31	18.46	18.50	0
HSDPA Subtest-2	12.69	13.11	13.37	13.73	13.79	13.63	17.98	18.13	18.19	0
HSDPA Subtest-3	12.14	12.56	12.82	13.23	13.29	13.13	17.73	17.88	17.94	0.5
HSDPA Subtest-4	12.19	12.61	12.87	13.19	13.25	13.09	17.77	17.92	17.98	0.5
DC-HSDPA Subtest-1	12.57	12.99	13.25	13.60	13.66	13.50	18.14	18.29	18.33	0
DC-HSDPA Subtest-2	12.56	12.98	13.24	13.58	13.64	13.48	17.81	17.96	18.02	0
DC-HSDPA Subtest-3	12.01	12.43	12.69	13.08	13.14	12.98	17.56	17.71	17.77	0.5
DC-HSDPA Subtest-4	12.06	12.48	12.74	13.04	13.10	12.94	17.60	17.75	17.81	0.5
HSUPA Subtest-1	12.34	12.76	13.02	13.12	13.18	13.02	18.26	18.41	18.47	0
HSUPA Subtest-2	10.25	10.67	10.93	11.14	11.20	11.04	16.37	16.44	16.50	2
HSUPA Subtest-3	11.65	12.07	12.33	12.02	12.08	11.92	17.23	17.38	17.44	1
HSUPA Subtest-4	9.55	9.97	10.23	11.05	11.11	10.95	16.32	16.47	16.49	2
HSUPA Subtest-5	12.12	12.54	12.80	12.92	12.98	12.82	18.24	18.39	18.45	0

LTE Band 2

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18700 1860.0 MHz	Mid CH 18900 1880.0 MHz	High CH 19100 1900.0 MHz	3GPP MPR (dB)	Low CH 18607 1850.7 MHz	Mid CH 18900 1880.0 MHz	High CH 19193 1909.3 MHz	3GPP MPR (dB)	Low CH 18607 1850.7 MHz	Mid CH 18900 1880.0 MHz	High CH 19193 1909.3 MHz	3GPP MPR (dB)
20	1	0	22.96	23.18	23.80	0	21.89	22.11	22.73	1	21.05	21.33	21.92	2
	1	50	22.97	23.19	23.79	0	21.90	22.12	22.72	1	21.07	21.31	21.84	2
	1	99	22.94	23.16	23.77	0	21.87	22.09	22.70	1	21.02	21.26	21.73	2
	50	0	22.04	22.26	22.87	1	20.97	21.19	21.80	2	20.03	20.17	20.87	3
	50	25	21.99	22.21	22.82	1	20.92	21.14	21.75	2	20.11	20.33	20.80	3
	50	50	21.96	22.18	22.79	1	20.89	21.11	21.72	2	20.03	20.20	20.76	3
	100	0	21.95	22.17	22.78	1	20.88	21.10	21.71	2	20.09	20.29	20.83	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18675 1857.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19125 1902.5 MHz	3GPP MPR (dB)	Low CH 18675 1857.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19125 1902.5 MHz	3GPP MPR (dB)	Low CH 18675 1857.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19125 1902.5 MHz	3GPP MPR (dB)
15	1	0	22.89	23.11	23.73	0	21.86	22.08	22.70	1	21.12	21.26	21.90	2
	1	37	22.90	23.12	23.72	0	21.87	22.09	22.69	1	21.08	21.29	21.74	2
	1	74	22.87	23.09	23.70	0	21.84	22.06	22.67	1	21.08	21.30	21.87	2
	36	0	21.97	22.19	22.80	1	20.94	21.16	21.77	2	20.50	20.25	20.76	3
	36	19	21.92	22.14	22.75	1	20.89	21.11	21.72	2	20.03	20.34	20.92	3
	36	39	21.89	22.11	22.72	1	20.86	21.08	21.69	2	20.09	20.24	20.79	3
	75	0	21.88	22.10	22.71	1	20.85	21.07	21.68	2	20.07	20.30	20.74	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18650 1855.0 MHz	Mid CH 18900 1880.0 MHz	High CH 19150 1905.0 MHz	3GPP MPR (dB)	Low CH 18650 1855.0 MHz	Mid CH 18900 1880.0 MHz	High CH 19150 1905.0 MHz	3GPP MPR (dB)	Low CH 18650 1855.0 MHz	Mid CH 18900 1880.0 MHz	High CH 19150 1905.0 MHz	3GPP MPR (dB)
10	1	0	22.86	23.08	23.70	0	21.79	22.01	22.63	1	21.11	21.15	21.91	2
	1	24	22.87	23.09	23.69	0	21.80	22.02	22.62	1	21.04	21.22	21.77	2
	1	49	22.84	23.06	23.67	0	21.77	21.99	22.60	1	21.03	21.30	21.77	2
	25	0	21.94	22.16	22.77	1	20.87	21.09	21.70	2	20.08	20.24	20.87	3
	25	12	21.89	22.11	22.72	1	20.82	21.04	21.65	2	20.02	20.19	20.78	3
	25	25	21.86	22.08	22.69	1	20.79	21.01	21.62	2	20.04	20.20	20.84	3
	50	0	21.85	22.07	22.68	1	20.78	21.00	21.61	2	20.08	20.14	20.83	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18625 1852.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19175 1907.5 MHz	3GPP MPR (dB)	Low CH 18625 1852.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19175 1907.5 MHz	3GPP MPR (dB)	Low CH 18625 1852.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19175 1907.5 MHz	3GPP MPR (dB)
5	1	0	22.80	23.02	23.64	0	21.74	21.96	22.58	1	21.11	21.23	21.75	2
	1	12	22.81	23.03	23.63	0	21.75	21.97	22.57	1	21.08	21.18	21.74	2
	1	24	22.78	23.00	23.61	0	21.72	21.94	22.55	1	21.09	21.20	21.75	2
	12	0	21.88	22.10	22.71	1	20.82	21.04	21.65	2	20.05	20.26	20.86	3
	12	6	21.83	22.05	22.66	1	20.77	20.99	21.60	2	20.02	20.29	20.85	3
	12	13	21.80	22.02	22.63	1	20.74	20.96	21.57	2	20.08	20.23	20.84	3
	25	0	21.79	22.01	22.62	1	20.73	20.95	21.56	2	20.05	20.18	20.84	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18615 1851.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19185 1908.5 MHz	3GPP MPR (dB)	Low CH 18615 1851.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19185 1908.5 MHz	3GPP MPR (dB)	Low CH 18615 1851.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19185 1908.5 MHz	3GPP MPR (dB)
3	1	0	22.75	22.97	23.59	0	21.68	21.90	22.52	1	21.11	21.33	21.81	2
	1	7	22.76	22.98	23.58	0	21.69	21.91	22.51	1	21.11	21.23	21.92	2
	1	14	22.73	22.95	23.56	0	21.66	21.88	22.49	1	21.03	21.14	21.75	2
	8	0	21.83	22.05	22.66	1	20.76	20.98	21.59	2	20.06	20.20	20.93	3
	8	3	21.78	22.00	22.61	1	20.71	20.93	21.54	2	20.10	20.14	20.87	3
	8	7	21.75	21.97	22.58	1	20.68	20.90	21.51	2	20.10	20.30	20.91	3
	15	0	21.74	21.96	22.57	1	20.67	20.89	21.50	2	20.05	20.11	20.89	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18607 1850.7 MHz	Mid CH 18900 1880.0 MHz	High CH 19193 1909.3 MHz	3GPP MPR (dB)	Low CH 18607 1850.7 MHz	Mid CH 18900 1880.0 MHz	High CH 19193 1909.3 MHz	3GPP MPR (dB)	Low CH 18607 1850.7 MHz	Mid CH 18900 1880.0 MHz	High CH 19193 1909.3 MHz	3GPP MPR (dB)
1.4	1	0	22.73	22.95	23.64	0	21.61	21.83	22.52	1	21.10	21.15	21.87	2
	1	2	22.74	22.96	23.56	0	21.62	21.84	22.44	1	21.09	21.22	21.92	2
	1	5	22.71	22.93	23.54	0	21.59	21.81	22.42	1	21.01	21.24	21.89	2
	3	0	22.81	23.03	23.57	0	21.69	21.91	22.45	1	21.10	21.23	21.84	2
	3	1	22.76	22.98	23.59	0	21.64	21.86	22.47	1	21.09	21.19	21.89	2
	3	3	22.73	22.95	23.56	0	21.61	21.83	22.44	1	21.05	21.22	21.85	2
	6	0	21.72	21.94	22.55	1	20.60	20.82	21.43	2	20.05	20.20	20.81	3

LTE Band 2

EUT with Power Reduction (P-Sensor Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18700	Mid CH 18900	High CH 19100	3GPP MPR (dB)	Low CH 18607	Mid CH 18900	High CH 19193	3GPP MPR (dB)	Low CH 18607	Mid CH 18900	High CH 19193	3GPP MPR (dB)
			1860.0 MHz	1880.0 MHz	1900.0 MHz		1850.7 MHz	1880.0 MHz	1909.3 MHz		1850.7 MHz	1880.0 MHz	1909.3 MHz	
20	1	0	13.62	13.78	14.21	0	12.53	12.69	13.12	1	12.49	12.65	13.08	2
	1	50	13.52	13.68	14.11	0	12.43	12.59	13.02	1	12.39	12.55	12.98	2
	1	99	13.49	13.65	14.08	0	12.40	12.56	12.99	1	12.36	12.52	12.95	2
	50	0	12.79	12.95	13.38	1	11.70	11.86	12.29	2	11.66	11.82	12.25	3
	50	25	12.68	12.84	13.27	1	11.59	11.75	12.18	2	11.55	11.71	12.14	3
	50	50	12.64	12.80	13.23	1	11.55	11.71	12.14	2	11.51	11.67	12.10	3
	100	0	12.82	12.98	13.41	1	11.73	11.89	12.32	2	11.69	11.85	12.28	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18675	Mid CH 18900	High CH 19125	3GPP MPR (dB)	Low CH 18675	Mid CH 18900	High CH 19125	3GPP MPR (dB)	Low CH 18675	Mid CH 18900	High CH 19125	3GPP MPR (dB)
			1857.5 MHz	1880.0 MHz	1902.5 MHz		1857.5 MHz	1880.0 MHz	1902.5 MHz		1857.5 MHz	1880.0 MHz	1902.5 MHz	
15	1	0	13.59	13.75	14.18	0	12.50	12.66	13.09	1	12.46	12.62	13.05	2
	1	37	13.49	13.65	14.08	0	12.40	12.56	12.99	1	12.36	12.52	12.95	2
	1	74	13.46	13.62	14.05	0	12.37	12.53	12.96	1	12.33	12.49	12.92	2
	36	0	12.76	12.92	13.35	1	11.67	11.83	12.26	2	11.63	11.79	12.22	3
	36	19	12.65	12.81	13.24	1	11.56	11.72	12.15	2	11.52	11.68	12.11	3
	36	39	12.61	12.77	13.20	1	11.52	11.68	12.11	2	11.48	11.64	12.07	3
	75	0	12.79	12.95	13.38	1	11.70	11.86	12.29	2	11.66	11.82	12.25	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18650	Mid CH 18900	High CH 19150	3GPP MPR (dB)	Low CH 18650	Mid CH 18900	High CH 19150	3GPP MPR (dB)	Low CH 18650	Mid CH 18900	High CH 19150	3GPP MPR (dB)
			1855.0 MHz	1880.0 MHz	1905.0 MHz		1855.0 MHz	1880.0 MHz	1905.0 MHz		1855.0 MHz	1880.0 MHz	1905.0 MHz	
10	1	0	13.49	13.65	14.08	0	12.40	12.56	12.99	1	12.36	12.52	12.95	2
	1	24	13.39	13.55	13.98	0	12.30	12.46	12.89	1	12.26	12.42	12.85	2
	1	49	13.36	13.52	13.95	0	12.27	12.43	12.86	1	12.23	12.39	12.82	2
	25	0	12.66	12.82	13.25	1	11.57	11.73	12.16	2	11.53	11.69	12.12	3
	25	12	12.55	12.71	13.14	1	11.46	11.62	12.05	2	11.42	11.58	12.01	3
	25	25	12.51	12.67	13.10	1	11.42	11.58	12.01	2	11.38	11.54	11.97	3
	50	0	12.69	12.85	13.28	1	11.60	11.76	12.19	2	11.56	11.72	12.15	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18625	Mid CH 18900	High CH 19175	3GPP MPR (dB)	Low CH 18625	Mid CH 18900	High CH 19175	3GPP MPR (dB)	Low CH 18625	Mid CH 18900	High CH 19175	3GPP MPR (dB)
			1852.5 MHz	1880.0 MHz	1907.5 MHz		1852.5 MHz	1880.0 MHz	1907.5 MHz		1852.5 MHz	1880.0 MHz	1907.5 MHz	
5	1	0	13.43	13.59	14.02	0	12.34	12.50	12.93	1	12.30	12.46	12.89	2
	1	12	13.33	13.49	13.92	0	12.24	12.40	12.83	1	12.20	12.36	12.79	2
	1	24	13.30	13.46	13.89	0	12.21	12.37	12.80	1	12.17	12.33	12.76	2
	12	0	12.60	12.76	13.19	1	11.51	11.67	12.10	2	11.47	11.63	12.06	3
	12	6	12.49	12.65	13.08	1	11.40	11.56	11.99	2	11.36	11.52	11.95	3
	12	13	12.45	12.61	13.04	1	11.36	11.52	11.95	2	11.32	11.48	11.91	3
	25	0	12.63	12.79	13.22	1	11.54	11.70	12.13	2	11.50	11.66	12.09	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18615	Mid CH 18900	High CH 19185	3GPP MPR (dB)	Low CH 18615	Mid CH 18900	High CH 19185	3GPP MPR (dB)	Low CH 18615	Mid CH 18900	High CH 19185	3GPP MPR (dB)
			1851.5 MHz	1880.0 MHz	1908.5 MHz		1851.5 MHz	1880.0 MHz	1908.5 MHz		1851.5 MHz	1880.0 MHz	1908.5 MHz	
3	1	0	13.40	13.56	13.99	0	12.31	12.47	12.90	1	12.27	12.43	12.86	2
	1	7	13.30	13.46	13.89	0	12.21	12.37	12.80	1	12.17	12.33	12.76	2
	1	14	13.27	13.43	13.86	0	12.18	12.34	12.77	1	12.14	12.30	12.73	2
	8	0	12.57	12.73	13.16	1	11.48	11.64	12.07	2	11.44	11.60	12.03	3
	8	3	12.46	12.62	13.05	1	11.37	11.53	11.96	2	11.33	11.49	11.92	3
	8	7	12.42	12.58	13.01	1	11.33	11.49	11.92	2	11.29	11.45	11.88	3
	15	0	12.60	12.76	13.19	1	11.51	11.67	12.10	2	11.47	11.63	12.06	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 18607	Mid CH 18900	High CH 19193	3GPP MPR (dB)	Low CH 18607	Mid CH 18900	High CH 19193	3GPP MPR (dB)	Low CH 18607	Mid CH 18900	High CH 19193	3GPP MPR (dB)
			1850.7 MHz	1880.0 MHz	1909.3 MHz		1850.7 MHz	1880.0 MHz	1909.3 MHz		1850.7 MHz	1880.0 MHz	1909.3 MHz	
1.4	1	0	13.38	13.54	13.97	0	12.29	12.45	12.88	1	12.25	12.41	12.44	2
	1	2	13.28	13.44	13.87	0	12.19	12.35	12.78	1	12.15	12.31	12.43	2
	1	5	13.25	13.41	13.84	0	12.16	12.32	12.75	1	12.12	12.28	12.41	2
	3	0	13.07	13.23	13.66	0	11.98	12.14	12.57	1	11.94	12.10	12.33	2
	3	1	12.96	13.12	13.55	0	11.87	12.03	12.46	1	11.83	11.99	12.42	2
	3	3	12.92	13.08	13.51	0	11.83	11.99	12.42	1	11.79	11.95	12.38	2
	6	0	12.58	12.74	13.17	1	11.49	11.65	12.08	2	11.45	11.46	11.50	3

LTE Band 4

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20050	Mid CH 20175	High CH 20300	3GPP MPR (dB)	Low CH 20050	Mid CH 20175	High CH 20300	3GPP MPR (dB)	Low CH 20050	Mid CH 20175	High CH 20300	3GPP MPR (dB)
			1720.0 MHz	1732.5 MHz	1745.0 MHz		1720.0 MHz	1732.5 MHz	1745.0 MHz		1720.0 MHz	1732.5 MHz	1745.0 MHz	
20	1	0	23.42	23.52	23.44	0	22.61	22.71	22.63	1	21.45	21.67	21.42	2
	1	50	23.28	23.38	23.30	0	22.47	22.57	22.49	1	21.27	21.41	21.45	2
	1	99	23.04	23.14	23.06	0	22.23	22.33	22.25	1	21.14	21.19	21.12	2
	50	0	22.35	22.45	22.37	1	21.54	21.64	21.56	2	20.38	20.53	20.59	3
	50	25	22.25	22.35	22.27	1	21.44	21.54	21.46	2	20.35	20.48	20.30	3
	50	50	22.15	22.25	22.17	1	21.34	21.44	21.36	2	20.01	20.29	20.19	3
	100	0	22.27	22.37	22.29	1	21.46	21.56	21.48	2	20.06	20.12	20.15	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20025	Mid CH 20175	High CH 20325	3GPP MPR (dB)	Low CH 20025	Mid CH 20175	High CH 20325	3GPP MPR (dB)	Low CH 20025	Mid CH 20175	High CH 20325	3GPP MPR (dB)
			1717.5 MHz	1732.5 MHz	1747.5 MHz		1717.5 MHz	1732.5 MHz	1747.5 MHz		1717.5 MHz	1732.5 MHz	1747.5 MHz	
15	1	0	23.34	23.44	23.36	0	22.53	22.63	22.55	1	21.49	21.64	21.49	2
	1	37	23.20	23.30	23.22	0	22.39	22.49	22.41	1	21.42	21.34	21.38	2
	1	74	22.96	23.06	22.98	0	22.15	22.25	22.17	1	21.17	21.11	21.18	2
	36	0	22.27	22.37	22.29	1	21.46	21.56	21.48	2	20.55	20.54	20.44	3
	36	19	22.17	22.27	22.19	1	21.36	21.46	21.38	2	20.33	20.48	20.44	3
	36	39	22.07	22.17	22.09	1	21.26	21.36	21.28	2	20.16	20.17	20.14	3
	75	0	22.19	22.29	22.21	1	21.38	21.48	21.40	2	20.09	20.28	20.07	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20000	Mid CH 20175	High CH 20350	3GPP MPR (dB)	Low CH 20000	Mid CH 20175	High CH 20350	3GPP MPR (dB)	Low CH 20000	Mid CH 20175	High CH 20350	3GPP MPR (dB)
			1715.0 MHz	1732.5 MHz	1750.0 MHz		1715.0 MHz	1732.5 MHz	1750.0 MHz		1715.0 MHz	1732.5 MHz	1750.0 MHz	
10	1	0	23.24	23.34	23.26	0	22.43	22.53	22.45	1	21.40	21.62	21.39	2
	1	24	23.10	23.20	23.12	0	22.29	22.39	22.31	1	21.32	21.53	21.36	2
	1	49	22.86	22.96	22.88	0	22.05	22.15	22.07	1	21.10	21.26	21.08	2
	25	0	22.17	22.27	22.19	1	21.36	21.46	21.38	2	20.49	20.56	20.42	3
	25	12	22.07	22.17	22.09	1	21.26	21.36	21.28	2	20.30	20.47	20.34	3
	25	25	21.97	22.07	21.99	1	21.16	21.26	21.18	2	20.09	20.09	20.17	3
	50	0	22.09	22.19	22.11	1	21.28	21.38	21.30	2	20.07	20.24	20.18	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 19975	Mid CH 20175	High CH 20375	3GPP MPR (dB)	Low CH 19975	Mid CH 20175	High CH 20375	3GPP MPR (dB)	Low CH 19975	Mid CH 20175	High CH 20375	3GPP MPR (dB)
			1712.5 MHz	1732.5 MHz	1752.5 MHz		1712.5 MHz	1732.5 MHz	1752.5 MHz		1712.5 MHz	1732.5 MHz	1752.5 MHz	
5	1	0	23.15	23.25	23.17	0	22.34	22.44	22.36	1	21.44	21.58	21.52	2
	1	12	23.01	23.11	23.03	0	22.20	22.30	22.22	1	21.43	21.51	21.45	2
	1	24	22.77	22.87	22.79	0	21.96	22.06	21.98	1	21.18	21.17	21.17	2
	12	0	22.08	22.18	22.10	1	21.27	21.37	21.29	2	20.41	20.52	20.46	3
	12	6	21.98	22.08	22.00	1	21.17	21.27	21.19	2	20.26	20.52	20.34	3
	12	13	21.88	21.98	21.90	1	21.07	21.17	21.09	2	20.06	20.27	20.18	3
	25	0	22.00	22.10	22.02	1	21.19	21.29	21.21	2	20.01	20.11	20.11	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 19965	Mid CH 20175	High CH 20385	3GPP MPR (dB)	Low CH 19965	Mid CH 20175	High CH 20385	3GPP MPR (dB)	Low CH 19965	Mid CH 20175	High CH 20385	3GPP MPR (dB)
			1711.5 MHz	1732.5 MHz	1753.5 MHz		1711.5 MHz	1732.5 MHz	1753.5 MHz		1711.5 MHz	1732.5 MHz	1753.5 MHz	
3	1	0	23.04	23.14	23.06	0	22.23	22.33	22.25	1	21.41	21.55	21.45	2
	1	7	22.90	23.00	22.92	0	22.09	22.19	22.11	1	21.38	21.53	21.32	2
	1	14	22.66	22.76	22.68	0	21.85	21.95	21.87	1	21.04	21.18	21.17	2
	8	0	21.97	22.07	21.99	1	21.16	21.26	21.18	2	20.43	20.55	20.40	3
	8	3	21.87	21.97	21.89	1	21.06	21.16	21.08	2	20.28	20.42	20.38	3
	8	7	21.77	21.87	21.79	1	20.96	21.06	20.98	2	20.02	20.17	20.02	3
	15	0	21.89	21.99	21.91	1	21.08	21.18	21.10	2	20.05	20.19	20.20	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 19957	Mid CH 20175	High CH 20393	3GPP MPR (dB)	Low CH 19957	Mid CH 20175	High CH 20393	3GPP MPR (dB)	Low CH 19957	Mid CH 20175	High CH 20393	3GPP MPR (dB)
			1710.7 MHz	1732.5 MHz	1754.3 MHz		1710.7 MHz	1732.5 MHz	1754.3 MHz		1710.7 MHz	1732.5 MHz	1754.3 MHz	
1.4	1	0	22.99	23.09	23.01	0	22.29	22.49	22.26	1	21.37	21.47	21.40	2
	1	2	22.85	22.95	22.87	0	22.10	22.35	22.11	1	21.30	21.30	21.39	2
	1	5	22.61	22.71	22.63	0	21.92	22.01	21.86	1	21.01	21.14	21.13	2
	3	0	23.12	22.62	22.54	0	22.39	22.47	22.37	1	21.43	21.51	21.46	2
	3	1	22.42	22.52	22.44	0	22.11	22.38	22.28	1	21.36	21.28	21.36	2
	3	3	22.32	22.42	22.34	0	22.01	21.95	21.86	1	21.04	21.06	21.11	2
	6	0	21.84	21.94	21.86	1	20.90	20.98	20.88	2	20.03	20.13	20.11	3

LTE Band 4

EUT with Power Reduction (P-Sensor Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20050 / 1720.0 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20300 / 1745.0 MHz	3GPP MPR (dB)	Low CH 20050 / 1720.0 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20300 / 1745.0 MHz	3GPP MPR (dB)	Low CH 20050 / 1720.0 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20300 / 1745.0 MHz	3GPP MPR (dB)
20	1	0	14.73	14.85	14.88	0	13.65	13.77	13.80	1	12.55	12.67	12.70	2
	1	50	14.53	14.65	14.68	0	13.45	13.57	13.60	1	12.35	12.47	12.50	2
	1	99	14.51	14.63	14.66	0	13.43	13.55	13.58	1	12.33	12.45	12.48	2
	50	0	13.68	13.80	13.83	1	12.60	12.72	12.75	2	11.50	11.62	11.65	3
	50	25	13.63	13.75	13.78	1	12.55	12.67	12.70	2	11.45	11.57	11.60	3
	50	50	13.56	13.68	13.71	1	12.48	12.60	12.63	2	11.38	11.50	11.53	3
	100	0	13.70	13.82	13.85	1	12.62	12.74	12.77	2	11.52	11.64	11.67	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20025 / 1717.5 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20325 / 1747.5 MHz	3GPP MPR (dB)	Low CH 20025 / 1717.5 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20325 / 1747.5 MHz	3GPP MPR (dB)	Low CH 20025 / 1717.5 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20325 / 1747.5 MHz	3GPP MPR (dB)
15	1	0	14.68	14.80	14.83	0	13.60	13.72	13.75	1	12.50	12.62	12.65	2
	1	37	14.48	14.60	14.63	0	13.40	13.52	13.55	1	12.30	12.42	12.45	2
	1	74	14.46	14.58	14.61	0	13.38	13.50	13.53	1	12.28	12.40	12.43	2
	36	0	13.63	13.75	13.78	1	12.55	12.67	12.70	2	11.45	11.57	11.60	3
	36	19	13.58	13.70	13.73	1	12.50	12.62	12.65	2	11.40	11.52	11.55	3
	36	39	13.51	13.63	13.66	1	12.43	12.55	12.58	2	11.33	11.45	11.48	3
	75	0	13.65	13.77	13.80	1	12.57	12.69	12.72	2	11.47	11.59	11.62	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20000 / 1715.0 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20350 / 1750.0 MHz	3GPP MPR (dB)	Low CH 20000 / 1715.0 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20350 / 1750.0 MHz	3GPP MPR (dB)	Low CH 20000 / 1715.0 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20350 / 1750.0 MHz	3GPP MPR (dB)
10	1	0	14.65	14.77	14.80	0	13.57	13.69	13.72	1	12.47	12.59	12.62	2
	1	24	14.45	14.57	14.60	0	13.37	13.49	13.52	1	12.27	12.39	12.42	2
	1	49	14.43	14.55	14.58	0	13.35	13.47	13.50	1	12.25	12.37	12.40	2
	25	0	13.60	13.72	13.75	1	12.52	12.64	12.67	2	11.42	11.54	11.57	3
	25	12	13.55	13.67	13.70	1	12.47	12.59	12.62	2	11.37	11.49	11.52	3
	25	25	13.48	13.60	13.63	1	12.40	12.52	12.55	2	11.30	11.42	11.45	3
	50	0	13.62	13.74	13.77	1	12.54	12.66	12.69	2	11.44	11.56	11.59	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 19975 / 1712.5 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20375 / 1752.5 MHz	3GPP MPR (dB)	Low CH 19975 / 1712.5 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20375 / 1752.5 MHz	3GPP MPR (dB)	Low CH 19975 / 1712.5 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20375 / 1752.5 MHz	3GPP MPR (dB)
5	1	0	14.60	14.72	14.75	0	13.52	13.64	13.67	1	12.42	12.54	12.57	2
	1	12	14.40	14.52	14.55	0	13.32	13.44	13.47	1	12.22	12.34	12.37	2
	1	24	14.38	14.50	14.53	0	13.30	13.42	13.45	1	12.20	12.32	12.35	2
	12	0	13.55	13.67	13.70	1	12.47	12.59	12.62	2	11.37	11.49	11.52	3
	12	6	13.50	13.62	13.65	1	12.42	12.54	12.57	2	11.32	11.44	11.47	3
	12	13	13.43	13.55	13.58	1	12.35	12.47	12.50	2	11.25	11.37	11.40	3
	25	0	13.57	13.69	13.72	1	12.49	12.61	12.64	2	11.39	11.51	11.54	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 19965 / 1711.5 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20385 / 1753.5 MHz	3GPP MPR (dB)	Low CH 19965 / 1711.5 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20385 / 1753.5 MHz	3GPP MPR (dB)	Low CH 19965 / 1711.5 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20385 / 1753.5 MHz	3GPP MPR (dB)
3	1	0	14.52	14.64	14.67	0	13.44	13.56	13.59	1	12.34	12.46	12.49	2
	1	7	14.32	14.44	14.47	0	13.24	13.36	13.39	1	12.14	12.26	12.29	2
	1	14	14.30	14.42	14.45	0	13.22	13.34	13.37	1	12.12	12.24	12.27	2
	8	0	13.47	13.59	13.62	1	12.39	12.51	12.54	2	11.29	11.41	11.44	3
	8	3	13.42	13.54	13.57	1	12.34	12.46	12.49	2	11.24	11.36	11.39	3
	8	7	13.35	13.47	13.50	1	12.27	12.39	12.42	2	11.17	11.29	11.32	3
	15	0	13.49	13.61	13.64	1	12.41	12.53	12.56	2	11.31	11.43	11.46	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 19957 / 1710.7 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20393 / 1754.3 MHz	3GPP MPR (dB)	Low CH 19957 / 1710.7 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20393 / 1754.3 MHz	3GPP MPR (dB)	Low CH 19957 / 1710.7 MHz	Mid CH 20175 / 1732.5 MHz	High CH 20393 / 1754.3 MHz	3GPP MPR (dB)
1.4	1	0	14.47	14.59	14.62	0	13.39	13.51	13.54	1	12.29	12.41	12.44	2
	1	2	14.27	14.39	14.42	0	13.19	13.31	13.34	1	12.09	12.21	12.24	2
	1	5	14.25	14.37	14.40	0	13.17	13.29	13.32	1	12.07	12.19	12.22	2
	3	0	14.07	14.19	14.22	0	12.99	13.11	13.14	1	11.89	12.01	12.04	2
	3	1	14.02	14.14	14.17	0	12.94	13.06	13.09	1	11.84	11.96	11.99	2
	3	3	13.95	14.07	14.10	0	12.87	12.99	13.02	1	11.77	11.89	11.92	2
	6	0	13.44	13.56	13.59	1	12.36	12.48	12.51	2	11.26	11.38	11.41	3

LTE Band 5

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20450 829.0 MHz	Mid CH 20525 836.5 MHz	High CH 20600 844.0 MHz	3GPP MPR (dB)	Low CH 20450 829.0 MHz	Mid CH 20525 836.5 MHz	High CH 20600 844.0 MHz	3GPP MPR (dB)	Low CH 20450 829.0 MHz	Mid CH 20525 836.5 MHz	High CH 20600 844.0 MHz	3GPP MPR (dB)
10	1	0	22.94	22.98	22.93	0	21.86	21.90	21.85	1	21.22	21.27	21.15	2
	1	24	22.93	22.97	22.92	0	21.85	21.89	21.84	1	21.20	21.25	21.13	2
	1	49	22.90	22.94	22.89	0	21.82	21.86	21.81	1	21.18	21.23	21.11	2
	25	0	21.92	21.96	21.91	1	20.84	20.88	20.83	2	20.05	20.10	20.08	3
	25	12	21.90	21.94	21.89	1	20.82	20.86	20.81	2	20.01	20.06	20.04	3
	25	25	21.87	21.91	21.86	1	20.79	20.83	20.78	2	20.08	20.13	20.01	3
	50	0	21.91	21.95	21.90	1	20.83	20.87	20.82	2	20.02	20.07	20.05	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20425 826.5 MHz	Mid CH 20525 836.5 MHz	High CH 20625 846.5 MHz	3GPP MPR (dB)	Low CH 20425 826.5 MHz	Mid CH 20525 836.5 MHz	High CH 20625 846.5 MHz	3GPP MPR (dB)	Low CH 20425 826.5 MHz	Mid CH 20525 836.5 MHz	High CH 20625 846.5 MHz	3GPP MPR (dB)
5	1	0	22.86	22.90	22.85	0	21.78	21.82	21.77	1	21.19	21.24	21.12	2
	1	12	22.85	22.89	22.84	0	21.77	21.81	21.76	1	21.17	21.22	21.10	2
	1	24	22.82	22.86	22.81	0	21.74	21.78	21.73	1	21.15	21.20	21.08	2
	12	0	21.84	21.88	21.83	1	20.76	20.80	20.75	2	20.12	20.17	20.05	3
	12	6	21.82	21.86	21.81	1	20.74	20.78	20.73	2	20.08	20.13	20.01	3
	12	13	21.79	21.83	21.78	1	20.71	20.75	20.70	2	20.05	20.10	20.05	3
	25	0	21.83	21.87	21.82	1	20.75	20.79	20.74	2	20.09	20.14	20.02	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20415 825.5 MHz	Mid CH 20525 836.5 MHz	High CH 20635 847.5 MHz	3GPP MPR (dB)	Low CH 20415 825.5 MHz	Mid CH 20525 836.5 MHz	High CH 20635 847.5 MHz	3GPP MPR (dB)	Low CH 20415 825.5 MHz	Mid CH 20525 836.5 MHz	High CH 20635 847.5 MHz	3GPP MPR (dB)
3	1	0	22.75	22.79	22.74	0	21.67	21.71	21.66	1	21.13	21.18	21.06	2
	1	7	22.74	22.78	22.73	0	21.66	21.70	21.65	1	21.11	21.16	21.04	2
	1	14	22.71	22.75	22.70	0	21.63	21.67	21.62	1	21.09	21.14	21.02	2
	8	0	21.73	21.77	21.72	1	20.65	20.69	20.64	2	20.06	20.11	20.07	3
	8	3	21.71	21.75	21.70	1	20.63	20.67	20.62	2	20.02	20.07	20.03	3
	8	7	21.68	21.72	21.67	1	20.60	20.64	20.59	2	20.05	20.04	20.02	3
	15	0	21.72	21.76	21.71	1	20.64	20.68	20.63	2	20.03	20.08	20.04	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20407 824.7 MHz	Mid CH 20525 836.5 MHz	High CH 20643 848.3 MHz	3GPP MPR (dB)	Low CH 20407 824.7 MHz	Mid CH 20525 836.5 MHz	High CH 20643 848.3 MHz	3GPP MPR (dB)	Low CH 20407 824.7 MHz	Mid CH 20525 836.5 MHz	High CH 20643 848.3 MHz	3GPP MPR (dB)
1.4	1	0	22.69	22.73	22.68	0	21.92	21.99	21.95	1	21.09	21.14	21.02	2
	1	2	22.68	22.72	22.67	0	21.82	21.91	21.89	1	21.07	21.12	21.08	2
	1	5	22.65	22.69	22.64	0	21.97	21.90	21.80	1	21.05	21.10	21.03	2
	3	0	22.67	22.71	22.66	0	21.96	21.92	21.87	1	21.02	21.07	21.03	2
	3	1	22.65	22.69	22.64	0	21.92	21.95	21.84	1	21.05	21.03	21.03	2
	3	3	22.62	22.66	22.61	0	21.90	21.92	21.84	1	21.01	21.05	21.06	2
	6	0	21.66	21.70	21.65	1	20.79	20.83	20.97	2	20.02	20.04	20.01	3

LTE Band 5

EUT with Power Reduction (P-Sensor Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20450 829.0 MHz	Mid CH 20525 836.5 MHz	High CH 20600 844.0 MHz	3GPP MPR (dB)	Low CH 20450 829.0 MHz	Mid CH 20525 836.5 MHz	High CH 20600 844.0 MHz	3GPP MPR (dB)	Low CH 20450 829.0 MHz	Mid CH 20525 836.5 MHz	High CH 20600 844.0 MHz	3GPP MPR (dB)
10	1	0	19.18	19.22	19.23	0	18.16	18.20	18.21	1	17.13	17.17	17.18	2
	1	24	19.16	19.20	19.21	0	18.14	18.18	18.19	1	17.11	17.15	17.16	2
	1	49	19.14	19.18	19.19	0	18.12	18.16	18.17	1	17.09	17.13	17.14	2
	25	0	18.31	18.35	18.36	1	17.29	17.33	17.34	2	16.26	16.30	16.31	3
	25	12	18.27	18.31	18.32	1	17.25	17.29	17.30	2	16.22	16.26	16.27	3
	25	25	18.26	18.30	18.31	1	17.24	17.28	17.29	2	16.21	16.25	16.26	3
	50	0	18.18	18.22	18.23	1	17.16	17.20	17.21	2	16.13	16.17	16.18	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20425 826.5 MHz	Mid CH 20525 836.5 MHz	High CH 20625 846.5 MHz	3GPP MPR (dB)	Low CH 20425 826.5 MHz	Mid CH 20525 836.5 MHz	High CH 20625 846.5 MHz	3GPP MPR (dB)	Low CH 20425 826.5 MHz	Mid CH 20525 836.5 MHz	High CH 20625 846.5 MHz	3GPP MPR (dB)
5	1	0	19.12	19.16	19.17	0	18.10	18.14	18.15	1	17.07	17.11	17.12	2
	1	12	19.10	19.14	19.15	0	18.08	18.12	18.13	1	17.05	17.09	17.10	2
	1	24	19.08	19.12	19.13	0	18.06	18.10	18.11	1	17.03	17.07	17.08	2
	12	0	18.25	18.29	18.30	1	17.23	17.27	17.28	2	16.20	16.24	16.25	3
	12	6	18.21	18.25	18.26	1	17.19	17.23	17.24	2	16.16	16.20	16.21	3
	12	13	18.20	18.24	18.25	1	17.18	17.22	17.23	2	16.15	16.19	16.20	3
	25	0	18.12	18.16	18.17	1	17.10	17.14	17.15	2	16.07	16.11	16.12	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20415 825.5 MHz	Mid CH 20525 836.5 MHz	High CH 20635 847.5 MHz	3GPP MPR (dB)	Low CH 20415 825.5 MHz	Mid CH 20525 836.5 MHz	High CH 20635 847.5 MHz	3GPP MPR (dB)	Low CH 20415 825.5 MHz	Mid CH 20525 836.5 MHz	High CH 20635 847.5 MHz	3GPP MPR (dB)
3	1	0	19.06	19.10	19.11	0	18.04	18.08	18.09	1	17.01	17.05	17.06	2
	1	7	19.04	19.08	19.09	0	18.02	18.06	18.07	1	16.99	17.03	17.04	2
	1	14	19.02	19.06	19.07	0	18.00	18.04	18.05	1	16.97	17.01	17.02	2
	8	0	18.19	18.23	18.24	1	17.17	17.21	17.22	2	16.14	16.18	16.19	3
	8	3	18.15	18.19	18.20	1	17.13	17.17	17.18	2	16.10	16.14	16.15	3
	8	7	18.14	18.18	18.19	1	17.12	17.16	17.17	2	16.09	16.13	16.14	3
	15	0	18.06	18.10	18.11	1	17.04	17.08	17.09	2	16.01	16.05	16.06	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20407 824.7 MHz	Mid CH 20525 836.5 MHz	High CH 20643 848.3 MHz	3GPP MPR (dB)	Low CH 20407 824.7 MHz	Mid CH 20525 836.5 MHz	High CH 20643 848.3 MHz	3GPP MPR (dB)	Low CH 20407 824.7 MHz	Mid CH 20525 836.5 MHz	High CH 20643 848.3 MHz	3GPP MPR (dB)
1.4	1	0	19.02	19.06	19.07	0	18.00	18.04	18.05	1	16.97	17.01	17.02	2
	1	2	19.00	19.04	19.05	0	17.98	18.02	18.03	1	16.95	16.99	17.00	2
	1	5	18.98	19.02	19.03	0	17.96	18.00	18.01	1	16.93	16.97	16.98	2
	3	0	18.99	19.03	19.04	0	17.97	18.01	18.02	1	16.94	16.98	16.99	2
	3	1	18.95	18.99	19.00	0	17.93	17.97	17.98	1	16.90	16.94	16.95	2
	3	3	18.94	18.98	18.99	0	17.92	17.96	17.97	1	16.89	16.93	16.94	2
	6	0	18.02	18.06	18.07	1	17.00	17.04	17.05	2	15.97	16.01	16.02	3

LTE Band 7

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20850 / 2510.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21350 / 2560.0 MHz	3GPP MPR (dB)	Low CH 20850 / 2510.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21350 / 2560.0 MHz	3GPP MPR (dB)	Low CH 20850 / 2510.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21350 / 2560.0 MHz	3GPP MPR (dB)
20	1	0	23.83	23.67	23.52	0	22.95	22.89	22.74	1	21.79	21.63	21.48	2
	1	50	23.70	23.54	23.39	0	22.92	22.76	22.61	1	21.81	21.54	21.49	2
	1	99	23.66	23.50	23.35	0	22.88	22.72	22.57	1	21.78	21.53	21.43	2
	50	0	22.81	22.65	22.50	1	21.83	21.87	21.72	2	20.88	20.74	20.51	3
	50	25	22.79	22.63	22.48	1	21.81	21.85	21.70	2	20.71	20.55	20.47	3
	50	50	22.74	22.58	22.43	1	21.96	21.80	21.65	2	20.71	20.59	20.40	3
	100	0	22.78	22.62	22.47	1	22.00	21.84	21.69	2	20.79	20.55	20.35	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20825 / 2507.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21375 / 2562.5 MHz	3GPP MPR (dB)	Low CH 20825 / 2507.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21375 / 2562.5 MHz	3GPP MPR (dB)	Low CH 20825 / 2507.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21375 / 2562.5 MHz	3GPP MPR (dB)
15	1	0	23.74	23.58	23.43	0	22.86	22.80	22.65	1	21.86	21.72	21.53	2
	1	37	23.61	23.45	23.30	0	22.83	22.67	22.52	1	21.71	21.50	21.43	2
	1	74	23.57	23.41	23.26	0	22.79	22.63	22.48	1	21.65	21.61	21.41	2
	36	0	22.72	22.56	22.41	1	21.74	21.78	21.63	2	20.88	20.68	20.51	3
	36	19	22.70	22.54	22.39	1	21.72	21.76	21.61	2	20.69	20.49	20.38	3
	36	39	22.65	22.49	22.34	1	21.87	21.71	21.56	2	20.73	20.55	20.49	3
	75	0	22.69	22.53	22.38	1	21.91	21.75	21.60	2	20.73	20.60	20.35	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20800 / 2505.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21400 / 2565.0 MHz	3GPP MPR (dB)	Low CH 20800 / 2505.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21400 / 2565.0 MHz	3GPP MPR (dB)	Low CH 20800 / 2505.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21400 / 2565.0 MHz	3GPP MPR (dB)
10	1	0	23.61	23.45	23.30	0	22.73	22.67	22.52	1	21.82	21.74	21.65	2
	1	24	23.48	23.32	23.17	0	22.70	22.54	22.39	1	21.73	21.53	21.50	2
	1	49	23.44	23.28	23.13	0	22.66	22.50	22.35	1	21.75	21.61	21.38	2
	25	0	22.59	22.43	22.28	1	21.61	21.65	21.50	2	20.87	20.80	20.51	3
	25	12	22.57	22.41	22.26	1	21.59	21.63	21.48	2	20.66	20.53	20.49	3
	25	25	22.52	22.36	22.21	1	21.74	21.58	21.43	2	20.69	20.51	20.40	3
	50	0	22.56	22.40	22.25	1	21.78	21.62	21.47	2	20.66	20.45	20.50	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 20775 / 2502.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21425 / 2567.5 MHz	3GPP MPR (dB)	Low CH 20775 / 2502.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21425 / 2567.5 MHz	3GPP MPR (dB)	Low CH 20775 / 2502.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21425 / 2567.5 MHz	3GPP MPR (dB)
5	1	0	23.55	23.39	23.24	0	22.67	22.61	22.46	1	21.98	21.74	21.48	2
	1	12	23.42	23.26	23.11	0	22.64	22.48	22.33	1	21.85	21.52	21.38	2
	1	24	23.38	23.22	23.07	0	22.60	22.44	22.29	1	21.78	21.56	21.43	2
	12	0	22.53	22.37	22.22	1	21.55	21.59	21.44	2	20.89	20.81	20.66	3
	12	6	22.51	22.35	22.20	1	21.53	21.57	21.42	2	20.74	20.49	20.36	3
	12	13	22.46	22.30	22.15	1	21.68	21.52	21.37	2	20.68	20.60	20.44	3
	25	0	22.50	22.34	22.19	1	21.72	21.56	21.41	2	20.79	20.51	20.48	3

LTE Band 7																
EUT with Power Reduction (P-Sensor Triggered)																
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 20850 / 2510.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21350 / 2560.0 MHz	3GPP MPR (dB)	Low CH 20850 / 2510.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21350 / 2560.0 MHz	3GPP MPR (dB)	Low CH 20850 / 2510.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21350 / 2560.0 MHz	3GPP MPR (dB)		
20	1	0	12.82	12.87	12.83	0	11.80	11.85	11.81	1	10.77	10.82	10.78	2		
	1	50	12.64	12.69	12.65	0	11.62	11.67	11.63	1	10.59	10.64	10.60	2		
	1	99	12.62	12.67	12.63	0	11.60	11.65	11.61	1	10.57	10.62	10.58	2		
	50	0	11.76	11.81	11.77	1	10.74	10.79	10.75	2	9.71	9.76	9.72	3		
	50	25	11.74	11.79	11.75	1	10.72	10.77	10.73	2	9.69	9.74	9.70	3		
	50	50	11.67	11.72	11.68	1	10.65	10.70	10.66	2	9.62	9.67	9.63	3		
	100	0	11.73	11.76	11.73	1	10.71	10.74	10.71	2	9.68	9.71	9.68	3		
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 20825 / 2507.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21375 / 2562.5 MHz	3GPP MPR (dB)	Low CH 20825 / 2507.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21375 / 2562.5 MHz	3GPP MPR (dB)	Low CH 20825 / 2507.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21375 / 2562.5 MHz	3GPP MPR (dB)		
15	1	0	12.77	12.82	12.78	0	11.75	11.80	11.76	1	10.72	10.77	10.73	2		
	1	37	12.59	12.64	12.60	0	11.57	11.62	11.58	1	10.54	10.59	10.55	2		
	1	74	12.57	12.62	12.58	0	11.55	11.60	11.56	1	10.52	10.57	10.53	2		
	36	0	11.71	11.76	11.72	1	10.69	10.74	10.70	2	9.66	9.71	9.67	3		
	36	19	11.69	11.74	11.70	1	10.67	10.72	10.68	2	9.64	9.69	9.65	3		
	36	39	11.62	11.67	11.63	1	10.60	10.65	10.61	2	9.57	9.62	9.58	3		
	75	0	11.68	11.71	11.68	1	10.66	10.69	10.66	2	9.63	9.66	9.63	3		
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 20800 / 2505.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21400 / 2565.0 MHz	3GPP MPR (dB)	Low CH 20800 / 2505.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21400 / 2565.0 MHz	3GPP MPR (dB)	Low CH 20800 / 2505.0 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21400 / 2565.0 MHz	3GPP MPR (dB)		
10	1	0	12.72	12.77	12.73	0	11.70	11.75	11.71	1	10.67	10.72	10.68	2		
	1	24	12.54	12.59	12.55	0	11.52	11.57	11.53	1	10.49	10.54	10.50	2		
	1	49	12.52	12.57	12.53	0	11.50	11.55	11.51	1	10.47	10.52	10.48	2		
	25	0	11.66	11.71	11.67	1	10.64	10.69	10.65	2	9.61	9.66	9.62	3		
	25	12	11.64	11.69	11.65	1	10.62	10.67	10.63	2	9.59	9.64	9.60	3		
	25	25	11.57	11.62	11.58	1	10.55	10.60	10.56	2	9.52	9.57	9.53	3		
	50	0	11.63	11.66	11.63	1	10.61	10.64	10.61	2	9.58	9.61	9.58	3		
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 20775 / 2502.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21425 / 2567.5 MHz	3GPP MPR (dB)	Low CH 20775 / 2502.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21425 / 2567.5 MHz	3GPP MPR (dB)	Low CH 20775 / 2502.5 MHz	Mid CH 21100 / 2535.0 MHz	High CH 21425 / 2567.5 MHz	3GPP MPR (dB)		
5	1	0	12.65	12.70	12.66	0	11.63	11.68	11.64	1	10.60	10.65	10.61	2		
	1	12	12.47	12.52	12.48	0	11.45	11.50	11.46	1	10.42	10.47	10.43	2		
	1	24	12.45	12.50	12.46	0	11.43	11.48	11.44	1	10.40	10.45	10.41	2		
	12	0	11.59	11.64	11.60	1	10.57	10.62	10.58	2	9.54	9.59	9.55	3		
	12	6	11.57	11.62	11.58	1	10.55	10.60	10.56	2	9.52	9.57	9.53	3		
	12	13	11.50	11.55	11.51	1	10.48	10.53	10.49	2	9.45	9.50	9.46	3		
	25	0	11.56	11.59	11.56	1	10.54	10.57	10.54	2	9.51	9.54	9.51	3		

LTE Band 12

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 23060 / 704.0 MHz	Mid CH 23095 / 707.5 MHz	High CH 23130 / 711.0 MHz	3GPP MPR (dB)	Low CH 23060 / 704.0 MHz	Mid CH 23095 / 707.5 MHz	High CH 23130 / 711.0 MHz	3GPP MPR (dB)	Low CH 23060 / 704.0 MHz	Mid CH 23095 / 707.5 MHz	High CH 23130 / 711.0 MHz	3GPP MPR (dB)
10	1	0	23.54	23.49	23.23	0	22.82	22.77	22.51	1	21.63	21.45	21.22	2
	1	24	23.35	23.30	23.04	0	22.63	22.58	22.32	1	21.42	21.39	21.19	2
	1	49	23.34	23.29	23.03	0	22.62	22.57	22.31	1	21.47	21.28	21.08	2
	25	0	22.42	22.37	22.11	1	21.70	21.65	21.39	2	20.52	20.48	20.19	3
	25	12	22.41	22.36	22.10	1	21.69	21.64	21.38	2	20.38	20.35	20.08	3
	25	25	22.39	22.34	22.08	1	21.67	21.62	21.36	2	20.45	20.30	20.06	3
	50	0	22.40	22.35	22.09	1	21.68	21.63	21.37	2	20.33	20.31	20.14	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 23035 / 701.5 MHz	Mid CH 23095 / 707.5 MHz	High CH 23155 / 713.5 MHz	3GPP MPR (dB)	Low CH 23035 / 701.5 MHz	Mid CH 23095 / 707.5 MHz	High CH 23155 / 713.5 MHz	3GPP MPR (dB)	Low CH 23035 / 701.5 MHz	Mid CH 23095 / 707.5 MHz	High CH 23155 / 713.5 MHz	3GPP MPR (dB)
5	1	0	23.45	23.40	23.14	0	22.73	22.68	22.42	1	21.64	21.46	21.28	2
	1	12	23.26	23.21	22.95	0	22.54	22.49	22.23	1	21.50	21.27	21.03	2
	1	24	23.25	23.20	22.94	0	22.53	22.48	22.22	1	21.36	21.43	21.07	2
	12	0	22.33	22.28	22.02	1	21.61	21.56	21.30	2	20.55	20.60	20.27	3
	12	6	22.32	22.27	22.01	1	21.60	21.55	21.29	2	20.47	20.42	20.02	3
	12	13	22.30	22.25	21.99	1	21.58	21.53	21.27	2	20.32	20.29	20.05	3
	25	0	22.31	22.26	22.00	1	21.59	21.54	21.28	2	20.39	20.27	20.03	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 23025 / 700.5 MHz	Mid CH 23095 / 707.5 MHz	High CH 23165 / 714.5 MHz	3GPP MPR (dB)	Low CH 23025 / 700.5 MHz	Mid CH 23095 / 707.5 MHz	High CH 23165 / 714.5 MHz	3GPP MPR (dB)	Low CH 23025 / 700.5 MHz	Mid CH 23095 / 707.5 MHz	High CH 23165 / 714.5 MHz	3GPP MPR (dB)
3	1	0	23.32	23.27	23.01	0	22.60	22.55	22.29	1	21.51	21.59	21.34	2
	1	7	23.13	23.08	22.82	0	22.41	22.36	22.10	1	21.42	21.39	21.11	2
	1	14	23.12	23.07	22.81	0	22.40	22.35	22.09	1	21.45	21.37	21.10	2
	8	0	22.20	22.15	21.89	1	21.48	21.43	21.17	2	20.66	20.53	20.26	3
	8	3	22.19	22.14	21.88	1	21.47	21.42	21.16	2	20.39	20.28	20.18	3
	8	7	22.17	22.12	21.86	1	21.45	21.40	21.14	2	20.35	20.24	20.13	3
	15	0	22.18	22.13	21.87	1	21.46	21.41	21.15	2	20.35	20.35	20.02	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 23017 / 699.7 MHz	Mid CH 23095 / 707.5 MHz	High CH 23173 / 715.3 MHz	3GPP MPR (dB)	Low CH 23017 / 699.7 MHz	Mid CH 23095 / 707.5 MHz	High CH 23173 / 715.3 MHz	3GPP MPR (dB)	Low CH 23017 / 699.7 MHz	Mid CH 23095 / 707.5 MHz	High CH 23173 / 715.3 MHz	3GPP MPR (dB)
1.4	1	0	23.54	23.51	23.21	0	22.53	22.52	22.12	1	21.45	21.55	21.18	2
	1	2	23.43	23.31	22.97	0	22.28	22.21	22.04	1	21.32	21.22	21.06	2
	1	5	23.23	23.24	23.12	0	22.40	22.36	22.09	1	21.30	21.36	21.03	2
	3	0	23.50	23.51	23.12	0	22.50	22.40	22.28	1	21.54	21.53	21.21	2
	3	1	23.31	23.37	23.06	0	22.40	22.38	22.10	1	21.36	21.28	21.09	2
	3	3	23.23	23.33	23.01	0	22.29	22.20	21.96	1	21.25	21.18	21.08	2
	6	0	22.43	22.32	22.00	1	21.23	21.21	20.98	2	20.24	20.24	20.01	3

LTE Band 12																
EUT with Power Reduction (P-Sensor Triggered)																
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 23060 704.0 MHz	Mid CH 23095 707.5 MHz	High CH 23130 711.0 MHz	3GPP MPR (dB)	Low CH 23060 704.0 MHz	Mid CH 23095 707.5 MHz	High CH 23130 711.0 MHz	3GPP MPR (dB)	Low CH 23060 704.0 MHz	Mid CH 23095 707.5 MHz	High CH 23130 711.0 MHz	3GPP MPR (dB)		
10	1	0	20.58	20.55	20.52	0	19.56	19.53	19.50	1	18.53	18.50	18.47	2		
	1	24	20.48	20.45	20.42	0	19.46	19.43	19.40	1	18.43	18.40	18.37	2		
	1	49	20.46	20.43	20.40	0	19.44	19.41	19.38	1	18.41	18.38	18.35	2		
	25	0	19.50	19.47	19.44	1	18.48	18.45	18.42	2	17.45	17.42	17.39	3		
	25	12	19.48	19.45	19.42	1	18.46	18.43	18.40	2	17.43	17.40	17.37	3		
	25	25	19.45	19.42	19.39	1	18.43	18.40	18.37	2	17.40	17.37	17.34	3		
	50	0	19.46	19.43	19.40	1	18.44	18.41	18.38	2	17.41	17.38	17.35	3		
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 23035 701.5 MHz	Mid CH 23095 707.5 MHz	High CH 23155 713.5 MHz	3GPP MPR (dB)	Low CH 23035 701.5 MHz	Mid CH 23095 707.5 MHz	High CH 23155 713.5 MHz	3GPP MPR (dB)	Low CH 23035 701.5 MHz	Mid CH 23095 707.5 MHz	High CH 23155 713.5 MHz	3GPP MPR (dB)		
5	1	0	20.53	20.50	20.47	0	19.51	19.48	19.45	1	18.48	18.45	18.42	2		
	1	12	20.43	20.40	20.37	0	19.41	19.38	19.35	1	18.38	18.35	18.32	2		
	1	24	20.41	20.38	20.35	0	19.39	19.36	19.33	1	18.36	18.33	18.30	2		
	12	0	19.45	19.42	19.39	1	18.43	18.40	18.37	2	17.40	17.37	17.34	3		
	12	6	19.43	19.40	19.37	1	18.41	18.38	18.35	2	17.38	17.35	17.32	3		
	12	13	19.40	19.37	19.34	1	18.38	18.35	18.32	2	17.35	17.32	17.29	3		
	25	0	19.41	19.38	19.35	1	18.39	18.36	18.33	2	17.36	17.33	17.30	3		
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 23025 700.5 MHz	Mid CH 23095 707.5 MHz	High CH 23165 714.5 MHz	3GPP MPR (dB)	Low CH 23025 700.5 MHz	Mid CH 23095 707.5 MHz	High CH 23165 714.5 MHz	3GPP MPR (dB)	Low CH 23025 700.5 MHz	Mid CH 23095 707.5 MHz	High CH 23165 714.5 MHz	3GPP MPR (dB)		
3	1	0	20.46	20.43	20.40	0	19.44	19.41	19.38	1	18.41	18.38	18.35	2		
	1	7	20.36	20.33	20.30	0	19.34	19.31	19.28	1	18.31	18.28	18.25	2		
	1	14	20.34	20.31	20.28	0	19.32	19.29	19.26	1	18.29	18.26	18.23	2		
	8	0	19.38	19.35	19.32	1	18.36	18.33	18.30	2	17.33	17.30	17.27	3		
	8	3	19.36	19.33	19.30	1	18.34	18.31	18.28	2	17.31	17.28	17.25	3		
	8	7	19.33	19.30	19.27	1	18.31	18.28	18.25	2	17.28	17.25	17.22	3		
	15	0	19.34	19.31	19.28	1	18.32	18.29	18.26	2	17.29	17.26	17.23	3		
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 23017 699.7 MHz	Mid CH 23095 707.5 MHz	High CH 23173 715.3 MHz	3GPP MPR (dB)	Low CH 23017 699.7 MHz	Mid CH 23095 707.5 MHz	High CH 23173 715.3 MHz	3GPP MPR (dB)	Low CH 23017 699.7 MHz	Mid CH 23095 707.5 MHz	High CH 23173 715.3 MHz	3GPP MPR (dB)		
1.4	1	0	20.38	20.35	20.32	0	19.36	19.33	19.30	1	18.33	18.30	18.27	2		
	1	2	20.28	20.25	20.22	0	19.26	19.23	19.20	1	18.23	18.20	18.17	2		
	1	5	20.26	20.23	20.20	0	19.24	19.21	19.18	1	18.21	18.18	18.15	2		
	3	0	20.18	20.15	20.12	0	19.16	19.13	19.10	1	18.13	18.10	18.07	2		
	3	1	20.16	20.13	20.10	0	19.14	19.11	19.08	1	18.11	18.08	18.05	2		
	3	3	20.13	20.10	20.07	0	19.11	19.08	19.05	1	18.08	18.05	18.02	2		
	6	0	19.26	19.23	19.20	1	18.24	18.21	18.18	2	17.21	17.18	17.15	3		

LTE Band 13

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
				Mid CH 23230				Mid CH 23230				Mid CH 23230		
				782.0 MHz				782.0 MHz				782.0 MHz		
10	1	0		23.43		0		22.38		1		21.40		2
	1	24		23.40		0		22.35		1		21.40		2
	1	49		23.36		0		22.31		1		21.46		2
	25	0		22.51		1		21.46		2		20.47		3
	25	12		22.41		1		21.36		2		20.43		3
	25	25		22.39		1		21.34		2		20.32		3
	50	0		22.01		1		20.96		2		20.47		3

BW (MHz)	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH 23205	Mid CH 23230	High CH 23255		Low CH 23205	Mid CH 23230	High CH 23255		Low CH 23205	Mid CH 23230	High CH 23255	
			779.5 MHz	782.0 MHz	784.5 MHz		779.5 MHz	782.0 MHz	784.5 MHz		779.5 MHz	782.0 MHz	784.5 MHz	
5	1	0	23.34	23.39	23.33	0	22.29	22.34	22.28	1	21.36	21.44	21.43	2
	1	12	23.20	23.25	23.19	0	22.15	22.20	22.14	1	21.31	21.39	21.20	2
	1	24	23.26	23.31	23.25	0	22.21	22.26	22.20	1	21.30	21.31	21.21	2
	12	0	22.41	22.46	22.40	1	21.36	21.41	21.35	2	20.43	20.34	20.30	3
	12	6	22.40	22.45	22.39	1	21.35	21.40	21.34	2	20.23	20.26	20.29	3
	12	13	22.34	22.39	22.33	1	21.29	21.34	21.28	2	20.35	20.42	20.28	3
	25	0	22.40	22.45	22.39	1	21.35	21.40	21.34	2	20.33	20.35	20.22	3

LTE Band 13

EUT with Power Reduction (P-Sensor Triggered)

BW (MHz)	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
				Mid CH 23230				Mid CH 23230				Mid CH 23230		
				782.0 MHz				782.0 MHz				782.0 MHz		
10	1	0		19.41		0		18.35		1		17.33		2
	1	24		19.35		0		18.29		1		17.27		2
	1	49		19.33		0		18.27		1		17.25		2
	25	0		18.47		1		17.41		2		16.39		3
	25	12		18.45		1		17.39		2		16.37		3
	25	25		18.43		1		17.37		2		16.35		3
	50	0		18.46		1		17.40		2		16.38		3

BW (MHz)	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH 23205	Mid CH 23230	High CH 23255		Low CH 23205	Mid CH 23230	High CH 23255		Low CH 23205	Mid CH 23230	High CH 23255	
			779.5 MHz	782.0 MHz	784.5 MHz		779.5 MHz	782.0 MHz	784.5 MHz		779.5 MHz	782.0 MHz	784.5 MHz	
5	1	0	19.32	19.37	19.35	0	18.27	18.32	18.30	1	17.25	17.30	17.28	2
	1	12	19.24	19.29	19.27	0	18.19	18.24	18.22	1	17.17	17.22	17.20	2
	1	24	19.22	19.27	19.25	0	18.17	18.22	18.20	1	17.15	17.20	17.18	2
	12	0	18.38	18.43	18.41	1	17.33	17.38	17.36	2	16.31	16.36	16.34	3
	12	6	18.36	18.41	18.39	1	17.31	17.36	17.34	2	16.29	16.34	16.32	3
	12	13	18.34	18.39	18.37	1	17.29	17.34	17.32	2	16.27	16.32	16.30	3
	25	0	18.33	18.38	18.36	1	17.28	17.33	17.31	2	16.26	16.31	16.29	3

LTE Band 17

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 23780	Mid CH 23790	High CH 23800	3GPP MPR (dB)	Low CH 23780	Mid CH 23790	High CH 23800	3GPP MPR (dB)	Low CH 23780	Mid CH 23790	High CH 23800	3GPP MPR (dB)
			709.0 MHz	710.0 MHz	711.0 MHz		709.0 MHz	710.0 MHz	711.0 MHz		709.0 MHz	710.0 MHz	711.0 MHz	
10	1	0	23.43	23.47	23.33	0	22.65	22.69	22.55	1	21.41	21.55	21.48	2
	1	24	23.20	23.24	23.10	0	22.42	22.46	22.32	1	21.35	21.29	21.22	2
	1	49	23.19	23.23	23.09	0	22.41	22.45	22.31	1	21.29	21.26	21.13	2
	25	0	22.30	22.34	22.20	1	21.52	21.56	21.42	2	20.55	20.59	20.47	3
	25	12	22.29	22.33	22.19	1	21.51	21.55	21.41	2	20.28	20.21	20.16	3
	25	25	22.21	22.25	22.11	1	21.43	21.47	21.33	2	20.14	20.24	20.12	3
	50	0	22.25	22.29	22.15	1	21.47	21.51	21.37	2	20.22	20.26	20.22	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 23755	Mid CH 23790	High CH 23825	3GPP MPR (dB)	Low CH 23755	Mid CH 23790	High CH 23825	3GPP MPR (dB)	Low CH 23755	Mid CH 23790	High CH 23825	3GPP MPR (dB)
			706.5 MHz	710.0 MHz	713.5 MHz		706.5 MHz	710.0 MHz	713.5 MHz		706.5 MHz	710.0 MHz	713.5 MHz	
5	1	0	23.34	23.38	23.24	0	22.56	22.60	22.46	1	21.41	21.58	21.34	2
	1	12	23.11	23.15	23.01	0	22.33	22.37	22.23	1	21.20	21.33	21.18	2
	1	24	23.10	23.14	23.00	0	22.32	22.36	22.22	1	21.17	21.29	21.09	2
	12	0	22.21	22.25	22.11	1	21.43	21.47	21.33	2	20.44	20.58	20.46	3
	12	6	22.20	22.24	22.10	1	21.42	21.46	21.32	2	20.18	20.30	20.14	3
	12	13	22.12	22.16	22.02	1	21.34	21.38	21.24	2	20.28	20.28	20.06	3
	25	0	22.16	22.20	22.06	1	21.38	21.42	21.28	2	20.32	20.21	20.04	3

LTE Band 17

EUT with Power Reduction (P-Sensor Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 23780	Mid CH 23790	High CH 23800	3GPP MPR (dB)	Low CH 23780	Mid CH 23790	High CH 23800	3GPP MPR (dB)	Low CH 23780	Mid CH 23790	High CH 23800	3GPP MPR (dB)
			709.0 MHz	710.0 MHz	711.0 MHz		709.0 MHz	710.0 MHz	711.0 MHz		709.0 MHz	710.0 MHz	711.0 MHz	
10	1	0	20.47	20.45	20.46	0	19.45	19.43	19.44	1	18.42	18.40	18.41	2
	1	24	20.33	20.31	20.32	0	19.31	19.29	19.30	1	18.28	18.26	18.27	2
	1	49	20.20	20.18	20.19	0	19.18	19.16	19.17	1	18.15	18.13	18.14	2
	25	0	19.39	19.37	19.38	1	18.37	18.35	18.36	2	17.34	17.32	17.33	3
	25	12	19.37	19.35	19.36	1	18.35	18.33	18.34	2	17.32	17.30	17.31	3
	25	25	19.25	19.23	19.24	1	18.23	18.21	18.22	2	17.20	17.18	17.19	3
	50	0	19.33	19.31	19.32	1	18.31	18.29	18.30	2	17.28	17.26	17.27	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 23755	Mid CH 23790	High CH 23825	3GPP MPR (dB)	Low CH 23755	Mid CH 23790	High CH 23825	3GPP MPR (dB)	Low CH 23755	Mid CH 23790	High CH 23825	3GPP MPR (dB)
			706.5 MHz	710.0 MHz	713.5 MHz		706.5 MHz	710.0 MHz	713.5 MHz		706.5 MHz	710.0 MHz	713.5 MHz	
5	1	0	20.41	20.39	20.40	0	19.39	19.37	19.38	1	18.36	18.34	18.35	2
	1	12	20.27	20.25	20.26	0	19.25	19.23	19.24	1	18.22	18.20	18.21	2
	1	24	20.14	20.12	20.13	0	19.12	19.10	19.11	1	18.09	18.07	18.08	2
	12	0	19.33	19.31	19.32	1	18.31	18.29	18.30	2	17.28	17.26	17.27	3
	12	6	19.31	19.29	19.30	1	18.29	18.27	18.28	2	17.26	17.24	17.25	3
	12	13	19.19	19.17	19.18	1	18.17	18.15	18.16	2	17.14	17.12	17.13	3
	25	0	19.27	19.25	19.26	1	18.25	18.23	18.24	2	17.22	17.20	17.21	3

LTE Band 25

EUT without Power Reduction (P-Sensor NOT Triggered)

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	22.35	22.88	23.15	0
		1	50	22.52	23.05	23.32	0
		1	99	22.28	22.81	23.08	0
		50	0	21.54	22.07	22.34	1
		50	25	21.56	22.09	22.36	1
		50	50	21.49	22.02	22.29	1
		100	0	21.61	22.14	22.41	1
	16QAM	1	0	21.66	22.19	22.48	1
		1	50	21.79	22.32	22.61	1
		1	99	21.61	22.14	22.43	1
		50	0	20.56	21.09	21.38	2
		50	25	20.56	21.09	21.38	2
		50	50	20.50	21.03	21.32	2
		100	0	20.59	21.12	21.41	2
	64QAM	1	0	21.31	21.33	21.36	2
		1	50	21.42	21.44	21.47	2
		1	99	21.32	21.34	21.37	2
		50	0	20.35	20.37	20.40	3
		50	25	20.37	20.39	20.42	3
		50	50	20.33	20.32	20.35	3
		100	0	20.37	20.39	20.42	3

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	22.29	22.82	23.09	0
		1	37	22.46	22.99	23.26	0
		1	74	22.22	22.75	23.02	0
		36	0	21.48	22.01	22.28	1
		36	19	21.50	22.03	22.30	1
		36	39	21.43	21.96	22.23	1
		75	0	21.55	22.08	22.35	1
	16QAM	1	0	21.58	22.11	22.40	1
		1	37	21.71	22.24	22.53	1
		1	74	21.53	22.06	22.35	1
		36	0	20.48	21.01	21.30	2
		36	19	20.48	21.01	21.30	2
		36	39	20.42	20.95	21.24	2
		75	0	20.51	21.04	21.33	2
	64QAM	1	0	21.28	21.30	21.33	2
		1	37	21.39	21.41	21.44	2
		1	74	21.29	21.31	21.34	2
		36	0	20.32	20.34	20.37	3
		36	19	20.34	20.36	20.39	3
		36	39	20.30	20.29	20.32	3
		75	0	20.34	20.36	20.39	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26090	26365	26640	
		Frequency (MHz)		2855.0	1882.5	1910.0	
10M	QPSK	1	0	22.24	22.77	23.04	0
		1	24	22.41	22.94	23.21	0
		1	49	22.17	22.70	22.97	0
		25	0	21.43	21.96	22.23	1
		25	12	21.45	21.98	22.25	1
		25	25	21.38	21.91	22.18	1
		50	0	21.50	22.03	22.30	1
	16QAM	1	0	21.55	22.08	22.37	1
		1	24	21.68	22.21	22.50	1
		1	49	21.50	22.03	22.32	1
		25	0	20.45	20.98	21.27	2
		25	12	20.45	20.98	21.27	2
		25	25	20.39	20.92	21.21	2
		50	0	20.48	21.01	21.30	2
	64QAM	1	0	21.22	21.22	21.25	2
		1	24	21.33	21.33	21.36	2
		1	49	21.23	21.23	21.26	2
		25	0	20.26	20.26	20.29	3
		25	12	20.28	20.28	20.31	3
		25	25	20.24	20.21	20.24	3
		50	0	20.28	20.28	20.31	3

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	22.22	22.75	23.02	0
		1	12	22.39	22.92	23.19	0
		1	24	22.15	22.68	22.95	0
		12	0	21.41	21.94	22.21	1
		12	6	21.43	21.96	22.23	1
		12	13	21.36	21.89	22.16	1
		25	0	21.48	22.01	22.28	1
	16QAM	1	0	21.48	22.01	22.30	1
		1	12	21.61	22.14	22.43	1
		1	24	21.43	21.96	22.25	1
		12	0	20.38	20.91	21.20	2
		12	6	20.38	20.91	21.20	2
		12	13	20.32	20.85	21.14	2
		25	0	20.41	20.94	21.23	2
	64QAM	1	0	21.15	21.18	21.21	2
		1	12	21.26	21.29	21.32	2
		1	24	21.16	21.19	21.22	2
		12	0	20.19	20.22	20.25	3
		12	6	20.21	20.24	20.27	3
		12	13	20.17	20.17	20.20	3
		25	0	20.21	20.24	20.27	3

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	22.17	22.70	22.97	0
		1	7	22.34	22.87	23.14	0
		1	14	22.10	22.63	22.90	0
		8	0	21.36	21.89	22.16	1
		8	3	21.38	21.91	22.18	1
		8	7	21.31	21.84	22.11	1
		15	0	21.43	21.96	22.23	1
	16QAM	1	0	21.45	21.98	22.27	1
		1	7	21.58	22.11	22.40	1
		1	14	21.40	21.93	22.22	1
		8	0	20.35	20.88	21.17	2
		8	3	20.35	20.88	21.17	2
		8	7	20.29	20.82	21.11	2
		15	0	20.38	20.91	21.20	2
	64QAM	1	0	21.12	21.11	21.14	2
		1	7	21.23	21.22	21.25	2
		1	14	21.13	21.12	21.15	2
		8	0	20.16	20.15	20.18	3
		8	3	20.18	20.17	20.20	3
		8	7	20.14	20.10	20.13	3
		15	0	20.18	20.17	20.20	3

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	1	0	22.15	22.68	22.95	0
		1	2	22.32	22.85	23.12	0
		1	5	22.08	22.61	22.88	0
		3	0	22.34	22.87	23.14	0
		3	1	22.36	22.89	23.16	0
		3	3	22.29	22.82	23.09	0
		6	0	21.41	21.94	22.21	1
	16QAM	1	0	21.37	21.90	22.19	1
		1	2	21.50	22.03	22.32	1
		1	5	21.32	21.85	22.14	1
		3	0	21.27	21.80	22.09	1
		3	1	21.27	21.80	22.09	1
		3	3	21.21	21.74	22.03	1
		6	0	20.30	20.83	21.12	2
	64QAM	1	0	21.05	21.08	21.11	2
		1	2	21.16	21.19	21.22	2
		1	5	21.06	21.09	21.12	2
		3	0	21.09	21.12	21.15	2
		3	1	21.11	21.14	21.17	2
		3	3	21.07	21.07	21.10	2
		6	0	20.11	20.14	20.17	3

LTE Band 25

EUT with Power Reduction (P-Sensor Triggered)

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	14.03	14.63	14.65	0
		1	50	14.30	14.90	14.92	0
		1	99	13.85	14.45	14.47	0
		50	0	13.15	13.75	13.77	1
		50	25	13.21	13.81	13.83	1
		50	50	13.01	13.61	13.63	1
		100	0	13.13	13.73	13.75	1
	16QAM	1	0	13.01	13.61	13.63	1
		1	50	13.28	13.88	13.90	1
		1	99	12.83	13.43	13.45	1
		50	0	12.19	12.79	12.81	2
		50	25	12.13	12.73	12.75	2
		50	50	11.99	12.59	12.61	2
		100	0	12.11	12.71	12.73	2
	64QAM	1	0	12.02	12.62	12.64	2
		1	50	12.29	12.89	12.91	2
		1	99	11.84	12.44	12.46	2
		50	0	11.20	11.80	11.82	3
		50	25	11.14	11.74	11.76	3
		50	50	11.00	11.60	11.62	3
		100	0	11.12	11.72	11.74	3

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	13.96	14.56	14.58	0
		1	37	14.23	14.83	14.85	0
		1	74	13.78	14.38	14.40	0
		36	0	13.14	13.74	13.76	1
		36	19	13.08	13.68	13.70	1
		36	39	12.94	13.54	13.56	1
		75	0	13.06	13.66	13.68	1
	16QAM	1	0	12.94	13.54	13.56	1
		1	37	13.21	13.81	13.83	1
		1	74	12.76	13.36	13.38	1
		36	0	12.12	12.72	12.74	2
		36	19	12.06	12.66	12.68	2
		36	39	11.92	12.52	12.54	2
		75	0	12.04	12.64	12.66	2
	64QAM	1	0	11.95	12.55	12.57	2
		1	37	12.22	12.82	12.84	2
		1	74	11.77	12.37	12.39	2
		36	0	11.13	11.73	11.75	3
		36	19	11.07	11.67	11.69	3
		36	39	10.93	11.53	11.55	3
		75	0	11.05	11.65	11.67	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		26090	26365	26640	
		Frequency (MHz)		2855.0	1882.5	1910.0	
10M	QPSK	1	0	13.88	14.48	14.50	0
		1	24	14.15	14.75	14.77	0
		1	49	13.70	14.30	14.32	0
		25	0	13.06	13.66	13.68	1
		25	12	13.00	13.60	13.62	1
		25	25	12.86	13.46	13.48	1
		50	0	12.98	13.58	13.60	1
	16QAM	1	0	12.86	13.46	13.48	1
		1	24	13.13	13.73	13.75	1
		1	49	12.68	13.28	13.30	1
		25	0	12.04	12.64	12.66	2
		25	12	11.98	12.58	12.60	2
		25	25	11.84	12.44	12.46	2
		50	0	11.96	12.56	12.58	2
	64QAM	1	0	11.87	12.47	12.49	2
		1	24	12.14	12.74	12.76	2
		1	49	11.69	12.29	12.31	2
		25	0	11.05	11.65	11.67	3
		25	12	10.99	11.59	11.61	3
		25	25	10.85	11.45	11.47	3
		50	0	10.97	11.57	11.59	3

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	13.81	14.41	14.43	0
		1	12	14.08	14.68	14.70	0
		1	24	13.63	14.23	14.25	0
		12	0	12.99	13.59	13.61	1
		12	6	12.93	13.53	13.55	1
		12	13	12.79	13.39	13.41	1
		25	0	12.91	13.51	13.53	1
	16QAM	1	0	12.79	13.39	13.41	1
		1	12	13.06	13.66	13.68	1
		1	24	12.61	13.21	13.23	1
		12	0	11.97	12.57	12.59	2
		12	6	11.91	12.51	12.53	2
		12	13	11.77	12.37	12.39	2
		25	0	11.89	12.49	12.51	2
	64QAM	1	0	11.80	12.40	12.42	2
		1	12	12.07	12.67	12.69	2
		1	24	11.62	12.22	12.24	2
		12	0	10.98	11.58	11.60	3
		12	6	10.92	11.52	11.54	3
		12	13	10.78	11.38	11.40	3
		25	0	10.90	11.50	11.52	3

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	13.76	14.36	14.38	0
		1	7	14.03	14.63	14.65	0
		1	14	13.58	14.18	14.20	0
		8	0	12.94	13.54	13.56	1
		8	3	12.88	13.48	13.50	1
		8	7	12.74	13.34	13.36	1
		15	0	12.86	13.46	13.48	1
	16QAM	1	0	12.74	13.34	13.36	1
		1	7	13.01	13.61	13.63	1
		1	14	12.56	13.16	13.18	1
		8	0	11.92	12.52	12.54	2
		8	3	11.86	12.46	12.48	2
		8	7	11.72	12.32	12.34	2
		15	0	11.84	12.44	12.46	2
	64QAM	1	0	11.75	12.35	12.37	2
		1	7	12.02	12.62	12.64	2
		1	14	11.57	12.17	12.19	2
		8	0	10.93	11.53	11.55	3
		8	3	10.87	11.47	11.49	3
		8	7	10.73	11.33	11.35	3
		15	0	10.85	11.45	11.47	3

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	1	0	13.69	14.29	14.31	0
		1	2	13.96	14.56	14.58	0
		1	5	13.51	14.11	14.13	0
		3	0	12.87	13.47	13.49	0
		3	1	12.81	13.41	13.43	0
		3	3	12.67	13.27	13.29	0
		6	0	12.79	13.39	13.41	1
	16QAM	1	0	12.67	13.27	13.29	1
		1	2	12.94	13.54	13.56	1
		1	5	12.49	13.09	13.11	1
		3	0	12.35	12.95	12.97	1
		3	1	12.29	12.89	12.91	1
		3	3	12.15	12.75	12.77	1
		6	0	11.77	12.37	12.39	2
	64QAM	1	0	11.68	12.28	12.30	2
		1	2	11.95	12.55	12.57	2
		1	5	11.50	12.10	12.12	2
		3	0	11.36	11.96	11.98	2
		3	1	11.30	11.90	11.92	2
		3	3	11.16	11.76	11.78	2
		6	0	10.78	11.38	11.40	3

LTE Band 26

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26765 / 821.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 26965 / 841.5 MHz	3GPP MPR (dB)	Low CH 26765 / 821.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 26965 / 841.5 MHz	3GPP MPR (dB)	Low CH 26765 / 821.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 26965 / 841.5 MHz	3GPP MPR (dB)
15	1	0	23.59	23.55	23.79	0	22.54	22.50	22.74	1	21.67	21.45	21.76	2
	1	37	23.13	23.09	23.26	0	22.08	22.04	22.21	1	21.22	21.03	21.21	2
	1	74	23.66	23.62	23.72	0	22.61	22.57	22.67	1	21.76	21.54	21.80	2
	36	0	22.35	22.31	22.52	1	21.30	21.26	21.47	2	20.55	20.50	20.86	3
	36	19	22.27	22.23	22.40	1	21.22	21.18	21.35	2	20.21	20.01	20.33	3
	36	39	22.39	22.35	22.48	1	21.34	21.30	21.43	2	20.56	20.61	20.79	3
	75	0	22.36	22.32	22.49	1	21.31	21.27	21.44	2	20.57	20.71	20.74	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26740 / 819.0 MHz	Mid CH 26865 / 831.5 MHz	High CH 26990 / 844.0 MHz	3GPP MPR (dB)	Low CH 26740 / 819.0 MHz	Mid CH 26865 / 831.5 MHz	High CH 26990 / 844.0 MHz	3GPP MPR (dB)	Low CH 26740 / 819.0 MHz	Mid CH 26865 / 831.5 MHz	High CH 26990 / 844.0 MHz	3GPP MPR (dB)
10	1	0	23.54	23.50	23.74	0	22.50	22.46	22.70	1	21.58	21.61	21.86	2
	1	24	23.08	23.04	23.21	0	22.04	22.00	22.17	1	21.23	21.02	21.21	2
	1	49	23.61	23.57	23.67	0	22.57	22.53	22.63	1	21.73	21.56	21.70	2
	25	0	22.30	22.26	22.47	1	21.26	21.22	21.43	2	20.53	20.45	20.83	3
	25	12	22.22	22.18	22.35	1	21.18	21.14	21.31	2	20.20	20.05	20.18	3
	25	25	22.34	22.30	22.43	1	21.30	21.26	21.39	2	20.60	20.58	20.81	3
	50	0	22.31	22.27	22.44	1	21.27	21.23	21.40	2	20.62	20.56	20.72	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26715 / 816.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27015 / 846.5 MHz	3GPP MPR (dB)	Low CH 26715 / 816.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27015 / 846.5 MHz	3GPP MPR (dB)	Low CH 26715 / 816.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27015 / 846.5 MHz	3GPP MPR (dB)
5	1	0	23.46	23.42	23.66	0	22.47	22.43	22.67	1	21.58	21.63	21.85	2
	1	12	23.00	22.96	23.13	0	22.01	21.97	22.14	1	21.06	21.04	21.27	2
	1	24	23.53	23.49	23.59	0	22.54	22.50	22.60	1	21.64	21.71	21.68	2
	12	0	22.22	22.18	22.39	1	21.23	21.19	21.40	2	20.55	20.51	20.76	3
	12	6	22.14	22.10	22.27	1	21.15	21.11	21.28	2	20.22	20.09	20.25	3
	12	13	22.26	22.22	22.35	1	21.27	21.23	21.36	2	20.71	20.65	20.70	3
	25	0	22.23	22.19	22.36	1	21.24	21.20	21.37	2	20.63	20.72	20.80	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26705 / 815.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27025 / 847.5 MHz	3GPP MPR (dB)	Low CH 26705 / 815.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27025 / 847.5 MHz	3GPP MPR (dB)	Low CH 26705 / 815.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27025 / 847.5 MHz	3GPP MPR (dB)
3	1	0	23.43	23.39	23.63	0	22.39	22.35	22.59	1	21.66	21.50	21.89	2
	1	7	22.97	22.93	23.10	0	21.93	21.89	22.06	1	21.08	21.03	21.24	2
	1	14	23.50	23.46	23.56	0	22.46	22.42	22.52	1	21.65	21.72	21.80	2
	8	0	22.19	22.15	22.36	1	21.15	21.11	21.32	2	20.64	20.51	20.88	3
	8	3	22.11	22.07	22.24	1	21.07	21.03	21.20	2	20.13	20.12	20.27	3
	8	7	22.23	22.19	22.32	1	21.19	21.15	21.28	2	20.71	20.63	20.72	3
	15	0	22.20	22.16	22.33	1	21.16	21.12	21.29	2	20.72	20.71	20.66	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26697 / 814.7 MHz	Mid CH 26865 / 831.5 MHz	High CH 27033 / 848.3 MHz	3GPP MPR (dB)	Low CH 26697 / 814.7 MHz	Mid CH 26865 / 831.5 MHz	High CH 27033 / 848.3 MHz	3GPP MPR (dB)	Low CH 26697 / 814.7 MHz	Mid CH 26865 / 831.5 MHz	High CH 27033 / 848.3 MHz	3GPP MPR (dB)
1.4	1	0	23.41	23.37	23.61	0	22.32	22.28	22.52	1	21.65	21.50	21.78	2
	1	2	22.95	22.91	23.08	0	21.86	21.82	21.99	1	21.14	21.15	21.30	2
	1	5	23.48	23.44	23.54	0	22.39	22.35	22.45	1	21.67	21.59	21.67	2
	3	0	23.17	23.13	23.34	0	22.08	22.04	22.25	1	21.53	21.53	21.69	2
	3	1	23.09	23.05	23.22	0	22.00	21.96	22.13	1	21.22	21.16	21.23	2
	3	3	23.21	23.17	23.30	0	22.12	22.08	22.21	1	21.72	21.71	21.78	2
	6	0	22.18	22.14	22.31	1	21.09	21.05	21.22	2	20.69	20.55	20.82	3

LTE Band 26

EUT with Power Reduction (P-Sensor Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26765 / 821.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 26965 / 841.5 MHz	3GPP MPR (dB)	Low CH 26765 / 821.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 26965 / 841.5 MHz	3GPP MPR (dB)	Low CH 26765 / 821.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 26965 / 841.5 MHz	3GPP MPR (dB)
15	1	0	18.71	18.63	18.73	0	17.69	17.61	17.71	1	16.67	16.59	16.69	2
	1	37	18.23	18.15	18.25	0	17.21	17.13	17.23	1	16.19	16.11	16.21	2
	1	74	18.61	18.53	18.63	0	17.59	17.51	17.61	1	16.57	16.49	16.59	2
	36	0	17.41	17.33	17.43	1	16.39	16.31	16.41	2	15.37	15.29	15.39	3
	36	19	17.35	17.27	17.37	1	16.33	16.25	16.35	2	15.31	15.23	15.33	3
	36	39	17.30	17.22	17.32	1	16.28	16.20	16.30	2	15.26	15.18	15.28	3
	75	0	17.39	17.31	17.41	1	16.37	16.29	16.39	2	15.35	15.27	15.37	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26740 / 819.0 MHz	Mid CH 26865 / 831.5 MHz	High CH 26990 / 844.0 MHz	3GPP MPR (dB)	Low CH 26740 / 819.0 MHz	Mid CH 26865 / 831.5 MHz	High CH 26990 / 844.0 MHz	3GPP MPR (dB)	Low CH 26740 / 819.0 MHz	Mid CH 26865 / 831.5 MHz	High CH 26990 / 844.0 MHz	3GPP MPR (dB)
10	1	0	18.65	18.57	18.67	0	17.63	17.55	17.65	1	16.61	16.53	16.63	2
	1	24	18.17	18.09	18.19	0	17.15	17.07	17.17	1	16.13	16.05	16.15	2
	1	49	18.55	18.47	18.57	0	17.53	17.45	17.55	1	16.51	16.43	16.53	2
	25	0	17.35	17.27	17.37	1	16.33	16.25	16.35	2	15.31	15.23	15.33	3
	25	12	17.29	17.21	17.31	1	16.27	16.19	16.29	2	15.25	15.17	15.27	3
	25	25	17.24	17.16	17.26	1	16.22	16.14	16.24	2	15.20	15.12	15.22	3
	50	0	17.33	17.25	17.35	1	16.31	16.23	16.33	2	15.29	15.21	15.31	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26715 / 816.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27015 / 846.5 MHz	3GPP MPR (dB)	Low CH 26715 / 816.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27015 / 846.5 MHz	3GPP MPR (dB)	Low CH 26715 / 816.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27015 / 846.5 MHz	3GPP MPR (dB)
5	1	0	18.60	18.52	18.62	0	17.58	17.50	17.60	1	16.56	16.48	16.58	2
	1	12	18.12	18.04	18.14	0	17.10	17.02	17.12	1	16.08	16.05	16.10	2
	1	24	18.50	18.42	18.52	0	17.48	17.40	17.50	1	16.46	16.38	16.48	2
	12	0	17.30	17.22	17.32	1	16.28	16.20	16.30	2	15.26	15.18	15.28	3
	12	6	17.24	17.16	17.26	1	16.22	16.14	16.24	2	15.20	15.12	15.22	3
	12	13	17.19	17.11	17.21	1	16.17	16.09	16.19	2	15.15	15.07	15.17	3
	25	0	17.28	17.20	17.30	1	16.26	16.18	16.28	2	15.24	15.16	15.26	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26705 / 815.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27025 / 847.5 MHz	3GPP MPR (dB)	Low CH 26705 / 815.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27025 / 847.5 MHz	3GPP MPR (dB)	Low CH 26705 / 815.5 MHz	Mid CH 26865 / 831.5 MHz	High CH 27025 / 847.5 MHz	3GPP MPR (dB)
3	1	0	18.57	18.49	18.59	0	17.55	17.47	17.57	1	16.53	16.45	16.55	2
	1	7	18.09	18.01	18.11	0	17.07	16.99	17.09	1	16.05	16.03	16.07	2
	1	14	18.47	18.39	18.49	0	17.45	17.37	17.47	1	16.43	16.35	16.45	2
	8	0	17.27	17.19	17.29	1	16.25	16.17	16.27	2	15.23	15.15	15.25	3
	8	3	17.21	17.13	17.23	1	16.19	16.11	16.21	2	15.17	15.09	15.19	3
	8	7	17.16	17.08	17.18	1	16.14	16.06	16.16	2	15.12	15.04	15.14	3
	15	0	17.25	17.17	17.27	1	16.23	16.15	16.25	2	15.21	15.13	15.23	3
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 26697 / 814.7 MHz	Mid CH 26865 / 831.5 MHz	High CH 27033 / 848.3 MHz	3GPP MPR (dB)	Low CH 26697 / 814.7 MHz	Mid CH 26865 / 831.5 MHz	High CH 27033 / 848.3 MHz	3GPP MPR (dB)	Low CH 26697 / 814.7 MHz	Mid CH 26865 / 831.5 MHz	High CH 27033 / 848.3 MHz	3GPP MPR (dB)
1.4	1	0	18.55	18.47	18.57	0	17.53	17.45	17.55	1	16.51	16.43	16.53	2
	1	2	18.07	17.99	18.09	0	17.05	16.97	17.07	1	16.03	16.01	16.05	2
	1	5	18.45	18.37	18.47	0	17.43	17.35	17.45	1	16.41	16.33	16.43	2
	3	0	18.17	18.09	18.19	0	17.15	17.07	17.17	1	16.13	16.05	16.15	2
	3	1	18.11	18.03	18.13	0	17.09	17.01	17.11	1	16.07	15.99	16.09	2
	3	3	18.06	17.98	18.08	0	17.04	16.96	17.06	1	16.02	15.94	16.04	2
	6	0	17.23	17.15	17.25	1	16.21	16.13	16.23	2	15.19	15.11	15.21	3

LTE Band 30

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
				Mid CH 27710		3GPP MPR (dB)		Mid CH 27710		3GPP MPR (dB)		Mid CH 27710		3GPP MPR (dB)
				2310.0 MHz				2310.0 MHz				2310.0 MHz		
10	1	0		23.45		0		22.10		1		21.26		2
	1	24		23.06		0		22.01		1		21.19		2
	1	49		22.90		0		21.85		1		21.02		2
	25	0		22.27		1		21.22		2		20.24		3
	25	12		22.18		1		21.13		2		20.19		3
	25	25		22.17		1		21.12		2		20.02		3
	50	0		22.15		1		20.77		2		20.01		3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 27685	Mid CH 27710	High CH 27735	3GPP MPR (dB)	Low CH 27685	Mid CH 27710	High CH 27735	3GPP MPR (dB)	Low CH 27685	Mid CH 27710	High CH 27735	3GPP MPR (dB)
			2307.5 MHz	2310.0 MHz	2312.5 MHz		2307.5 MHz	2310.0 MHz	2312.5 MHz		2307.5 MHz	2310.0 MHz	2312.5 MHz	
5	1	0	22.76	23.12	23.03	0	21.72	22.08	21.99	1	20.85	21.21	21.11	2
	1	12	22.70	23.06	22.97	0	21.66	22.02	21.93	1	20.74	21.16	20.98	2
	1	24	22.66	23.02	22.93	0	21.62	21.98	21.89	1	20.81	20.99	21.07	2
	12	0	21.76	22.12	22.03	1	20.72	21.08	20.99	2	19.82	20.16	20.18	3
	12	6	21.77	22.13	22.04	1	20.73	21.09	21.00	2	19.73	20.10	20.07	3
	12	13	21.74	22.10	22.01	1	20.70	21.06	20.97	2	19.69	20.16	19.89	3
	25	0	21.76	22.12	22.03	1	20.72	21.08	20.99	2	19.66	20.15	19.92	3

LTE Band 30

EUT with Power Reduction (P-Sensor Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
				Mid CH 27710		3GPP MPR (dB)		Mid CH 27710		3GPP MPR (dB)		Mid CH 27710		3GPP MPR (dB)
				2310.0 MHz				2310.0 MHz				2310.0 MHz		
10	1	0		11.53		0		10.51		1		9.50		2
	1	24		11.22		0		10.20		1		9.19		2
	1	49		11.31		0		10.29		1		9.28		2
	25	0		10.46		1		9.44		2		8.43		3
	25	12		10.33		1		9.31		2		8.30		3
	25	25		10.37		1		9.35		2		8.34		3
	50	0		10.27		1		9.25		2		8.24		3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 27685	Mid CH 27710	High CH 27735	3GPP MPR (dB)	Low CH 27685	Mid CH 27710	High CH 27735	3GPP MPR (dB)	Low CH 27685	Mid CH 27710	High CH 27735	3GPP MPR (dB)
			2307.5 MHz	2310.0 MHz	2312.5 MHz		2307.5 MHz	2310.0 MHz	2312.5 MHz		2307.5 MHz	2310.0 MHz	2312.5 MHz	
5	1	0	11.47	11.39	11.29	0	10.44	10.36	10.26	1	9.43	9.35	9.25	2
	1	12	11.33	11.25	11.15	0	10.30	10.22	10.12	1	9.29	9.21	9.11	2
	1	24	11.21	11.13	11.03	0	10.18	10.10	10.00	1	9.17	9.09	9.01	2
	12	0	10.38	10.30	10.20	1	9.35	9.27	9.17	2	8.34	8.26	8.16	3
	12	6	10.37	10.29	10.19	1	9.34	9.26	9.16	2	8.33	8.25	8.15	3
	12	13	10.33	10.25	10.15	1	9.30	9.22	9.12	2	8.29	8.21	8.11	3
	25	0	10.35	10.27	10.17	1	9.32	9.24	9.14	2	8.31	8.23	8.13	3

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EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 37850	Mid CH 38000	High CH 38150	3GPP MPR (dB)	Low CH 37850	Mid CH 38000	High CH 38150	3GPP MPR (dB)	Low CH 37850	Mid CH 38000	High CH 38150	3GPP MPR (dB)
			2580.0 MHz	2595.0 MHz	2610.0 MHz		2580.0 MHz	2595.0 MHz	2610.0 MHz		2580.0 MHz	2595.0 MHz	2610.0 MHz	
20	1	0	23.53	23.45	23.48	0	22.55	22.48	22.51	1	21.59	21.51	21.55	2
	1	50	23.35	23.29	23.32	0	22.42	22.31	22.33	1	21.45	21.32	21.35	2
	1	99	23.27	23.21	23.23	0	22.27	22.21	22.24	1	21.33	21.22	21.26	2
	50	0	22.50	22.38	22.40	1	21.50	21.37	21.39	2	20.52	20.36	20.39	3
	50	25	22.33	22.27	22.30	1	21.31	21.23	21.26	2	20.29	20.19	20.22	3
	50	50	22.28	22.23	22.26	1	21.24	21.18	21.20	2	20.22	20.13	20.17	3
	100	0	22.38	22.33	22.36	1	21.37	21.30	21.33	2	20.35	20.28	20.31	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 37825	Mid CH 38000	High CH 38175	3GPP MPR (dB)	Low CH 37825	Mid CH 38000	High CH 38175	3GPP MPR (dB)	Low CH 37825	Mid CH 38000	High CH 38175	3GPP MPR (dB)
			2577.5 MHz	2595.0 MHz	2612.5 MHz		2577.5 MHz	2595.0 MHz	2612.5 MHz		2577.5 MHz	2595.0 MHz	2612.5 MHz	
15	1	0	23.45	23.39	23.42	0	22.50	22.40	22.47	1	21.55	21.48	21.51	2
	1	37	23.29	23.22	23.24	0	22.29	22.22	22.26	1	21.45	21.28	21.35	2
	1	74	23.20	23.12	23.15	0	22.23	22.14	22.17	1	21.22	21.14	21.17	2
	36	0	22.38	22.27	22.30	1	21.39	21.28	21.30	2	20.40	20.27	20.31	3
	36	19	22.23	22.13	22.17	1	21.23	21.09	21.14	2	20.24	20.04	20.11	3
	36	39	22.15	22.08	22.11	1	21.10	21.03	21.06	2	20.09	20.05	20.01	3
	75	0	22.27	22.20	22.23	1	21.28	21.18	21.22	2	20.27	20.16	20.19	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 37800	Mid CH 38000	High CH 38200	3GPP MPR (dB)	Low CH 37800	Mid CH 38000	High CH 38200	3GPP MPR (dB)	Low CH 37800	Mid CH 38000	High CH 38200	3GPP MPR (dB)
			2575.0 MHz	2595.0 MHz	2615.0 MHz		2575.0 MHz	2595.0 MHz	2615.0 MHz		2575.0 MHz	2595.0 MHz	2615.0 MHz	
10	1	0	23.40	23.34	23.37	0	22.45	22.37	22.42	1	21.50	21.39	21.43	2
	1	24	23.24	23.12	23.14	0	22.33	22.18	22.22	1	21.26	21.17	21.21	2
	1	49	23.12	23.01	23.04	0	22.18	22.08	22.12	1	21.17	21.02	21.05	2
	25	0	22.22	22.15	22.20	1	21.31	21.23	21.25	2	20.33	20.13	20.17	3
	25	12	22.09	21.99	22.05	1	21.13	20.95	20.97	2	20.06	19.89	19.95	3
	25	25	22.00	21.94	21.97	1	20.99	20.88	20.92	2	19.91	19.83	19.86	3
	50	0	22.15	22.09	22.12	1	21.23	21.07	21.10	2	20.10	20.02	20.04	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low CH 37775	Mid CH 38000	High CH 38225	3GPP MPR (dB)	Low CH 37775	Mid CH 38000	High CH 38225	3GPP MPR (dB)	Low CH 37775	Mid CH 38000	High CH 38225	3GPP MPR (dB)
			2572.5 MHz	2595.0 MHz	2617.5 MHz		2572.5 MHz	2595.0 MHz	2617.5 MHz		2572.5 MHz	2595.0 MHz	2617.5 MHz	
5	1	0	23.35	23.27	23.31	0	22.39	22.34	22.37	1	21.42	21.32	21.37	2
	1	12	23.16	23.06	23.10	0	22.26	22.12	22.16	1	21.25	21.08	21.15	2
	1	24	23.04	22.94	22.98	0	22.05	21.95	21.98	1	21.06	21.05	21.04	2
	12	0	22.21	22.07	22.11	1	21.15	21.06	21.13	2	20.20	20.03	20.06	3
	12	6	22.02	21.86	21.90	1	20.99	20.82	20.88	2	19.92	19.76	19.83	3
	12	13	21.92	21.78	21.82	1	20.87	20.75	20.80	2	19.81	19.69	19.73	3
	25	0	22.07	21.97	21.99	1	21.06	20.95	20.97	2	20.00	19.90	19.96	3

LTE Band 38																
EUT with Power Reduction (P-Sensor Triggered)																
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 37850 / 2580.0 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38150 / 2610.0 MHz	3GPP MPR (dB)	Low CH 37850 / 2580.0 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38150 / 2610.0 MHz	3GPP MPR (dB)	Low CH 37850 / 2580.0 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38150 / 2610.0 MHz	3GPP MPR (dB)		
20	1	0	14.50	14.38	14.31	0	13.49	13.35	13.28	1	12.60	12.46	12.39	2		
	1	50	14.43	14.28	14.22	0	13.40	13.25	13.19	1	12.51	12.36	12.30	2		
	1	99	14.28	14.13	14.07	0	13.25	13.10	13.04	1	12.36	12.21	12.15	2		
	50	0	13.46	13.31	13.25	1	12.43	12.28	12.22	2	11.54	11.39	11.33	3		
	50	25	13.43	13.28	13.22	1	12.40	12.25	12.19	2	11.51	11.36	11.30	3		
	50	50	13.31	13.16	13.10	1	12.28	12.13	12.07	2	11.39	11.24	11.18	3		
	100	0	13.45	13.30	13.24	1	12.42	12.27	12.21	2	11.53	11.38	11.32	3		
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 37825 / 2577.5 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38175 / 2612.5 MHz	3GPP MPR (dB)	Low CH 37825 / 2577.5 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38175 / 2612.5 MHz	3GPP MPR (dB)	Low CH 37825 / 2577.5 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38175 / 2612.5 MHz	3GPP MPR (dB)		
15	1	0	14.47	14.33	14.26	0	13.44	13.30	13.23	1	12.58	12.44	12.37	2		
	1	37	14.38	14.23	14.17	0	13.35	13.20	13.14	1	12.49	12.34	12.28	2		
	1	74	14.23	14.08	14.02	0	13.20	13.05	12.99	1	12.34	12.19	12.13	2		
	36	0	13.41	13.26	13.20	1	12.38	12.23	12.17	2	11.52	11.37	11.31	3		
	36	19	13.38	13.23	13.17	1	12.35	12.20	12.14	2	11.49	11.34	11.28	3		
	36	39	13.26	13.11	13.05	1	12.23	12.08	12.02	2	11.37	11.22	11.16	3		
	75	0	13.40	13.25	13.19	1	12.37	12.22	12.16	2	11.51	11.36	11.30	3		
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 37800 / 2575.0 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38200 / 2615.0 MHz	3GPP MPR (dB)	Low CH 37800 / 2575.0 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38200 / 2615.0 MHz	3GPP MPR (dB)	Low CH 37800 / 2575.0 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38200 / 2615.0 MHz	3GPP MPR (dB)		
10	1	0	14.44	14.30	14.23	0	13.41	13.27	13.20	1	12.55	12.41	12.34	2		
	1	24	14.35	14.20	14.14	0	13.32	13.17	13.11	1	12.46	12.31	12.25	2		
	1	49	14.20	14.05	13.99	0	13.17	13.02	12.96	1	12.31	12.16	12.10	2		
	25	0	13.38	13.23	13.17	1	12.35	12.20	12.14	2	11.49	11.34	11.28	3		
	25	12	13.35	13.20	13.14	1	12.32	12.17	12.11	2	11.46	11.31	11.25	3		
	25	25	13.23	13.08	13.02	1	12.20	12.05	11.99	2	11.34	11.19	11.13	3		
	50	0	13.37	13.22	13.16	1	12.34	12.19	12.13	2	11.48	11.33	11.27	3		
BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM					
			Low CH 37775 / 2572.5 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38225 / 2617.5 MHz	3GPP MPR (dB)	Low CH 37775 / 2572.5 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38225 / 2617.5 MHz	3GPP MPR (dB)	Low CH 37775 / 2572.5 MHz	Mid CH 38000 / 2595.0 MHz	High CH 38225 / 2617.5 MHz	3GPP MPR (dB)		
5	1	0	14.39	14.25	14.18	0	13.36	13.22	13.15	1	12.50	12.36	12.29	2		
	1	12	14.30	14.15	14.09	0	13.27	13.12	13.06	1	12.41	12.26	12.20	2		
	1	24	14.15	14.00	13.94	0	13.12	12.97	12.91	1	12.26	12.11	12.05	2		
	12	0	13.33	13.18	13.12	1	12.30	12.15	12.09	2	11.44	11.29	11.23	3		
	12	6	13.30	13.15	13.09	1	12.27	12.12	12.06	2	11.41	11.26	11.20	3		
	12	13	13.18	13.03	12.97	1	12.15	12.00	11.94	2	11.29	11.14	11.08	3		
	25	0	13.32	13.17	13.11	1	12.29	12.14	12.08	2	11.43	11.28	11.22	3		

LTE Band 41

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK						16QAM						64QAM					
			L-CH 39750	M-CH 40185	M-CH 40620	M-CH 41055	H-CH 41490	3GPP MPR (dB)	L-CH 39750	M-CH 40185	M-CH 40620	M-CH 41055	H-CH 41490	3GPP MPR (dB)	L-CH 39750	M-CH 40185	M-CH 40620	M-CH 41055	H-CH 41490	3GPP MPR (dB)
			2506.0 MHz	2549.5 MHz	2593.0 MHz	2636.5 MHz	2680.0 MHz		2506.0 MHz	2549.5 MHz	2593.0 MHz	2636.5 MHz	2680.0 MHz		2506.0 MHz	2549.5 MHz	2593.0 MHz	2636.5 MHz	2680.0 MHz	
20	1	0	23.49	23.48	23.57	23.65	22.77	0	22.70	22.69	22.78	22.86	21.58	1	21.64	21.56	21.60	21.68	20.76	2
	1	50	23.45	23.44	23.53	23.61	22.73	0	22.66	22.65	22.74	22.82	21.54	1	21.51	21.42	21.53	21.71	20.81	2
	1	99	23.38	23.37	23.46	23.54	22.66	0	22.59	22.58	22.67	22.75	21.47	1	21.53	21.38	21.52	21.51	20.67	2
	50	0	22.58	22.57	22.66	22.74	21.86	1	21.79	21.78	21.87	21.95	20.67	2	20.71	20.67	20.63	20.71	20.00	3
	50	25	22.49	22.48	22.57	22.65	21.77	1	21.70	21.69	21.78	21.86	20.58	2	20.60	20.48	20.66	20.74	19.91	3
	50	50	22.44	22.43	22.52	22.60	21.72	1	21.65	21.64	21.73	21.81	20.53	2	20.53	20.45	20.48	20.58	19.82	3
	100	0	22.52	22.51	22.60	22.68	21.80	1	21.73	21.72	21.81	21.89	20.61	2	20.47	20.48	20.62	20.67	19.95	3
BW (MHz)	RB Size	RB Offset	QPSK						16QAM						64QAM					
			L-CH 39725	M-CH 40173	M-CH 40620	M-CH 41068	H-CH 41515	3GPP MPR (dB)	L-CH 39725	M-CH 40173	M-CH 40620	M-CH 41068	H-CH 41515	3GPP MPR (dB)	L-CH 39725	M-CH 40173	M-CH 40620	M-CH 41068	H-CH 41515	3GPP MPR (dB)
			2503.5 MHz	2548.3 MHz	2593.0 MHz	2637.8 MHz	2682.5 MHz		2503.5 MHz	2548.3 MHz	2593.0 MHz	2637.8 MHz	2682.5 MHz		2503.5 MHz	2548.3 MHz	2593.0 MHz	2637.8 MHz	2682.5 MHz	
15	1	0	23.38	23.37	23.46	23.54	22.76	0	22.59	22.58	22.67	22.75	21.47	1	21.50	21.46	21.71	21.75	20.80	2
	1	37	23.34	23.33	23.42	23.50	22.75	0	22.55	22.54	22.63	22.71	21.43	1	21.48	21.52	21.52	21.57	20.73	2
	1	74	23.27	23.26	23.35	23.43	22.80	0	22.48	22.47	22.56	22.64	21.36	1	21.47	21.47	21.41	21.62	20.80	2
	36	0	22.47	22.46	22.55	22.63	21.93	1	21.68	21.67	21.76	21.84	20.56	2	20.63	20.60	20.74	20.85	19.82	3
	36	19	22.38	22.37	22.46	22.54	21.86	1	21.59	21.58	21.67	21.75	20.47	2	20.52	20.55	20.57	20.77	19.86	3
	36	39	22.33	22.32	22.41	22.49	21.77	1	21.54	21.53	21.62	21.70	20.42	2	20.44	20.48	20.57	20.55	19.78	3
	75	0	22.41	22.40	22.49	22.57	21.89	1	21.62	21.61	21.70	21.78	20.50	2	20.52	20.47	20.64	20.66	19.86	3
BW (MHz)	RB Size	RB Offset	QPSK						16QAM						64QAM					
			L-CH 39700	M-CH 40160	M-CH 40620	M-CH 41080	H-CH 41540	3GPP MPR (dB)	L-CH 39700	M-CH 40160	M-CH 40620	M-CH 41080	H-CH 41540	3GPP MPR (dB)	L-CH 39700	M-CH 40160	M-CH 40620	M-CH 41080	H-CH 41540	3GPP MPR (dB)
			2501.0 MHz	2547.0 MHz	2593.0 MHz	2639.0 MHz	2685.0 MHz		2501.0 MHz	2547.0 MHz	2593.0 MHz	2639.0 MHz	2685.0 MHz		2501.0 MHz	2547.0 MHz	2593.0 MHz	2639.0 MHz	2685.0 MHz	
10	1	0	23.29	23.28	23.37	23.45	22.87	0	22.50	22.49	22.58	22.66	21.38	1	21.62	21.58	21.69	21.63	20.83	2
	1	24	23.25	23.24	23.33	23.41	22.72	0	22.46	22.45	22.54	22.62	21.34	1	21.47	21.47	21.59	21.64	20.81	2
	1	49	23.18	23.17	23.26	23.34	22.70	0	22.39	22.38	22.47	22.55	21.27	1	21.35	21.37	21.48	21.49	20.68	2
	25	0	22.38	22.37	22.46	22.54	21.90	1	21.59	21.58	21.67	21.75	20.47	2	20.63	20.58	20.71	20.72	19.82	3
	25	12	22.29	22.28	22.37	22.45	21.89	1	21.50	21.49	21.58	21.66	20.38	2	20.50	20.52	20.54	20.73	19.81	3
	25	25	22.24	22.23	22.32	22.40	21.79	1	21.45	21.44	21.53	21.61	20.33	2	20.54	20.39	20.53	20.57	19.79	3
	50	0	22.32	22.31	22.40	22.48	21.76	1	21.53	21.52	21.61	21.69	20.41	2	20.65	20.54	20.55	20.70	19.86	3
BW (MHz)	RB Size	RB Offset	QPSK						16QAM						64QAM					
			L-CH 39675	M-CH 40148	M-CH 40620	M-CH 41093	H-CH 41565	3GPP MPR (dB)	L-CH 39675	M-CH 40148	M-CH 40620	M-CH 41093	H-CH 41565	3GPP MPR (dB)	L-CH 39675	M-CH 40148	M-CH 40620	M-CH 41093	H-CH 41565	3GPP MPR (dB)
			2498.5 MHz	2545.8 MHz	2593.0 MHz	2640.3 MHz	2687.5 MHz		2498.5 MHz	2545.8 MHz	2593.0 MHz	2640.3 MHz	2687.5 MHz		2498.5 MHz	2545.8 MHz	2593.0 MHz	2640.3 MHz	2687.5 MHz	
5	1	0	23.21	23.20	23.29	23.37	22.77	0	22.42	22.41	22.50	22.58	21.30	1	21.47	21.63	21.65	21.74	20.84	2
	1	12	23.17	23.16	23.25	23.33	22.82	0	22.38	22.37	22.46	22.54	21.26	1	21.52	21.57	21.66	21.64	20.86	2
	1	24	23.10	23.09	23.18	23.26	22.76	0	22.31	22.30	22.39	22.47	21.19	1	21.45	21.40	21.49	21.49	20.62	2
	12	0	22.30	22.29	22.38	22.46	21.88	1	21.51	21.50	21.59	21.67	20.39	2	20.58	20.58	20.71	20.75	19.86	3
	12	6	22.21	22.20	22.29	22.37	21.78	1	21.42	21.41	21.50	21.58	20.30	2	20.45	20.55	20.63	20.71	19.81	3
	12	13	22.16	22.15	22.24	22.32	21.81	1	21.37	21.36	21.45	21.53	20.25	2	20.43	20.51	20.66	20.56	19.74	3
	25	0	22.24	22.23	22.32	22.40	21.84	1	21.45	21.44	21.53	21.61	20.33	2	20.66	20.62	20.59	20.80	19.78	3

LTE Band 41

EUT with Power Reduction (P-Sensor Triggered)

BW (MHz)	RB Size	RB Offset	QPSK						16QAM						64QAM					
			L-CH 39750	M-CH 40185	M-CH 40620	M-CH 41055	H-CH 41490	3GPP MPR (dB)	L-CH 39750	M-CH 40185	M-CH 40620	M-CH 41055	H-CH 41490	3GPP MPR (dB)	L-CH 39750	M-CH 40185	M-CH 40620	M-CH 41055	H-CH 41490	3GPP MPR (dB)
			2506.0 MHz	2549.5 MHz	2593.0 MHz	2636.5 MHz	2680.0 MHz		2506.0 MHz	2549.5 MHz	2593.0 MHz	2636.5 MHz	2680.0 MHz		2506.0 MHz	2549.5 MHz	2593.0 MHz	2636.5 MHz	2680.0 MHz	
20	1	0	14.43	14.37	14.49	14.45	13.47	0	13.45	13.39	13.49	13.47	12.49	1	12.43	12.37	12.47	12.45	11.47	2
	1	50	14.31	14.25	14.39	14.33	13.36	0	13.33	13.27	13.41	13.35	12.38	1	12.31	12.25	12.39	12.33	11.36	2
	1	99	14.29	14.23	14.37	14.31	13.34	0	13.31	13.25	13.39	13.33	12.36	1	12.29	12.23	12.37	12.31	11.34	2
	50	0	13.39	13.33	13.47	13.41	12.44	1	12.41	12.35	12.49	12.43	11.46	2	11.39	11.33	11.47	11.41	10.44	3
	50	25	13.35	13.29	13.43	13.37	12.40	1	12.37	12.31	12.45	12.39	11.42	2	11.35	11.29	11.43	11.37	10.40	3
	50	50	13.33	13.27	13.41	13.35	12.38	1	12.35	12.29	12.43	12.37	11.40	2	11.33	11.27	11.41	11.35	10.38	3
	100	0	13.38	13.32	13.46	13.40	12.43	1	12.40	12.34	12.48	12.42	11.45	2	11.38	11.32	11.46	11.40	10.43	3

BW (MHz)	RB Size	RB Offset	QPSK						16QAM						64QAM					
			L-CH 39725	M-CH 40173	M-CH 40620	M-CH 41068	H-CH 41515	3GPP MPR (dB)	L-CH 39725	M-CH 40173	M-CH 40620	M-CH 41068	H-CH 41515	3GPP MPR (dB)	L-CH 39725	M-CH 40173	M-CH 40620	M-CH 41068	H-CH 41515	3GPP MPR (dB)
			2503.5 MHz	2548.3 MHz	2593.0 MHz	2637.8 MHz	2682.5 MHz		2503.5 MHz	2548.3 MHz	2593.0 MHz	2637.8 MHz	2682.5 MHz		2503.5 MHz	2548.3 MHz	2593.0 MHz	2637.8 MHz	2682.5 MHz	
15	1	0	14.40	14.34	14.46	14.42	13.44	0	13.42	13.36	13.46	13.44	12.46	1	12.40	12.34	12.44	12.42	11.44	2
	1	37	14.28	14.22	14.36	14.30	13.33	0	13.30	13.24	13.38	13.32	12.35	1	12.28	12.22	12.36	12.30	11.33	2
	1	74	14.26	14.20	14.34	14.28	13.31	0	13.28	13.22	13.36	13.30	12.33	1	12.26	12.20	12.34	12.28	11.31	2
	36	0	13.36	13.30	13.44	13.38	12.41	1	12.38	12.32	12.46	12.40	11.43	2	11.36	11.30	11.44	11.38	10.41	3
	36	19	13.32	13.26	13.40	13.34	12.37	1	12.34	12.28	12.42	12.36	11.39	2	11.32	11.26	11.40	11.34	10.37	3
	36	39	13.30	13.24	13.38	13.32	12.35	1	12.32	12.26	12.40	12.34	11.37	2	11.30	11.24	11.38	11.32	10.35	3
	75	0	13.35	13.29	13.43	13.37	12.40	1	12.37	12.31	12.45	12.39	11.42	2	11.35	11.29	11.43	11.37	10.40	3

BW (MHz)	RB Size	RB Offset	QPSK						16QAM						64QAM					
			L-CH 39700	M-CH 40160	M-CH 40620	M-CH 41080	H-CH 41540	3GPP MPR (dB)	L-CH 39700	M-CH 40160	M-CH 40620	M-CH 41080	H-CH 41540	3GPP MPR (dB)	L-CH 39700	M-CH 40160	M-CH 40620	M-CH 41080	H-CH 41540	3GPP MPR (dB)
			2501.0 MHz	2547.0 MHz	2593.0 MHz	2639.0 MHz	2685.0 MHz		2501.0 MHz	2547.0 MHz	2593.0 MHz	2639.0 MHz	2685.0 MHz		2501.0 MHz	2547.0 MHz	2593.0 MHz	2639.0 MHz	2685.0 MHz	
10	1	0	14.35	14.29	14.41	14.37	13.39	0	13.37	13.31	13.41	13.39	12.41	1	12.35	12.29	12.39	12.37	11.39	2
	1	24	14.23	14.17	14.31	14.25	13.28	0	13.25	13.19	13.33	13.27	12.30	1	12.23	12.17	12.31	12.25	11.28	2
	1	49	14.21	14.15	14.29	14.23	13.26	0	13.23	13.17	13.31	13.25	12.28	1	12.21	12.15	12.29	12.23	11.26	2
	25	0	13.31	13.25	13.39	13.33	12.36	1	12.33	12.27	12.41	12.35	11.38	2	11.31	11.25	11.39	11.33	10.36	3
	25	12	13.27	13.21	13.35	13.29	12.32	1	12.29	12.23	12.37	12.31	11.34	2	11.27	11.21	11.35	11.29	10.32	3
	25	25	13.25	13.19	13.33	13.27	12.30	1	12.27	12.21	12.35	12.29	11.32	2	11.25	11.19	11.33	11.27	10.30	3
	50	0	13.30	13.24	13.38	13.32	12.35	1	12.32	12.26	12.40	12.34	11.37	2	11.30	11.24	11.38	11.32	10.35	3

BW (MHz)	RB Size	RB Offset	QPSK						16QAM						64QAM					
			L-CH 39675	M-CH 40148	M-CH 40620	M-CH 41093	H-CH 41565	3GPP MPR (dB)	L-CH 39675	M-CH 40148	M-CH 40620	M-CH 41093	H-CH 41565	3GPP MPR (dB)	L-CH 39675	M-CH 40148	M-CH 40620	M-CH 41093	H-CH 41565	3GPP MPR (dB)
			2498.5 MHz	2545.8 MHz	2593.0 MHz	2640.3 MHz	2687.5 MHz		2498.5 MHz	2545.8 MHz	2593.0 MHz	2640.3 MHz	2687.5 MHz		2498.5 MHz	2545.8 MHz	2593.0 MHz	2640.3 MHz	2687.5 MHz	
5	1	0	14.28	14.22	14.34	14.30	13.32	0	13.30	13.24	13.34	13.32	12.34	1	12.28	12.22	12.32	12.30	11.32	2
	1	12	14.16	14.10	14.24	14.18	13.21	0	13.18	13.12	13.26	13.20	12.23	1	12.16	12.10	12.24	12.18	11.21	2
	1	24	14.14	14.08	14.22	14.16	13.19	0	13.16	13.10	13.24	13.18	12.21	1	12.14	12.08	12.22	12.16	11.19	2
	12	0	13.24	13.18	13.32	13.26	12.29	1	12.26	12.20	12.34	12.28	11.31	2	11.24	11.18	11.32	11.26	10.29	3
	12	6	13.20	13.14	13.28	13.22	12.25	1	12.22	12.16	12.30	12.24	11.27	2	11.20	11.14	11.28	11.22	10.25	3
	12	13	13.18	13.12	13.26	13.20	12.23	1	12.20	12.14	12.28	12.22	11.25	2	11.18	11.12	11.26	11.20	10.23	3
	25	0	13.23	13.17	13.31	13.25	12.28	1	12.25	12.19	12.33	12.27	11.30	2	11.23	11.17	11.31	11.25	10.28	3

LTE Band 66

EUT without Power Reduction (P-Sensor NOT Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 132072 1720.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132572 1770.0 MHz	3GPP MPR (dB)	Low Ch 132072 1720.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132572 1770.0 MHz	3GPP MPR (dB)	Low Ch 132072 1720.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132572 1770.0 MHz	3GPP MPR (dB)
20	1	0	23.48	23.51	23.56	0	22.39	22.42	22.47	1	21.49	21.52	21.54	2
	1	50	23.30	23.33	23.38	0	22.21	22.24	22.29	1	21.30	21.42	21.39	2
	1	99	23.21	23.24	23.29	0	22.12	22.15	22.20	1	21.11	21.33	21.30	2
	50	0	22.54	22.57	22.62	1	21.45	21.48	21.53	2	20.41	20.46	20.54	3
	50	25	22.38	22.41	22.46	1	21.29	21.32	21.37	2	20.24	20.23	20.42	3
	50	50	22.25	22.28	22.33	1	21.16	21.19	21.24	2	20.15	20.30	20.21	3
	100	0	22.36	22.39	22.44	1	21.27	21.30	21.35	2	20.11	20.17	20.31	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 132047 1717.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132597 1772.5 MHz	3GPP MPR (dB)	Low Ch 132047 1717.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132597 1772.5 MHz	3GPP MPR (dB)	Low Ch 132047 1717.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132597 1772.5 MHz	3GPP MPR (dB)
15	1	0	23.41	23.44	23.49	0	22.36	22.39	22.44	1	21.31	21.34	21.39	2
	1	37	23.23	23.26	23.31	0	22.18	22.21	22.26	1	21.13	21.16	21.21	2
	1	74	23.14	23.17	23.22	0	22.09	22.12	22.17	1	21.04	21.07	21.12	2
	36	0	22.47	22.50	22.55	1	21.42	21.45	21.50	2	20.37	20.40	20.45	3
	36	19	22.31	22.34	22.39	1	21.26	21.29	21.34	2	20.21	20.24	20.29	3
	36	39	22.18	22.21	22.26	1	21.13	21.16	21.21	2	20.08	20.11	20.16	3
	75	0	22.29	22.32	22.37	1	21.24	21.27	21.32	2	20.19	20.22	20.27	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 132022 1715.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132622 1775.0 MHz	3GPP MPR (dB)	Low Ch 132022 1715.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132622 1775.0 MHz	3GPP MPR (dB)	Low Ch 132022 1715.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132622 1775.0 MHz	3GPP MPR (dB)
10	1	0	23.37	23.40	23.45	0	22.30	22.33	22.38	1	21.21	21.24	21.29	2
	1	24	23.19	23.22	23.27	0	22.12	22.15	22.20	1	21.03	21.06	21.11	2
	1	49	23.10	23.13	23.18	0	22.03	22.06	22.11	1	21.14	21.18	21.28	2
	25	0	22.43	22.46	22.51	1	21.36	21.39	21.44	2	20.27	20.30	20.35	3
	25	12	22.27	22.30	22.35	1	21.20	21.23	21.28	2	20.11	20.14	20.19	3
	25	25	22.14	22.17	22.22	1	21.07	21.10	21.15	2	20.19	20.01	20.06	3
	50	0	22.25	22.28	22.33	1	21.18	21.21	21.26	2	20.09	20.12	20.17	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 131997 1712.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132647 1777.5 MHz	3GPP MPR (dB)	Low Ch 131997 1712.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132647 1777.5 MHz	3GPP MPR (dB)	Low Ch 131997 1712.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132647 1777.5 MHz	3GPP MPR (dB)
5	1	0	23.34	23.37	23.42	0	22.22	22.25	22.30	1	21.19	21.22	21.27	2
	1	12	23.16	23.19	23.24	0	22.04	22.07	22.12	1	21.01	21.04	21.09	2
	1	24	23.07	23.10	23.15	0	21.95	21.98	22.03	1	21.12	21.15	21.18	2
	12	0	22.40	22.43	22.48	1	21.28	21.31	21.36	2	20.25	20.28	20.33	3
	12	6	22.24	22.27	22.32	1	21.12	21.15	21.20	2	20.09	20.12	20.17	3
	12	13	22.11	22.14	22.19	1	20.99	21.02	21.07	2	20.16	20.18	20.04	3
	25	0	22.22	22.25	22.30	1	21.10	21.13	21.18	2	20.07	20.10	20.15	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 131987 1711.5 MHz	Mid Ch 132322 1745.5 MHz	High Ch 132657 1778.5 MHz	3GPP MPR (dB)	Low Ch 131987 1711.5 MHz	Mid Ch 132322 1745.5 MHz	High Ch 132657 1778.5 MHz	3GPP MPR (dB)	Low Ch 131987 1711.5 MHz	Mid Ch 132322 1745.5 MHz	High Ch 132657 1778.5 MHz	3GPP MPR (dB)
3	1	0	23.27	23.30	23.35	0	22.17	22.20	22.25	1	21.12	21.15	21.20	2
	1	7	23.09	23.12	23.17	0	21.99	22.02	22.07	1	21.14	21.17	21.02	2
	1	14	23.00	23.03	23.08	0	21.90	21.93	21.98	1	21.05	21.08	21.13	2
	8	0	22.33	22.36	22.41	1	21.23	21.26	21.31	2	20.18	20.21	20.26	3
	8	3	22.17	22.20	22.25	1	21.07	21.10	21.15	2	20.02	20.05	20.10	3
	8	7	22.04	22.07	22.12	1	20.94	20.97	21.02	2	20.09	20.12	20.17	3
	15	0	22.15	22.18	22.23	1	21.05	21.08	21.13	2	20.21	20.03	20.08	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 131979 1710.7 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132665 1779.3 MHz	3GPP MPR (dB)	Low Ch 131979 1710.7 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132665 1779.3 MHz	3GPP MPR (dB)	Low Ch 131979 1710.7 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132665 1779.3 MHz	3GPP MPR (dB)
1.4	1	0	23.25	23.28	23.33	0	22.10	22.13	22.18	1	21.41	21.49	21.54	2
	1	2	23.07	23.10	23.15	0	21.92	21.95	22.00	1	21.38	21.22	21.38	2
	1	5	22.98	23.01	23.06	0	21.83	21.86	21.91	1	21.24	21.24	21.34	2
	3	0	23.31	23.34	23.33	0	22.16	22.19	22.24	1	21.56	21.53	21.63	2
	3	1	23.15	23.18	23.23	0	22.00	22.03	22.08	1	21.28	21.37	21.46	2
	3	3	23.02	23.05	23.10	0	21.87	21.90	21.95	1	21.28	21.17	21.26	2
	6	0	22.13	22.16	22.21	1	20.98	21.01	21.06	2	20.28	20.25	20.19	3

LTE Band 66

EUT with Power Reduction (P-Sensor Triggered)

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 132072 1720.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132572 1770.0 MHz	3GPP MPR (dB)	Low Ch 132072 1720.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132572 1770.0 MHz	3GPP MPR (dB)	Low Ch 132072 1720.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132572 1770.0 MHz	3GPP MPR (dB)
20	1	0	15.33	15.43	15.45	0	14.35	14.45	14.47	1	13.34	13.44	13.46	2
	1	50	15.13	15.23	15.25	0	14.15	14.25	14.27	1	13.14	13.24	13.26	2
	1	99	15.09	15.19	15.21	0	14.11	14.21	14.23	1	13.10	13.20	13.22	2
	50	0	14.31	14.41	14.43	1	13.33	13.43	13.45	2	12.32	12.42	12.44	3
	50	25	14.25	14.35	14.37	1	13.27	13.37	13.39	2	12.26	12.36	12.38	3
	50	50	14.14	14.24	14.26	1	13.16	13.26	13.28	2	12.15	12.25	12.27	3
	100	0	14.26	14.36	14.38	1	13.28	13.38	13.40	2	12.27	12.37	12.39	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 132047 1717.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132597 1772.5 MHz	3GPP MPR (dB)	Low Ch 132047 1717.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132597 1772.5 MHz	3GPP MPR (dB)	Low Ch 132047 1717.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132597 1772.5 MHz	3GPP MPR (dB)
15	1	0	15.27	15.37	15.39	0	14.29	14.39	14.41	1	13.28	13.38	13.40	2
	1	37	15.07	15.17	15.19	0	14.09	14.19	14.21	1	13.08	13.18	13.20	2
	1	74	15.03	15.13	15.15	0	14.05	14.15	14.17	1	13.04	13.14	13.16	2
	36	0	14.25	14.35	14.37	1	13.27	13.37	13.39	2	12.26	12.36	12.38	3
	36	19	14.19	14.29	14.31	1	13.21	13.31	13.33	2	12.20	12.30	12.32	3
	36	39	14.08	14.18	14.20	1	13.10	13.20	13.22	2	12.09	12.19	12.21	3
	75	0	14.20	14.30	14.32	1	13.22	13.32	13.34	2	12.21	12.31	12.33	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 132022 1715.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132622 1775.0 MHz	3GPP MPR (dB)	Low Ch 132022 1715.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132622 1775.0 MHz	3GPP MPR (dB)	Low Ch 132022 1715.0 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132622 1775.0 MHz	3GPP MPR (dB)
10	1	0	15.22	15.32	15.34	0	14.24	14.34	14.36	1	13.23	13.33	13.35	2
	1	24	15.02	15.12	15.14	0	14.04	14.14	14.16	1	13.03	13.13	13.15	2
	1	49	14.98	15.08	15.10	0	14.00	14.10	14.12	1	12.99	13.09	13.11	2
	25	0	14.20	14.30	14.32	1	13.22	13.32	13.34	2	12.21	12.31	12.33	3
	25	12	14.14	14.24	14.26	1	13.16	13.26	13.28	2	12.15	12.25	12.27	3
	25	25	14.03	14.13	14.15	1	13.05	13.15	13.17	2	12.04	12.14	12.16	3
	50	0	14.15	14.25	14.27	1	13.17	13.27	13.29	2	12.16	12.26	12.28	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 131997 1712.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132647 1777.5 MHz	3GPP MPR (dB)	Low Ch 131997 1712.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132647 1777.5 MHz	3GPP MPR (dB)	Low Ch 131997 1712.5 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132647 1777.5 MHz	3GPP MPR (dB)
5	1	0	15.14	15.24	15.26	0	14.16	14.26	14.28	1	13.15	13.25	13.27	2
	1	12	14.94	15.04	15.06	0	13.96	14.06	14.08	1	12.95	13.05	13.07	2
	1	24	14.90	15.00	15.02	0	13.92	14.02	14.04	1	12.91	13.01	13.03	2
	12	0	14.12	14.22	14.24	1	13.14	13.24	13.26	2	12.13	12.23	12.25	3
	12	6	14.06	14.16	14.18	1	13.08	13.18	13.20	2	12.07	12.17	12.19	3
	12	13	13.95	14.05	14.07	1	12.97	13.07	13.09	2	11.96	12.06	12.08	3
	25	0	14.07	14.17	14.19	1	13.09	13.19	13.21	2	12.08	12.18	12.20	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 131987 1711.5 MHz	Mid Ch 132322 1745.5 MHz	High Ch 132657 1778.5 MHz	3GPP MPR (dB)	Low Ch 131987 1711.5 MHz	Mid Ch 132322 1745.5 MHz	High Ch 132657 1778.5 MHz	3GPP MPR (dB)	Low Ch 131987 1711.5 MHz	Mid Ch 132322 1745.5 MHz	High Ch 132657 1778.5 MHz	3GPP MPR (dB)
3	1	0	15.11	15.21	15.23	0	14.13	14.23	14.25	1	13.12	13.22	13.24	2
	1	7	14.91	15.01	15.03	0	13.93	14.03	14.05	1	12.92	13.02	13.04	2
	1	14	14.87	14.97	14.99	0	13.89	13.99	14.01	1	12.88	12.98	13.00	2
	8	0	14.09	14.19	14.21	1	13.11	13.21	13.23	2	12.10	12.20	12.22	3
	8	3	14.03	14.13	14.15	1	13.05	13.15	13.17	2	12.04	12.14	12.16	3
	8	7	13.92	14.02	14.04	1	12.94	13.04	13.06	2	11.93	12.03	12.05	3
	15	0	14.04	14.14	14.16	1	13.06	13.16	13.18	2	12.05	12.15	12.17	3

BW (MHz)	RB Size	RB Offset	QPSK				16QAM				64QAM			
			Low Ch 131979 1710.7 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132665 1779.3 MHz	3GPP MPR (dB)	Low Ch 131979 1710.7 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132665 1779.3 MHz	3GPP MPR (dB)	Low Ch 131979 1710.7 MHz	Mid Ch 132322 1745.0 MHz	High Ch 132665 1779.3 MHz	3GPP MPR (dB)
1.4	1	0	14.99	15.09	15.11	0	14.01	14.11	14.13	1	13.00	13.10	13.12	2
	1	2	14.79	14.89	14.91	0	13.81	13.91	13.93	1	12.80	12.90	12.92	2
	1	5	14.75	14.85	14.87	0	13.77	13.87	13.89	1	12.76	12.86	12.88	2
	3	0	14.98	15.08	15.10	0	14.00	14.10	14.12	1	12.99	13.09	13.11	2
	3	1	14.92	15.02	15.04	0	13.94	14.04	14.06	1	12.93	13.03	13.05	2
	3	3	14.81	14.91	14.93	0	13.83	13.93	13.95	1	12.82	12.92	12.94	2
	6	0	13.92	14.02	14.04	1	12.94	13.04	13.06	2	11.93	12.03	12.05	3

<WLAN 2.4G>

Mode	802.11b		
Channel / Frequency (MHz)	1 (2412)	6 (2437)	11 (2462)
Average Power (Ant-0)	14.36	14.58	14.38
Mode	802.11n (HT20)		
Channel / Frequency (MHz)	1 (2412)	6 (2437)	11 (2462)
Average Power (Ant-0 + Ant-1)	15.17	15.38	15.77
Mode	802.11n (HT40)		
Channel / Frequency (MHz)	3 (2422)	6 (2437)	9 (2452)
Average Power (Ant-1)	14.74	15.11	15.42

<WLAN 5.3G>

Mode	802.11n (HT40)	
Channel / Frequency (MHz)	54 (5270)	62 (5310)
Average Power (Ant-0)	12.67	12.71
Average Power (Ant-1)	13.46	13.55
Average Power (Ant-0 + Ant-1)	16.20	15.51

<WLAN 5.6G>

Mode	802.11n (HT40)			
Channel / Frequency (MHz)	102 (5510)	110 (5550)	134 (5670)	142 (5710)
Average Power (Ant-0)	13.10	13.04	12.98	12.87
Average Power (Ant-1)	13.89	13.92	14.01	13.74
Average Power (Ant-0 + Ant-1)	15.14	16.69	16.67	16.55

<WLAN 5.8G>

Mode	802.11n (HT40)	
Channel / Frequency (MHz)	151 (5755)	159 (5795)
Average Power (Ant-0)	13.67	13.68
Average Power (Ant-1)	14.72	14.93
Average Power (Ant-0 + Ant-1)	17.31	17.43

<Bluetooth>

Mode	Bluetooth		
Channel / Frequency (MHz)	0 (2402)	39 (2441)	78 (2480)
Average Power	4.56	4.84	5.55

Mode	Bluetooth LE		
Channel / Frequency (MHz)	0 (2402)	19 (2440)	39 (2480)
Average Power	2.89	3.19	4.17

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

<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				SCC2				SCC3				Power	
	LTE Band	BW (MHz)	UL Ch	UL Freq. (MHz)	RB Size	RB Offset	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	Single Carrier Tx Power (dBm)	Tx Power with DL-CA Active (dBm)
7B	7	15M	20825	2507.5	1	0	2825	2627.5	7	5M	2918	2636	-	-	-	-	-	-	-	-	23.74	23.38
7C	7	20M	20850	2510	1	0	2850	2630	7	20M	3048	2649.8	-	-	-	-	-	-	-	-	23.83	23.48
38C	38	20M	37850	2310	1	0	37850	2310	38	20M	38048	2329.8	-	-	-	-	-	-	-	-	23.53	23.42

Power Measurements for Intra-Band Non-Contiguous Downlink CA

CA Combination	PCC								SCC1				SCC2				SCC3				Power	
	LTE Band	BW (MHz)	UL Ch	UL Freq. (MHz)	RB Size	RB Offset	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	Single Carrier Tx Power (dBm)	Tx Power with DL-CA Active (dBm)
41A-41A	41	20M	41055	2636.5	1	0	41055	2636.5	41	20M	39750	2506	-	-	-	-	-	-	-	-	23.65	23.24
41A-41C	41	20M	41055	2636.5	1	0	41055	2636.5	41	20M	40857	2616.7	41	20M	41490	2680	-	-	-	-	23.65	23.01
41A-41D	41	20M	41055	2636.5	1	0	41055	2636.5	41	20M	39750	2506	41	20M	39948	2525.8	41	20M	40146	2545.6	23.65	23.23
66A-66B	66	20M	132572	1770	1	0	67036	2170	66	15M	67061	2172.5	66	5M	66966	2163	-	-	-	-	23.56	23.22
66A-66C	66	20M	132572	1770	1	0	67036	2170	66	20M	66536	2120	66	20M	66734	2139.8	-	-	-	-	23.56	23.18

Power Measurements for Inter-Band Downlink CA(Two Band)

CA Combination	PCC								SCC1				SCC2				SCC3				Power	
	LTE Band	BW (MHz)	UL Ch	UL Freq. (MHz)	RB Size	RB Offset	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	Single Carrier Tx Power (dBm)	Tx Power with DL-CA Active (dBm)
2A-12B	2	20M	19100	1900	1	0	1100	1980	12	5M	5035	731.5	12	10M	5107	738.7	-	-	-	-	23.80	23.40
2A-17A	2	10M	19150	1905	1	0	1150	1985	17	10M	5790	740	-	-	-	-	-	-	-	-	23.80	22.46
2A-46A-46C	2	20M	19100	1900	1	0	1100	1980	46	20M	50090	5480	46	20M	50450	5516	46	20M	50648	5535.8	23.80	23.31
2A-46D	2	20M	19100	1900	1	0	1100	1980	46	20M	50090	5480	46	20M	50288	5499.8	46	20M	50486	5519.6	23.80	23.38
2A-66B	2	20M	19100	1900	1	0	1100	1980	66	15M	67061	2172.5	66	5M	66966	2163	-	-	-	-	23.80	23.15
2A-66C	2	20M	19100	1900	1	0	1100	1980	66	20M	67036	2170	66	20M	66837	2150.1	-	-	-	-	23.80	22.77
4A-12B	4	20M	20175	1732.5	1	0	2175	2132.5	12	5M	5035	731.5	12	10M	5107	738.7	-	-	-	-	23.52	22.98
4A-17A	4	10M	20175	1732.5	1	0	2175	2132.5	17	10M	5790	740	-	-	-	-	-	-	-	-	23.34	23.24
4A-46A-46A	4	20M	20175	1732.5	1	0	2175	2132.5	46	20M	46890	5160	46	20M	54440	5915	-	-	-	-	23.52	23.13
4A-46A-46C	4	20M	20050	1720	1	0	2050	2120	46	20M	50090	5480	46	20M	50450	5516	46	20M	50648	5535.8	23.52	23.44
4A-46D	4	20M	20050	1720	1	0	2050	2120	46	20M	50090	5480	46	20M	50288	5499.8	46	20M	50486	5519.6	23.52	23.37
5A-7A-7A	5	10M	20525	836.5	1	0	2525	881.5	7	20M	2850	2360	7	20M	3100	2655	-	-	-	-	22.98	22.59
5A-25A	5	10M	20525	836.5	1	0	2525	881.5	25	20M	8365	1962.5	-	-	-	-	-	-	-	-	22.98	22.77
5A-46A	5	10M	20525	836.5	1	0	2525	881.5	46	20M	50665	5537.5	-	-	-	-	-	-	-	-	22.98	22.75
5A-46C	5	10M	20525	836.5	1	0	2525	881.5	46	20M	46890	5160	46	20M	47088	5179.8	-	-	-	-	22.98	22.32
5A-66B	5	10M	20525	836.5	1	0	2525	881.5	66	15M	67061	2172.5	66	5M	66966	2163	-	-	-	-	22.98	22.12
5A-66C	5	10M	20525	836.5	1	0	2525	881.5	66	20M	67036	2170	66	20M	66838	2150.2	-	-	-	-	22.98	22.25
7A-46A	7	20M	20850	2510	1	0	2850	2630	46	20M	50665	5537.5	-	-	-	-	-	-	-	-	23.83	23.16
7A-46C	7	20M	20850	2510	1	0	2850	2630	46	20M	46890	5160	46	20M	47088	5179.8	-	-	-	-	22.98	22.29
7A-46D	7	20M	20850	2510	1	0	3100	2655	46	20M	50090	5480	46	20M	50288	5499.8	46	20M	50486	5519.6	23.83	23.43
12A-25A	12	10M	23060	704	1	0	5060	734	25	20M	8365	1962.5	-	-	-	-	-	-	-	-	23.54	23.54
12A-46A	12	10M	23060	704	1	0	5060	734	46	20M	50665	5537.5	-	-	-	-	-	-	-	-	23.54	23.52
12A-66B	12	10M	23060	704	1	0	5060	734	66	15M	67061	2172.5	66	5M	66966	2163	-	-	-	-	23.54	22.33
12A-66C	12	10M	23060	704	1	0	5060	734	66	20M	67036	2170	66	20M	66838	2150.2	-	-	-	-	23.54	22.42
12A-46C	12	10M	23060	704	1	0	5060	734	46	20M	46890	5160	46	20M	47088	5179.8	-	-	-	-	23.54	22.18
13A-46A	13	10M	23230	782	1	0	5230	751	46	20M	50665	5537.5	-	-	-	-	-	-	-	-	23.43	22.86
13A-46C	13	10M	23230	782	1	0	5230	751	46	20M	50090	5480	46	20M	50288	5499.8	-	-	-	-	23.43	23.33
13A-46D	13	10M	23230	782	1	0	5230	751	46	20M	50090	5480	46	20M	50288	5499.8	46	20M	50486	5519.6	23.43	23.38
13A-66B	13	10M	23230	782	1	0	5230	751	66	15M	67061	2172.5	66	5M	66966	2163	-	-	-	-	23.43	23.32
13A-66C	13	10M	23230	782	1	0	5230	751	66	20M	67036	2170	66	20M	66838	2150.2	-	-	-	-	23.43	23.11
25A-26A	25	20M	26590	1905	1	0	8590	1985	26	15M	8865	876.5	-	-	-	-	-	-	-	-	23.15	22.87
25A-41A	25	20M	26590	1905	1	0	8590	1985	41	20M	39750	2506	-	-	-	-	-	-	-	-	23.15	22.96
25A-41C	25	20M	26590	1905	1	0	8590	1985	41	20M	41055	2636.5	41	20M	40857	2616.7	-	-	-	-	23.15	22.99
25A-41D	25	20M	26590	1905	1	0	8590	1985	41	20M	41055	2636.5	41	20M	40857	2616.7	41	20M	40659	2596.9	23.15	23.05
26A-41A	26	15M	26965	841.5	1	0	8965	886.5	41	20M	40620	2593	-	-	-	-	-	-	-	-	23.79	23.45
26A-41C	26	15M	26965	841.5	1	0	8965	886.5	41	20M	41055	2636.5	41	20M	40857	2616.7	-	-	-	-	23.79	23.12
41A-46A	41	20M	41055	2636.5	1	0	41055	2636.5	46	20M	50665	5537.5	-	-	-	-	-	-	-	-	23.65	23.29
66A-46D	66	20M	132572	1770	1	0	67036	2170	46	20M	50090	5480	46	20M	50288	5499.8	46	20M	50486	5519.6	23.56	23.40
66A-46A-46C	66	20M	132572	1770	1	0	67036	2170	46	20M	50090	5480	46	20M	50450	5516	46	20M	50648	5535.8	23.56	23.55

Power Measurements for Inter-Band Downlink CA(Three Band)

CA Combination	PCC								SCC1				SCC2				SCC3				Power	
	LTE Band	BW (MHz)	UL Ch	UL Freq. (MHz)	RB Size	RB Offset	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	Single Carrier Tx Power (dBm)	Tx Power with DL-CA Active (dBm)
2A-4A-13A	2	20M	19100	1900	1	0	1100	1980	4	20M	2175	2132.5	13	10M	5230	751	-	-	-	-	23.80	23.33
2C-5A-30A	2	20M	19100	1900	1	0	1100	1980	2	20M	902	1960.2	5	10M	2525	881.5	30	10M	9820	2355	23.80	23.57
2A-5B-30A	2	20M	19100	1900	1	0	1100	1980	5	10M	2450	874	5	10M	2549	883.9	30	10M	9820	2355	23.80	23.51
2A-5B-66A	2	20M	19100	1900	1	0	1100	1980	5	10M	2450	874	5	10M	2549	883.9	66	20M	66886	2155	23.80	23.47
2C-12A-30A	2	20M	19100	1900	1	0	1100	1980	2	20M	902	1960.2	12	10M	5095	737.5	30	10M	9820	2355	23.80	23.43
2A-13A-66A	2	20M	19100	1900	1	0	1100	1980	13	10M	5230	751	66	20M	66786	2145	-	-	-	-	23.80	23.22
2C-29A-30A	2	20M	19100	1900	1	0	1100	1980	2	20M	902	1960.2	29	10M	9715	722.5	30	10M	9820	2355	23.80	23.30
5B-30A-66A	5	10M	20525	836.5	1	0	2525	881.5	5	10M	2625	891.5	30	10M	9820	2355	66	20M	66886	2155	22.98	22.91

Power Measurements for Inter-Band Downlink CA(Four Band)

CA Combination	PCC								SCC1				SCC2				SCC3				Power	
	LTE Band	BW (MHz)	UL Ch	UL Freq. (MHz)	RB Size	RB Offset	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	Single Carrier Tx Power (dBm)	Tx Power with DL-CA Active (dBm)
2A-29A-30A-66A	2	20M	19100	1900	1	0	1100	1980	29	10M	9715	722.5	30	10M	9820	2355	66	20M	66886	2155	23.80	22.85
2A-4A-5A-30A	2	20M	19100	1900	1	0	1100	1980	4	20M	2175	2132.5	5	10M	2525	881.5	30	10M	9820	2355	23.80	23.40
2A-4A-7A-12A	2	20M	19100	1900	1	0	1100	1980	4	20M	2175	2132.5	7	20M	3100	2655	12	10M	5095	737.5	23.80	23.27
2A-4A-12A-30A	2	20M	19100	1900	1	0	1100	1980	4	20M	2175	2132.5	12	10M	5060	734	30	10M	9820	2355	23.80	23.22
2A-4A-29A-30A	2	20M	19100	1900	1	0	1100	1980	4	20M	2175	2132.5	29	10M	9715	722.5	30	10M	9820	2355	23.80	23.31
2A-5A-30A-66A	2	20M	19100	1900	1	0	1100	1980	5	10M	2525	881.5	30	10M	9820	2355	66	20M	66886	2155	23.80	23.50
2A-12A-30A-66A	2	20M	19100	1900	1	0	1100	1980	12	10M	5095	737.5	30	10M	9820	2355	66	20M	66886	2155	23.80	23.58

Power Measurements for Inter Band Downlink CA(4*4 MIMO)

2CA 4x4 MIMO

CA Combination	PCC								SCC1				SCC2				SCC3				Power	
	LTE Band	BW (MHz)	UL Ch	UL Freq. (MHz)	RB Size	RB Offset	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	Single Carrier Tx Power (dBm)	Tx Power with DL-CA Active (dBm)
2C	2	20M	19100	1900	1	0	1100	1980	2	20M	902	1960.2	-	-	-	-	-	-	-	-	23.80	23.49
7C	7	20M	20850	2510	1	0	2850	2630	7	20M	3048	2649.8	-	-	-	-	-	-	-	-	23.83	23.54
25C	25	20M	26590	1905	1	0	8590	1985	25	20M	8390	1965	-	-	-	-	-	-	-	-	23.15	22.88
41C	41	20M	41055	2636.5	1	0	41055	2636.5	41	20M	40857	2616.7	-	-	-	-	-	-	-	-	23.65	23.24
66B	66	15M	132597	1772.5	1	0	67061	2172.5	66	5M	66966	2163	-	-	-	-	-	-	-	-	23.49	23.35
66C	66	20M	132572	1770	1	0	67036	2170	66	20M	66838	2150.2	-	-	-	-	-	-	-	-	23.56	23.52

3CA 4x4 MIMO

CA Combination	PCC								SCC1				SCC2				SCC3				Power	
	LTE Band	BW (MHz)	UL Ch	UL Freq. (MHz)	RB Size	RB Offset	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	LTE Band	BW (MHz)	DL Ch	DL Freq. (MHz)	Single Carrier Tx Power (dBm)	Tx Power with DL-CA Active (dBm)
41D	41	20M	41055	2636.5	1	0	41055	2636.5	41	20M	40857	2616.7	41	20M	40659	2596.9	-	-	-	-	23.65	23.35

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.

<Power Confirmation for SAR Testing for LTE Uplink CA>

The conducted power for uplink CA active was measured on the highest reported SAR configuration for each exposure condition with both two carrier components was set to largest channel bandwidth.

EUT without Power Reduction (P-Sensor NOT Triggered)

PCC							SCC							Power		
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Single Carrier Tx Power (dBm	Tx Power with DL-CA Active (dBm))
7	20	QPSK	1	0	20850	2510	7	20	QPSK	1	99	21048	2529.8	0-8.5	23.83	15.78
			1	99						1	0			0	**23.66**	**23.55**
7	20	QPSK	1	0	21100	2535	7	20	QPSK	1	99	21298	2554.8	0-8.5	23.67	15.71
			1	99						1	0			0	**23.50**	**23.48**
7	20	QPSK	1	0	21350	2560	7	20	QPSK	1	99	21152	2540.2	0-8.5	23.52	14.91
			1	99						1	0			0	**23.35**	**23.34**

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

PCC							SCC							Power		
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Single Carrier Tx Power (dBm	Tx Power with UL-CA Active (dBm)
7	20	QPSK	1	0	20850	2510	7	20	QPSK	1	99	21048	2529.8	0-8.5	12.82	5.27
			1	99						1	0			0	**12.62**	**12.52**
7	20	QPSK	1	0	21100	2535	7	20	QPSK	1	99	21298	2554.8	0-8.5	12.87	5.34
			1	99						1	0			0	**12.67**	**12.60**
7	20	QPSK	1	0	21350	2560	7	20	QPSK	1	99	21152	2540.2	0-8.5	12.83	5.44
			1	99						1	0			0	**12.63**	**12.59**

EUT without Power Reduction (P-Sensor NOT Triggered)

PCC							SCC							Power		
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Single Carrier Tx Power (dBm	Tx Power with UL-CA Active (dBm)
38	20	QPSK	1	0	37850	2580	38	20	QPSK	1	99	38048	2599.8	0-8.5	23.53	15.94
			1	99						1	0			0	**23.27**	**23.25**
38	20	QPSK	1	0	38000	2595	38	20	QPSK	1	99	38198	2614.8	0-8.5	23.45	15.88
			1	99						1	0			0	**23.21**	**23.16**
38	20	QPSK	1	0	38150	2610	38	20	QPSK	1	99	37952	2590.2	0-8.5	23.48	16.26
			1	99						1	0			0	**23.23**	**23.13**

EUT with Power Reduction (P-Sensor Triggered Power Reduction)

PCC							SCC							Power		
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Single Carrier Tx Power (dBm	Tx Power with UL-CA Active (dBm)
38	20	QPSK	1	0	37850	2580	38	20	QPSK	1	99	38048	2599.8	0-8.5	14.50	7.08
			1	99						1	0			0	**14.28**	**14.20**
38	20	QPSK	1	0	38000	2595	38	20	QPSK	1	99	38198	2614.8	0-8.5	14.38	7.12
			1	99						1	0			0	**14.13**	**14.08**
38	20	QPSK	1	0	38150	2610	38	20	QPSK	1	99	37952	2590.2	0-8.5	14.31	7.04
			1	99						1	0			0	**14.07**	**14.02**

EUT without Power Reduction (P-Sensor NOT Triggered)																
PCC							SCC							Power		
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Single Carrier Tx Power (dBm	Tx Power with UL-CA Active (dBm)
41	20	QPSK	1	0	39750	2506.0	41	20	QPSK	1	99	39948	2525.8	0-8.5	23.49	15.47
			1	99						1	0			0	**23.38**	**23.28**
41	20	QPSK	1	0	40185	2549.5	41	20	QPSK	1	99	40383	2569.3	0-8.5	23.48	15.65
			1	99						1	0			0	**23.37**	**23.27**
41	20	QPSK	1	0	40620	2593.0	41	20	QPSK	1	99	40818	2612.8	0-8.5	23.57	15.98
			1	99						1	0			0	**23.46**	**23.37**
41	20	QPSK	1	0	41055	2636.5	41	20	QPSK	1	99	41253	2656.3	0-8.5	23.65	15.76
			1	99						1	0			0	**23.54**	**23.52**
41	20	QPSK	1	0	41292	2660.2	41	20	QPSK	1	99	41490	2680.0	0-8.5	22.77	15.74
			1	99						1	0			0	**22.66**	**23.45**
EUT with Power Reduction (P-Sensor Triggered Power Reduction)																
PCC							SCC							Power		
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Single Carrier Tx Power (dBm	Tx Power with UL-CA Active (dBm)
41	20	QPSK	1	0	39750	2506.0	41	20	QPSK	1	99	39948	2525.8	0-8.5	14.43	7.10
			1	99						1	0			0	**14.29**	**14.25**
41	20	QPSK	1	0	40185	2549.5	41	20	QPSK	1	99	40383	2569.3	0-8.5	14.37	7.05
			1	99						1	0			0	**14.23**	**14.21**
41	20	QPSK	1	0	40620	2539.0	41	20	QPSK	1	99	40818	2612.8	0-8.5	14.49	6.96
			1	99						1	0			0	**14.37**	**14.34**
41	20	QPSK	1	0	41055	2636.5	41	20	QPSK	1	99	41253	2656.3	0-8.5	14.45	6.92
			1	99						1	0			0	**14.31**	**14.21**
41	20	QPSK	1	0	41292	2660.2	41	20	QPSK	1	99	41490	2680.0	0-8.5	13.47	6.9
			1	99						1	0			0	**13.34**	**14.19**

SAR Measurements for Intra-Band Contiguous CA

The SAR testing was performed with the single carrier (uplink CA is inactive) for all test positions for each exposure condition. The LTE uplink CA active was verified with maximum output power on the highest SAR configuration of single carrier for each exposure condition. For intra-band contiguous CA, the SCC channel was set to closest available contiguous channel.

<KDB 248227 D01, SAR Guidance for Wi-Fi Transmitters>

(1) For handsets operating next to ear, hotspot mode or mini-tablet configurations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When the reported SAR of initial test position is <= 0.4 W/kg, SAR testing for remaining test positions is not required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is <= 0.8 W/kg or all test positions are measured.

(2) For WLAN 2.4 GHz, the highest measured maximum output power channel for DSSS was selected for SAR measurement. When the reported SAR is <= 0.8 W/kg, no further SAR testing is required. Otherwise, SAR is evaluated at the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel. For OFDM modes (802.11g/n), SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and it is <= 1.2 W/kg.

(3) For WLAN 5 GHz, the initial test configuration was selected according to the transmission mode with the highest maximum output power. When the reported SAR of initial test configuration is > 0.8 W/kg, SAR is required for the subsequent highest measured output power channel until the reported SAR result is <= 1.2 W/kg or all required channels are measured. For other transmission modes, SAR is not required when the highest reported SAR for initial test configuration is adjusted by the ratio of subsequent test configuration to initial test configuration specified maximum output power and it is <= 1.2 W/kg.

(4) For WLAN MIMO mode, the power-based standalone SAR test exclusion or the sum of SAR provision in KDB 447498 to determine simultaneous transmission SAR test exclusion should be applied. Otherwise, SAR for MIMO mode will be measured with all applicable antennas transmitting simultaneously at the specified maximum output power of MIMO operation.

4.7.2 SAR Results for Body Exposure Condition

Laptop PC Mode

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
01	WCDMA II	RMC12.2K	Bottom	0	9538	1	14.5	14.43	1.02	0.08	0.394	**0.40**
	WCDMA II	RMC12.2K	Bottom	0	9262	1	14.5	13.75	1.19	0.05	0.326	0.39
	WCDMA II	RMC12.2K	Bottom	0	9400	1	14.5	14.17	1.08	0.15	0.359	0.39
02	WCDMA IV	RMC12.2K	Bottom	0	1413	1	15.0	14.78	1.05	0.09	0.478	**0.50**
	WCDMA IV	RMC12.2K	Bottom	0	1312	1	15.0	14.72	1.07	0.15	0.467	0.50
	WCDMA IV	RMC12.2K	Bottom	0	1513	1	15.0	14.62	1.09	0.15	0.449	0.49
03	WCDMA V	RMC12.2K	Bottom	0	4233	0	19.5	19.39	1.03	-0.06	0.808	**0.83**
	WCDMA V	RMC12.2K	Bottom	0	4132	0	19.5	19.18	1.08	0.07	0.734	0.79
	WCDMA V	RMC12.2K	Bottom	0	4182	0	19.5	19.33	1.04	0.02	0.742	0.77
	WCDMA V	RMC12.2K	Bottom	0	4233	0	19.5	19.39	1.03	0.05	0.801	0.82

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	RB#	RB Offset	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 2	QPSK20M	Bottom	0	19100	1	1	0	14.5	14.21	1.07	-0.02	0.385	**0.41**
	LTE 2	QPSK20M	Bottom	0	19100	1	50	0	13.5	13.38	1.03	0.06	0.311	0.32
	LTE 2	QPSK20M	Bottom	0	18700	1	1	0	14.5	13.62	1.22	0.12	0.323	0.40
	LTE 2	QPSK20M	Bottom	0	18900	1	1	0	14.5	13.78	1.18	0.15	0.336	0.40
06	LTE 5	QPSK10M	Bottom	0	20600	0	1	0	19.5	19.23	1.06	0.05	0.777	**0.83**
	LTE 5	QPSK10M	Bottom	0	20600	0	25	0	18.5	18.36	1.03	0.01	0.627	0.65
	LTE 5	QPSK10M	Bottom	0	20450	0	1	0	19.5	19.18	1.08	0.03	0.752	0.81
	LTE 5	QPSK10M	Bottom	0	20525	0	1	0	19.5	19.22	1.07	0.05	0.762	0.81
	LTE 5	QPSK10M	Bottom	0	20600	0	50	0	18.5	18.23	1.06	0.03	0.642	0.68

Uplink Mode	Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
Single Carrier (CA inactive)	07	LTE 7	QPSK20M	Bottom	0	21100	0	1	0	13.0	12.87	1.03	-0.10	0.350	**0.36**
		LTE 7	QPSK20M	Bottom	0	21100	0	50	0	12.0	11.81	1.04	0.04	0.284	0.30
		LTE 7	QPSK20M	Bottom	0	20850	0	1	0	13.0	12.82	1.04	0.05	0.309	0.32
		LTE 7	QPSK20M	Bottom	0	21350	0	1	0	13.0	12.83	1.04	0.15	0.342	0.36
2 CC (CA active)		LTE 7	QPSK20M	Bottom	0	PCC:20850 SCC:21048	0	PCC:1 SCC:1	PCC:99 SCC:0	13.0	12.77	1.05	-0.18	0.332	0.35
		LTE 7	QPSK20M	Bottom	0	PCC:21100 SCC:21298	0	PCC:1 SCC:1	PCC:99 SCC:0	13.0	12.85	1.04	0.10	0.344	0.36
		LTE 7	QPSK20M	Bottom	0	PCC:21350 SCC:21152	0	PCC:1 SCC:1	PCC:99 SCC:0	13.0	12.69	1.07	-0.18	0.068	0.07

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
08	LTE 12	QPSK10M	Bottom	0	23060	0	1	0	21.0	20.58	1.10	-0.03	0.859	**0.95**
	LTE 12	QPSK10M	Bottom	0	23060	0	25	0	20.0	19.50	1.12	0.03	0.644	0.72
	LTE 12	QPSK10M	Bottom	0	23095	0	1	0	21.0	20.55	1.11	0.01	0.836	0.93
	LTE 12	QPSK10M	Bottom	0	23130	0	1	0	21.0	20.52	1.12	0.01	0.847	0.95
	LTE 12	QPSK10M	Bottom	0	23060	0	50	0	20.0	19.46	1.13	0.09	0.798	0.90
	LTE 12	QPSK10M	Bottom	0	23060	0	1	0	21.0	20.58	1.10	0.07	0.842	0.93

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
09	LTE 13	QPSK10M	Bottom	0	23230	0	1	0	19.5	19.41	1.02	-0.04	0.901	**0.92**
	LTE 13	QPSK10M	Bottom	0	23230	0	25	0	18.5	18.47	1.01	0.05	0.758	0.76
	LTE 13	QPSK10M	Bottom	0	23230	0	50	0	18.5	18.46	1.01	-0.13	0.828	0.84
	LTE 13	QPSK10M	Bottom	0	23230	0	1	0	19.5	19.41	1.02	0.14	0.891	0.91
10	LTE 25	QPSK20M	Bottom	0	26590	0	1	50	15.0	14.92	1.02	0.05	0.468	**0.48**
	LTE 25	QPSK20M	Bottom	0	26590	0	50	25	14.0	13.83	1.04	0.02	0.367	0.38
11	LTE 26	QPSK15M	Bottom	0	26965	0	1	0	19.0	18.73	1.06	0.13	0.768	**0.82**
	LTE 26	QPSK15M	Bottom	0	26965	0	36	0	18.0	17.43	1.14	0.05	0.563	0.64
	LTE 26	QPSK15M	Bottom	0	26765	0	1	0	19.0	18.71	1.07	-0.13	0.715	0.76
	LTE 26	QPSK15M	Bottom	0	26865	0	1	0	19.0	18.63	1.09	0.01	0.743	0.81
	LTE 26	QPSK15M	Bottom	0	26965	0	75	0	18.0	17.41	1.15	-0.11	0.533	0.61
12	LTE 30	QPSK10M	Bottom	0	27710	0	1	0	12.0	11.53	1.11	0.17	0.398	**0.44**
	LTE 30	QPSK10M	Bottom	0	27710	0	25	0	11.0	10.46	1.13	0.07	0.322	0.36

Uplink Mode	Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
Single Carrier (CA inactive)	14	LTE 41	QPSK20M	Bottom	0	40620	0	1	0	14.5	14.49	1.00	0.14	0.425	**0.43**
		LTE 41	QPSK20M	Bottom	0	40620	0	50	0	13.5	13.47	1.01	0.09	0.338	0.34
		LTE 41	QPSK20M	Bottom	0	39750	0	1	0	14.5	14.43	1.02	0.15	0.412	0.42
		LTE 41	QPSK20M	Bottom	0	39790	0	1	0	14.5	14.35	1.04	0.11	0.407	0.42
		LTE 41	QPSK20M	Bottom	0	40185	0	1	0	14.5	14.37	1.03	0.15	0.406	0.42
		LTE 41	QPSK20M	Bottom	0	41055	0	1	0	14.5	14.45	1.01	0.12	0.408	0.41
		LTE 41	QPSK20M	Bottom	0	41490	0	1	0	14.5	13.47	1.27	0.13	0.329	0.42
2 CC (CA active)		LTE 41	QPSK20M	Bottom	0	PCC:39750 SCC:39948	0	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.44	1.01	-0.09	0.322	0.33
		LTE 41	QPSK20M	Bottom	0	PCC:40185 SCC:40383	0	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.43	1.02	-0.02	0.372	0.38
		LTE 41	QPSK20M	Bottom	0	PCC:40620 SCC:40818	0	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.45	1.01	0.07	0.398	0.40
		LTE 41	QPSK20M	Bottom	0	PCC:41055 SCC:41253	0	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.41	1.02	-0.15	0.382	0.39
		LTE 41	QPSK20M	Bottom	0	PCC:41292 SCC:41490	0	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.40	1.02	0.02	0.366	0.37

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	RB#	RB Offset	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	LTE 66	QPSK20M	Bottom	0	132572	1	1	0	15.5	15.45	1.01	0.10	0.482	**0.49**
	LTE 66	QPSK20M	Bottom	0	132572	1	50	0	14.5	14.43	1.02	-0.06	0.397	0.40
	LTE 66	QPSK20M	Bottom	0	132072	1	1	0	15.5	15.33	1.04	0.15	0.437	0.45
	LTE 66	QPSK20M	Bottom	0	132322	1	1	0	15.5	15.43	1.02	0.12	0.452	0.46

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
17	2.4G WLAN	802.11b	Bottom	0	6	0	15.0	14.58	1.10	-0.08	0.965	**1.06**
	2.4G WLAN	802.11n HT40	Bottom	0	9	1	15.5	15.42	1.02	0.11	0.529	0.54
	2.4G WLAN	802.11n HT20	Bottom	0	11	0+1	16.0	15.77	1.05	0.03	0.523	0.55
	2.4G WLAN	802.11b	Bottom	0	1	0	15.0	14.36	1.16	-0.07	0.833	0.97
	2.4G WLAN	802.11b	Bottom	0	11	0	15.0	14.38	1.15	-0.08	0.911	1.05
	2.4G WLAN	802.11b	Bottom	0	6	0	15.0	14.58	1.10	0.02	0.936	1.03
	5.3G WLAN	802.11n HT40	Bottom	0	62	0	13.0	12.71	1.07	0.09	0.476	0.51
18	5.3G WLAN	802.11n HT40	Bottom	0	62	1	14.0	13.55	1.11	-0.01	0.590	**0.65**
	5.3G WLAN	802.11n HT40	Bottom	0	54	0+1	16.5	16.20	1.07	-0.05	0.494	0.53
	5.3G WLAN	802.11n HT40	Bottom	0	54	1	14.0	13.46	1.13	0.02	0.564	0.64
	5.6G WLAN	802.11n HT40	Bottom	0	102	0	13.5	13.10	1.10	-0.03	0.637	0.70
	5.6G WLAN	802.11n HT40	Bottom	0	134	1	14.5	14.01	1.12	0.07	0.543	0.61
19	5.6G WLAN	802.11n HT40	Bottom	0	110	0+1	17.0	16.69	1.07	-0.09	0.677	**0.73**
	5.6G WLAN	802.11n HT40	Bottom	0	102	0+1	17.0	15.14	1.53	-0.02	0.472	0.72
	5.6G WLAN	802.11n HT40	Bottom	0	134	0+1	17.0	16.67	1.08	-0.14	0.584	0.63
	5.6G WLAN	802.11n HT40	Bottom	0	142	0+1	17.0	16.55	1.11	0.07	0.545	0.60
	5.8G WLAN	802.11n HT40	Bottom	0	159	0	14.0	13.68	1.08	-0.07	0.892	0.96
	5.8G WLAN	802.11n HT40	Bottom	0	159	1	15.0	14.93	1.02	0.05	0.794	0.81
20	5.8G WLAN	802.11n HT40	Bottom	0	159	0+1	17.5	17.43	1.02	-0.02	0.996	**1.01**
	5.8G WLAN	802.11n HT40	Bottom	0	151	0	14.0	13.67	1.08	-0.13	0.764	0.82
	5.8G WLAN	802.11n HT40	Bottom	0	151	1	15.0	14.72	1.07	0.05	0.767	0.82
	5.8G WLAN	802.11n HT40	Bottom	0	151	0+1	17.5	17.31	1.04	0.09	0.889	0.93
	5.8G WLAN	802.11n HT40	Bottom	0	159	0+1	17.5	17.43	1.02	0.01	0.986	1.00

Plot No.	Band	Test Position	Separation Distance (cm)	Ch.	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
41	Bluetooth	Bottom	0	78	6.0	5.55	1.11	0.03	0.103	**0.11**
	Bluetooth	Bottom	0	0	6.0	4.56	1.39	0.06	0.058	0.08
	Bluetooth	Bottom	0	39	6.0	4.84	1.31	-0.02	0.071	0.09

Tablet PC Mode

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	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)
21	WCDMA II	RMC12.2K	Rear Face	0	9538	1	w/	14.5	14.43	1.02	-0.01	0.801	**0.81**
	WCDMA II	RMC12.2K	Rear Face	2	9538	1	w/o	24.0	23.77	1.05	-0.01	0.398	0.42
	WCDMA II	RMC12.2K	Left Side	0	9538	1	w/o	24.0	23.77	1.05	0.07	0.338	0.36
	WCDMA II	RMC12.2K	Top Side	0	9538	1	w/o	24.0	23.77	1.05	0.02	0.303	0.32
	WCDMA II	RMC12.2K	Rear Face	0	9262	1	w/	14.5	13.75	1.19	0.03	0.651	0.77
	WCDMA II	RMC12.2K	Rear Face	0	9400	1	w/	14.5	14.17	1.08	0.08	0.753	0.81
	WCDMA II	RMC12.2K	Rear Face	0	9538	1	w/	14.5	14.43	1.02	0.03	0.799	0.81
22	WCDMA IV	RMC12.2K	Rear Face	0	1413	1	w/	15.0	14.78	1.05	-0.09	0.753	**0.79**
	WCDMA IV	RMC12.2K	Rear Face	2	1513	1	w/o	24.0	23.19	1.21	-0.07	0.271	0.33
	WCDMA IV	RMC12.2K	Left Side	0	1513	1	w/o	24.0	23.19	1.21	0.05	0.172	0.21
	WCDMA IV	RMC12.2K	Top Side	0	1513	1	w/o	24.0	23.19	1.21	0.08	0.209	0.25
	WCDMA IV	RMC12.2K	Rear Face	0	1312	1	w/	15.0	14.72	1.07	-0.02	0.727	0.78
	WCDMA IV	RMC12.2K	Rear Face	0	1513	1	w/	15.0	14.62	1.09	0.11	0.71	0.77
23	WCDMA V	RMC12.2K	Rear Face	0	4233	0	w/	19.5	19.39	1.03	-0.06	1.05	**1.08**
	WCDMA V	RMC12.2K	Rear Face	2	4233	0	w/o	24.0	23.69	1.07	-0.14	0.113	0.12
	WCDMA V	RMC12.2K	Left Side	0	4233	0	w/o	24.0	23.69	1.07	0.13	0.097	0.10
	WCDMA V	RMC12.2K	Right Side	0	4233	0	w/	19.5	19.39	1.03	0.08	0.113	0.12
	WCDMA V	RMC12.2K	Right Side	1.5	4233	0	w/o	24.0	23.69	1.07	0.02	0.001	0.00
	WCDMA V	RMC12.2K	Top Side	0	4233	0	w/o	24.0	23.69	1.07	0.07	0.047	0.05
	WCDMA V	RMC12.2K	Bottom Side	0	4233	0	w/o	24.0	23.69	1.07	0.11	0.123	0.13
	WCDMA V	RMC12.2K	Rear Face	0	4132	0	w/	19.5	19.18	1.08	0.01	0.93	1.00
	WCDMA V	RMC12.2K	Rear Face	0	4182	0	w/	19.5	19.33	1.04	-0.11	1	1.04
	WCDMA V	RMC12.2K	Rear Face	0	4233	0	w/	19.5	19.39	1.03	0.05	1.03	1.06

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	Power Reduction	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
24	LTE 2	QPSK20M	Rear Face	0	19100	1	w/	1	0	14.5	14.21	1.07	-0.13	0.875	**0.94**
	LTE 2	QPSK20M	Rear Face	2	19100	1	w/o	1	0	24.0	23.80	1.05	-0.11	0.353	0.37
	LTE 2	QPSK20M	Left Side	0	19100	1	w/o	1	0	24.0	23.80	1.05	0.13	0.31	0.32
	LTE 2	QPSK20M	Top Side	0	19100	1	w/o	1	0	24.0	23.80	1.05	0.06	0.284	0.30
	LTE 2	QPSK20M	Rear Face	0	19100	1	w/	50	0	13.5	13.38	1.03	0.01	0.738	0.76
	LTE 2	QPSK20M	Rear Face	2	19100	1	w/o	50	0	23.0	22.87	1.03	-0.1	0.285	0.29
	LTE 2	QPSK20M	Left Side	0	19100	1	w/o	50	0	23.0	22.87	1.03	0.01	0.3	0.31
	LTE 2	QPSK20M	Top Side	0	19100	1	w/o	50	0	23.0	22.87	1.03	0.03	0.232	0.24
	LTE 2	QPSK20M	Rear Face	0	18700	1	w/	1	0	14.5	13.62	1.22	0.13	0.759	0.93
	LTE 2	QPSK20M	Rear Face	0	18900	1	w/	1	0	14.5	13.78	1.18	0.11	0.789	0.93
	LTE 2	QPSK20M	Rear Face	0	19100	1	w/	100	0	13.5	13.41	1.02	0.13	0.8	0.82
	LTE 2	QPSK20M	Rear Face	0	19100	1	w/	1	0	14.5	14.21	1.07	0.01	0.868	0.93
26	LTE 5	QPSK10M	Rear Face	0	20600	0	w/	1	0	19.5	19.23	1.06	-0.07	1.02	**1.09**
	LTE 5	QPSK10M	Rear Face	2	20525	0	w/o	1	0	24.0	22.98	1.26	-0.12	0.12	0.15
	LTE 5	QPSK10M	Left Side	0	20525	0	w/o	1	0	24.0	22.98	1.26	0.00	0.001	0.00
	LTE 5	QPSK10M	Right Side	0	20600	0	w/	1	0	19.5	19.23	1.06	0.01	0.105	0.11
	LTE 5	QPSK10M	Right Side	1.5	20525	0	w/o	1	0	24.0	22.98	1.26	-0.12	0.001	0.00
	LTE 5	QPSK10M	Top Side	0	20525	0	w/o	1	0	24.0	22.98	1.26	0.13	0.059	0.07
	LTE 5	QPSK10M	Bottom Side	0	20525	0	w/o	1	0	24.0	22.98	1.26	-0.09	0.021	0.03
	LTE 5	QPSK10M	Rear Face	0	20600	0	w/	25	0	18.5	18.36	1.03	0.08	0.767	0.79
	LTE 5	QPSK10M	Rear Face	2	20525	0	w/o	25	0	23.0	21.96	1.27	0.05	0.097	0.12
	LTE 5	QPSK10M	Left Side	0	20525	0	w/o	25	0	23.0	21.96	1.27	-0.01	0.001	0.00
	LTE 5	QPSK10M	Right Side	0	20600	0	w/	25	0	18.5	18.36	1.03	-0.07	0.087	0.09
	LTE 5	QPSK10M	Right Side	1.5	20525	0	w/o	25	0	23.0	21.96	1.27	0.18	0.001	0.00
	LTE 5	QPSK10M	Top Side	0	20525	0	w/o	25	0	23.0	21.96	1.27	0.15	0.045	0.06
	LTE 5	QPSK10M	Bottom Side	0	20525	0	w/o	25	0	23.0	21.96	1.27	0.07	0.012	0.02
	LTE 5	QPSK10M	Rear Face	0	20450	0	w/	1	0	19.5	19.18	1.08	0.11	1	1.08
	LTE 5	QPSK10M	Rear Face	0	20525	0	w/	1	0	19.5	19.22	1.07	0.13	0.998	1.06
	LTE 5	QPSK10M	Rear Face	0	20600	0	w/	50	0	18.5	18.23	1.06	-0.11	0.992	1.06
	LTE 5	QPSK10M	Rear Face	0	20600	0	w/	1	0	19.5	19.23	1.06	-0.08	0.981	1.04

Uplink Mode	Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	Power Reduction	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
Single Carrier (CA inactive)		LTE 7	QPSK20M	Rear Face	0	21100	0	w/	1	0	13.0	12.87	1.03	-0.10	0.555	0.57
		LTE 7	QPSK20M	Rear Face	2	20850	0	w/o	1	0	24.0	23.83	1.04	0.02	0.439	0.46
		LTE 7	QPSK20M	Right Side	0	21100	0	w/	1	0	13.0	12.87	1.03	0.03	0.199	0.21
		LTE 7	QPSK20M	Right Side	1.5	20850	0	w/o	1	0	24.0	23.83	1.04	0.01	0.077	0.08
		LTE 7	QPSK20M	Top Side	0	20850	0	w/o	1	0	24.0	23.83	1.04	-0.08	0.066	0.07
		LTE 7	QPSK20M	Rear Face	0	21100	0	w/	50	0	12.0	11.81	1.04	-0.05	0.467	0.49
		LTE 7	QPSK20M	Rear Face	2	20850	0	w/o	50	0	23.0	22.81	1.04	0.01	0.357	0.37
		LTE 7	QPSK20M	Right Side	0	21100	0	w/	50	0	12.0	11.81	1.04	0.07	0.161	0.17
		LTE 7	QPSK20M	Right Side	1.5	20850	0	w/o	50	0	23.0	22.81	1.04	-0.05	0.001	0.00
		LTE 7	QPSK20M	Top Side	0	20850	0	w/o	50	0	23.0	22.81	1.04	0.01	0.060	0.06
	27	LTE 7	QPSK20M	Rear Face	0	20850	0	w/	1	0	13.0	12.82	1.04	-0.10	0.613	**0.64**
		LTE 7	QPSK20M	Rear Face	0	21350	0	w/	1	0	13.0	12.83	1.04	-0.10	0.563	0.59
2 CC (CA active)		LTE 7	QPSK20M	Rear Face	0	PCC:20850 SCC:21048	0	w/	PCC:1 SCC:1	PCC:99 SCC:0	13.0	12.77	1.05	-0.03	0.57	0.60
		LTE 7	QPSK20M	Rear Face	0	PCC:21100 SCC:21298	0	w/	PCC:1 SCC:1	PCC:99 SCC:0	13.0	12.85	1.04	-0.17	0.52	0.54
		LTE 7	QPSK20M	Rear Face	0	PCC:21350 SCC:21152	0	w/	PCC:1 SCC:1	PCC:99 SCC:0	13.0	12.69	1.07	-0.18	0.16	0.17
		LTE 7	QPSK20M	Rear Face	2	PCC:20850 SCC:21048	0	w/o	PCC:1 SCC:1	PCC:99 SCC:0	24.0	23.82	1.04	-0.03	0.259	0.27
		LTE 7	QPSK20M	Rear Face	2	PCC:21100 SCC:21298	0	w/o	PCC:1 SCC:1	PCC:99 SCC:0	24.0	23.78	1.05	-0.03	0.232	0.24
		LTE 7	QPSK20M	Rear Face	2	PCC:21350 SCC:21152	0	w/o	PCC:1 SCC:1	PCC:99 SCC:0	24.0	23.55	1.11	-0.07	0.084	0.09

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	Power Reduction	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
28	LTE 12	QPSK10M	Rear Face	0	23060	0	w/	1	0	21.0	20.58	1.10	0.01	1.02	**1.12**
	LTE 12	QPSK10M	Rear Face	2	23060	0	w/o	1	0	24.0	23.54	1.11	-0.03	0.091	0.10
	LTE 12	QPSK10M	Left Side	0	23060	0	w/o	1	0	24.0	23.54	1.11	0.03	0.062	0.07
	LTE 12	QPSK10M	Right Side	0	23060	0	w/	1	0	21.0	20.58	1.10	0.03	0.255	0.28
	LTE 12	QPSK10M	Right Side	1.5	23060	0	w/o	1	0	24.0	23.54	1.11	0	0.001	0.00
	LTE 12	QPSK10M	Top Side	0	23060	0	w/o	1	0	24.0	23.54	1.11	0.08	0.037	0.04
	LTE 12	QPSK10M	Bottom Side	0	23060	0	w/o	1	0	24.0	23.54	1.11	-0.08	0.384	0.43
	LTE 12	QPSK10M	Rear Face	0	23060	0	w/	25	0	20.0	19.50	1.12	0.14	0.797	0.89
	LTE 12	QPSK10M	Rear Face	2	23060	0	w/o	25	0	23.0	22.42	1.14	0.13	0.07	0.08
	LTE 12	QPSK10M	Left Side	0	23060	0	w/o	25	0	23.0	22.42	1.14	-0.05	0.041	0.05
	LTE 12	QPSK10M	Right Side	0	23060	0	w/	25	0	20.0	19.50	1.12	-0.15	0.196	0.22
	LTE 12	QPSK10M	Right Side	1.5	23060	0	w/o	25	0	23.0	22.42	1.14	0.01	0.001	0.00
	LTE 12	QPSK10M	Top Side	0	23060	0	w/o	25	0	23.0	22.42	1.14	0.08	0.029	0.03
	LTE 12	QPSK10M	Bottom Side	0	23060	0	w/o	25	0	23.0	22.42	1.14	0.07	0.321	0.37
	LTE 12	QPSK10M	Rear Face	0	23095	0	w/	1	0	21.0	20.55	1.11	0.03	1	1.11
	LTE 12	QPSK10M	Rear Face	0	23130	0	w/	1	0	21.0	20.52	1.12	0.05	0.99	1.11
	LTE 12	QPSK10M	Rear Face	0	23095	0	w/	25	0	20.0	19.47	1.13	0.13	0.791	0.89
	LTE 12	QPSK10M	Rear Face	0	23130	0	w/	25	0	20.0	19.44	1.14	0.11	0.784	0.89
	LTE 12	QPSK10M	Rear Face	0	23060	0	w/	50	0	20.0	19.46	1.13	0.03	0.911	1.03
	LTE 12	QPSK10M	Rear Face	0	23060	0	w/	1	0	21.0	20.58	1.10	0.01	0.990	1.09
29	LTE 13	QPSK10M	Rear Face	0	23230	0	w/	1	0	19.5	19.41	1.02	0.01	0.919	**0.94**
	LTE 13	QPSK10M	Rear Face	2	23230	0	w/o	1	0	24.0	23.43	1.14	-0.1	0.084	0.10
	LTE 13	QPSK10M	Left Side	0	23230	0	w/o	1	0	24.0	23.43	1.14	-0.05	0.001	0.00
	LTE 13	QPSK10M	Right Side	0	23230	0	w/	1	0	19.5	19.41	1.02	0.13	0.125	0.13
	LTE 13	QPSK10M	Right Side	1.5	23230	0	w/o	1	0	24.0	23.43	1.14	0.08	0.001	0.00
	LTE 13	QPSK10M	Top Side	0	23230	0	w/o	1	0	24.0	23.43	1.14	0.06	0.034	0.04
	LTE 13	QPSK10M	Bottom Side	0	23230	0	w/o	1	0	24.0	23.43	1.14	-0.08	0.025	0.03
	LTE 13	QPSK10M	Rear Face	0	23230	0	w/	25	0	18.5	18.47	1.01	0.08	0.752	0.76
	LTE 13	QPSK10M	Rear Face	2	23230	0	w/o	25	0	23.0	22.51	1.12	-0.15	0.065	0.07
	LTE 13	QPSK10M	Left Side	0	23230	0	w/o	25	0	23.0	22.51	1.12	0.00	0.001	0.00
	LTE 13	QPSK10M	Right Side	0	23230	0	w/	25	0	18.5	18.47	1.01	0.15	0.096	0.10
	LTE 13	QPSK10M	Right Side	1.5	23230	0	w/o	25	0	23.0	22.51	1.12	-0.17	0.001	0.00
	LTE 13	QPSK10M	Top Side	0	23230	0	w/o	25	0	23.0	22.51	1.12	0.02	0.027	0.03
	LTE 13	QPSK10M	Bottom Side	0	23230	0	w/o	25	0	23.0	22.51	1.12	0.09	0.018	0.02
	LTE 13	QPSK10M	Rear Face	0	23230	0	w/	50	0	18.5	18.46	1.01	0.03	0.879	0.89
	LTE 13	QPSK10M	Rear Face	0	23230	0	w/	1	0	19.5	19.41	1.02	0.01	0.909	0.93

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	Power Reduction	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
30	LTE 25	QPSK20M	Rear Face	0	26590	1	w/	1	50	15.0	14.92	1.02	-0.01	1.06	**1.08**
	LTE 25	QPSK20M	Rear Face	2	26590	1	w/o	1	50	24.0	23.32	1.17	-0.01	0.322	0.38
	LTE 25	QPSK20M	Left Side	0	26590	1	w/o	1	50	24.0	23.32	1.17	0.12	0.256	0.30
	LTE 25	QPSK20M	Top Side	0	26590	1	w/o	1	50	24.0	23.32	1.17	0.1	0.496	0.58
	LTE 25	QPSK20M	Rear Face	0	26590	1	w/	50	25	14.0	13.83	1.04	-0.14	0.879	0.91
	LTE 25	QPSK20M	Rear Face	2	26590	1	w/o	50	25	23.0	22.36	1.16	-0.14	0.238	0.28
	LTE 25	QPSK20M	Left Side	0	26590	1	w/o	50	25	23.0	22.36	1.16	-0.13	0.202	0.23
	LTE 25	QPSK20M	Top Side	0	26590	1	w/o	50	25	23.0	22.36	1.16	-0.1	0.372	0.43
	LTE 25	QPSK20M	Rear Face	0	26590	1	w/	100	0	14.0	13.75	1.06	-0.12	0.865	0.92
	LTE 25	QPSK20M	Rear Face	0	26140	1	w/	1	50	15.0	14.30	1.17	0.02	0.911	1.07
	LTE 25	QPSK20M	Rear Face	0	26365	1	w/	1	50	15.0	14.90	1.02	0.07	0.974	1.00
	LTE 25	QPSK20M	Rear Face	0	26140	1	w/	50	25	14.0	13.21	1.20	-0.02	0.752	0.90
	LTE 25	QPSK20M	Rear Face	0	26365	1	w/	50	25	14.0	13.81	1.04	-0.11	0.818	0.85
	LTE 25	QPSK20M	Rear Face	0	26590	1	w/	1	50	15.0	14.92	1.02	-0.01	1.05	1.07
31	LTE 26	QPSK15M	Rear Face	0	26965	0	w/	1	0	19.0	18.73	1.06	-0.12	0.902	**0.96**
	LTE 26	QPSK15M	Rear Face	2	26965	0	w/o	1	0	24.0	23.79	1.05	-0.13	0.139	0.15
	LTE 26	QPSK15M	Left Side	0	26965	0	w/o	1	0	24.0	23.79	1.05	0.00	0.001	0.00
	LTE 26	QPSK15M	Right Side	0	26965	0	w/	1	0	19.0	18.73	1.06	0.08	0.101	0.11
	LTE 26	QPSK15M	Right Side	1.5	26965	0	w/o	1	0	24.0	23.79	1.05	-0.07	0.001	0.00
	LTE 26	QPSK15M	Top Side	0	26965	0	w/o	1	0	24.0	23.79	1.05	-0.11	0.083	0.09
	LTE 26	QPSK15M	Bottom Side	0	26965	0	w/o	1	0	24.0	23.79	1.05	-0.08	0.032	0.03
	LTE 26	QPSK15M	Rear Face	0	26965	0	w/	36	0	18.0	17.43	1.14	0.15	0.661	0.75
	LTE 26	QPSK15M	Rear Face	2	26965	0	w/o	36	0	23.0	22.52	1.12	0.07	0.105	0.12
	LTE 26	QPSK15M	Left Side	0	26965	0	w/o	36	0	23.0	22.52	1.12	0.00	0.001	0.00
	LTE 26	QPSK15M	Right Side	0	26965	0	w/	36	0	18.0	17.43	1.14	0.02	0.087	0.10
	LTE 26	QPSK15M	Right Side	1.5	26965	0	w/o	36	0	23.0	22.52	1.12	0.11	0.001	0.00
	LTE 26	QPSK15M	Top Side	0	26965	0	w/o	36	0	23.0	22.52	1.12	0.07	0.071	0.08
	LTE 26	QPSK15M	Bottom Side	0	26965	0	w/o	36	0	23.0	22.52	1.12	-0.11	0.022	0.02
	LTE 26	QPSK15M	Rear Face	0	26765	0	w/	1	0	19.0	18.71	1.07	0.01	0.897	0.96
	LTE 26	QPSK15M	Rear Face	0	26865	0	w/	1	0	19.0	18.63	1.09	0.15	0.873	0.95
	LTE 26	QPSK15M	Rear Face	0	26965	0	w/	75	0	18.0	17.41	1.15	0.17	0.837	0.96
	LTE 26	QPSK15M	Rear Face	0	26965	0	w/	1	0	19.0	18.73	1.06	-0.12	0.898	0.96
32	LTE 30	QPSK10M	Rear Face	0	27710	0	w/	1	0	12.0	11.53	1.11	-0.10	0.977	**1.09**
	LTE 30	QPSK10M	Rear Face	2	27710	0	w/o	1	0	24.0	23.45	1.14	-0.01	0.696	0.79
	LTE 30	QPSK10M	Right Side	0	27710	0	w/	1	0	12.0	11.53	1.11	0.05	0.629	0.70
	LTE 30	QPSK10M	Right Side	1.5	27710	0	w/o	1	0	24.0	23.45	1.14	-0.01	0.436	0.49
	LTE 30	QPSK10M	Top Side	0	27710	0	w/o	1	0	24.0	23.45	1.14	0.13	0.087	0.10
	LTE 30	QPSK10M	Rear Face	0	27710	0	w/	25	0	11.0	10.46	1.13	-0.03	0.766	0.87
	LTE 30	QPSK10M	Rear Face	2	27710	0	w/o	25	0	23.0	22.27	1.18	0.05	0.665	0.79
	LTE 30	QPSK10M	Right Side	0	27710	0	w/	25	0	11.0	10.46	1.13	0.07	0.498	0.56
	LTE 30	QPSK10M	Right Side	1.5	27710	0	w/o	25	0	23.0	22.27	1.18	0.14	0.378	0.45
	LTE 30	QPSK10M	Top Side	0	27710	0	w/o	25	0	23.0	22.27	1.18	0.13	0.056	0.07
	LTE 30	QPSK10M	Rear Face	2	27710	0	w/o	50	0	23.0	22.15	1.22	0.11	0.641	0.78
	LTE 30	QPSK10M	Rear Face	0	27710	0	w/	50	0	11.0	10.27	1.18	0.12	0.741	0.88
	LTE 30	QPSK10M	Rear Face	0	27710	0	w/	1	0	12.0	11.53	1.11	-0.05	0.964	1.07

Uplink Mode	Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	Power Reduction	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
Single Carrier (CA inactive)	34	LTE 41	QPSK20M	Rear Face	0	40620	0	w/	1	0	14.5	14.49	1.00	-0.02	0.920	**0.92**
		LTE 41	QPSK20M	Rear Face	2	41055	0	w/o	1	0	24.0	23.65	1.08	0.01	0.137	0.15
		LTE 41	QPSK20M	Left Side	0	41055	0	w/o	1	0	24.0	23.65	1.08	0.03	0.001	0.00
		LTE 41	QPSK20M	Right Side	0	40620	0	w/	1	0	14.5	14.49	1.00	0.01	0.411	0.41
		LTE 41	QPSK20M	Right Side	1.5	41055	0	w/o	1	0	24.0	23.65	1.08	0.03	0.001	0.00
		LTE 41	QPSK20M	Top Side	0	41055	0	w/o	1	0	24.0	23.65	1.08	-0.07	0.139	0.15
		LTE 41	QPSK20M	Bottom Side	0	41055	0	w/o	1	0	24.0	23.65	1.08	0.05	0.022	0.02
		LTE 41	QPSK20M	Rear Face	0	40620	0	w/	50	0	13.5	13.47	1.01	0.06	0.786	0.79
		LTE 41	QPSK20M	Rear Face	2	41055	0	w/o	50	0	23.0	22.74	1.06	0.01	0.106	0.11
		LTE 41	QPSK20M	Left Side	0	41055	0	w/o	50	0	23.0	22.74	1.06	0.05	0.001	0.00
		LTE 41	QPSK20M	Right Side	0	40620	0	w/	50	0	13.5	13.47	1.01	-0.03	0.317	0.32
		LTE 41	QPSK20M	Right Side	1.5	41055	0	w/o	50	0	23.0	22.74	1.06	0.13	0.001	0.00
		LTE 41	QPSK20M	Top Side	0	41055	0	w/o	50	0	23.0	22.74	1.06	0.05	0.109	0.12
		LTE 41	QPSK20M	Bottom Side	0	41055	0	w/o	50	0	23.0	22.74	1.06	0.01	0.013	0.01
		LTE 41	QPSK20M	Rear Face	0	39750	0	w/	1	0	14.5	14.43	1.02	-0.03	0.898	0.91
		LTE 41	QPSK20M	Rear Face	0	39790	0	w/	1	0	14.5	14.35	1.04	-0.03	0.711	0.74
		LTE 41	QPSK20M	Rear Face	0	40185	0	w/	1	0	14.5	14.37	1.03	0.01	0.855	0.88
		LTE 41	QPSK20M	Rear Face	0	41055	0	w/	1	0	14.5	14.45	1.01	0.09	0.882	0.89
		LTE 41	QPSK20M	Rear Face	0	41490	0	w/	1	0	14.5	14.47	1.01	-0.06	0.905	0.91
		LTE 41	QPSK20M	Rear Face	0	40620	0	w/	100	0	13.5	13.46	1.01	0.08	0.752	0.76
		LTE 41	QPSK20M	Rear Face	0	40620	0	w/	1	0	14.5	14.49	1.00	0.09	0.908	0.91
2 CC (CA active)		LTE 41	QPSK20M	Rear Face	0	PCC:39750 SCC:39948	0	w/	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.44	1.01	-0.09	0.322	0.33
		LTE 41	QPSK20M	Rear Face	0	PCC:40185 SCC:40383	0	w/	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.43	1.02	-0.02	0.372	0.38
		LTE 41	QPSK20M	Rear Face	0	PCC:40620 SCC:40818	0	w/	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.45	1.01	0.07	0.398	0.40
		LTE 41	QPSK20M	Rear Face	0	PCC:41055 SCC:41253	0	w/	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.41	1.02	-0.15	0.382	0.39
		LTE 41	QPSK20M	Rear Face	0	PCC:41292 SCC:41490	0	w/	PCC:1 SCC:1	PCC:99 SCC:0	14.5	14.40	1.02	0.02	0.366	0.37
		LTE 41	QPSK20M	Rear Face	2	PCC:39750 SCC:39948	0	w/o	PCC:1 SCC:1	PCC:99 SCC:0	24.0	23.48	1.13	-0.15	0.117	0.13
		LTE 41	QPSK20M	Rear Face	2	PCC:40185 SCC:40383	0	w/o	PCC:1 SCC:1	PCC:99 SCC:0	24.0	23.59	1.10	-0.07	0.122	0.13
		LTE 41	QPSK20M	Rear Face	2	PCC:40620 SCC:40818	0	w/o	PCC:1 SCC:1	PCC:99 SCC:0	24.0	23.57	1.10	-0.03	0.122	0.13
		LTE 41	QPSK20M	Rear Face	2	PCC:41055 SCC:41253	0	w/o	PCC:1 SCC:1	PCC:99 SCC:0	24.0	23.62	1.09	-0.16	0.13	0.14
		LTE 41	QPSK20M	Rear Face	2	PCC:41292 SCC:41490	0	w/o	PCC:1 SCC:1	PCC:99 SCC:0	24.0	23.60	1.10	-0.01	0.109	0.12

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	Power Reduction	RB#	RB Offset	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
36	LTE 66	QPSK20M	Rear Face	0	132572	1	w/	1	0	15.5	15.45	1.01	0.09	0.941	**0.95**
	LTE 66	QPSK20M	Rear Face	2	132572	1	w/o	1	0	24.0	23.56	1.11	-0.04	0.28	0.31
	LTE 66	QPSK20M	Left Side	0	132572	1	w/o	1	0	24.0	23.56	1.11	-0.06	0.324	0.36
	LTE 66	QPSK20M	Top Side	0	132572	1	w/o	1	0	24.0	23.56	1.11	-0.08	0.261	0.29
	LTE 66	QPSK20M	Rear Face	0	132572	1	w/	50	0	14.5	14.43	1.02	0.08	0.521	0.53
	LTE 66	QPSK20M	Rear Face	2	132572	1	w/o	50	0	23.0	22.62	1.09	0.13	0.213	0.23
	LTE 66	QPSK20M	Left Side	0	132572	1	w/o	50	0	23.0	22.62	1.09	-0.15	0.201	0.22
	LTE 66	QPSK20M	Top Side	0	132572	1	w/o	50	0	23.0	22.62	1.09	0.09	0.201	0.22
	LTE 66	QPSK20M	Rear Face	0	132072	1	w/	1	0	15.5	15.33	1.04	0.16	0.851	0.88
	LTE 66	QPSK20M	Rear Face	0	132322	1	w/	1	0	15.5	15.43	1.02	0.06	0.835	0.85
	LTE 66	QPSK20M	Rear Face	0	132572	1	w/	100	0	14.5	14.38	1.03	-0.06	0.488	0.50
	LTE 66	QPSK20M	Rear Face	0	132572	1	w/	1	0	15.5	15.45	1.01	0.09	0.934	0.94

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Tx Antenna	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
37	2.4G WLAN	802.11b	Rear Face	0	6	0	15.0	14.58	1.10	0.04	0.844	**0.93**
	2.4G WLAN	802.11b	Bottom Side	0	6	0	15.0	14.58	1.10	-0.03	0.254	0.28
	2.4G WLAN	802.11n HT40	Rear Face	0	9	1	15.5	15.42	1.02	0.07	0.505	0.51
	2.4G WLAN	802.11n HT40	Bottom sSide	0	9	1	15.5	15.42	1.02	0.12	0.369	0.38
	2.4G WLAN	802.11n HT20	Rear Face	0	11	0+1	16.0	15.77	1.05	0.05	0.494	0.52
	2.4G WLAN	802.11n HT20	Bottom Side	0	11	0+1	16.0	15.77	1.05	0.03	0.148	0.16
	2.4G WLAN	802.11b	Rear Face	0	1	0	15.0	14.36	1.16	-0.08	0.701	0.81
	2.4G WLAN	802.11b	Rear Face	0	11	0	15.0	14.38	1.15	0.01	0.721	0.83
	2.4G WLAN	802.11b	Rear Face	0	6	0	15.0	14.58	1.10	0.05	0.829	0.91
	5.3G WLAN	802.11n HT40	Rear Face	0	62	0	13.0	12.71	1.07	0.07	0.431	0.46
	5.3G WLAN	802.11n HT40	Bottom Side	0	62	0	13.0	12.71	1.07	0.09	0.249	0.27
38	5.3G WLAN	802.11n HT40	Rear Face	0	62	1	14.0	13.55	1.11	0.01	0.875	**0.97**
	5.3G WLAN	802.11n HT40	Bottom sSide	0	62	1	14.0	13.55	1.11	0.01	0.421	0.47
	5.3G WLAN	802.11n HT40	Rear Face	0	54	0+1	16.5	16.20	1.07	-0.03	0.867	0.93
	5.3G WLAN	802.11n HT40	Bottom Side	0	54	0+1	16.5	16.20	1.07	0.01	0.319	0.34
	5.3G WLAN	802.11n HT40	Rear Face	0	54	1	14.0	13.46	1.13	-0.07	0.836	0.95
	5.3G WLAN	802.11n HT20	Rear Face	0	62	0+1	16.5	15.51	1.26	0.05	0.756	0.95
	5.3G WLAN	802.11n HT40	Rear Face	0	62	1	14.0	13.55	1.11	0.03	0.869	0.96
	5.6G WLAN	802.11n HT40	Rear Face	0	102	0	13.5	13.10	1.10	-0.08	0.515	0.56
	5.6G WLAN	802.11n HT40	Bottom Side	0	102	0	13.5	13.10	1.10	0.02	0.313	0.34
	5.6G WLAN	802.11n HT40	Rear Face	0	134	1	14.5	14.01	1.12	0.03	0.766	0.86
	5.6G WLAN	802.11n HT40	Bottom sSide	0	134	1	14.5	14.01	1.12	0.01	0.337	0.38
	5.6G WLAN	802.11n HT40	Rear Face	0	110	0+1	17.0	16.69	1.07	0.06	0.792	0.85
	5.6G WLAN	802.11n HT40	Bottom Side	0	110	0+1	17.0	16.69	1.07	0	0.301	0.32
	5.6G WLAN	802.11n HT40	Rear Face	0	102	1	14.5	13.89	1.15	0.03	0.682	0.78
39	5.6G WLAN	802.11n HT40	Rear Face	0	110	1	14.5	13.92	1.14	-0.10	0.818	**0.93**
	5.6G WLAN	802.11n HT40	Rear Face	0	142	1	14.5	13.74	1.19	-0.1	0.745	0.89
	5.6G WLAN	802.11n HT40	Rear Face	0	134	0+1	17.0	16.67	1.08	-0.03	0.683	0.74
	5.6G WLAN	802.11n HT40	Rear Face	0	110	1	14.5	13.92	1.14	0.05	0.802	0.92
	5.8G WLAN	802.11n HT40	Rear Face	0	159	0	14.0	13.68	1.08	0.11	0.701	0.75
	5.8G WLAN	802.11n HT40	Bottom Side	0	159	0	14.0	13.68	1.08	-0.13	0.653	0.70
40	5.8G WLAN	802.11n HT40	Rear Face	0	159	1	15.0	14.93	1.02	0.08	1.06	**1.08**
	5.8G WLAN	802.11n HT40	Bottom sSide	0	159	1	15.0	14.93	1.02	0.01	0.579	0.59
	5.8G WLAN	802.11n HT40	Rear Face	0	159	0+1	17.5	17.43	1.02	0.13	1.05	1.07
	5.8G WLAN	802.11n HT40	Bottom Side	0	159	0+1	17.5	17.43	1.02	0.01	0.699	0.71
	5.8G WLAN	802.11n HT40	Rear Face	0	151	1	15.0	14.72	1.07	-0.09	0.714	0.76
	5.8G WLAN	802.11n HT40	Rear Face	0	151	0+1	17.5	17.31	1.04	0.15	0.728	0.76
	5.8G WLAN	802.11n HT40	Rear Face	0	159	1	15.0	14.93	1.02	0.01	1.03	1.05

Plot No.	Band	Test Position	Separation Distance (cm)	Ch.	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
42	Bluetooth	Rear Face	0	78	6.0	5.55	1.11	-0.04	0.150	**0.17**
	Bluetooth	Bottom Side	0	78	6.0	5.55	1.11	0.02	0.023	0.03
	Bluetooth	Rear Face	0	0	6.0	4.56	1.39	0.09	0.111	0.15
	Bluetooth	Rear Face	0	39	6.0	4.84	1.31	0.03	0.095	0.12

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 may be 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 V	RMC12.2K	Bottom	4233	0.808	0.801	1.01	N/A	N/A	N/A	N/A
LTE 12	QPSK10M	Bottom	23060	0.859	0.798	1.08	N/A	N/A	N/A	N/A
LTE 13	QPSK10M	Bottom	23230	0.901	0.891	1.01	N/A	N/A	N/A	N/A
2.4G WLAN	802.11b	Bottom	6	0.965	0.936	1.03	N/A	N/A	N/A	N/A
5.8G WLAN	802.11n HT40	Bottom	159	0.996	0.986	1.01	N/A	N/A	N/A	N/A
WCDMA II	RMC12.2K	Rear Face	9538	0.801	0.799	1.00	N/A	N/A	N/A	N/A
WCDMA V	RMC12.2K	Rear Face	4233	1.05	1.03	1.02	N/A	N/A	N/A	N/A
LTE 2	QPSK20M	Rear Face	19100	0.875	0.868	1.01	N/A	N/A	N/A	N/A
LTE 5	QPSK10M	Rear Face	20600	1.02	0.981	1.04	N/A	N/A	N/A	N/A
LTE 12	QPSK20M	Rear Face	23060	1.02	0.99	1.03	N/A	N/A	N/A	N/A
LTE 13	QPSK20M	Rear Face	23230	0.919	0.909	1.01	N/A	N/A	N/A	N/A
LTE 25	QPSK20M	Rear Face	26590	1.06	1.05	1.01	N/A	N/A	N/A	N/A
LTE 26	QPSK15M	Rear Face	26965	0.902	0.898	1.00	N/A	N/A	N/A	N/A
LTE 30	QPSK10M	Rear Face	27710	0.977	0.964	1.01	N/A	N/A	N/A	N/A
LTE 41	QPSK20M	Rear Face	40620	0.920	0.908	1.01	N/A	N/A	N/A	N/A
LTE66	QPSK20M	Rear Face	132572	0.941	0.934	1.01	N/A	N/A	N/A	N/A
2.4G WLAN	802.11b	Rear Face	6	0.844	0.829	1.02	N/A	N/A	N/A	N/A
5.3G LWAN	802.11n HT40	Rear Face	62	0.875	0.869	1.01	N/A	N/A	N/A	N/A
5.6G WLAN	802.11n HT40	Rear Face	110	0.818	0.802	1.02	N/A	N/A	N/A	N/A
5.8G WLAN	802.11n HT40	Rear Face	159	1.06	1.03	1.03	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.

Simultaneous TX Combination	Capable Transmit Configurations	Body Exposure Condition
1	WCDMA + WLAN 2.4G	Yes
2	WCDMA + WLAN 5G	Yes
3	WCDMA + BT	Yes
4	LTE + WLAN 2.4G	Yes
5	LTE + WLAN 5G	Yes
6	LTE + BT	Yes
7	WiFi 5GHz Ant1 + BT Ant0	Yes
8	WiFi 2.4GHz + WiFi 5GHz	Yes
9	WWAN + WiFi2.4GHz Ant1+ BT Ant0	Yes
10	WWAN + WiFi5GHz Ant1 + BT Ant0	Yes

<Estimated SAR Calculation>

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

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

If the minimum test separation distance is < 5 mm, a distance of 5 mm is used for estimated SAR calculation. When the test separation distance is > 50 mm, the 0.4 W/kg is used for SAR-1g.

Mode / Band	Frequency (GHz)	Max. Tune-up Power (dBm)	Test Position	Separation Distance (mm)	Estimated SAR (W/kg)
WCDMA II	1.9076	24.0	Body	5	0.40
WCDMA IV	1.7526	24.0	Body	5	0.40
WCDMA V	0.8466	24.0	Body	5	0.40
LTE 2	1.91	24.0	Body	5	0.40
LTE 4	1.755	24.0	Body	5	0.40
LTE 5	0.849	24.0	Body	5	0.40
LTE 7	2.57	24.0	Body	5	0.40
LTE 12	0.716	24.0	Body	5	0.40
LTE 13	0.787	24.0	Body	5	0.40
LTE 25	1.915	24.0	Body	5	0.40
LTE 26	0.849	24.0	Body	5	0.40
LTE 30	2.315	24.0	Body	5	0.40
LTE 38	2.62	24.0	Body	5	0.40
LTE 41	2.69	24.0	Body	5	0.40
LTE 66	1.78	24.0	Body	5	0.40
WLAN (DTS)	2.462	16.0	Body	5	0.40
WLAN (NII)	5.825	17.5	Body	5	0.40
BT (DSS)	2.48	6.0	Body	5	0.17

Note:

1. The separation distance is determined from the outer housing of the EUT to the user.
2. When standalone SAR testing is not required, an estimated SAR can be applied to determine simultaneous transmission SAR test exclusion.

<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.

Laptop PC Mode

No.	Conditions (SAR1 + SAR2)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	SAR Summation	SPLSR Analysis
1	WLAN (DTS) Ant0 + WLAN (NII) Ant1	Body	Bottom Side	1.06	0.82	1.88	**Analyzed as below**
2	WLAN (DTS) Ant1 + WLAN (NII) Ant0	Body	Bottom Side	0.54	0.96	1.50	Σ SAR < 1.6, Not required
3	WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.54	0.11	0.65	Σ SAR < 1.6, Not required
4	WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.82	0.11	0.93	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
5	WCDMA II + WLAN (DTS)	Body	Bottom Side	0.40	1.06	-	1.46	Σ SAR < 1.6, Not required
6	WCDMA II + WLAN (NII)	Body	Bottom Side	0.40	1.01	-	1.41	Σ SAR < 1.6, Not required
7	WCDMA II + BT (DSS)	Body	Bottom Side	0.40	0.11	-	0.51	Σ SAR < 1.6, Not required
8	WCDMA II + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.40	0.54	0.11	1.05	Σ SAR < 1.6, Not required
9	WCDMA II + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.40	0.82	0.11	1.33	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
10	WCDMA IV + WLAN (DTS)	Body	Bottom Side	0.50	1.06	-	1.56	Σ SAR < 1.6, Not required
11	WCDMA IV + WLAN (NII)	Body	Bottom Side	0.50	1.01	-	1.51	Σ SAR < 1.6, Not required
12	WCDMA IV + BT (DSS)	Body	Bottom Side	0.50	0.11	-	0.61	Σ SAR < 1.6, Not required
13	WCDMA IV + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.50	0.54	0.11	1.15	Σ SAR < 1.6, Not required
14	WCDMA IV + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.50	0.82	0.11	1.43	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
15	WCDMA V + WLAN (DTS)	Body	Bottom Side	0.83	1.06	-	1.89	Analyzed as below
16	WCDMA V + WLAN (NII)	Body	Bottom Side	0.83	1.01	-	1.84	Analyzed as below
17	WCDMA V + BT (DSS)	Body	Bottom Side	0.83	0.11	-	0.94	Σ SAR < 1.6, Not required
18	WCDMA V + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.83	0.54	0.11	1.48	Σ SAR < 1.6, Not required
19	WCDMA V + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.83	0.82	0.11	1.76	Analyzed as below

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
20	LTE 2 + WLAN (DTS)	Body	Bottom Side	0.41	1.06	-	1.47	Σ SAR < 1.6, Not required
21	LTE 2 + WLAN (NII)	Body	Bottom Side	0.41	1.01	-	1.42	Σ SAR < 1.6, Not required
22	LTE 2 + BT (DSS)	Body	Bottom Side	0.41	0.11	-	0.52	Σ SAR < 1.6, Not required
23	LTE 2 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.41	0.54	0.11	1.06	Σ SAR < 1.6, Not required
24	LTE 2 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.41	0.82	0.11	1.34	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
25	LTE 5 + WLAN (DTS)	Body	Bottom Side	0.83	1.06	-	1.89	Analyzed as below
26	LTE 5 + WLAN (NII)	Body	Bottom Side	0.83	1.01	-	1.84	Analyzed as below
27	LTE 5 + BT (DSS)	Body	Bottom Side	0.83	0.11	-	0.94	Σ SAR < 1.6, Not required
28	LTE 5 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.83	0.54	0.11	1.48	Σ SAR < 1.6, Not required
29	LTE 5 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.83	0.82	0.11	1.76	Analyzed as below

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
30	LTE 7 + WLAN (DTS)	Body	Bottom Side	0.36	1.06	-	1.42	Σ SAR < 1.6, Not required
31	LTE 7 + WLAN (NII)	Body	Bottom Side	0.36	1.01	-	1.37	Σ SAR < 1.6, Not required
32	LTE 7 + BT (DSS)	Body	Bottom Side	0.36	0.11	-	0.47	Σ SAR < 1.6, Not required
33	LTE 7 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.36	0.54	0.11	1.01	Σ SAR < 1.6, Not required
34	LTE 7 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.36	0.82	0.11	1.29	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
35	LTE 12 + WLAN (DTS)	Body	Bottom Side	0.95	1.06	-	2.01	Analyzed as below
36	LTE 12 + WLAN (NII)	Body	Bottom Side	0.95	1.01	-	1.96	Analyzed as below
37	LTE 12 + BT (DSS)	Body	Bottom Side	0.95	0.11	-	1.06	Σ SAR < 1.6, Not required
38	LTE 12 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.95	0.54	0.11	1.60	Analyzed as below
39	LTE 12 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.95	0.82	0.11	1.88	Analyzed as below

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
40	LTE 13 + WLAN (DTS)	Body	Bottom Side	0.92	1.06	-	1.98	Analyzed as below
41	LTE 13 + WLAN (NII)	Body	Bottom Side	0.92	1.01	-	1.93	Analyzed as below
42	LTE 13 + BT (DSS)	Body	Bottom Side	0.92	0.11	-	1.03	Σ SAR < 1.6, Not required
43	LTE 13 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.92	0.54	0.11	1.57	Σ SAR < 1.6, Not required
44	LTE 13 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.92	0.82	0.11	1.85	Analyzed as below

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
45	LTE 25 + WLAN (DTS)	Body	Bottom Side	0.48	1.06	-	1.54	Σ SAR < 1.6, Not required
46	LTE 25 + WLAN (NII)	Body	Bottom Side	0.48	1.01	-	1.49	Σ SAR < 1.6, Not required
47	LTE 25 + BT (DSS)	Body	Bottom Side	0.48	0.11	-	0.59	Σ SAR < 1.6, Not required
48	LTE 25 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.48	0.54	0.11	1.13	Σ SAR < 1.6, Not required
49	LTE 25 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.48	0.82	0.11	1.41	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
50	LTE 26 + WLAN (DTS)	Body	Bottom Side	0.82	1.06	-	1.88	**Analyzed as below**
51	LTE 26 + WLAN (NII)	Body	Bottom Side	0.82	1.01	-	1.83	**Analyzed as below**
52	LTE 26 + BT (DSS)	Body	Bottom Side	0.82	0.11	-	0.93	Σ SAR < 1.6, Not required
53	LTE 26 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.82	0.54	0.11	1.47	Σ SAR < 1.6, Not required
54	LTE 26 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.82	0.82	0.11	1.75	**Analyzed as below**

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
55	LTE 30 + WLAN (DTS)	Body	Bottom Side	0.44	1.06	-	1.50	Σ SAR < 1.6, Not required
56	LTE 30 + WLAN (NII)	Body	Bottom Side	0.44	1.01	-	1.45	Σ SAR < 1.6, Not required
57	LTE 30 + BT (DSS)	Body	Bottom Side	0.44	0.11	-	0.55	Σ SAR < 1.6, Not required
58	LTE 30 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.44	0.54	0.11	1.09	Σ SAR < 1.6, Not required
59	LTE 30 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.44	0.82	0.11	1.37	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
60	LTE 41 + WLAN (DTS)	Body	Bottom Side	0.43	1.06	-	1.49	Σ SAR < 1.6, Not required
61	LTE 41 + WLAN (NII)	Body	Bottom Side	0.43	1.01	-	1.44	Σ SAR < 1.6, Not required
62	LTE 41 + BT (DSS)	Body	Bottom Side	0.43	0.11	-	0.54	Σ SAR < 1.6, Not required
63	LTE 41 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.43	0.54	0.11	1.08	Σ SAR < 1.6, Not required
64	LTE 41 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Bottom Side	0.43	0.82	0.11	1.36	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
65	**LTE 66 + WLAN (DTS)**	Body	Bottom Side	0.49	1.06	-	1.55	Σ SAR < 1.6, Not required
66	**LTE 66 + WLAN (NII)**	Body	Bottom Side	0.49	1.01	-	1.50	Σ SAR < 1.6, Not required
67	**LTE 66 + BT (DSS)**	Body	Bottom Side	0.49	0.11	-	0.60	Σ SAR < 1.6, Not required
68	**LTE 66 + WLAN (DTS) Ant1 + BT (DSS) Ant0**	Body	Bottom Side	0.49	0.54	0.11	1.14	Σ SAR < 1.6, Not required
69	**LTE 66 + WLAN (NII) Ant1 + BT (DSS) Ant0**	Body	Bottom Side	0.49	0.82	0.11	1.42	Σ SAR < 1.6, Not required

Tablet PC Mode

No.	Conditions (SAR1 + SAR2)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	SAR Summation	SPLSR Analysis
1	WLAN (DTS) Ant0 + WLAN (NII) Ant1	Body	Rear Face	0.93	1.08	2.01	**Analyzed as below**
			Left Side	0.40	0.40	0.80	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.80	Σ SAR < 1.6, Not required
			Top Side	0.40	0.40	0.80	Σ SAR < 1.6, Not required
			Bottom Side	0.28	0.59	0.87	Σ SAR < 1.6, Not required
2	WLAN (DTS) Ant1 + WLAN (NII) Ant0	Body	Rear Face	0.51	0.75	1.26	Σ SAR < 1.6, Not required
			Left Side	0.40	0.40	0.80	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.80	Σ SAR < 1.6, Not required
			Top Side	0.40	0.40	0.80	Σ SAR < 1.6, Not required
			Bottom Side	0.38	0.70	1.08	Σ SAR < 1.6, Not required
3	WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.51	0.17	0.68	Σ SAR < 1.6, Not required
			Left Side	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Top Side	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Bottom Side	0.38	0.03	0.41	Σ SAR < 1.6, Not required
4	WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.08	0.17	1.25	Σ SAR < 1.6, Not required
			Left Side	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Top Side	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Bottom Side	0.59	0.03	0.62	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
5	WCDMA II + WLAN (DTS)	Body	Rear Face	0.81	0.93	-	1.74	**Analyzed as below**
			Left Side	0.36	0.40	-	0.76	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.32	0.40	-	0.72	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	-	0.78	Σ SAR < 1.6, Not required
6	WCDMA II + WLAN (NII)	Body	Rear Face	0.81	1.08	-	1.89	**Analyzed as below**
			Left Side	0.36	0.40	-	0.76	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.32	0.40	-	0.72	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.71	-	1.11	Σ SAR < 1.6, Not required
7	WCDMA II + BT (DSS)	Body	Rear Face	0.81	0.17	-	0.98	Σ SAR < 1.6, Not required
			Left Side	0.36	0.17	-	0.53	Σ SAR < 1.6, Not required
			Right Side	0.40	0.17	-	0.57	Σ SAR < 1.6, Not required
			Top Side	0.32	0.17	-	0.49	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.03	-	0.43	Σ SAR < 1.6, Not required
8	WCDMA II + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.81	0.51	0.17	1.49	Σ SAR < 1.6, Not required
			Left Side	0.36	0.40	0.17	0.93	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Top Side	0.32	0.40	0.17	0.89	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	0.03	0.81	Σ SAR < 1.6, Not required
9	WCDMA II + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.81	1.08	0.17	2.06	**Analyzed as below**
			Left Side	0.36	0.40	0.17	0.93	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Top Side	0.32	0.40	0.17	0.89	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.59	0.03	1.02	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
10	WCDMA IV + WLAN (DTS)	Body	Rear Face	0.79	0.93	-	1.72	**Analyzed as below**
			Left Side	0.21	0.40	-	0.61	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.25	0.40	-	0.65	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	-	0.78	Σ SAR < 1.6, Not required
11	WCDMA IV + WLAN (NII)	Body	Rear Face	0.79	1.08	-	1.87	**Analyzed as below**
			Left Side	0.21	0.40	-	0.61	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.25	0.40	-	0.65	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.71	-	1.11	Σ SAR < 1.6, Not required
12	WCDMA IV + BT (DSS)	Body	Rear Face	0.79	0.17	-	0.96	Σ SAR < 1.6, Not required
			Left Side	0.21	0.17	-	0.38	Σ SAR < 1.6, Not required
			Right Side	0.40	0.17	-	0.57	Σ SAR < 1.6, Not required
			Top Side	0.25	0.17	-	0.42	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.03	-	0.43	Σ SAR < 1.6, Not required
13	WCDMA IV + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.79	0.51	0.17	1.47	Σ SAR < 1.6, Not required
			Left Side	0.21	0.40	0.17	0.78	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Top Side	0.25	0.40	0.17	0.82	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	0.03	0.81	Σ SAR < 1.6, Not required
14	WCDMA IV + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.79	1.08	0.17	2.04	**Analyzed as below**
			Left Side	0.21	0.40	0.17	0.78	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Top Side	0.25	0.40	0.17	0.82	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.59	0.03	1.02	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
15	WCDMA V + WLAN (DTS)	Body	Rear Face	1.08	0.93	-	2.01	**Analyzed as below**
			Left Side	0.10	0.40	-	0.50	Σ SAR < 1.6, Not required
			Right Side	0.12	0.40	-	0.52	Σ SAR < 1.6, Not required
			Top Side	0.05	0.40	-	0.45	Σ SAR < 1.6, Not required
			Bottom Side	0.13	0.38	-	0.51	Σ SAR < 1.6, Not required
16	WCDMA V + WLAN (NII)	Body	Rear Face	1.08	1.08	-	2.16	**Analyzed as below**
			Left Side	0.10	0.40	-	0.50	Σ SAR < 1.6, Not required
			Right Side	0.12	0.40	-	0.52	Σ SAR < 1.6, Not required
			Top Side	0.05	0.40	-	0.45	Σ SAR < 1.6, Not required
			Bottom Side	0.13	0.71	-	0.84	Σ SAR < 1.6, Not required
17	WCDMA V + BT (DSS)	Body	Rear Face	1.08	0.17	-	1.25	Σ SAR < 1.6, Not required
			Left Side	0.10	0.17	-	0.27	Σ SAR < 1.6, Not required
			Right Side	0.12	0.17	-	0.29	Σ SAR < 1.6, Not required
			Top Side	0.05	0.17	-	0.22	Σ SAR < 1.6, Not required
			Bottom Side	0.13	0.03	-	0.16	Σ SAR < 1.6, Not required
18	WCDMA V + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.08	0.51	0.17	1.76	**Analyzed as below**
			Left Side	0.10	0.40	0.17	0.67	Σ SAR < 1.6, Not required
			Right Side	0.12	0.40	0.17	0.69	Σ SAR < 1.6, Not required
			Top Side	0.05	0.40	0.17	0.62	Σ SAR < 1.6, Not required
			Bottom Side	0.13	0.38	0.03	0.54	Σ SAR < 1.6, Not required
19	WCDMA V + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.08	1.08	0.17	2.33	**Analyzed as below**
			Left Side	0.10	0.40	0.17	0.67	Σ SAR < 1.6, Not required
			Right Side	0.12	0.40	0.17	0.69	Σ SAR < 1.6, Not required
			Top Side	0.05	0.40	0.17	0.62	Σ SAR < 1.6, Not required
			Bottom Side	0.13	0.59	0.03	0.75	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
20	LTE 2 + WLAN (DTS)	Body	Rear Face	0.94	0.93	-	1.87	**Analyzed as below**
			Left Side	0.32	0.40	-	0.72	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.30	0.40	-	0.70	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	-	0.78	Σ SAR < 1.6, Not required
21	LTE 2 + WLAN (NII)	Body	Rear Face	0.94	1.08	-	2.02	**Analyzed as below**
			Left Side	0.32	0.40	-	0.72	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.30	0.40	-	0.70	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.71	-	1.11	Σ SAR < 1.6, Not required
22	LTE 2 + BT (DSS)	Body	Rear Face	0.94	0.17	-	1.11	Σ SAR < 1.6, Not required
			Left Side	0.32	0.17	-	0.49	Σ SAR < 1.6, Not required
			Right Side	0.40	0.17	-	0.57	Σ SAR < 1.6, Not required
			Top Side	0.30	0.17	-	0.47	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.03	-	0.43	Σ SAR < 1.6, Not required
23	LTE 2 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.94	0.51	0.17	1.62	**Analyzed as below**
			Left Side	0.32	0.40	0.17	0.89	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Top Side	0.30	0.40	0.17	0.87	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	0.03	0.81	Σ SAR < 1.6, Not required
24	LTE 2 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.94	1.08	0.17	2.19	**Analyzed as below**
			Left Side	0.32	0.40	0.17	0.89	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Top Side	0.30	0.40	0.17	0.87	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.59	0.03	1.02	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
25	LTE 5 + WLAN (DTS)	Body	Rear Face	1.09	0.93	-	2.02	**Analyzed as below**
			Left Side	0	0.40	-	0.40	Σ SAR < 1.6, Not required
			Right Side	0.11	0.40	-	0.51	Σ SAR < 1.6, Not required
			Top Side	0.07	0.40	-	0.47	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.38	-	0.41	Σ SAR < 1.6, Not required
26	LTE 5 + WLAN (NII)	Body	Rear Face	1.09	1.08	-	2.17	**Analyzed as below**
			Left Side	0	0.40	-	0.40	Σ SAR < 1.6, Not required
			Right Side	0.11	0.40	-	0.51	Σ SAR < 1.6, Not required
			Top Side	0.07	0.40	-	0.47	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.71	-	0.74	Σ SAR < 1.6, Not required
27	LTE 5 + BT (DSS)	Body	Rear Face	1.09	0.17	-	1.26	Σ SAR < 1.6, Not required
			Left Side	0	0.17	-	0.17	Σ SAR < 1.6, Not required
			Right Side	0.11	0.17	-	0.28	Σ SAR < 1.6, Not required
			Top Side	0.07	0.17	-	0.24	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.03	-	0.06	Σ SAR < 1.6, Not required
28	LTE 5 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.09	0.51	0.17	1.77	**Analyzed as below**
			Left Side	0	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.11	0.40	0.17	0.68	Σ SAR < 1.6, Not required
			Top Side	0.07	0.40	0.17	0.64	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.38	0.03	0.44	Σ SAR < 1.6, Not required
29	LTE 5 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.09	1.08	0.17	2.34	**Analyzed as below**
			Left Side	0	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.11	0.40	0.17	0.68	Σ SAR < 1.6, Not required
			Top Side	0.07	0.40	0.17	0.64	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.59	0.03	0.65	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
30	LTE 7 + WLAN (DTS)	Body	Rear Face	0.64	0.93	-	1.57	Σ SAR < 1.6, Not required
			Left Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Right Side	0.21	0.40	-	0.61	Σ SAR < 1.6, Not required
			Top Side	0.07	0.40	-	0.47	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	-	0.78	Σ SAR < 1.6, Not required
31	LTE 7 + WLAN (NII)	Body	Rear Face	0.64	1.08	-	1.72	**Analyzed as below**
			Left Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Right Side	0.21	0.40	-	0.61	Σ SAR < 1.6, Not required
			Top Side	0.07	0.40	-	0.47	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.71	-	1.11	Σ SAR < 1.6, Not required
32	LTE 7 + BT (DSS)	Body	Rear Face	0.64	0.17	-	0.81	Σ SAR < 1.6, Not required
			Left Side	0.40	0.17	-	0.57	Σ SAR < 1.6, Not required
			Right Side	0.21	0.17	-	0.38	Σ SAR < 1.6, Not required
			Top Side	0.07	0.17	-	0.24	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.03	-	0.43	Σ SAR < 1.6, Not required
33	LTE 7 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.64	0.51	0.17	1.32	Σ SAR < 1.6, Not required
			Left Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Right Side	0.21	0.40	0.17	0.78	Σ SAR < 1.6, Not required
			Top Side	0.07	0.40	0.17	0.64	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	0.03	0.81	Σ SAR < 1.6, Not required
34	LTE 7 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.64	1.08	0.17	1.89	**Analyzed as below**
			Left Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Right Side	0.21	0.40	0.17	0.78	Σ SAR < 1.6, Not required
			Top Side	0.07	0.40	0.17	0.64	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.59	0.03	1.02	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
35	LTE 12 + WLAN (DTS)	Body	Rear Face	1.12	0.93	-	2.05	**Analyzed as below**
			Left Side	0.07	0.40	-	0.47	Σ SAR < 1.6, Not required
			Right Side	0.28	0.40	-	0.68	Σ SAR < 1.6, Not required
			Top Side	0.04	0.40	-	0.44	Σ SAR < 1.6, Not required
			Bottom Side	0.43	0.38	-	0.81	Σ SAR < 1.6, Not required
36	LTE 12 + WLAN (NII)	Body	Rear Face	1.12	1.08	-	2.20	**Analyzed as below**
			Left Side	0.07	0.40	-	0.47	Σ SAR < 1.6, Not required
			Right Side	0.28	0.40	-	0.68	Σ SAR < 1.6, Not required
			Top Side	0.04	0.40	-	0.44	Σ SAR < 1.6, Not required
			Bottom Side	0.43	0.71	-	1.14	Σ SAR < 1.6, Not required
37	LTE 12 + BT (DSS)	Body	Rear Face	1.12	0.17	-	1.29	Σ SAR < 1.6, Not required
			Left Side	0.07	0.17	-	0.24	Σ SAR < 1.6, Not required
			Right Side	0.28	0.17	-	0.45	Σ SAR < 1.6, Not required
			Top Side	0.04	0.17	-	0.21	Σ SAR < 1.6, Not required
			Bottom Side	0.43	0.03	-	0.46	Σ SAR < 1.6, Not required
38	LTE 12 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.12	0.51	0.17	1.80	**Analyzed as below**
			Left Side	0.07	0.40	0.17	0.64	Σ SAR < 1.6, Not required
			Right Side	0.28	0.40	0.17	0.85	Σ SAR < 1.6, Not required
			Top Side	0.04	0.40	0.17	0.61	Σ SAR < 1.6, Not required
			Bottom Side	0.43	0.38	0.03	0.84	Σ SAR < 1.6, Not required
39	LTE 12 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.12	1.08	0.17	2.37	**Analyzed as below**
			Left Side	0.07	0.40	0.17	0.64	Σ SAR < 1.6, Not required
			Right Side	0.28	0.40	0.17	0.85	Σ SAR < 1.6, Not required
			Top Side	0.04	0.40	0.17	0.61	Σ SAR < 1.6, Not required
			Bottom Side	0.43	0.59	0.03	1.05	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
40	LTE 13 + WLAN (DTS)	Body	Rear Face	0.94	0.93	-	1.87	**Analyzed as below**
			Left Side	0	0.40	-	0.40	Σ SAR < 1.6, Not required
			Right Side	0.13	0.40	-	0.53	Σ SAR < 1.6, Not required
			Top Side	0.04	0.40	-	0.44	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.38	-	0.41	Σ SAR < 1.6, Not required
41	LTE 13 + WLAN (NII)	Body	Rear Face	0.94	1.08	-	2.02	**Analyzed as below**
			Left Side	0	0.40	-	0.40	Σ SAR < 1.6, Not required
			Right Side	0.13	0.40	-	0.53	Σ SAR < 1.6, Not required
			Top Side	0.04	0.40	-	0.44	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.71	-	0.74	Σ SAR < 1.6, Not required
42	LTE 13 + BT (DSS)	Body	Rear Face	0.94	0.17	-	1.11	Σ SAR < 1.6, Not required
			Left Side	0	0.17	-	0.17	Σ SAR < 1.6, Not required
			Right Side	0.13	0.17	-	0.30	Σ SAR < 1.6, Not required
			Top Side	0.04	0.17	-	0.21	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.03	-	0.06	Σ SAR < 1.6, Not required
43	LTE 13 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.94	0.51	0.17	1.62	**Analyzed as below**
			Left Side	0	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.13	0.40	0.17	0.70	Σ SAR < 1.6, Not required
			Top Side	0.04	0.40	0.17	0.61	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.38	0.03	0.44	Σ SAR < 1.6, Not required
44	LTE 13 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.94	1.08	0.17	2.19	**Analyzed as below**
			Left Side	0	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.13	0.40	0.17	0.70	Σ SAR < 1.6, Not required
			Top Side	0.04	0.40	0.17	0.61	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.59	0.03	0.65	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
45	LTE 25 + WLAN (DTS)	Body	Rear Face	1.08	0.93	-	2.01	**Analyzed as below**
			Left Side	0.30	0.40	-	0.70	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.58	0.40	-	0.98	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	-	0.78	Σ SAR < 1.6, Not required
46	LTE 25 + WLAN (NII)	Body	Rear Face	1.08	1.08	-	2.16	**Analyzed as below**
			Left Side	0.30	0.40	-	0.70	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.58	0.40	-	0.98	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.71	-	1.11	Σ SAR < 1.6, Not required
47	LTE 25 + BT (DSS)	Body	Rear Face	1.08	0.17	-	1.25	Σ SAR < 1.6, Not required
			Left Side	0.30	0.40	-	0.70	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.58	0.40	-	0.98	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.03	-	0.43	Σ SAR < 1.6, Not required
48	LTE 25 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.08	0.51	0.17	1.76	**Analyzed as below**
			Left Side	0.30	0.40	0.40	1.10	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.40	1.20	Σ SAR < 1.6, Not required
			Top Side	0.58	0.40	0.40	1.38	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	0.03	0.81	Σ SAR < 1.6, Not required
49	LTE 25 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.08	1.08	0.17	2.33	**Analyzed as below**
			Left Side	0.30	0.40	0.40	1.10	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.40	1.20	Σ SAR < 1.6, Not required
			Top Side	0.58	0.40	0.40	1.38	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.59	0.03	1.02	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
50	LTE 26 + WLAN (DTS)	Body	Rear Face	0.96	0.93	-	1.89	**Analyzed as below**
			Left Side	0	0.40	-	0.40	Σ SAR < 1.6, Not required
			Right Side	0.11	0.40	-	0.51	Σ SAR < 1.6, Not required
			Top Side	0.09	0.40	-	0.49	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.38	-	0.41	Σ SAR < 1.6, Not required
51	LTE 26 + WLAN (NII)	Body	Rear Face	0.96	1.08	-	2.04	**Analyzed as below**
			Left Side	0	0.40	-	0.40	Σ SAR < 1.6, Not required
			Right Side	0.11	0.40	-	0.51	Σ SAR < 1.6, Not required
			Top Side	0.09	0.40	-	0.49	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.71	-	0.74	Σ SAR < 1.6, Not required
52	LTE 26 + BT (DSS)	Body	Rear Face	0.96	0.17	-	1.13	Σ SAR < 1.6, Not required
			Left Side	0	0.17	-	0.17	Σ SAR < 1.6, Not required
			Right Side	0.11	0.17	-	0.28	Σ SAR < 1.6, Not required
			Top Side	0.09	0.17	-	0.26	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.03	-	0.06	Σ SAR < 1.6, Not required
53	LTE 26 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.96	0.51	0.17	1.64	**Analyzed as below**
			Left Side	0	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.11	0.40	0.17	0.68	Σ SAR < 1.6, Not required
			Top Side	0.09	0.40	0.17	0.66	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.38	0.03	0.44	Σ SAR < 1.6, Not required
54	LTE 26 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.96	1.08	0.17	2.21	**Analyzed as below**
			Left Side	0	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.11	0.40	0.17	0.68	Σ SAR < 1.6, Not required
			Top Side	0.09	0.40	0.17	0.66	Σ SAR < 1.6, Not required
			Bottom Side	0.03	0.59	0.03	0.65	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
55	LTE 30 + WLAN (DTS)	Body	Rear Face	1.09	0.93	-	2.02	**Analyzed as below**
			Left Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Right Side	0.70	0.40	-	1.10	Σ SAR < 1.6, Not required
			Top Side	0.10	0.40	-	0.50	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	-	0.78	Σ SAR < 1.6, Not required
56	LTE 30 + WLAN (NII)	Body	Rear Face	1.09	1.08	-	2.17	**Analyzed as below**
			Left Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Right Side	0.70	0.40	-	1.10	Σ SAR < 1.6, Not required
			Top Side	0.10	0.40	-	0.50	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.71	-	1.11	Σ SAR < 1.6, Not required
57	LTE 30 + BT (DSS)	Body	Rear Face	1.09	0.17	-	1.26	Σ SAR < 1.6, Not required
			Left Side	0.40	0.17	-	0.57	Σ SAR < 1.6, Not required
			Right Side	0.70	0.17	-	0.87	Σ SAR < 1.6, Not required
			Top Side	0.10	0.17	-	0.27	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.03	-	0.43	Σ SAR < 1.6, Not required
58	LTE 30 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.09	0.51	0.17	1.77	**Analyzed as below**
			Left Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Right Side	0.70	0.40	0.17	1.27	Σ SAR < 1.6, Not required
			Top Side	0.10	0.40	0.17	0.67	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	0.03	0.81	Σ SAR < 1.6, Not required
59	LTE 30 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	1.09	1.08	0.17	2.34	**Analyzed as below**
			Left Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Right Side	0.70	0.40	0.17	1.27	Σ SAR < 1.6, Not required
			Top Side	0.10	0.40	0.17	0.67	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.59	0.03	1.02	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
60	LTE 41 + WLAN (DTS)	Body	Rear Face	0.92	0.93	-	1.85	**Analyzed as below**
			Left Side	0	0.40	-	0.40	Σ SAR < 1.6, Not required
			Right Side	0.41	0.40	-	0.81	Σ SAR < 1.6, Not required
			Top Side	0.15	0.40	-	0.55	Σ SAR < 1.6, Not required
			Bottom Side	0.02	0.38	-	0.40	Σ SAR < 1.6, Not required
61	LTE 41 + WLAN (NII)	Body	Rear Face	0.92	1.08	-	2.00	**Analyzed as below**
			Left Side	0	0.40	-	0.40	Σ SAR < 1.6, Not required
			Right Side	0.41	0.40	-	0.81	Σ SAR < 1.6, Not required
			Top Side	0.15	0.40	-	0.55	Σ SAR < 1.6, Not required
			Bottom Side	0.02	0.71	-	0.73	Σ SAR < 1.6, Not required
62	LTE 41 + BT (DSS)	Body	Rear Face	0.92	0.17	-	1.09	Σ SAR < 1.6, Not required
			Left Side	0	0.17	-	0.17	Σ SAR < 1.6, Not required
			Right Side	0.41	0.17	-	0.58	Σ SAR < 1.6, Not required
			Top Side	0.15	0.17	-	0.32	Σ SAR < 1.6, Not required
			Bottom Side	0.02	0.03	-	0.05	Σ SAR < 1.6, Not required
63	LTE 41 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.92	0.51	0.17	1.60	**Analyzed as below**
			Left Side	0	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.41	0.40	0.17	0.98	Σ SAR < 1.6, Not required
			Top Side	0.15	0.40	0.17	0.72	Σ SAR < 1.6, Not required
			Bottom Side	0.02	0.38	0.03	0.43	Σ SAR < 1.6, Not required
64	LTE 41 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.92	1.08	0.17	2.17	**Analyzed as below**
			Left Side	0	0.40	0.17	0.57	Σ SAR < 1.6, Not required
			Right Side	0.41	0.40	0.17	0.98	Σ SAR < 1.6, Not required
			Top Side	0.15	0.40	0.17	0.72	Σ SAR < 1.6, Not required
			Bottom Side	0.02	0.59	0.03	0.64	Σ SAR < 1.6, Not required

No.	Conditions (SAR1+SAR2+SAR3)	Exposure Condition	Test Position	Max. SAR1	Max. SAR2	Max. SAR3	SAR Summation	SPLSR Analysis
65	LTE 66 + WLAN (DTS)	Body	Rear Face	0.95	0.93	-	1.88	**Analyzed as below**
			Left Side	0.36	0.40	-	0.76	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.29	0.40	-	0.69	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	-	0.78	Σ SAR < 1.6, Not required
66	LTE 66 + WLAN (NII)	Body	Rear Face	0.95	1.08	-	2.03	**Analyzed as below**
			Left Side	0.36	0.40	-	0.76	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	-	0.80	Σ SAR < 1.6, Not required
			Top Side	0.29	0.40	-	0.69	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.71	-	1.11	Σ SAR < 1.6, Not required
67	LTE 66 + BT (DSS)	Body	Rear Face	0.95	0.17	-	1.12	Σ SAR < 1.6, Not required
			Left Side	0.36	0.17	-	0.53	Σ SAR < 1.6, Not required
			Right Side	0.40	0.17	-	0.57	Σ SAR < 1.6, Not required
			Top Side	0.29	0.17	-	0.46	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.03	-	0.43	Σ SAR < 1.6, Not required
68	LTE 66 + WLAN (DTS) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.95	0.51	0.17	1.63	**Analyzed as below**
			Left Side	0.36	0.40	0.17	0.93	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Top Side	0.29	0.40	0.17	0.86	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.38	0.03	0.81	Σ SAR < 1.6, Not required
69	LTE 66 + WLAN (NII) Ant1 + BT (DSS) Ant0	Body	Rear Face	0.95	1.08	0.17	2.20	**Analyzed as below**
			Left Side	0.36	0.40	0.17	0.93	Σ SAR < 1.6, Not required
			Right Side	0.40	0.40	0.17	0.97	Σ SAR < 1.6, Not required
			Top Side	0.29	0.40	0.17	0.86	Σ SAR < 1.6, Not required
			Bottom Side	0.40	0.59	0.03	1.02	Σ SAR < 1.6, Not required

<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.

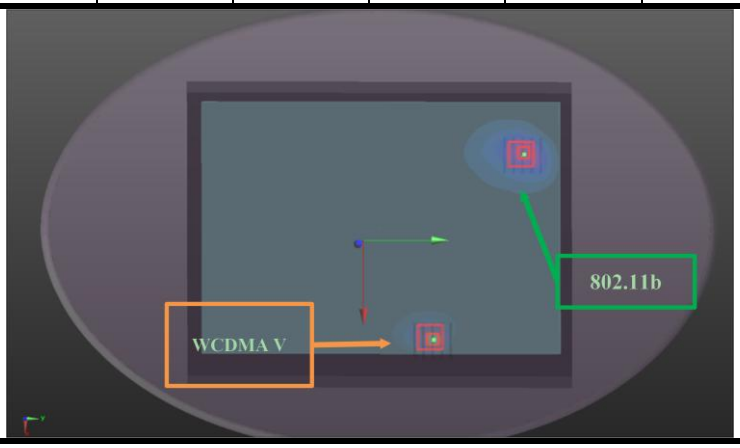
$$\text{SPLSR} = \frac{(\text{SAR}_1 + \text{SAR}_2)^{1.5}}{R_i}$$

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.

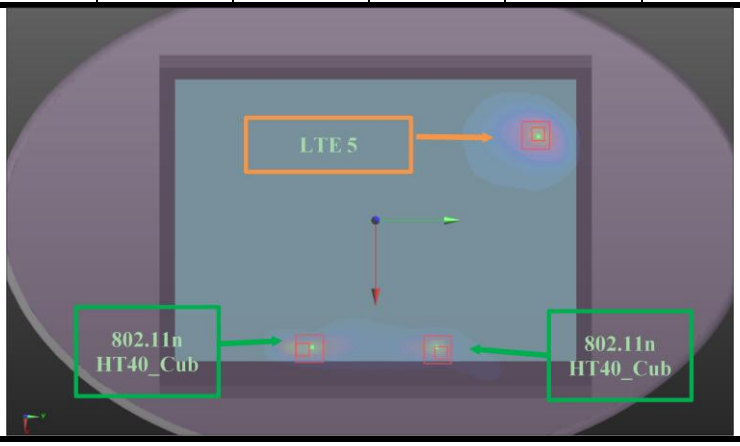
When the SPLSR is <= 0.04, the simultaneous transmission SAR is not required. Otherwise, the enlarged zoom scan and volume scan post-processing procedures will be performed.

Laptop PC Mode

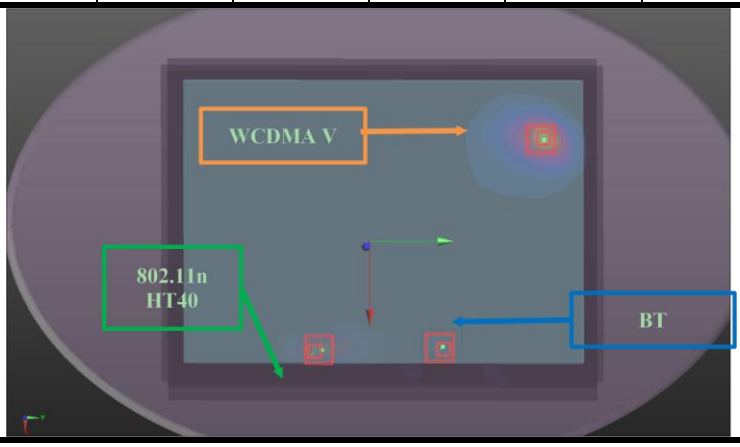
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA V RMC 12.2K Ch4233	Body	Bottom	0.83	-67.6	129.6	0.87	184.6	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			1.06	98	48	2.84			



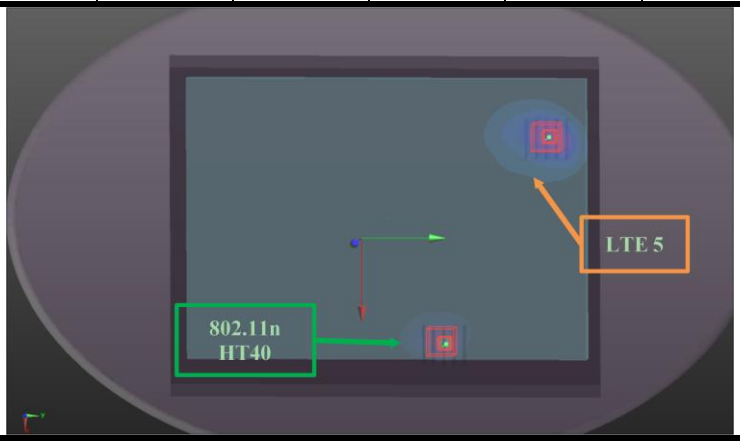
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA V RMC 12.2K Ch4233	Body	Bottom	0.83	-67.6	129.6	0.87	187.7	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			1.01	103.5	52.5	3.06			



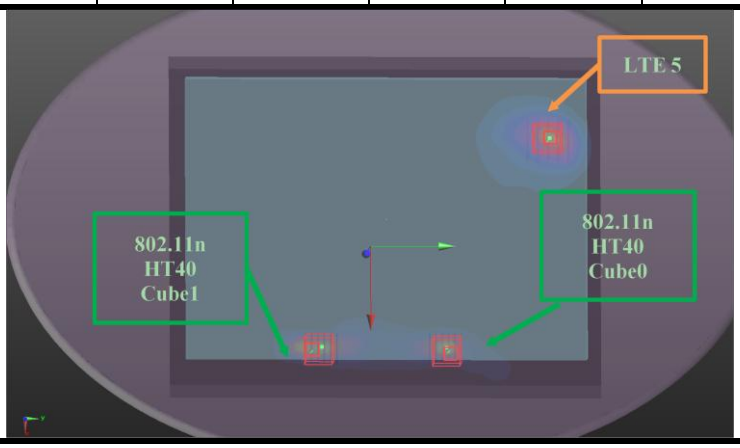
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA V RMC 12.2K Ch4233	Body	Bottom	0.83	-67.6	129.6	0.87	250.0	0.01	SPLSR ≤ 0.04, Not required
802n HT40_Ch151_Ant1			0.82	101.5	-54.5	2.98			
WCDMA V RMC 12.2K Ch4233	Body	Bottom	0.83	-67.6	129.6	0.87	184.4	0.00	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			
802n HT40_Ch151_Ant1	Body	Bottom	0.82	101.5	-54.5	2.98	102.1	0.01	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			



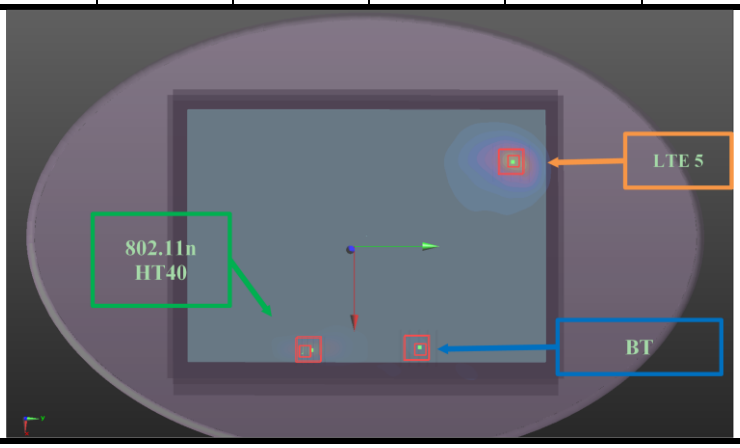
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 5 QPSK10M Ch20600	Body	Bottom	0.83	-66	131.6	0.88	184.1	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			1.06	98	48	2.84			



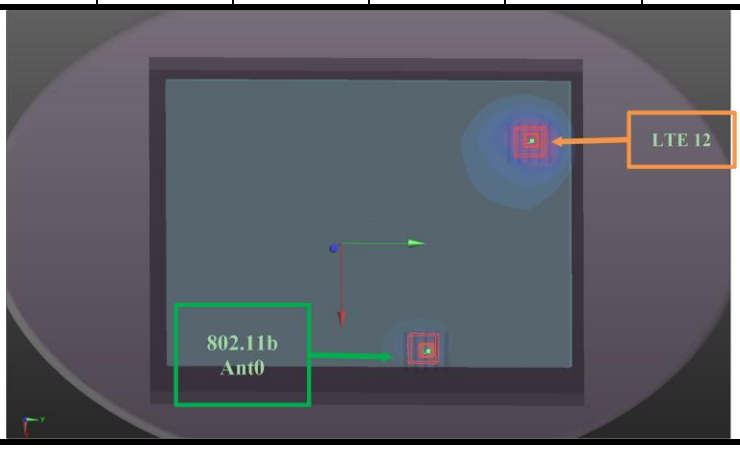
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 5 QPSK10M Ch20600	Body	Bottom	0.83	-66	131.6	0.88	187.1	0.01	SPLSR ≤ 0.04, Not required
802.11n T40 Ch159_ Ant0+1			1.01	103.5	52.5	3.06			



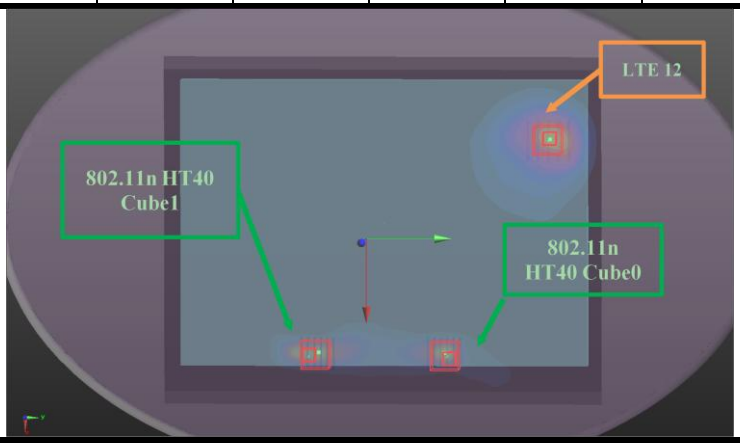
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 5 QPSK10M Ch20600	Body	Bottom	0.83	-66	131.6	0.88	250.4	0.01	SPLSR ≤ 0.04, Not required
802n HT40_Ch151_Ant1			0.82	101.5	-54.5	2.98			
LTE 5 QPSK10M Ch20600	Body	Bottom	0.83	-66	131.6	0.88	183.9	0.00	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			
802n HT40_Ch151_Ant1	Body	Bottom	0.82	101.5	-54.5	2.98	102.1	0.01	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			



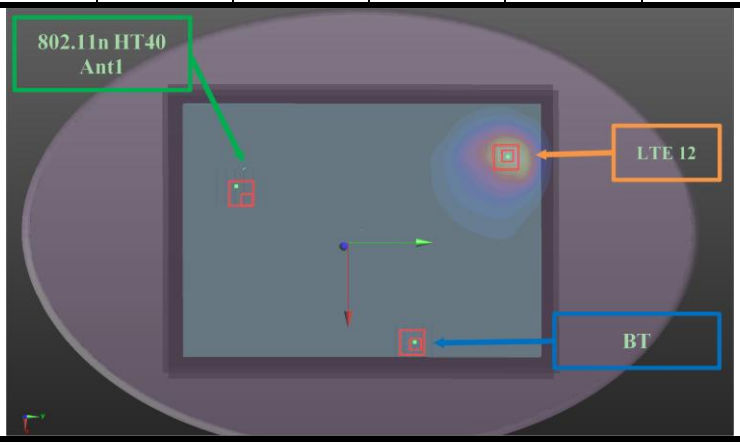
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 12 QPSK10M Ch23060	Body	Bottom	0.95	-66	130	1.34	183.4	0.02	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			1.06	98	48	2.84			



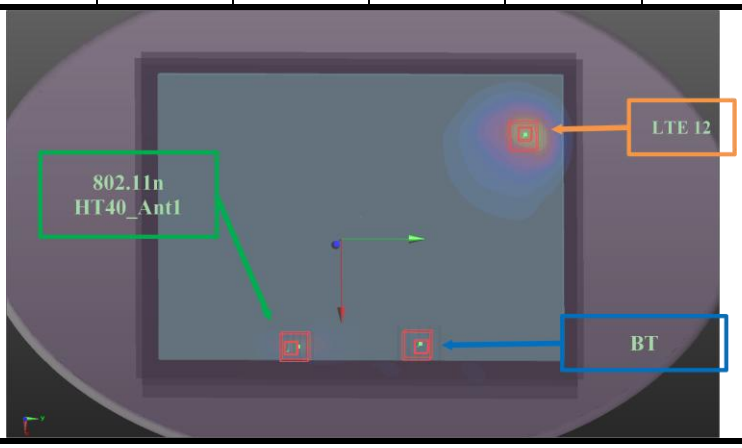
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 12 QPSK10M Ch23060	Body	Bottom	0.95	-66	130	1.34	186.4	0.01	SPLSR ≤ 0.04, Not required
802.11n T40 Ch159_ Ant0+1			1.01	103.5	52.5	3.06			



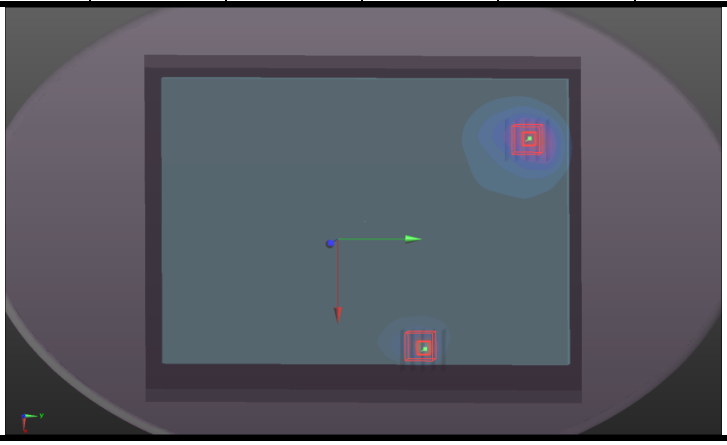
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 12 QPSK10M Ch23060	Body	Bottom	0.95	-66	130	1.34	234.2	0.01	SPLSR ≤ 0.04, Not required
802.11n T40 Ch9_Ant1			0.54	-56	-102	32.03			
LTE 12 QPSK10M Ch23060	Body	Bottom	0.95	-66	130	1.34	183.2	0.01	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			
802.11n HT40 Ch9_ Ant1	Body	Bottom	0.54	-56	-102	32.03	215.9	0.00	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			



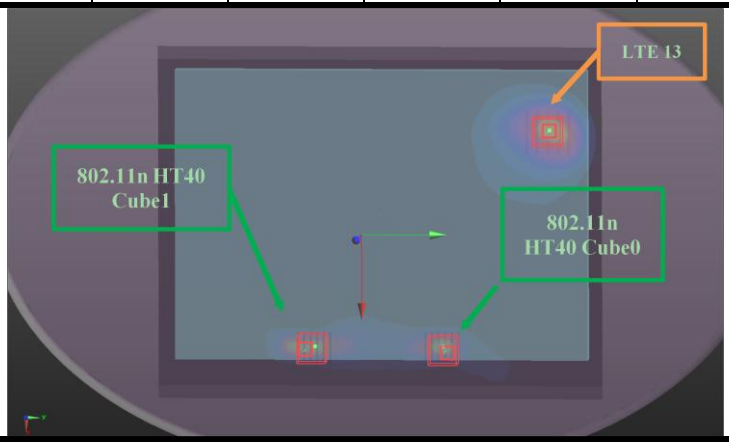
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 12 QPSK10M Ch23060	Body	Bottom	0.95	-66	130	1.34	249.2	0.01	SPLSR ≤ 0.04, Not required
802n HT40_ Ch151_Ant1			0.82	101.5	-54.5	2.98			
LTE 12 QPSK10M Ch23060	Body	Bottom	0.95	-66	130	1.34	183.2	0.01	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			
802n HT40_ Ch151_Ant1	Body	Bottom	0.82	101.5	-54.5	2.98	102.1	0.01	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			



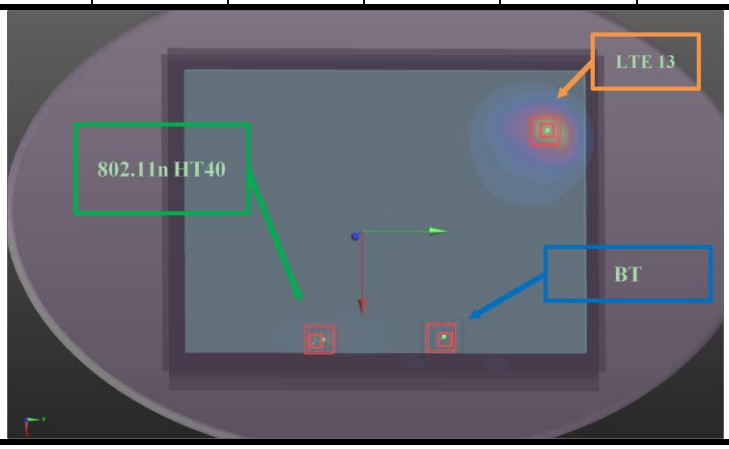
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 13 QPSK10M Ch23230	Body	Bottom	0.92	-66	130	1.29	183.4	0.02	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			1.06	98	48	2.84			



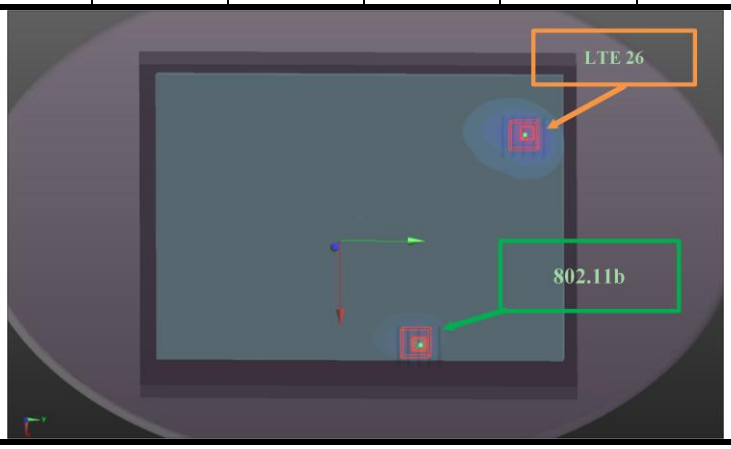
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 13 QPSK10M Ch23230	Body	Bottom	0.92	-66	130	1.29	186.4	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_ Ant0+1			1.01	103.5	52.5	3.06			



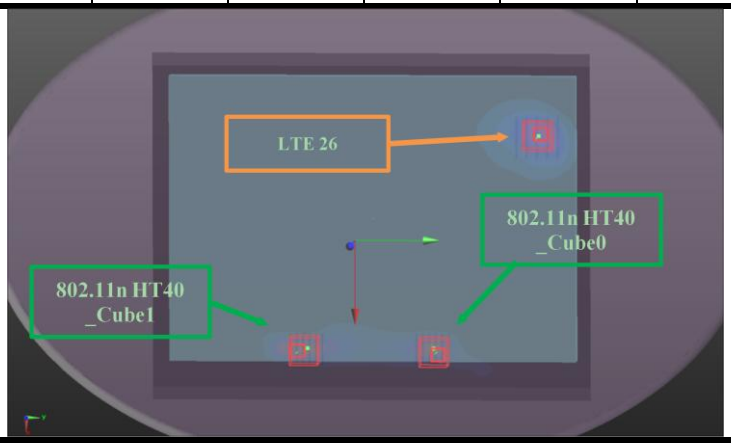
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 13 QPSK10M Ch23230	Body	Bottom	0.92	-66	130	1.29	249.2	0.01	SPLSR ≤ 0.04, Not required
802n HT40_ Ch151_Ant1			0.82	101.5	-54.5	2.98			
LTE 13 QPSK10M Ch23230	Body	Bottom	0.92	-66	130	1.29	183.2	0.01	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			
802n HT40_ Ch151_Ant1	Body	Bottom	0.82	101.5	-54.5	2.98	102.1	0.01	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			



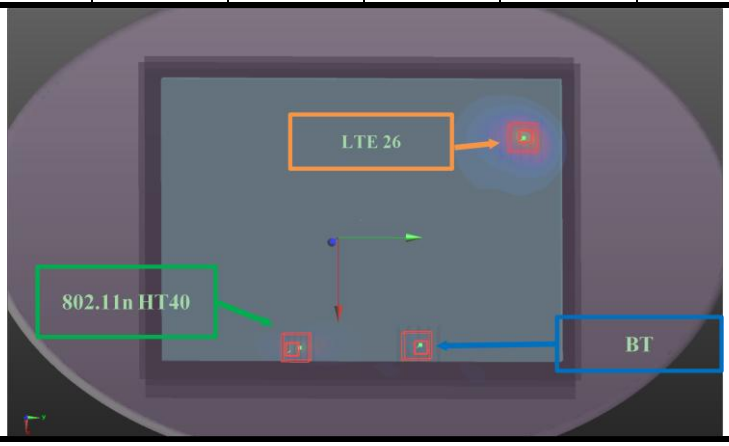
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 26 QPSK15M Ch26965	Body	Bottom	0.82	-67.6	131.6	1.35	185.5	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			1.06	98	48	2.84			



Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 26 QPSK15M Ch26965	Body	Bottom	0.82	-67.6	131.6	1.35	188.5	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159 _Ant0+1			1.01	103.5	52.5	3.06			

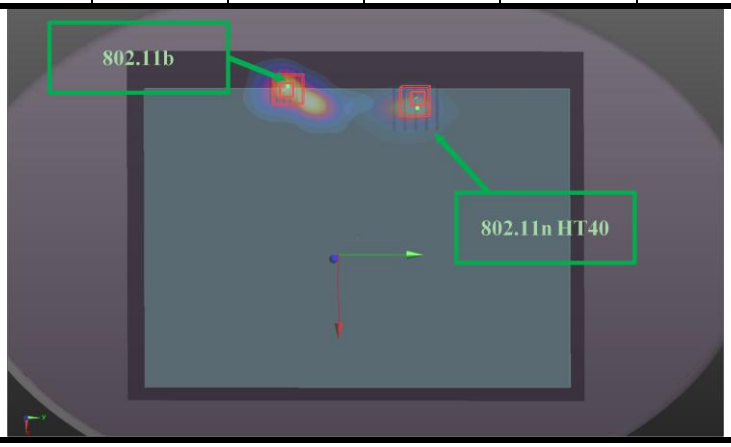


Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 26 QPSK15M Ch26965	Body	Bottom	0.82	-67.6	131.6	1.35	251.5	0.01	SPLSR ≤ 0.04, Not required
802n HT40_Ch151_Ant1			0.82	101.5	-54.5	2.98			
LTE 26 QPSK15M Ch26965	Body	Bottom	0.82	-67.6	131.6	1.35	185.3	0.00	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			
802n HT40_Ch151_Ant1	Body	Bottom	0.82	101.5	-54.5	2.98	102.1	0.01	SPLSR ≤ 0.04, Not required
BT DH1 Ch78			0.11	97.5	47.5	5.18			

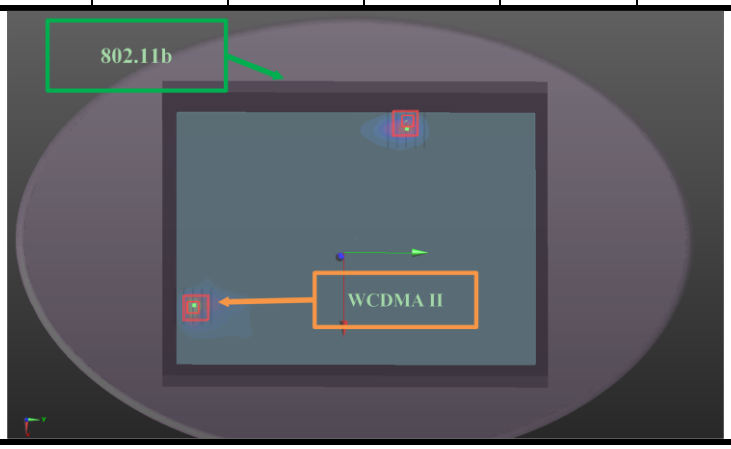


Tablet PC Mode

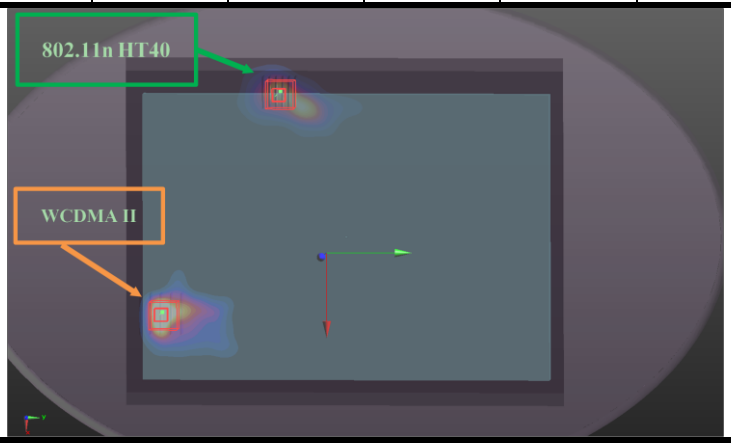
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
802.11b Ch6_Ant0	Body	Rear Face	0.93	-104.4	46	2.59	97.8	0.03	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



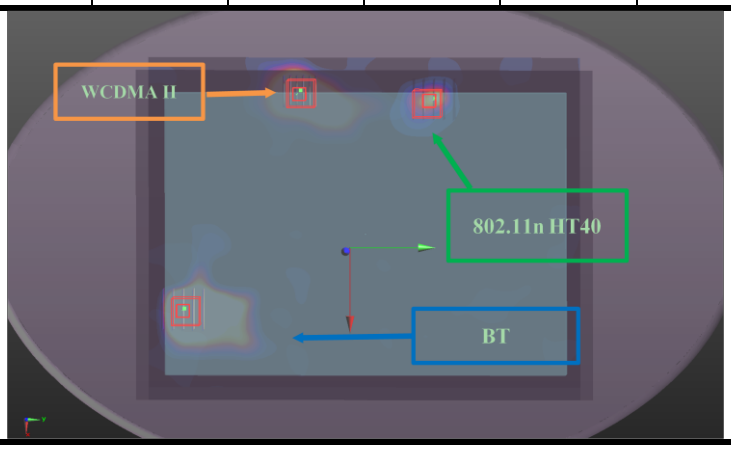
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA II RMC12.2K Ch9538	Body	Rear Face	0.81	59.6	-142	1.49	249.5	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



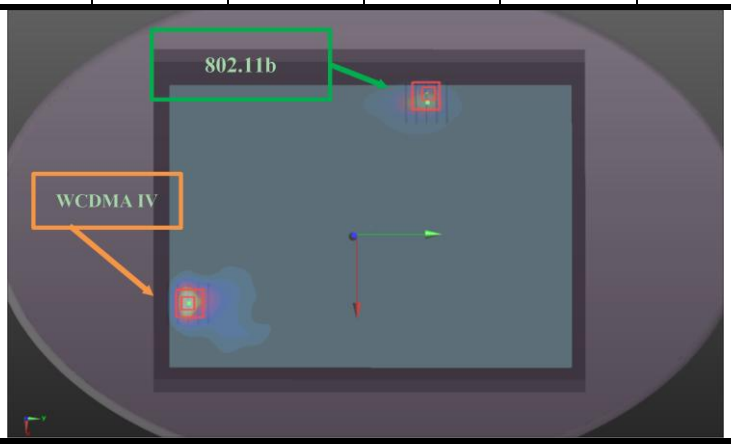
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA II RMC12.2K Ch9538	Body	Rear Face	0.81	59.6	-142	1.49	193.6	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



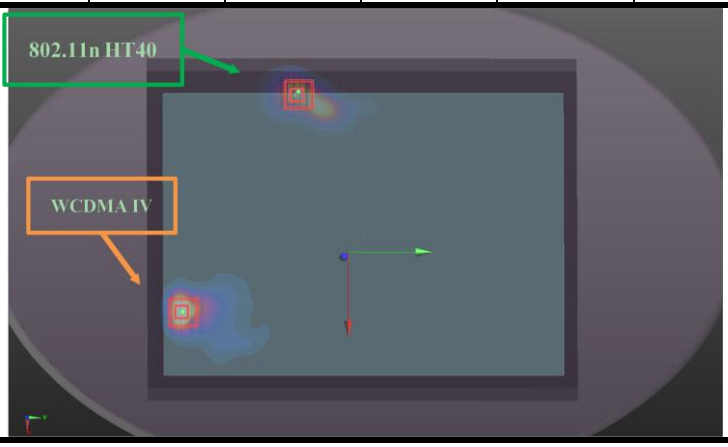
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA II RMC12.2K Ch9538	Body	Rear Face	0.81	59.6	-142	1.49	193.6	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
WCDMA II RMC12.2K Ch9538	Body	Rear Face	0.81	59.6	-142	1.49	255.9	0.00	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



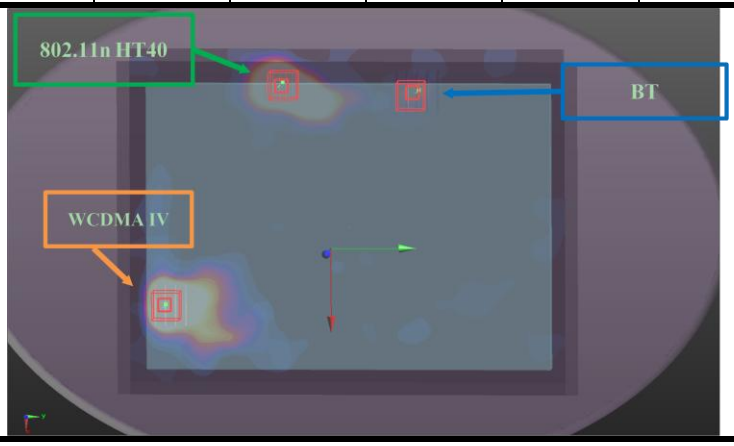
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA IV RMC12.2K Ch1413	Body	Rear Face	0.79	60	-142	1.48	249.7	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



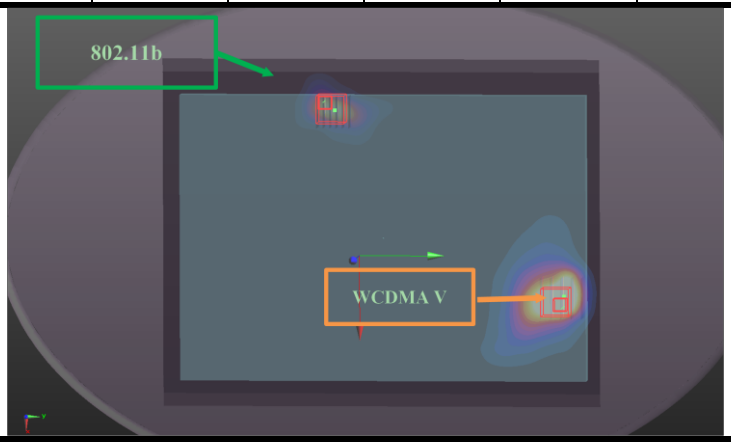
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA IV RMC12.2K Ch1413	Body	Rear Face	0.79	60	-142	1.48	193.9	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



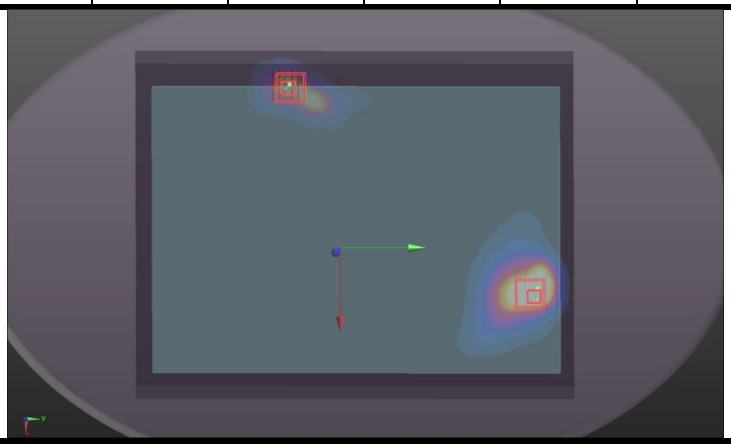
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA IV RMC12.2K Ch1413	Body	Rear Face	0.79	60	-142	1.48	193.9	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
WCDMA IV RMC12.2K Ch1413	Body	Rear Face	0.79	60	-142	1.48	256.2	0.00	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



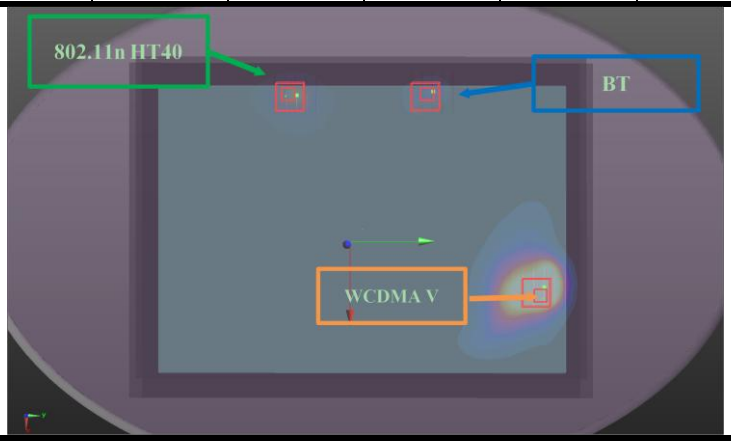
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA V RMC 12.2K Ch4233	Body	Rear Face	1.08	50.4	140.4	1.67	181.3	0.02	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



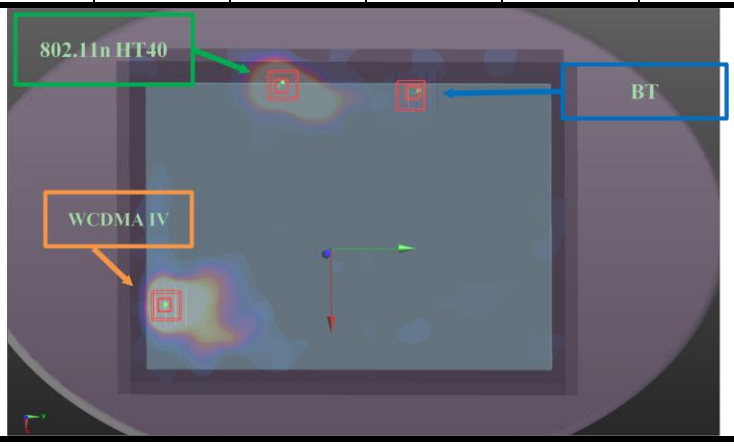
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA V RMC 12.2K Ch4233	Body	Rear Face	1.08	50.4	140.4	1.67	251.1	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



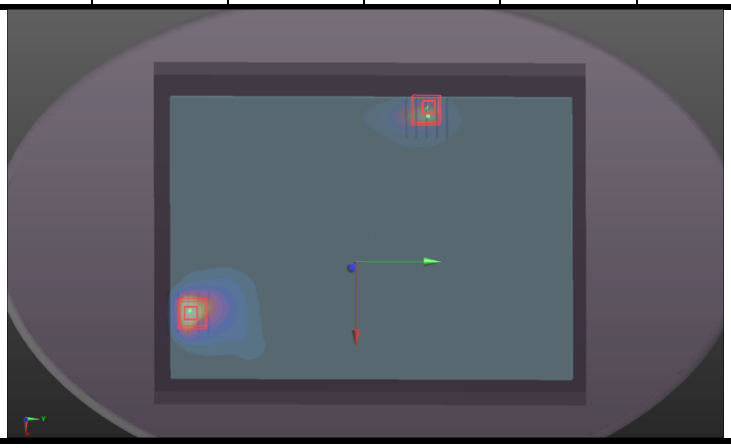
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA V RMC 12.2K Ch4233	Body	Rear Face	1.08	50.4	140.4	1.67	250.8	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
WCDMA V RMC 12.2K Ch4233	Body	Rear Face	1.08	50.4	140.4	1.67	179.6	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



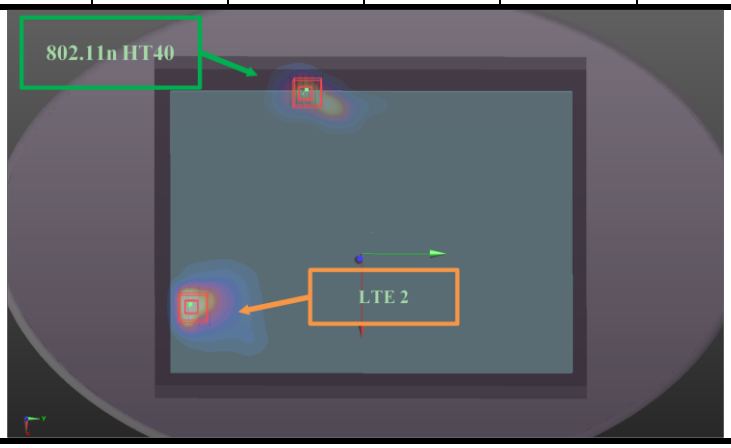
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
WCDMA V RMC 12.2K Ch4233	Body	Rear Face	1.08	50.4	140.4	1.67	251.1	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
WCDMA V RMC 12.2K Ch4233	Body	Rear Face	1.08	50.4	140.4	1.67	179.6	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



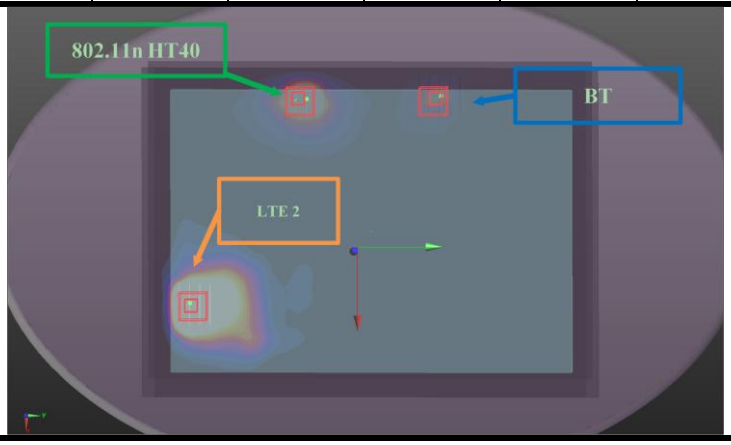
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 2 QPSK20M Ch19100	Body	Rear Face	0.94	57.6	-142	1.46	248.2	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



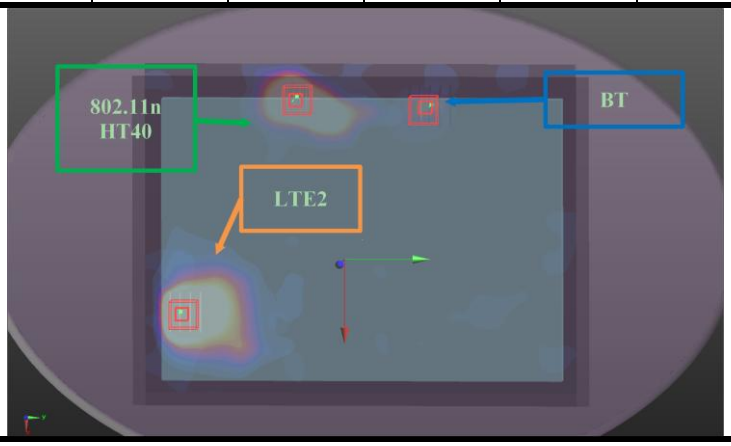
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 2 QPSK20M Ch19100	Body	Rear Face	0.94	57.6	-142	1.46	191.8	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



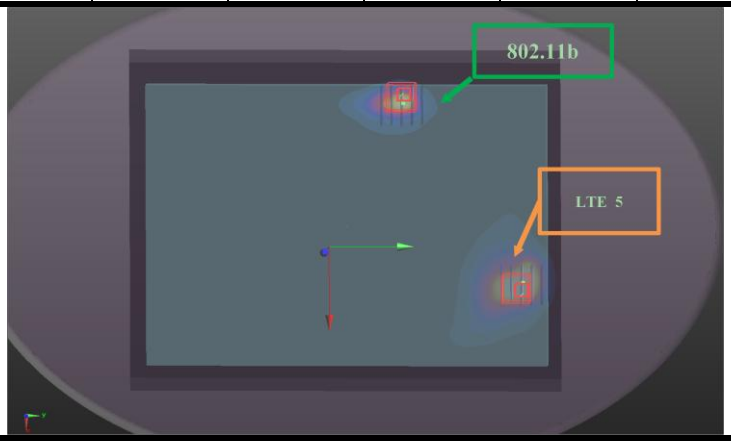
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 2 QPSK20M Ch19100	Body	Rear Face	0.94	57.6	-142	1.46	183.8	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
LTE 2 QPSK20M Ch19100	Body	Rear Face	0.94	57.6	-142	1.46	254.6	0.00	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



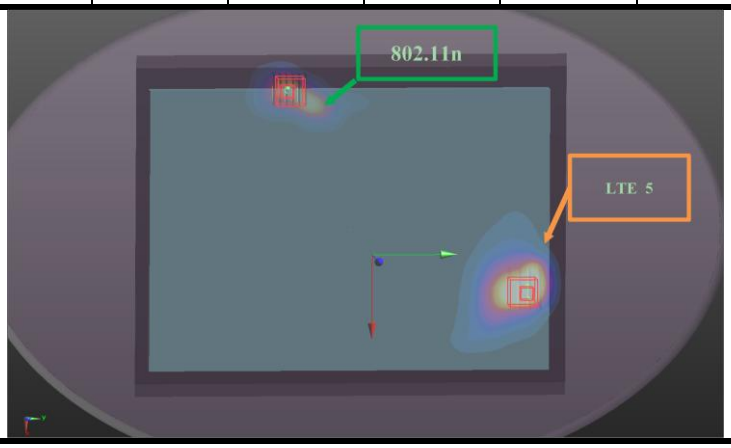
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 2 QPSK20M Ch19100	Body	Rear Face	0.94	57.6	-142	1.46	191.8	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 2 QPSK20M Ch19100	Body	Rear Face	0.94	57.6	-142	1.46	254.6	0.00	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



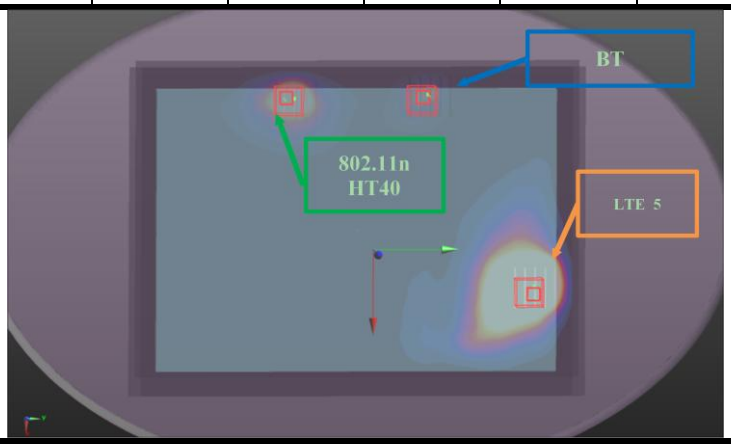
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 5 QPSK10M Ch20600	Body	Rear Face	1.09	48.8	140	1.67	179.7	0.02	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



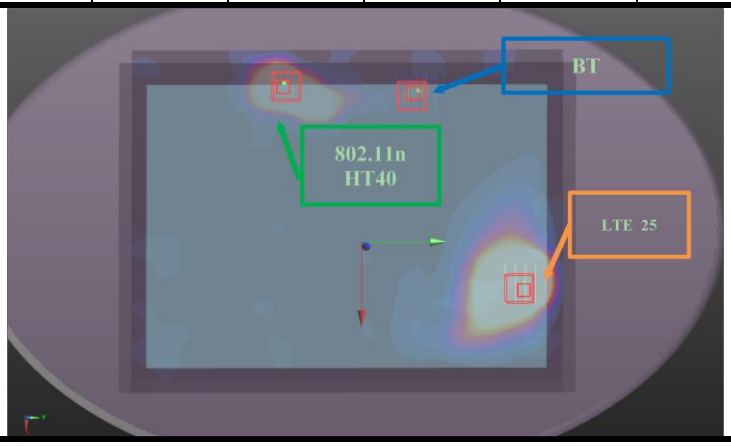
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 5 QPSK10M Ch20600	Body	Rear Face	1.09	48.8	140	1.67	249.7	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



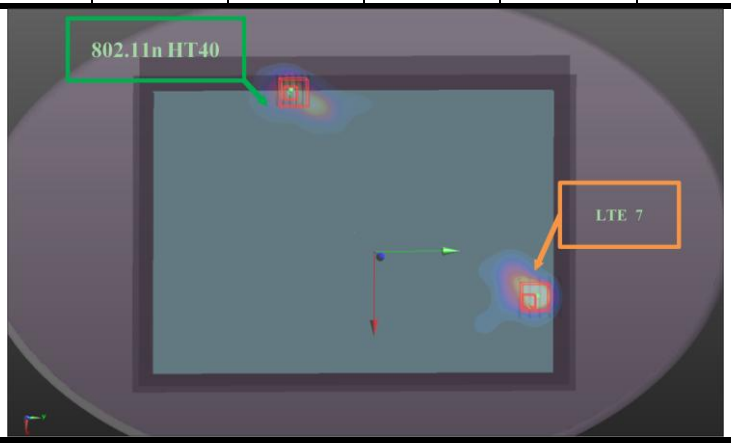
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 5 QPSK10M Ch20600	Body	Rear Face	1.09	48.8	140	1.67	249.5	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
LTE 5 QPSK10M Ch20600	Body	Rear Face	1.09	48.8	140	1.67	178.0	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



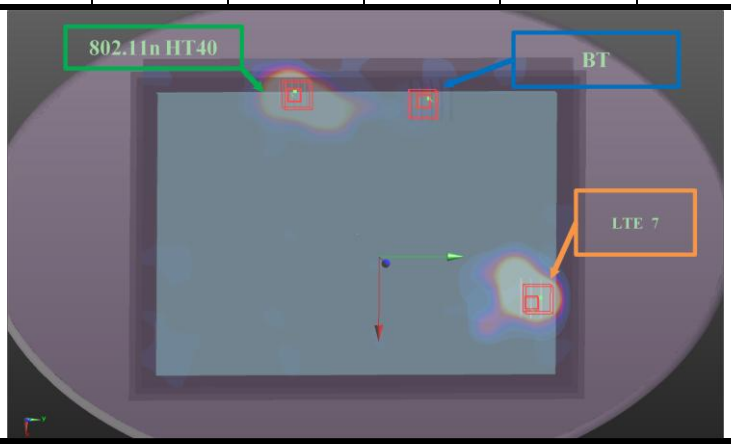
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 5 QPSK10M Ch20600	Body	Rear Face	1.09	48.8	140	1.67	249.7	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 5 QPSK10M Ch20600	Body	Rear Face	1.09	48.8	140	1.67	178.0	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



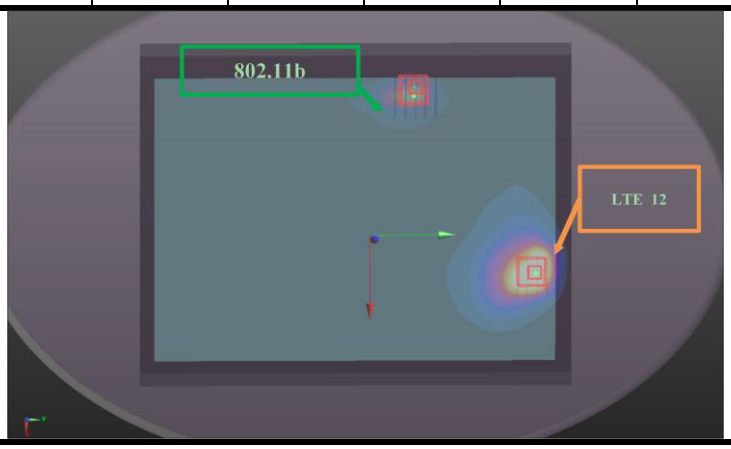
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 7 QPSK20M Ch20050	Body	Rear Face	0.64	56.4	138.6	2.65	253.6	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



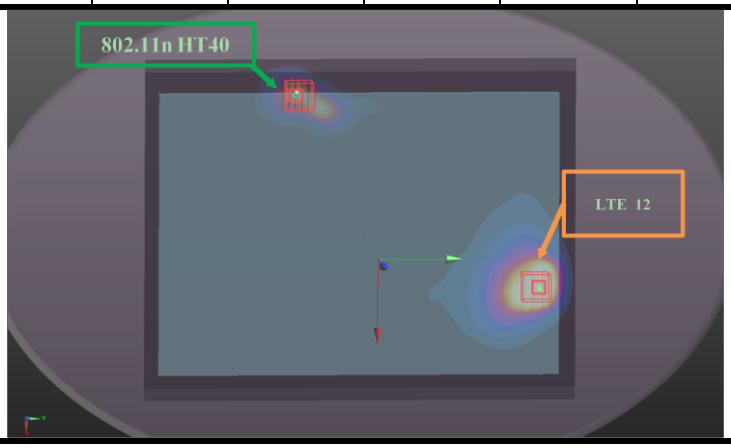
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 7 QPSK20M Ch20050	Body	Rear Face	0.64	56.4	138.6	2.65	253.6	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 7 QPSK20M Ch20050	Body	Rear Face	0.64	56.4	138.6	2.65	184.0	0.00	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



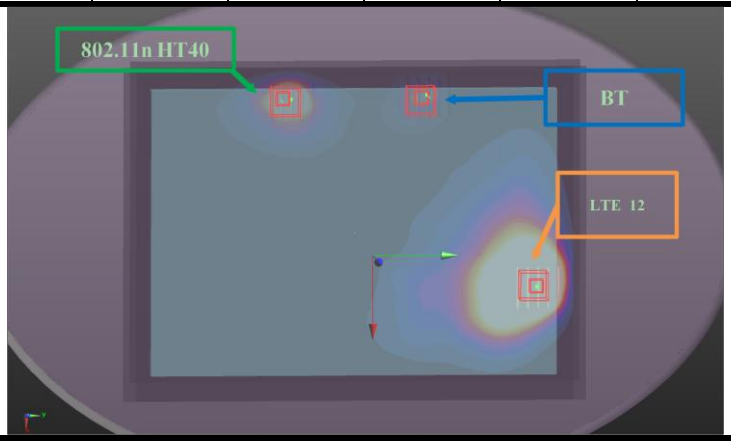
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 12 QPSK10M Ch23060	Body	Rear Face	1.12	40.4	142	1.08	173.7	0.02	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



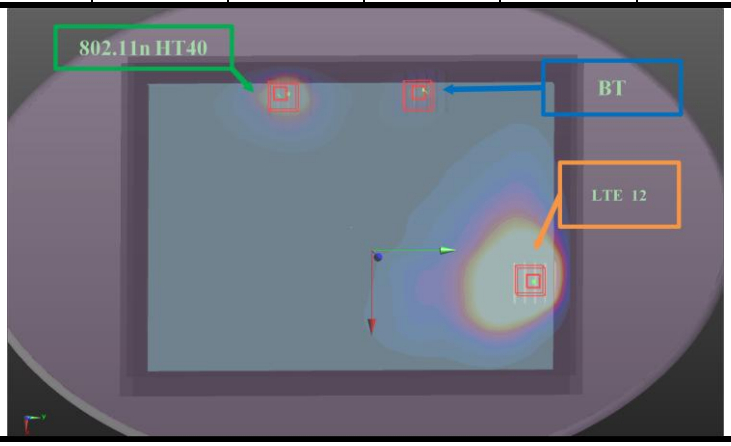
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 12 QPSK10M Ch23060	Body	Rear Face	1.12	40.4	142	1.08	246.0	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



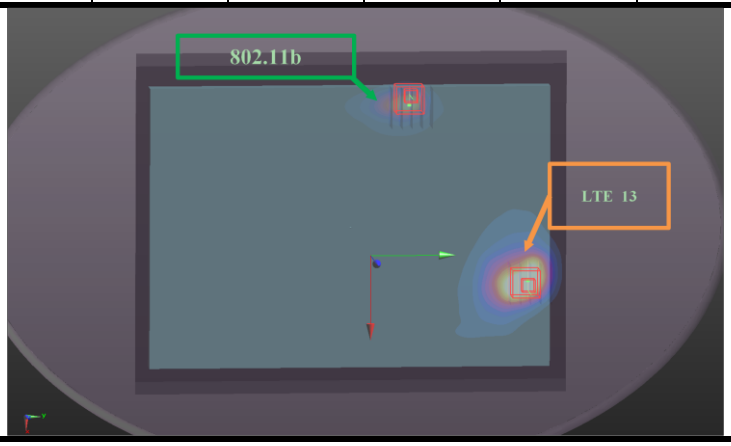
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 12 QPSK10M Ch23060	Body	Rear Face	1.12	40.4	142	1.08	246.0	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
LTE 12 QPSK10M Ch23060	Body	Rear Face	1.12	40.4	142	1.08	171.8	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



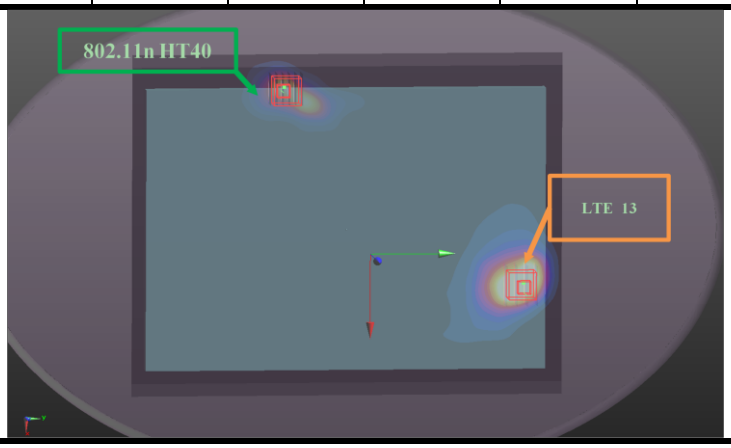
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 12 QPSK10M Ch23060	Body	Rear Face	1.12	40.4	142	1.08	246.0	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 12 QPSK10M Ch23060	Body	Rear Face	1.12	40.4	142	1.08	171.8	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



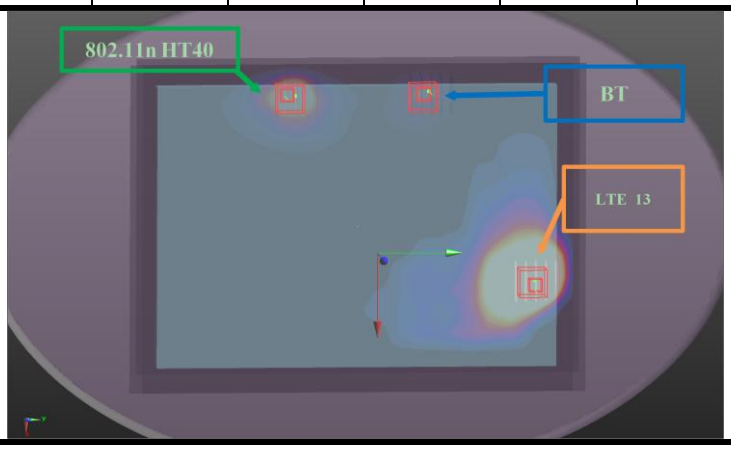
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 13 QPSK10M Ch23230	Body	Rear Face	0.94	46.8	141.6	0.88	178.9	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



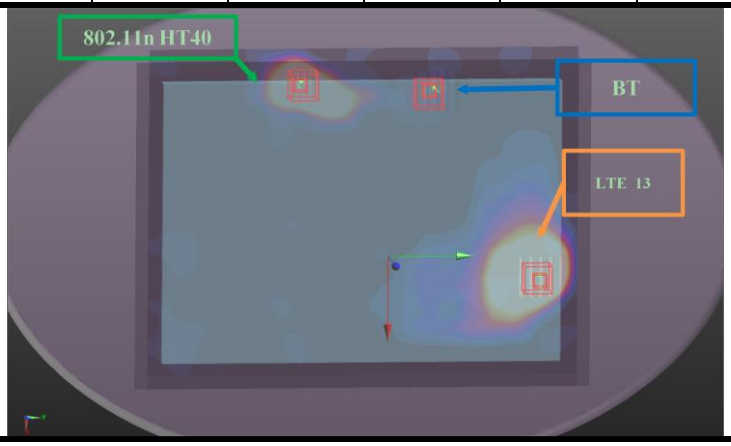
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 13 QPSK10M Ch23230	Body	Rear Face	0.94	46.8	141.6	0.88	249.7	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



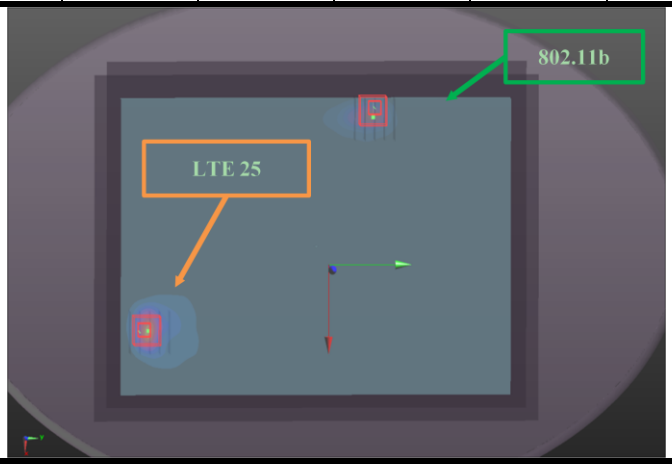
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 13 QPSK10M Ch23230	Body	Rear Face	0.94	46.8	141.6	0.88	249.5	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
LTE 13 QPSK10M Ch23230	Body	Rear Face	0.94	46.8	141.6	0.88	177.1	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



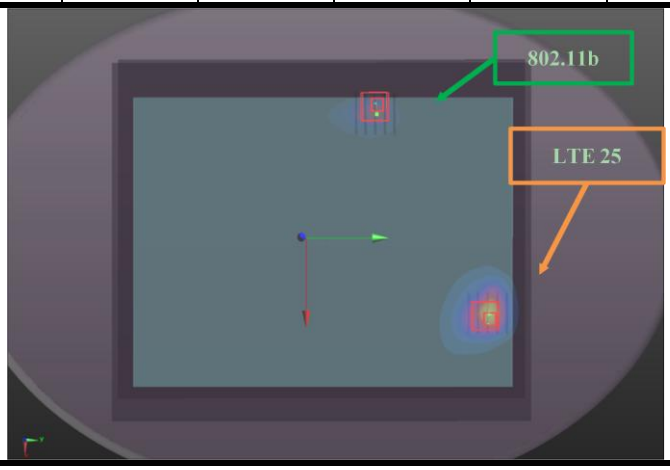
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 13 QPSK10M Ch23230	Body	Rear Face	0.94	46.8	141.6	0.88	249.7	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 13 QPSK10M Ch23230	Body	Rear Face	0.94	46.8	141.6	0.88	177.1	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



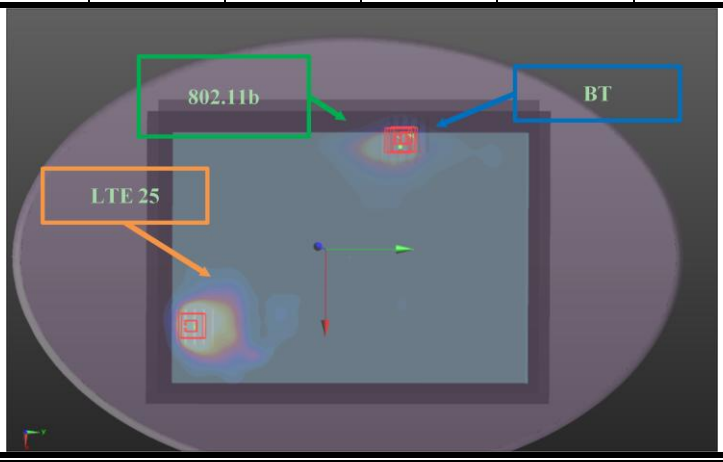
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 25 QPSK20M Ch26590	Body	Rear Face	1.08	60.4	-140.8	1.6	249.1	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



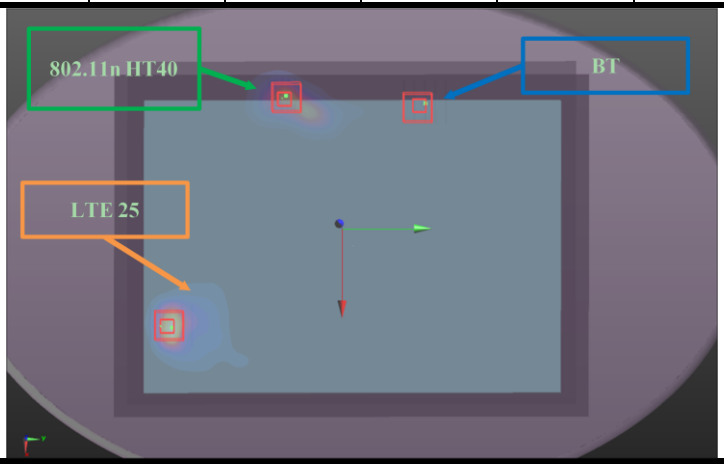
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 25 QPSK20M Ch26965	Body	Rear Face	1.08	60.4	-140.8	1.6	193.7	0.02	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



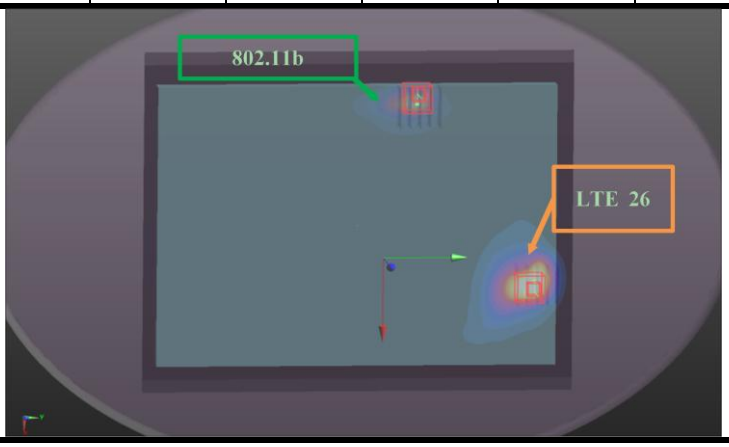
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 25 QPSK20M Ch26965	Body	Rear Face	1.08	60.4	-140.8	1.6	249.1	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
LTE 25 QPSK20M Ch26965	Body	Rear Face	1.08	60.4	-140.8	1.6	193.7	0.02	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



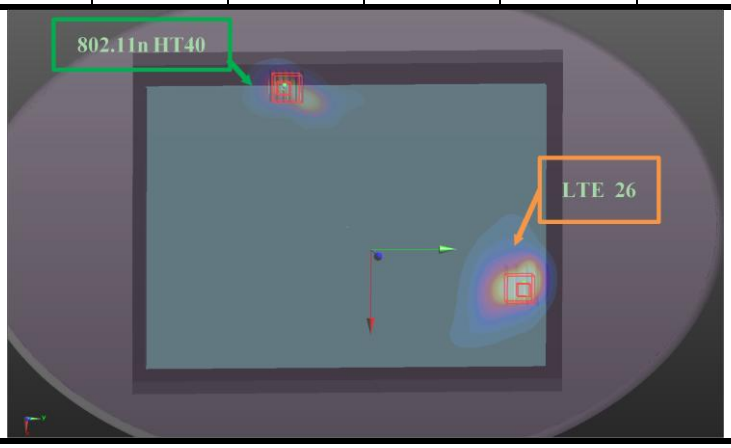
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 25 QPSK20M Ch26965	Body	Rear Face	1.08	60.4	-140.8	1.6	249.1	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 25 QPSK20M Ch26965	Body	Rear Face	1.08	60.4	-140.8	1.6	193.7	0.02	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



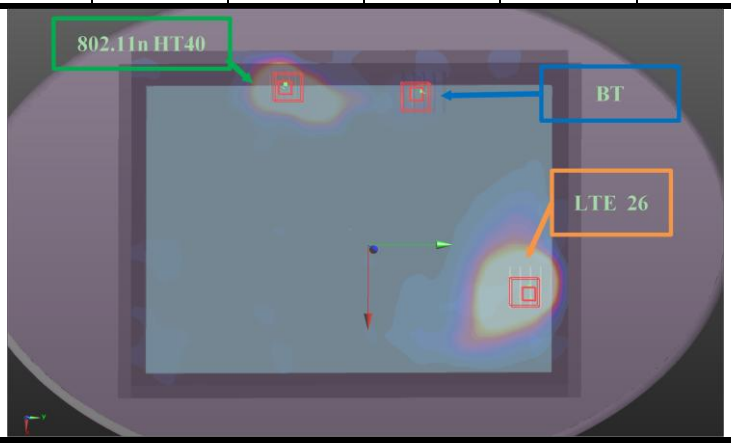
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 26 QPSK15M Ch26965	Body	Rear Face	0.96	50.4	140	1.48	181.1	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



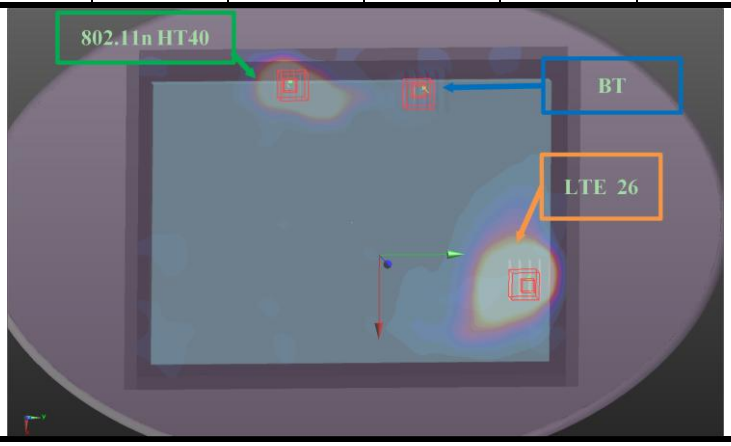
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 26 QPSK15M Ch26965	Body	Rear Face	0.96	50.4	140	1.48	250.8	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



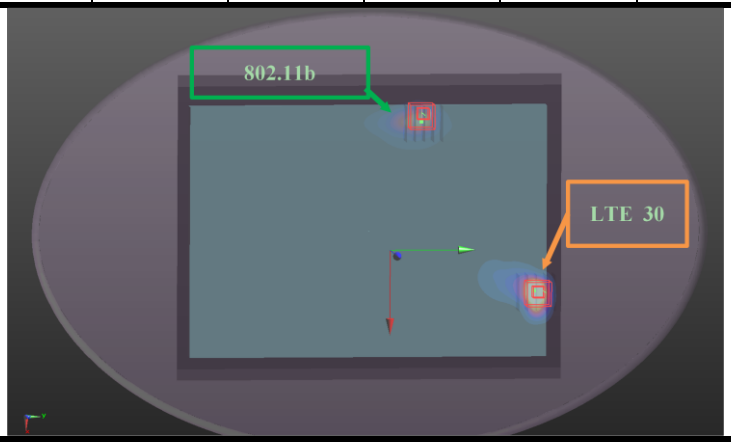
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 26 QPSK15M Ch26965	Body	Rear Face	0.96	50.4	140	1.48	250.4	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
LTE 26 QPSK15M Ch26965	Body	Rear Face	0.96	50.4	140	1.48	179.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



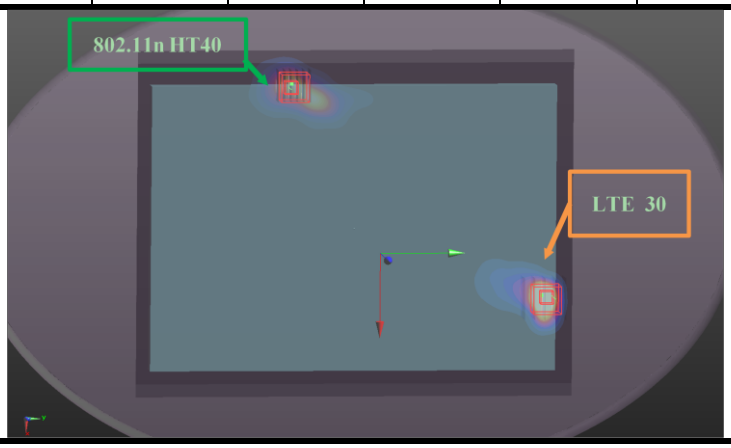
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 26 QPSK15M Ch26965	Body	Rear Face	0.96	50.4	140	1.48	250.8	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 26 QPSK15M Ch26965	Body	Rear Face	0.96	50.4	140	1.48	179.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



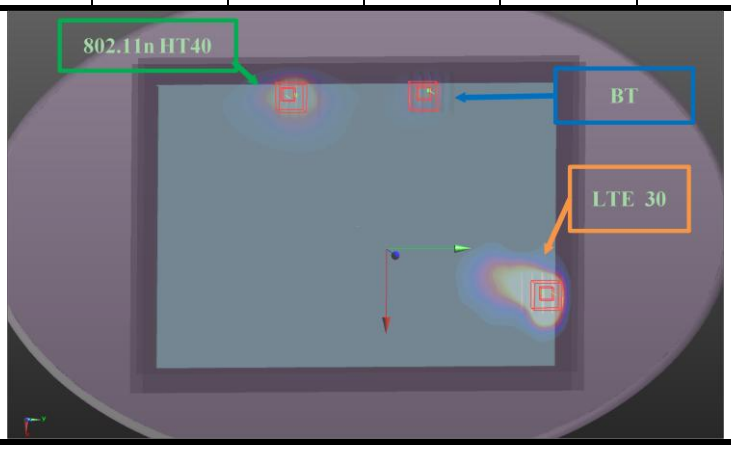
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 30 QPSK10M Ch27710	Body	Rear Face	1.09	53.6	150.8	1.37	189.6	0.02	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



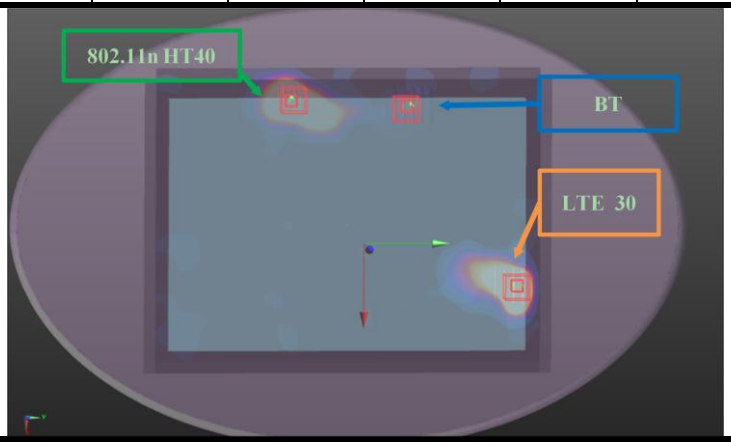
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 30 QPSK10M Ch27710	Body	Rear Face	1.09	53.6	150.8	1.37	261.1	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



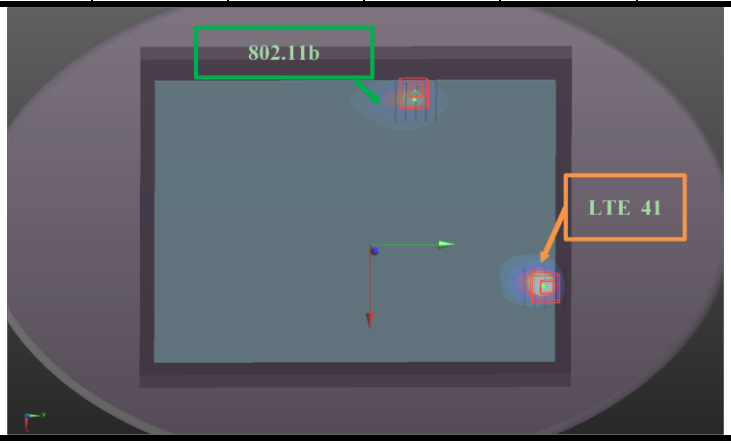
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 30 QPSK10M Ch27710	Body	Rear Face	1.09	53.6	150.8	1.37	260.9	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
LTE 30 QPSK10M Ch27710	Body	Rear Face	1.09	53.6	150.8	1.37	187.6	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



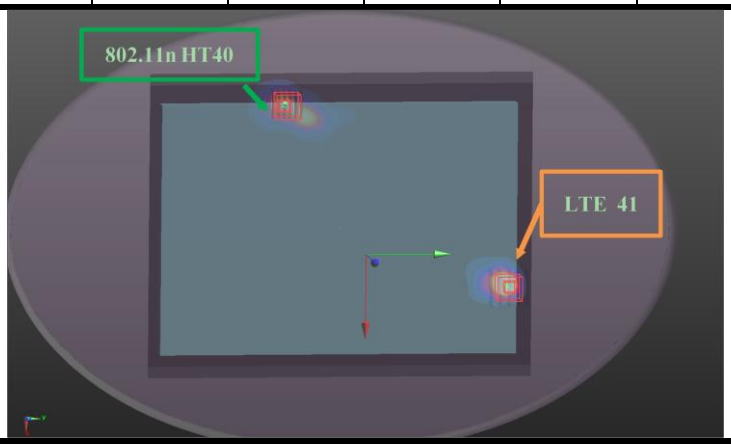
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 30 QPSK10M Ch27710	Body	Rear Face	1.09	53.6	150.8	1.37	261.1	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 30 QPSK10M Ch27710	Body	Rear Face	1.09	53.6	150.8	1.37	187.6	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



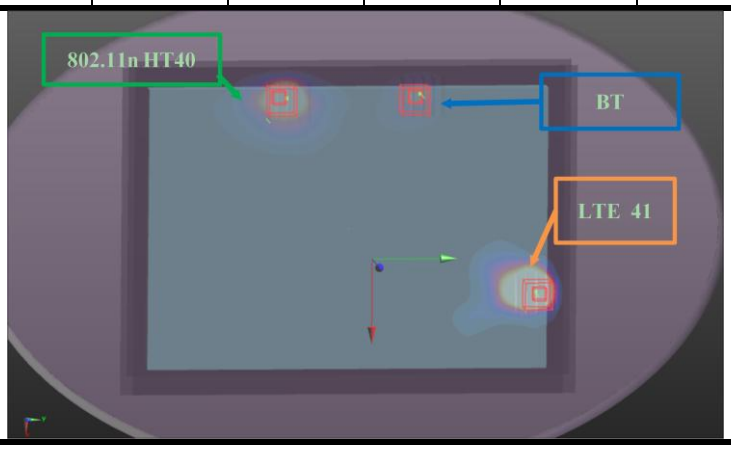
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 41 QPSK20M Ch40620	Body	Rear Face	0.92	51.6	151.2	1.4	188.2	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



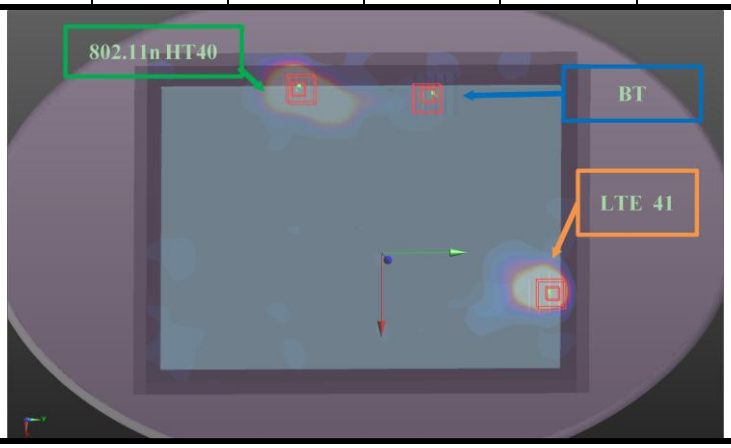
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 41 QPSK20M Ch40620	Body	Rear Face	0.92	51.6	151.2	1.4	260.2	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



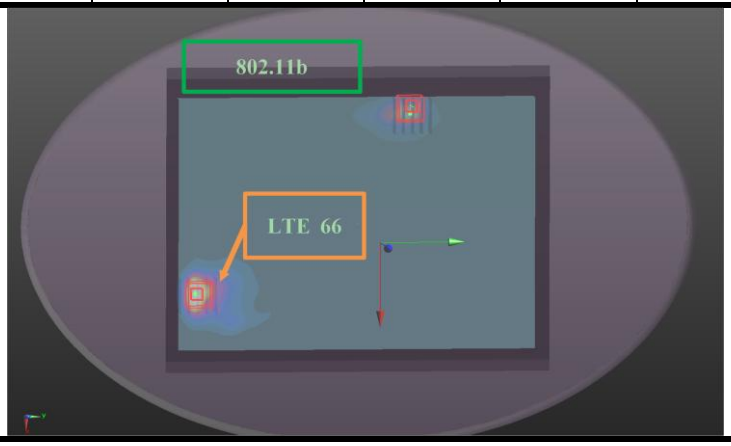
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 41 QPSK20M Ch40620	Body	Rear Face	0.92	51.6	151.2	1.4	260.0	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
LTE 41 QPSK20M Ch40620	Body	Rear Face	0.92	51.6	151.2	1.4	186.1	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



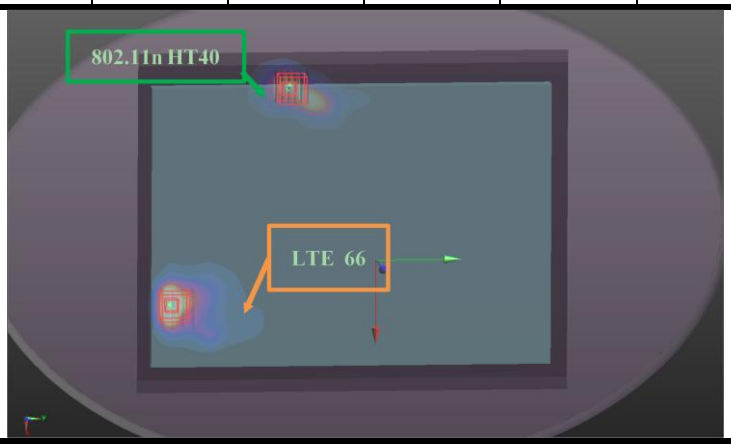
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 41 QPSK20M Ch40620	Body	Rear Face	0.92	51.6	151.2	1.4	260.2	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 41 QPSK20M Ch40620	Body	Rear Face	0.92	51.6	151.2	1.4	186.1	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



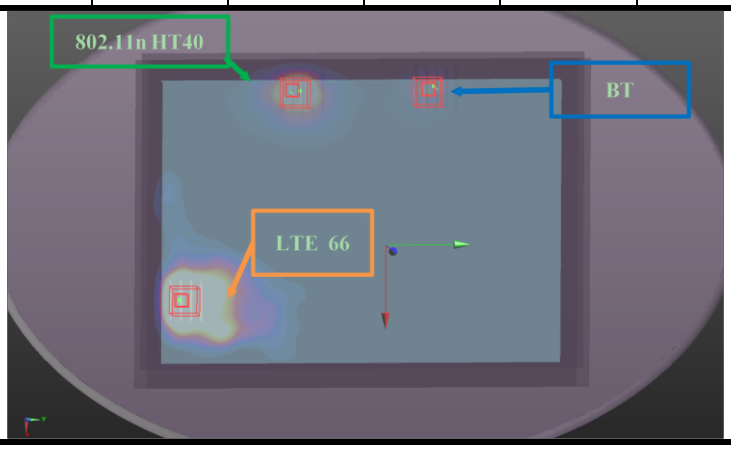
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 66 QPSK20M Ch132572	Body	Rear Face	0.95	60	-144	-1.89	251.3	0.01	SPLSR ≤ 0.04, Not required
802.11b Ch6_Ant0			0.93	-104.4	46	2.59			



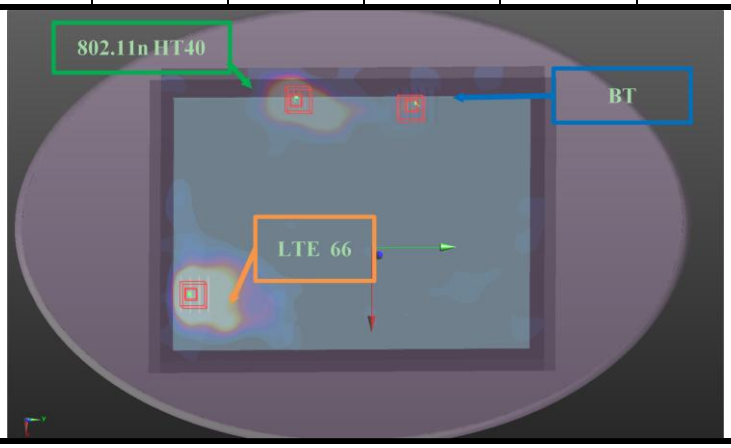
Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 66 QPSK20M Ch132572	Body	Rear Face	0.95	60	-144	-1.89	194.9	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			



Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 66 QPSK20M Ch132572	Body	Rear Face	0.95	60	-144	-1.89	186.9	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40_Ch9_Ant1			0.51	-105	-56.4	2.29			
LTE 66 QPSK20M Ch132572	Body	Rear Face	0.95	60	-144	-1.89	257.8	0.00	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40_Ch9_Ant1	Body	Rear Face	0.51	-105	-56.4	2.29	109.2	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



Conditions	Exposure Condition	Test Position	SAR Value (W/kg)	Coordinates			Peak Location Separation Distance (R_i, mm)	SPLSR	Simultaneous Transmission SAR Test
				x	y	z			
LTE 66 QPSK20M Ch132572	Body	Rear Face	0.95	60	-144	-1.89	194.9	0.01	SPLSR ≤ 0.04, Not required
802.11n HT40 Ch159_Ant1			1.08	-111.5	-51.5	2.16			
LTE 66 QPSK20M Ch132572	Body	Rear Face	0.95	60	-144	-1.89	257.8	0.00	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			
802.11n HT40 Ch159_Ant1	Body	Rear Face	1.08	-111.5	-51.5	2.16	104.4	0.01	SPLSR ≤ 0.04, Not required
BT_Ch78_Ant0			0.17	-106.4	52.8	2.4			



Test Engineer：Chienlun Huang, and Hance Chang

5. Calibration of Test Equipment

Equipment	Manufacturer	Model	SN	Cal. Date	Cal. Interval
System Validation Dipole	SPEAG	D750V3	1013	Aug. 21, 2017	1 Year
System Validation Dipole	SPEAG	D835V2	4d121	Aug. 21, 2017	1 Year
System Validation Dipole	SPEAG	D1750V2	1055	Aug. 21, 2017	1 Year
System Validation Dipole	SPEAG	D1900V2	5d036	Jan. 23, 2017	1 Year
System Validation Dipole	SPEAG	D2300V2	1004	Jan. 25, 2017	1 Year
System Validation Dipole	SPEAG	D2450V2	737	Aug. 17, 2017	1 Year
System Validation Dipole	SPEAG	D2600V2	1020	Aug. 17, 2017	1 Year
System Validation Dipole	SPEAG	D5GHzV2	1019	Aug. 23, 2017	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3650	Jul. 24, 2017	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3971	Mar. 24, 2017	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7346	Oct. 24, 2017	1 Year
Data Acquisition Electronics	SPEAG	DAE4	861	May. 22, 2017	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1431	Mar. 20, 2017	1 Year
Data Acquisition Electronics	SPEAG	DAE4	679	Jul. 31, 2017	1 Year
Wireless Communication Test Set	Agilent	E5515C	MY50266628	Dec. 06, 2017	1 Year
Radio Communication Analyzer	Anritsu	MT8820C	6201300638	Jul. 11, 2017	1 Year
Spectrum Analyzer	R&S	FSL6	102006	Mar. 27, 2017	1 Year
ENA Series Network Analyzer	Agilent	E5071C	MY46214281	Jun. 09, 2017	1 Year
MXG Analong Signal Generator	Agilent	N5181A	MY50143868	Jul. 10, 2017	1 Year
Vector Signal Generator	Anritsu	MG3710A	6201599977	Mar. 27, 2017	1 Year
Power Meter	Anritsu	ML2495A	1218009	Jul. 12, 2017	1 Year
Power Sensor	Anritsu	MA2411B	1207252	Jul. 12, 2017	1 Year
Thermometer	YFE	YF-160A	130504591	Mar. 24, 2017	1 Year
Power Amplifier	AR	5S1G4	0339656	Sep. 20, 2017	1 Year
Power Amplifier	mini-circuits	ZVE-8G	05770420A	Sep. 15, 2017	1 Year
Attenuator	MTJ	MTJ6011-03	N/A	Sep. 15, 2017	1 Year
Directional Coupler	Woken	0110A05602O-10	11122702	Sep. 15, 2017	1 Year
Thermometer	YFE	YF-160A	120702365	Aug. 15, 2017	1 Year
Dielectric Assessment Kit	SPEAG	DAK-3.5	1047	Aug. 15, 2017	1 Year

6. Measurement Uncertainty

Source of Uncertainty	Uncertainty (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	Vi
Measurement System								
Probe Calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Axial Isotropy	4.7	Rectangular	√3	√0.5	√0.5	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	√3	√0.5	√0.5	3.9	3.9	∞
Boundary Effect	1.0	Rectangular	√3	1	1	0.6	0.6	∞
Linearity	4.7	Rectangular	√3	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Probe Modulation Response	3.5	Rectangular	√3	1	1	2.0	2.0	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.4	Rectangular	√3	1	1	0.2	0.2	∞
Probe Positioning with Respect to Phantom	2.9	Rectangular	√3	1	1	1.7	1.7	∞
Post-processing	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Test Sample Related								
Test Sample Positioning	4.38 / 1.35	Normal	1	1	1	4.4	1.4	29
Device Holder Uncertainty	2.9 / 4.1	Normal	1	1	1	2.9	4.1	11
Power Drift of Measurement	5.0	Rectangular	√3	1	1	2.9	2.9	∞
Power Scaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	7.2	Rectangular	√3	1	1	4.2	4.2	∞
Liquid Conductivity (Temperature Uncertainty)	3.24	Rectangular	√3	0.78	0.71	1.5	1.3	∞
Liquid Conductivity (Measured)	2.88	Normal	1	0.78	0.71	2.2	2.0	43
Liquid Permittivity (Temperature Uncertainty)	1.13	Rectangular	√3	0.23	0.26	0.2	0.2	∞
Liquid Permittivity (Measured)	2.50	Normal	1	0.23	0.26	0.6	0.7	54
Combined Standard Uncertainty						± 11.8 %	± 11.3 %	
Expanded Uncertainty (K=2)						**± 23.6 %**	**± 22.6 %**	

Body SAR Uncertainty Budget for Frequency Range of 300 MHz to 3 GHz

Source of Uncertainty	Uncertainty (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	Vi
Measurement System								
Probe Calibration	6.55	Normal	1	1	1	6.55	6.55	∞
Axial Isotropy	4.7	Rectangular	√3	0.7	0.7	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	√3	0.7	0.7	3.9	3.9	∞
Boundary Effect	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Linearity	4.7	Rectangular	√3	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Probe Modulation Response	3.5	Rectangular	√3	1	1	2.0	2.0	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.4	Rectangular	√3	1	1	0.2	0.2	∞
Probe Positioning with Respect to Phantom	6.7	Rectangular	√3	1	1	3.9	3.9	∞
Post-processing	4.0	Rectangular	√3	1	1	2.3	2.3	∞
Test Sample Related								
Test Sample Positioning	4.38 / 1.35	Normal	1	1	1	4.4	1.4	29
Device Holder Uncertainty	2.9 / 4.1	Normal	1	1	1	2.9	4.1	11
Power Drift of Measurement	5.0	Rectangular	√3	1	1	2.9	2.9	∞
Power Scaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	7.6	Rectangular	√3	1	1	4.4	4.4	∞
Liquid Conductivity (Temperature Uncertainty)	3.24	Rectangular	√3	0.78	0.71	1.5	1.3	∞
Liquid Conductivity (Measured)	2.88	Normal	1	0.78	0.71	2.2	2.0	43
Liquid Permittivity (Temperature Uncertainty)	1.13	Rectangular	√3	0.23	0.26	0.2	0.2	∞
Liquid Permittivity (Measured)	2.50	Normal	1	0.23	0.26	0.6	0.7	54
Combined Standard Uncertainty						± 12.8 %	± 12.4 %	
Expanded Uncertainty (K=2)						**± 25.6 %**	**± 24.8 %**	

Body SAR Uncertainty Budget for Frequency Range of 3 GHz to 6 GHz

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

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