Test report No.: 2460573R-SAUSV01S-A

SAR Test Report

Product Name	Handheld Tablet
Trademark	Toast Inc.
Model and /or type reference	TG310
Applicant´s name / address	Toast, Incorporated 333 Summer St, Boston, Massachusetts, United States 02210
Manufacturer´s name	Toast, Incorporated
FCC ID	2AMNG-TG310
Applicable Standard	IEEE 1528-2013 KDB 447498 D01 v06 KDB 865664 D01 v01r04
Test Result	Refer to Section 1.1
Verdict Summary	IN COMPLIANCE
Documented By (Supervisor / Jinn Chen)	Jinn Chen
Tested By (Senior Engineer / Luke Cheng)	Luke cheng
Approved By (Assistant Manager / San Lin)	San Lin
Date of Receipt	2024/06/19
Date of Issue	2025/04/08
Report Version	V1.0

INDEX

Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

General conditions

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

Report No.	Version	Description	Issued Date
2460573R-SAUSV01S-A	V1.0	Initial issue of report.	2025/04/08

1. General Information

1.1 EUT Description

Product Name	Handheld Tablet				
Trademark	Toast Inc.				
Model and /or type reference	TG310				
FCC ID	2AMNG-TG310				
Frequency Range(Licensed)	WCDMA Band 2: 1850 MHz-1910 MHz WCDMA Band 4: 1710 MHz-1755 MHz WCDMA Band 5: 824 MHz-849 MHz LTE Band 2: 1850 MHz-1910 MHz LTE Band 4: 1710 MHz-1755 MHz LTE Band 5: 824 MHz-849 MHz LTE Band 7: 2500 MHz-2570 MHz LTE Band 12: 699 MHz-716 MHz LTE Band 13: 777 MHz-787 MHz LTE Band 25: 1850 MHz-1915 MHz LTE Band 26: 814 MHz-849 MHz LTE Band 38: 2570 MHz-2620 MHz LTE Band 41: 2496 MHz-2690 MHz LTE Band 66: 1710 MHz-1780MHz				
Frequency Range	WLAN 2.4GHz: 2412-2472 MHz WLAN 5GHz: 5180-5240 MHz, 5260-5320 MHz, 5500-5720MHz, 5745-5825 MHz, 5845-5885MHz WLAN 6GHz: 5955-7115 MHz BT: 2402-2480 MHz				
Type of Modulation	802.11b: DSSS 802.11a/g/n/ac/ax: OFDM, OFDMA GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps) WCDMA: RMC 12.2Kbps, HSDPA, HSUPA LTE: QPSK, 16QAM				
Device Category	Portable				
RF Exposure Environment	Uncontrolled				
Summary of test result – Reported 1g SAR (W/kg)					
Test configuration	Licensed	DTS	NII	6XD	DSS(BT)
Standalone	1.170	1.149	1.159	0.701	0.300
Simultaneous	N/A	1.149	1.417	0.854	1.417
Summary of test result – Power Density					
Test configuration	6XD				
APD (W/m^2)	5.470				
Reported PD (W/m^2)	7.774				

1.2 Antenna List

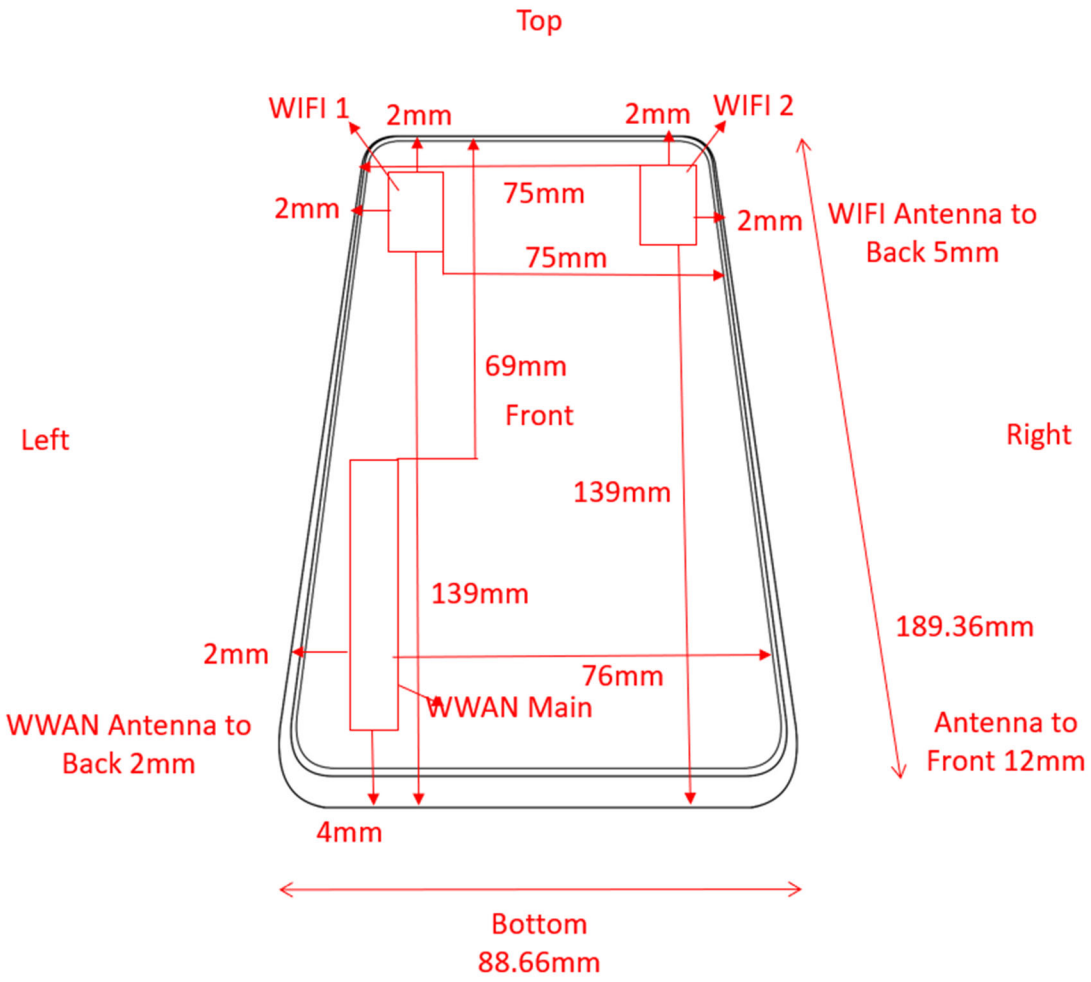
No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Advanced Wireless & Antenna INC.	ALF00-000026B (WWAN)(Main)	Monopole	-3.29 dBi for 698~716 MHz -3.83 dBi for 777~787 MHz -5.09 dBi for 814~849 MHz -5.37 dBi for 824~849 MHz -6.41 dBi for 880~915 MHz 0.19 dBi for 1710~1755 MHz 0.19 dBi for 1710~1780 MHz 0.35 dBi for 1850~1910 MHz 0.35 dBi for 1850~1915 MHz 0.42 dBi for 1920~1980 MHz 0.97 dBi for 2496~2690 MHz 0.97 dBi for 2500~2570 MHz
2	Advanced Wireless & Antenna INC.	ALL6Y-100008B(WIFI 1)	PIFA	3.06 dBi for 2400MHz 2.57 dBi for 5150~5250MHz 2.99 dBi for 5250~5350MHz 2.69 dBi for 5470~5725MHz 3.26 dBi for 5725~5850MHz 3.38 dBi for 5850~5895MHz 3.43 dBi for 5925~6425MHz 3.32 dBi for 6425~6525MHz 2.43 dBi for 6525~6875MHz 2.77 dBi for 6875~7125MHz
3	Advanced Wireless & Antenna INC.	ALL6Y-100007B(WIFI 2)	PIFA	2.33 dBi for 2400MHz 3.42 dBi for 5150~5250MHz 2.45 dBi for 5250~5350MHz 1.19 dBi for 5470~5725MHz 2.69 dBi for 5725~5850MHz 3.09 dBi for 5850~5895MHz 3.92 dBi for 5925~6425MHz 2.90 dBi for 6425~6525MHz 2.51 dBi for 6525~6875MHz 3.82 dBi for 6875~7125MHz

Note: The above EUT information is provided by the manufacturer.

1.3 SAR Test Exclusion Calculation

According to KDB 941225 D07, when the distance from the antenna to the edge is > 25 mm, SAR testing is not required.

Antenna	Distance from the antenna to the edge					
	Front	Back	Left-side	Right-side	Top	Bottom
WWAN	< 25mm	< 25mm	< 25mm	> 25mm	> 25mm	< 25mm
	Yes	Yes	Yes	No	No	Yes
WIFI 1	< 25mm	< 25mm	< 25mm	> 25mm	< 25mm	> 25mm
	Yes	Yes	Yes	No	Yes	No
WIFI 2	< 25mm	< 25mm	> 25mm	< 25mm	< 25mm	> 25mm
	Yes	Yes	No	Yes	Yes	No



1.4 Test Environment

Ambient conditions in the laboratory:

Test Date: 2025/01/08 - 2025/02/18

Items	Required	Actual
Temperature (°C)	18-25	23 ± 2
Humidity (%RH)	30-70	50 ± 20

USA	FCC Designation Number: TW0033
Canada	CAB Identifier Number: TW3023 / Company Number: 26930

Site Description	Accredited by TAF
	Accredited Number: 3023

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
	Linkou Laboratory
Address	No. 85, Wenlin St., Linkou Dist., New Taipei City 244017, Taiwan, R.O.C.
Performed Location	No. 26, Huaya 1st Rd., Guishan Dist.,Taoyuan City 333411, Taiwan, R.O.C.
Phone Number	+886-3-275-7255
Fax Number	+886-3-327-8031

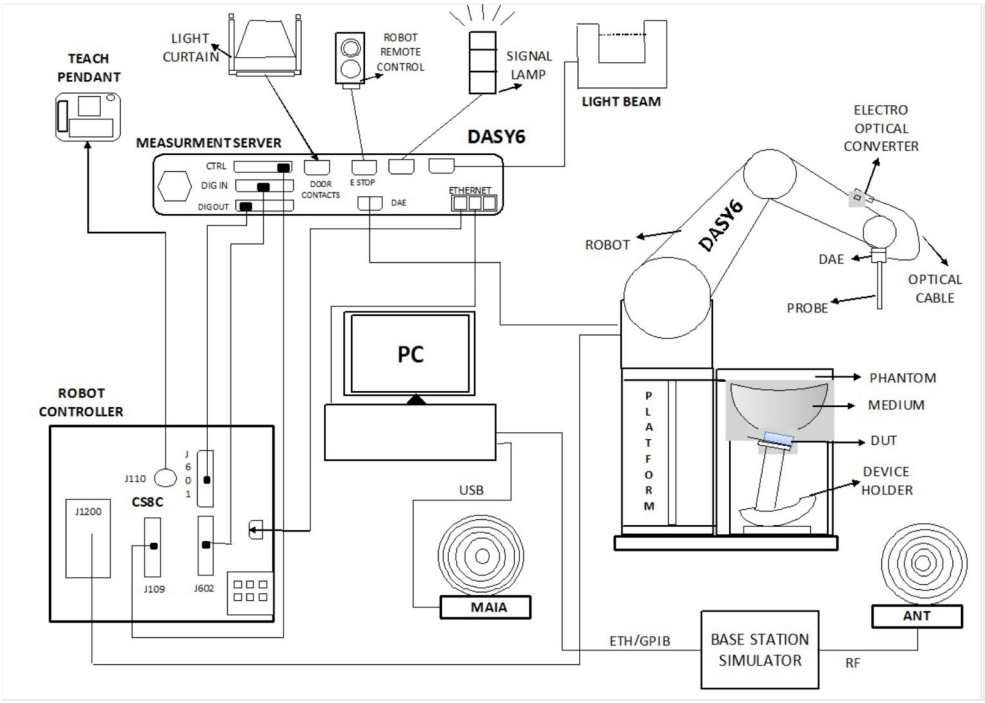
1.5 Measurement procedures

IEEE 1528-2013
47CFR § 2.1093
KDB 248227 D01 v02r02
KDB 447498 D01 v06
KDB 616217 D04 v01r02
KDB 865664 D01 v01r04
KDB 941225 D01 v03r01
KDB 941225 D05 v02r05
KDB 941225 D07 v01r02
IEC TR 63170:2018
IEC/IEEE 62209-1528:2020

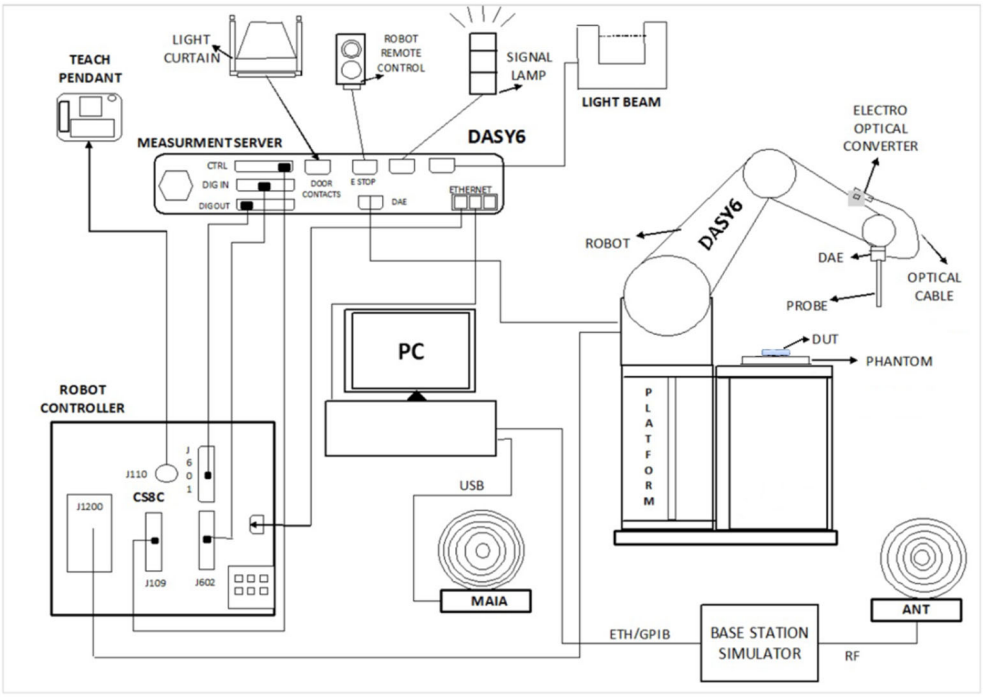
2. SAR Measurement System

2.1 DASY System Description

SAR Configurations is shown below:



Power Density Configurations is shown below:



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

- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win7/8/10 and the DASY software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

2.2 Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for utilize a 10mm² step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments.

When an Area Scan has measured all reachable points, it computes the field maxima found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing.

2.2.1 Zoom Scan (Cube Scan Averaging)

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. A density of 1000 kg/m³ is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm, with the side length of the 10 g cube 21,5mm.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications utilize a physical step of 5x5x7 (8mmx8mmx5mm) providing a volume of 32mm in the X & Y axis, and 30mm in the Z axis.

2.2.2 SAR measurement drifts

Before an area scan and after the zoom scan, single point SAR measurements are performed at defined locations to estimate the SAR measurement drift due to device output power variations. If a device is known to drift randomly, additional single point drift reference measurements should be performed at regular intervals throughout the area and zoom scan test durations. The SAR drift shall be kept within ± 5%, whether there are substantial drifts or not. The field difference will be calculated in dB units in the DASY software.

2.2.3 Uncertainty of Inter-/Extrapolation and Averaging

In order to evaluate the uncertainty of the interpolation, extrapolation and averaged SAR calculation algorithms of the Postprocessor, DASY allows the generation of measurement grids which are artificially predefined by analytically based test functions. Therefore, the grids of area scans and zoom scans can be filled with uncertainty test data, according to the SAR benchmark functions.

2.3 DASY E-Field Probe

The SAR measurement is conducted with the dosimetric probe manufactured by SPEAG. 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.

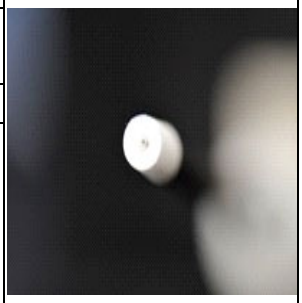
SPEAG conducts the probe calibration in compliance with international and national standards under ISO 17025. The calibration data are in Appendix D**.**

Isotropic E-Field Probe Specification

Model	Ex3DV4	
Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 MHz – 10 GHz Linearity: ± 0.2 dB (30 MHz to 10 GHz)	
Directivity	± 0.1 dB in TSL (rotation around probe axis) ± 0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 µW/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.	

E-Field mm-Wave Probe Specification

Model	EUmmWVx
Construction	Two dipoles optimally arranged to obtain pseudo-vector information Minimum three measurements/point, 120º rotated around probe axis Sensors (0.8 mm length) printed on glass substrate protected by high density foam
Frequency	750 MHz to 110 GHz
Dynamic Range	< 20 V/m to 10000 V/m with PRE-10 (min < 20 V/m to 2000 V/m)
Position Precision	< 0.2 mm
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: encapsulation 8 mm (internal sensor < 1mm) Distance from probe tip to dipole centers: < 2 mm Sensor displacement to probe's calibration point: < 0.3 mm
Application	E-field measurements of 5G devices and other mm-wave transmitters operating above 10GHz in < 2 mm distance from device (free-space) Power density, H-field, and far-field analysis using total field reconstruction

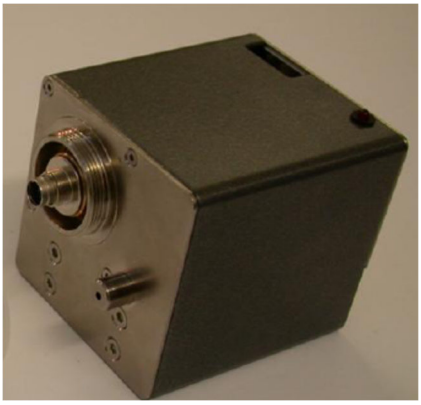


2.4 DATA Acquisition Electronics (DAE) and Measurement Server

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16-bit AD-converter and a command decoder and control logic unit.

Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

The input impedance of the DAE4 is 200M Ohm; the inputs are symmetrical and floating. Common mode rejection is above 80dB.



2.5 Robot

The DASY system uses the high precision robots TX90 XL type out of the newer series from Stäubli SA (France). For the 6-axis controller DASY system, the CS8C robot controller version from Stäubli is used.

The XL robot series have many features that are important for our application:

- High precision (repeatability 0.02 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)
- 6-axis controller

2.6 Device Holder

The DASY device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles.

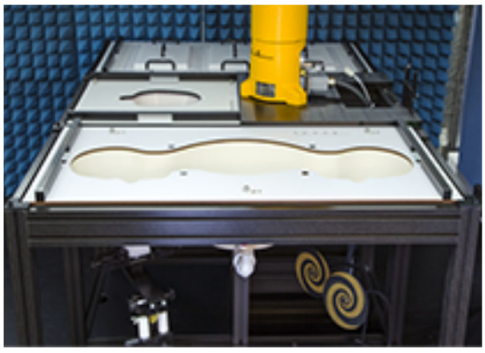
The DASY device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity εr = 3 and loss tangent δ = 0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence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

2.7 Phantom

2.7.1 SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region where shell thickness increases to 6mm). It has three measurement areas:

- Left head
- Right head
- Flat phantom



The device holder positions are adjusted to the standard measurement positions in the three sections. A cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

2.7.2 mmWave Phantom

The mmWave Phantom approximates free-space conditions, allowing to evaluate not only the antenna side of the device but also the front (screen) side or any opposite-radiating side of wireless devices operating above 10 GHz without distorting the RF field. It consists of a 40 mm thick Rohacell plate used as a test bed, which has a loss tangent ($\tan \delta$) ≤ 0.05 and a relative permittivity (ε_r) ≤ 1.2. High-performance RF absorbers are placed below the foam.

3. Tissue Simulating Liquid

3.1 The composition of the tissue simulating liquid

Description: Aqueous solution with surfactants and inhibitors
Declarable, or hazardous components:

CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28-0000	**Ethanediol** STOT RE 2, H373; Acute Tox. 4, H302	< 5.2%
CAS: 68608-26-4 EINECS: 271-781-5 Reg.nr.: 01-2119527859-22-0000	**Sodium petroleum sulfonate** Eye Irrit. 2, H319	< 2.9%
CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35-0000	**Hexylene Glycol / 2-Methyl-pentane-2,4-diol** Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.9%
CAS: 68920-66-1 NLP: 500-236-9 Reg.nr.: 01-2119489407-26-0000	**Alkoxylated alcohol, > C_{16}** Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.0%

3.2 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using Dielectric Probe Kit and Vector Network Analyzer.

Date	Tissue Type	Frequency (MHz)	Relative Permittivity (εr)			Conductivity (σ)			Tissue Temp. (°C)
			Measured	Target	Delta (%)	Measured	Target	Delta (%)	
2025/1/8	Head	750	41.92	41.90	0.05	0.90	0.89	1.12	21.8
	Head	704	42.13	42.15	-0.05	0.88	0.89	-1.12	
	Head	707.5	42.12	42.13	-0.02	0.88	0.89	-1.12	
	Head	711	42.10	42.11	-0.02	0.88	0.89	-1.12	
	Head	782	41.77	41.75	0.05	0.91	0.89	2.25	
2025/1/11	Head	900	42.05	41.50	1.33	0.97	0.97	0.00	21.8
	Head	821.5	42.14	41.57	1.37	0.93	0.90	3.33	
	Head	826.4	42.14	41.54	1.44	0.93	0.90	3.33	
	Head	831.5	42.13	41.52	1.47	0.94	0.90	4.44	
	Head	836.6	42.12	41.50	1.49	0.94	0.90	4.44	
	Head	841.5	42.12	41.50	1.49	0.94	0.91	3.30	
	Head	846.6	42.11	41.50	1.47	0.95	0.91	4.40	

Date	Tissue Type	Frequency (MHz)	Relative Permittivity (εr)			Conductivity (σ)			Tissue Temp. (°C)
			Measured	Target	Delta (%)	Measured	Target	Delta (%)	
2025/1/17	Head	1750	40.22	40.10	0.30	1.37	1.37	0.00	22.2
	Head	1712.4	40.25	40.13	0.30	1.35	1.35	0.00	
	Head	1720	40.24	40.13	0.27	1.35	1.35	0.00	
	Head	1732.6	40.23	40.12	0.27	1.36	1.36	0.00	
	Head	1745	40.23	40.10	0.32	1.37	1.37	0.00	
	Head	1752.6	40.22	40.10	0.30	1.37	1.37	0.00	
	Head	1770	40.21	40.06	0.37	1.38	1.38	0.00	
2025/1/19	Head	1950	39.45	40.00	-1.37	1.44	1.40	2.86	21.9
	Head	1852.4	39.52	40.00	-1.20	1.40	1.40	0.00	
	Head	1860	39.52	40.00	-1.20	1.40	1.40	0.00	
	Head	1880	39.50	40.00	-1.25	1.40	1.40	0.00	
	Head	1882.5	39.50	40.00	-1.25	1.41	1.40	0.71	
	Head	1905	39.48	40.00	-1.30	1.42	1.40	1.43	
	Head	1907.6	39.48	40.00	-1.30	1.42	1.40	1.43	
2025/1/24	Head	2450	40.27	39.20	2.73	1.83	1.80	1.67	22.1
	Head	2412	40.41	39.28	2.88	1.78	1.77	0.56	
	Head	2437	40.32	39.23	2.78	1.81	1.79	1.12	
	Head	2440	40.31	39.22	2.78	1.82	1.79	1.68	
	Head	2462	40.22	39.18	2.65	1.84	1.81	1.66	
2025/1/16	Head	2600	39.32	39.00	0.82	1.98	1.96	1.02	22.1
	Head	2506	39.58	39.13	1.15	1.88	1.86	1.08	
	Head	2593	39.34	39.01	0.85	1.97	1.95	1.03	
	Head	2680	39.09	38.90	0.49	2.07	2.05	0.98	
	Head	2549.5	39.46	39.01	0.85	1.92	1.95	-1.54	
	Head	2636.5	39.21	38.90	0.49	2.02	2.05	-1.46	
2025/1/16	Head	2600	39.23	39.00	0.59	1.97	1.96	0.51	22.1
	Head	2510	39.31	39.12	0.49	1.90	1.86	2.15	
	Head	2535	39.28	39.09	0.49	1.92	1.89	1.59	
	Head	2560	39.26	39.05	0.54	1.94	1.92	1.04	

Date	Tissue Type	Frequency (MHz)	Relative Permittivity (εr)			Conductivity (σ)			Tissue Temp. (°C)
			Measured	Target	Delta (%)	Measured	Target	Delta (%)	
2025/1/25	Head	5250	36.19	35.95	0.67	4.74	4.71	0.64	21.8
	Head	5290	36.08	35.91	0.47	4.80	4.75	1.05	
	Head	5600	35.22	35.50	-0.79	5.22	5.07	2.96	
	Head	5530	35.41	35.61	-0.56	5.12	5.00	2.40	
	Head	5610	35.19	35.49	-0.85	5.23	5.08	2.95	
	Head	5690	34.98	35.41	-1.21	5.33	5.16	3.29	
	Head	5800	34.67	35.30	-1.78	5.48	5.27	3.98	
	Head	5775	34.74	35.33	-1.67	5.44	5.25	3.62	
	Head	5855	34.52	35.25	-2.07	5.55	5.33	4.13	
2025/1/26	Head	6500	34.50	34.50	0.00	6.02	6.07	-0.82	22.1
	Head	6025	36.00	35.07	2.65	5.37	5.51	-2.54	
	Head	6185	35.50	34.88	1.78	5.59	5.70	-1.93	
	Head	6505	34.50	34.49	0.02	6.03	6.08	-0.82	
	Head	6985	33.00	33.92	-2.71	6.67	6.63	0.60	
2025/2/18	Head	6500	34.60	34.50	0.29	6.08	6.07	0.16	21.8
	Head	6665	34.10	34.30	-0.59	6.23	6.26	-0.48	

3.3 Tissue Dielectric Parameters for Phantoms

The head tissue dielectric parameters recommended by the IEC/IEEE 62209-1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head tissue parameters that have not been specified are interpolated according to the head parameters specified in IEC/IEEE 62209-1528.

Target Frequency	Head	
(MHz)	ε_r	σ (S/m)
450	43.5	0.87
750	41.9	0.89
835	41.5	0.90
900	41.5	0.97
1450	40.5	1.20
1640	40.2	1.31
1750	40.1	1.37
1800 – 2000	40.0	1.40
2450	39.2	1.80
3000	38.5	2.40
5000	36.2	4.45
5200	36.0	4.66
5400	35.8	4.86
5600	35.5	5.07
5800	35.3	5.27
6000	35.1	5.48
6500	34.5	6.07
7000	33.9	6.65
7500	33.3	7.24

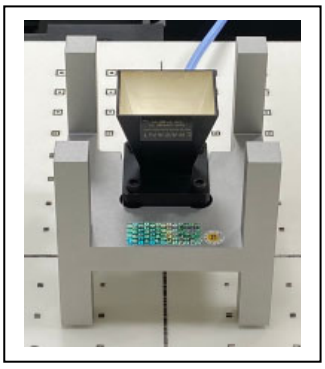
4. Measurement Procedure

4.1 SAR System Check

4.1.1 Dipoles

The SAR dipoles are optimized symmetrical dipole with $\lambda/4$ balun matched to a Flat phantom section filled with tissue simulating liquids. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC signals. They are available for the variety of frequencies between 300MHz and 10 GHz. The provided tripod is used to hold the dipole below the phantom. As the distance between the dipole center and the TSL is critical, a spacer is placed between the dipole and the phantom. The spacing distance is frequency dependent.

4.1.2 Verification Source



The verification sources apply to system check or verification at specific mmWave frequencies. The sources comprisehorn-antennas and very stable signal generators.

4.1.3 SAR System Check Result

1. Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %.
2. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix A of this report.

Date	Frequency (MHz)	Input Power (mW)	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Delta 1g ±10 (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Delta 10g ±10 (%)	Tissue Temp. (°C)
2025/1/8	750	250	2.25	8.52	9	5.63	1.48	5.56	5.92	6.47	21.8
2025/1/11	900	250	2.66	10.90	10.64	-2.39	1.71	7.00	6.84	-2.29	21.8
2025/1/17	1750	250	9.12	36.70	36.48	-0.60	4.88	19.30	19.52	1.14	22.2
2025/1/17	1750	250	8.98	36.70	35.92	-2.13	4.70	19.30	18.8	-2.59	22.2
2025/1/19	1950	250	9.72	40.10	38.88	-3.04	4.97	20.80	19.88	-4.42	21.9
2025/1/24	2450	250	13.10	51.80	52.4	1.16	6.16	24.20	24.64	1.82	22.1
2025/1/16	2600	250	13.50	56.10	54	-3.74	6.02	25.00	24.08	-3.68	22.1
2025/1/16	2600	250	13.10	56.10	52.4	-6.60	5.99	25.00	23.96	-4.16	22.1
2025/1/25	5250	100	8.03	78.10	80.3	2.82	2.29	22.40	22.9	2.23	21.8
2025/1/25	5600	100	8.55	82.30	85.5	3.89	2.44	23.50	24.4	3.83	21.8
2025/1/25	5800	100	7.65	80.20	76.5	-4.61	2.19	22.80	21.9	-3.95	21.8
2025/1/26	6500	100	29.70	294.00	297	1.02	5.44	53.90	54.4	0.93	22.1
2025/2/18	6500	100	28.80	294.00	288	-2.04	5.32	53.90	53.2	-1.30	21.8

4.1.4 Power Density System Check Result

The system performance check verifies that the system operates within its specifications.

The system check is successful if the difference between the normalized measured local power density and the numerically validated target value is within the reported expanded uncertainty of the measurement system.

The recommended settings for measurement of verification sources are listed in the following:

Frequency (GHz)	Grid step	Grid extent X/Y (mm)	Measurement points
10	0.125 (λ/8)	60 / 60	18 x 18

According to the DASY specification in the user's manual and SPEAG's recommendation, the deviation threshold of ±0.66 dB represents the expanded standard uncertainty for system performance check. The system check is successful if the measured results are within ±0.66 dB tolerances to the target value shown in the calibration certificate of the verification source.

Date	Frequency (GHz)	Distance (mm)	Input Power (mW)	Measured Avg PD 4 cm^2 (W/m^2)	Targeted Avg PD 4 cm^2 (W/m^2)	Deviation (dB)
2025/1/27	10	10	138	181.0	187.00	-0.14
2025/2/18	10	10	138	181.0	187.00	-0.14

Note: The Measured Avg PD was the average of psPDn+, psPDtot+ and psPDmod+, which refers to the demonstration from calibration certificate.

4.2 SAR Measurement Procedure

The Dasy calculates SAR using the following equation,

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

Where：

σ: represents the simulated tissue conductivity

ρ: represents the tissue density

E :RMS electric field strength (V/m)

The SAR / APD measurements for the EUT should be performed on the channel that produces the highest rated output power of each transmitting antenna.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the Universal Phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR / APD distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR / APD location (interpolated resolution set at $1mm^2$)which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at $1mm^3$).

4.3 Absorbed Power Density (APD)

Absorbed Power Density (APD) is defined as the energy flow per unit area directly under the body surface that based on Poynting vector. The equation description is as below:

$$S_{ab} = \iint_A \mathrm{Re}[\mathrm{S}] \cdot \frac{ds}{A} = \iint_A \mathrm{Re}[\mathrm{E} \times \mathrm{H}^*] \cdot \frac{ds}{A}$$

Where:

E = electric field strength (V/m)

H = magnetic field strength (A/m)

S = power density (W/m2 or mW/cm2)

APD is expressed in units of Watts per square meter or units of milliwatt per square centimeter.

4.4 Power Density Measurement Procedure

The power density for an electromagnetic field represents the rate of energy transfer per unit area. The local power density (i.e. Poynting vector) at a given spatial point is deduced from electromagnetic fields by the following formula:

$$\mathrm{S} = \frac{1}{2}\mathrm{Re}[E \times \mathrm{H}^*] \cdot \vec{n}$$

Where: E is the complex electric field peak phasor and H is the complex conjugate magnetic field peak phasor.

The spatial-average power density distribution on the evaluation surface is determined per the IEC TR 63170. The spatial area, A is specified by the applicable exposure limit or regulatory requirements. The circular shape was used.

$$\mathrm{S_{av}} = \frac{1}{2A}\Re(\int \mathrm{E} \times \mathrm{H} \cdot \hat{\mathrm{n}}\, \mathrm{dA})$$

5. RF Exposure Limits

SAR assessments have been made in line with the requirements of IEEE-1528, RSS-102 Issue 6, and comply with ANSI/IEEE C95.1-1992 “Uncontrolled Environments” limits. These limits apply to a location which is deemed as “Uncontrolled Environment” which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

Limits for General Population/Uncontrolled Exposure (W/kg)

Type Exposure	Uncontrolled Environment Limit
Spatial Peak SAR (1g cube tissue for brain or body)	**1.60 W/kg**
Spatial Average SAR (whole body)	**0.08 W/kg**
Spatial Peak SAR (10g for hands, feet, ankles and wrist)	**4.00 W/kg**
Power density[1]	**1 mW/cm^2**

Note: 1 mW/cm^2 = 10 W/m^2

6. Test Equipment List

Instrument	Manufacturer	Model No.	Serial No.	Last Calibration	Next Calibration
Reference Dipole 750MHz	Speag	D750V3	1031	2023/05/16	2026/05/15
Reference Dipole 900MHz	Speag	D900V2	1d176	2022/11/24	2025/11/23
Reference Dipole 1750MHz	Speag	D1750V2	1113	2022/11/21	2025/11/20
Reference Dipole 1950MHz	Speag	D1950V3	1213	2022/11/18	2025/11/17
Reference Dipole 2450MHz	Speag	D2450V2	1054	2024/11/18	2027/11/17
Reference Dipole 2600MHz	Speag	D2600V2	1202	2023/02/01	2026/01/31
Reference Dipole 5GHz	Speag	D5GHzV2	1321	2024/03/12	2027/03/11
Reference Dipole 6.5GHz	Speag	D6.5GHzV2	1021	2024/02/12	2027/02/11
Verification Source Antenna 10GHz	Speag	5G Verification Source 10GHz	2006	2024/04/18	2025/04/17
Device Holder	Speag	N/A	N/A	N/A	N/A
Data Acquisition Electronic	Speag	DAE4	1651	2024/02/15	2025/02/14
Data Acquisition Electronic	Speag	DAE4	916	2024/12/04	2025/12/03
Data Acquisition Electronic	Speag	DAE4	1425	2024/11/18	2025/11/17
E-Field Probe	Speag	EX3DV4	7631	2024/02/21	2025/02/20
E-Field Probe	Speag	EX3DV4	7350	2024/12/19	2025/12/18
E-Field Probe	Speag	EX3DV4	3979	2024/11/20	2025/11/19
mmWave E-field Probe	Speag	EUmmWV4	9546	2024/04/18	2025/04/17
Power Amplifier	Mini-Circuit	ZHL-42	D051404-20	N/A	N/A
Power Amplifier	Mini-Circuit	ZVE-8G+	447202211	N/A	N/A
Directional Coupler	Agilent	87300C	MY44300353	N/A	N/A[1]
Attenuator	Woken	WATT-218FS-10	N/A	N/A	N/A[1]
Attenuator	Mini-Circuit	BW-S20W2+	N/A	N/A	N/A[1]
Universal Radio Communication	Anritsu	MT8820C	6201465467	2024/09/13	2025/09/12
Universal Radio Communication	R&S	CMW500	157304	2024/03/20	2025/03/19
Vector Network Analyzer	Agilent	E5071C	MY46108013	2024/03/19	2025/03/18
Signal Generator	Anritsu	MG3694A	041902	2024/08/20	2025/08/19
Power Meter	Anritsu	ML2487A	6K00001447	2024/10/19	2025/10/18
Power Sensor	Anritsu	MA2411B	1339194	2024/10/19	2025/10/18

Note: 1. System Check, the path loss measured by the network analyzer, includes the signal generator, amplifier, cable, attenuator and directional coupler.

Note:

Per KDB 865664 D01 requirements for dipole calibration, the following are recommended FCC procedures for SAR dipole calibration.

1. After a dipole is damaged and properly repaired to meet required specifications.

2. When the measured SAR deviates from the calibrated SAR value by more than 10% due to changes in physical, mechanical, electrical or other relevant dipole conditions.

3. When the most recent return-loss, measured at least annually, deviates by more than 20% from the previous measurement (i.e. 0.2 of the dB value) or not meeting the required -20 dB return-loss specification.

D750V3-1031

	Frequency	Tissue	Return loss	Limit	Date
Calibration	750 MHz	Head	-27.0	Within 20%	2023/5/16
Measurement	750 MHz	Head	-27.06		2024/5/12

D900V2-1d176

	Frequency	Tissue	Return loss	Limit	Date
Calibration	900 MHz	Head	-31.1	Within 20%	2022/11/24
Measurement	900 MHz	Head	-31.03		2023/11/16
Measurement	900 MHz	Head	-30.97		2024/11/12

D1750V2-1113

	Frequency	Tissue	Return loss	Limit	Date
Calibration	1750 MHz	Head	-29.0	Within 20%	2022/11/21
Measurement	1750 MHz	Head	-29.69		2023/11/16
Measurement	1750 MHz	Head	-29.36		2024/11/12

D1950V3-1213

	Frequency	Tissue	Return loss	Limit	Date
Calibration	1950 MHz	Head	-30.4	Within 20%	2022/11/18
Measurement	1950 MHz	Head	-30.32		2023/11/16
Measurement	1950 MHz	Head	-30.17		2024/11/12

D2600V2-1202

	Frequency	Tissue	Return loss	Limit	Date
Calibration	2600 MHz	Head	-28.6	Within 20%	2023/2/1
Measurement	2600 MHz	Head	-28.82		2024/1/29

D6.5GHzV2-1021

	Frequency	Tissue	Return loss	Limit	Date
Calibration	6500 MHz	Head	-27.6	Within 20%	2024/2/12
Measurement	6500 MHz	Head	-27.70		2025/2/10

4. When the most recent measurement of the real or imaginary parts of the impedance, measured at least annually, deviates by more than 5 Ω from the previous measurement.

D750V3-1031

	Frequency	Tissue	Impedance	Limit	Date
Calibration	750 MHz	Head	54.5	Within 5Ω	2023/5/16
Measurement	750 MHz	Head	54.46		2024/5/12

D900V2-1d176

	Frequency	Tissue	Impedance	Limit	Date
Calibration	900 MHz	Head	52.8	Within 5Ω	2022/11/24
Measurement	900 MHz	Head	52.80		2023/11/16
Measurement	900 MHz	Head	52.92		2024/11/12

D1750V2-1113

	Frequency	Tissue	Impedance	Limit	Date
Calibration	1750 MHz	Head	51.3	Within 5Ω	2022/11/21
Measurement	1750 MHz	Head	51.34		2023/11/16
Measurement	1750 MHz	Head	51.94		2024/11/12

D1950V3-1213

	Frequency	Tissue	Impedance	Limit	Date
Calibration	1950 MHz	Head	49.0	Within 5Ω	2022/11/18
Measurement	1950 MHz	Head	48.90		2023/11/16
Measurement	1950 MHz	Head	48.69		2024/11/12

D2600V2-1202

	Frequency	Tissue	Impedance	Limit	Date
Calibration	2600 MHz	Head	46.4	Within 5Ω	2023/2/1
Measurement	2600 MHz	Head	46.47		2024/1/29

D6.5GHzV2-1021

	Frequency	Tissue	Impedance	Limit	Date
Calibration	6500 MHz	Head	53.5	Within 5Ω	2024/2/12
Measurement	6500 MHz	Head	53.26		2025/2/10

7. Measurement Uncertainty

Measurement uncertainty for 300 MHz to 3 GHz							
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors							
Probe Calibration	±12.0%	N	2	1	1	±6.0%	±6.0%
Probe Calibration Drift	±1.7%	R	1.732	1	1	±1.0%	±1.0%
Probe Linearity	±4.7%	R	1.732	1	1	±2.7%	±2.7%
Broadband Signal	±2.8%	R	1.732	1	1	±1.6%	±1.6%
Probe Isotropy	±7.6%	R	1.732	1	1	±4.4%	±4.4%
Other Probe+Electronic	±0.8%	N	1	1	1	±0.8%	±0.8%
RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Probe Positioning	±0.006 mm	N	1	0.14	0.14	±0.1%	±0.1%
Data Processing	±1.2%	N	1	1	1	±1.2%	±1.2%
Phantom and Device Errors							
Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
Conductivity (temp.)	±3.3%	R	1.732	0.78	0.71	±1.5%	±1.4%
Phantom Permittivity	±14.0%	R	1.732	0	0	±0.0%	±0.0%
Distance DUT - TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
DUT Modulation	±2.4%	R	1.732	1	1	±1.4%	±1.4%
Time-average SAR	±1.7%	R	1.732	1	1	±1.0%	±1.0%
DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
Val Antenna Unc.	±0.0%	N	1	1	1	±0.0%	±0.0%
Unc. Input Power	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results							
Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
SAR scaling	±0.0%	R	1.732	1	1	±0.0%	±0.0%
Combined Uncertainty						±11.0%	±10.9%
Expanded Uncertainty						±21.9%	±21.7%

Measurement uncertainty for 3 GHz to 6 GHz							
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors							
Probe Calibration	±14.0%	N	2	1	1	±7.0%	±7.0%
Probe Calibration Drift	±1.7%	R	1.732	1	1	±1.0%	±1.0%
Probe Linearity	±4.7%	R	1.732	1	1	±2.7%	±2.7%
Broadband Signal	±2.6%	R	1.732	1	1	±1.5%	±1.5%
Probe Isotropy	±7.6%	R	1.732	1	1	±4.4%	±4.4%
Other Probe+Electronic	±1.2%	N	1	1	1	±1.2%	±1.2%
RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Probe Positioning	±0.005 mm	N	1	0.29	0.29	±0.2%	±0.2%
Data Processing	±2.3%	N	1	1	1	±2.3%	±2.3%
Phantom and Device Errors							
Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
Conductivity (temp.)	±3.4%	R	1.732	0.78	0.71	±1.5%	±1.4%
Phantom Permittivity	±14.0%	R	1.732	0.25	0.25	±2.0%	±2.0%
Distance DUT - TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
DUT Modulation	±2.4%	R	1.732	1	1	±1.4%	±1.4%
Time-average SAR	±1.7%	R	1.732	1	1	±1.0%	±1.0%
DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
Val Antenna Unc.	±0.0%	N	1	1	1	±0.0%	±0.0%
Unc. Input Power	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results							
Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
SAR scaling	±0.0%	R	1.732	1	1	±0.0%	±0.0%
Combined Uncertainty						±11.9%	±11.8%
Expanded Uncertainty						±23.8%	±23.6%

Measurement uncertainty for 6 GHz to 10 GHz							
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors							
Probe Calibration	±18.6%	N	2	1	1	±9.3%	±9.3%
Probe Calibration Drift	±1.7%	R	1.732	1	1	±1.0%	±1.0%
Probe Linearity	±4.7%	R	1.732	1	1	±2.7%	±2.7%
Broadband Signal	±2.6%	R	1.732	1	1	±1.5%	±1.5%
Probe Isotropy	±7.6%	R	1.732	1	1	±4.4%	±4.4%
Other Probe+Electronic	±2.4%	N	1	1	1	±2.4%	±2.4%
RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Probe Positioning	±0.005 mm	N	1	0.5	0.5	±0.3%	±0.3%
Data Processing	±3.5%	N	1	1	1	±3.5%	±3.5%
Phantom and Device Errors							
Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
Conductivity (temp.)	±2.4%	R	1.732	0.78	0.71	±1.1%	±1.0%
Phantom Permittivity	±14.0%	R	1.732	0.5	0.5	±4.0%	±4.0%
Distance DUT - TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
DUT Modulation	±2.4%	R	1.732	1	1	±1.4%	±1.4%
Time-average SAR	±1.7%	R	1.732	1	1	±1.0%	±1.0%
DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
Val Antenna Unc.	±0.0%	N	1	1	1	±0.0%	±0.0%
Unc. Input Power	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results							
Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
SAR scaling	±0.0%	R	1.732	1	1	±0.0%	±0.0%
Combined Uncertainty						±14.2%	±14.1%
Expanded Uncertainty						±28.4%	±28.3%

APD Measurement uncertainty for 6 GHz to 10 GHz							
Error Description	Uncert. value	Prob. Dist.	Div.	(Ci) 1 cm^2	(Ci) 4 cm^2	Std. Unc. (1 cm^2)	Std. Unc. (4 cm^2)
SAR MU	±14.2/13.9%	N	1	1	1	±14.2%	±14.1%
Power Density Conversion	±13.5%	R	$\sqrt{3}$	1	1	±7.8%	±7.8%
Combined Uncertainty						±16.2%	±16.1%
Expanded Uncertainty in dB						±32.4% ±1.2 dB	±32.3% ±1.2 dB

Measurement uncertainty for Power Density						
Error Description	Uncert. Value (±dB)	Prob. Dist.	Div.	(ci)	Std. Unc. (±dB)	(vi) veff
Uncertainty terms dependent on the measurement system						
Calibration	0.49	N	1	1	0.49	∞
Probe correction	0	R	1.732	1	0	∞
Frequency response (BW ≤ 1 GHz)	0.2	R	1.732	1	0.12	∞
Sensor cross coupling	0	R	1.732	1	0	∞
Isotropy	0.5	R	1.732	1	0.29	∞
Linearity	0.2	R	1.732	1	0.12	∞
Probe scattering	0	R	1.732	1	0	∞
Probe positioning offset	0.3	R	1.732	1	0.17	∞
Probe positioning repeatability	0.04	R	1.732	1	0.02	∞
Sensor mechanical offset	0	R	1.732	1	0	∞
Probe spatial resolution	0	R	1.732	1	0	∞
Field impedance dependance	0	R	1.732	1	0	∞
Amplitude and phase drift	0	R	1.732	1	0	∞
Amplitude and phase noise	0.04	R	1.732	1	0.02	∞
Measurement area truncation	0	R	1.732	1	0	∞
Data acquisition	0.03	N	1	1	0.03	∞
Sampling	0	R	1.732	1	0	∞
Field reconstruction	2	R	1.732	1	1.15	∞
FTE/MEO	0	R	1.732	1	0	∞
Power density scaling	0	R	1.732	1	0	∞
Spatial averaging	0.1	R	1.732	1	0.06	∞
System detection limit	0.04	R	1.732	1	0.02	∞
Uncertainty terms dependent on the DUT and environmental factors						
Probe coupling with DUT	0	R	1.732	1	0	∞
Modulation response	0.4	R	1.732	1	0.23	∞
Integration time	0	R	1.732	1	0	∞
Response time	0	R	1.732	1	0	∞
Device holder influence	0.1	R	1.732	1	0.06	∞
DUT alignment	0	R	1.732	1	0	∞
RF ambient conditions	0.04	R	1.732	1	0.02	∞
Ambient reflections	0.04	R	1.732	1	0.02	∞
Immunity / secondary reception	0	R	1.732	1	0	∞
Drift of the DUT	0.21	R	1.732	1	0.12	∞
Combined Standard Uncertainty					1.33	∞
Expanded Standard Uncertainty (95%)					2.67	

8. Conducted Power Measurement (Including tolerance allowed for production unit)

WLAN 2.4G 2TX SISO									
				SISO-Wifi 1			SISO-Wifi 2		
	Frequency	Mode	BW	CH	Avg. Power	Tune-Up Power	CH	Avg. Power	Tune-Up Power
DSSS/OFDM mode specified maximum output power at an antenna port	WLAN 2.4GHz	b	20	1	12.11	12.5	1	12.3	12.5
				6	12.15	12.5	6	12.32	12.5
				11	11.72	12.5	11	12.11	12.5
				12	11.71	12.5	12	12.08	12.5
				13	11.69	12.5	13	12.07	12.5
		g	20	1	11.7	12.5	1	11.69	12.5
				6	11.77	12.5	6	11.85	12.5
				11	11.64	12.5	11	11.83	12.5
				12	11.66	12.5	12	11.65	12.5
				13	11.62	12.5	13	11.66	12.5
		n (HT)	20	1	11.63	12.5	1	11.67	12.5
				6	11.68	12.5	6	11.65	12.5
				11	11.64	12.5	11	11.67	12.5
				12	11.61	12.5	12	11.57	12.5
				13	11.64	12.5	13	11.64	12.5
			40	3	11.64	12.5	3	11.64	12.5
				6	11.67	12.5	6	11.66	12.5
				9	11.68	12.5	9	11.63	12.5
				10	11.62	12.5	10	11.62	12.5
				11	11.68	12.5	11	11.6	12.5
		ax (HE)	20	1	11.66	12.5	1	11.68	12.5
				6	11.62	12.5	6	11.67	12.5
				11	11.54	12.5	11	11.62	12.5
				12	11.62	12.5	12	11.59	12.5
				13	11.63	12.5	13	11.64	12.5
			40	3	11.63	12.5	3	11.62	12.5
				6	11.66	12.5	6	11.69	12.5
				9	11.65	12.5	9	11.64	12.5
				10	11.63	12.5	10	11.57	12.5
				11	11.62	12.5	11	11.66	12.5

WLAN 5G 2TX SISO									
OFDM mode specified maximum output power at an antenna port	Frequency	Mode	BW	SISO-Wifi 1			SISO-Wifi 2		
				CH	Avg. Power	Tune-Up Power	CH	Avg. Power	Tune-Up Power
	U-NII-1 (5150~5250MHz)	a	20	36	11.87	12.5	36	12.12	12.5
				40	11.77	12.5	40	12.11	12.5
				44	11.83	12.5	44	12.23	12.5
				48	11.94	12.5	48	12.22	12.5
		n (HT)	20	36	11.92	12.5	36	11.89	12.5
				40	11.87	12.5	40	11.79	12.5
				44	11.91	12.5	44	11.97	12.5
				48	11.96	12.5	48	11.86	12.5
			40	38	12.14	12.5	38	12.24	12.5
				46	12.13	12.5	46	12.19	12.5
		ac(VHT)	80	42	12.17	12.5	42	12.42	12.5
		ax (HE)	20	36	11.97	12.5	36	11.99	12.5
				40	11.82	12.5	40	11.78	12.5
				44	12.01	12.5	44	11.8	12.5
				48	11.79	12.5	48	12.08	12.5
			40	38	11.94	12.5	38	12.02	12.5
				46	11.99	12.5	46	12.13	12.5
			80	42	12.07	12.5	42	12.21	12.5
	U-NII-2A (5250~5350MHz)	a	20	52	11.86	12.5	52	12.29	12.5
				56	11.81	12.5	56	12.15	12.5
				60	11.91	12.5	60	12.11	12.5
				64	11.88	12.5	64	12.09	12.5
		n (HT)	20	52	11.79	12.5	52	11.72	12.5
				56	11.87	12.5	56	11.83	12.5
				60	12.01	12.5	60	11.98	12.5
				64	11.88	12.5	64	11.92	12.5
			40	54	12.01	12.5	54	12.1	12.5
				62	12.03	12.5	62	12.08	12.5
		ac (VHT)	80	58	12.18	12.5	58	12.45	12.5
			160	50	11.98	12.5	50	12.11	12.5
		ax (HE)	20	52	11.7	12.5	52	11.63	12.5
				56	11.78	12.5	56	11.96	12.5
				60	12.02	12.5	60	12.11	12.5
				64	11.88	12.5	64	11.89	12.5
			40	54	12.02	12.5	54	12.08	12.5
				62	11.94	12.5	62	11.94	12.5
			80	58	12.08	12.5	58	12.33	12.5
			160	50	11.97	12.5	50	12.09	12.5

	Frequency	Mode	BW	SISO-Wifi 1			SISO-Wifi 2		
				CH	Avg. Power	Tune-Up Power	CH	Avg. Power	Tune-Up Power
OFDM mode specified maximum output power at an antenna port	U-NII-2C (5470~5725MHz)	a	20	100	11.28	12	100	11.25	12
				116	11.34	12	116	11.34	12
				124	11.24	12	124	11.22	12
				132	11.22	12	132	11.12	12
				140	11.35	12	140	11.24	12
				144	11.31	12	144	11.26	12
		n (HT)	20	100	11.18	12	100	11.17	12
				116	11.29	12	116	11.35	12
				124	11.21	12	124	11.26	12
				132	11.31	12	132	11.32	12
				140	11.38	12	140	11.47	12
				144	11.25	12	144	11.32	12
			40	102	11.32	12	102	11.4	12
				110	11.17	12	110	11.21	12
				126	11.18	12	126	11.31	12
				134	11.14	12	134	11.24	12
				142	11.25	12	142	11.21	12
		ac (VHT)	80	106	11.69	12	106	11.64	12
				122	11.41	12	122	11.35	12
				138	11.74	12	138	11.69	12
			160	114	11.09	12	114	11.15	12
		ax (HE)	20	100	11.18	12	100	11.26	12
				116	11.34	12	116	11.26	12
				124	11.23	12	124	11.16	12
				132	11.24	12	132	11.38	12
				140	11.44	12	140	11.43	12
				144	11.32	12	144	11.46	12
			40	102	11.35	12	102	11.35	12
				110	11.2	12	110	11.11	12
				126	11.23	12	126	11.25	12
				134	11.2	12	134	11.21	12
				142	11.24	12	142	11.26	12
			80	106	11.53	12	106	11.55	12
				122	11.34	12	122	11.33	12
				138	11.22	12	138	11.32	12
			160	114	11.22	12	114	11.16	12

	Frequency	Mode	BW	SISO-Wifi 1			SISO-Wifi 2		
				CH	Avg. Power	Tune-Up Power	CH	Avg. Power	Tune-Up Power
OFDM mode specified maximum output power at an antenna port	U-NII-3 (5725~5850MHz)	a	20	149	10.69	11	149	10.69	11
				157	10.66	11	157	10.72	11
				165	10.64	11	165	10.77	11
		n (HT)	20	149	10.74	11	149	10.71	11
				157	10.57	11	157	10.62	11
				165	10.65	11	165	10.58	11
			40	151	10.65	11	151	10.6	11
				159	10.58	11	159	10.77	11
		ac(VHT)	80	155	10.98	11	155	10.93	11
		ax (HE)	20	149	10.67	11	149	10.87	11
				157	10.69	11	157	10.43	11
				165	10.66	11	165	10.69	11
			40	151	10.68	11	151	10.75	11
				159	10.55	11	159	10.63	11
			80	155	10.76	11	155	10.72	11
	U-NII-4 (5850~5925MHz)	a	20	169	10.66	11	169	10.83	11
				173	10.58	11	173	10.74	11
				177	10.61	11	177	10.78	11
		n (HT)	20	169	10.72	11	169	10.81	11
				173	10.48	11	173	10.42	11
				177	10.63	11	177	10.72	11
			40	167	10.67	11	167	10.68	11
				175	10.59	11	175	10.88	11
		ac(VHT)	80	171	10.72	11	171	10.92	11
			160	163	10.61	11	163	10.64	11
		ax (HE)	20	169	10.53	11	169	10.61	11
				173	10.35	11	173	10.47	11
				177	10.78	11	177	10.71	11
			40	167	10.55	11	167	10.59	11
				175	10.49	11	175	10.44	11
			80	171	10.67	11	171	10.85	11
			160	163	10.68	11	163	10.66	11

WLAN 6G 2TX SISO									
OFDM mode specified maximum output power at an antenna port	Frequency	Mode	BW	SISO-Wifi 1			SISO-Wifi 2		
				CH	Avg. Power	Tune-Up Power	CH	Avg. Power	Tune-Up Power
	U-NII-5 (5925~6425MHz)	a	20	1	6.44	7	1	6.37	7
				45	4.15	5	45	4.77	5
				93	5.06	5.5	93	4.18	5.5
		ax (HE)	20	1	6.28	6.5	1	6.22	6.5
				45	3.42	4.5	45	3.54	4.5
				93	5.19	5.5	93	4.22	5.5
			40	3	9.13	9.5	3	8.89	9.5
				43	8.15	9	43	8.2	9
				91	7.22	7.5	91	7.01	7.5
			80	7	9.31	10	7	9.15	10
				39	9.32	10	39	9.11	10
				87	9.28	10	87	9.04	10
			160	15	9.57	10	15	9.61	10
				47	9.47	10	47	9.92	10
				79	9.42	10	79	9.79	10
	U-NII-6 (6425~6525MHz)	a	20	97	4.22	4.5	97	3.38	4.5
				105	4.54	5	105	3.77	5
				113	4.88	5	113	3.98	5
		ax (HE)	20	97	5.23	5.5	97	4.51	5.5
				105	5.18	5.5	105	4.5	5.5
				113	4.52	5	113	3.85	5
			40	99	7.8	8	99	7.42	8
				107	7.01	7.5	107	6.92	7.5
			80	103	8.99	9.5	103	8.43	9.5
			160	111	9.01	9.5	111	9.46	9.5

	Frequency	Mode	BW	SISO-Wifi 1			SISO-Wifi 2		
				CH	Avg. Power	Tune-Up Power	CH	Avg. Power	Tune-Up Power
OFDM mode specified maximum output power at an antenna port	U-NII-7 (6525~6875MHz)	a	20	117	5.11	5.5	117	4.15	5.5
				149	6.01	6.5	149	5.11	6.5
				181	6.12	6.5	181	5.35	6.5
		ax (HE)	20	117	5.88	6	117	4.99	6
				149	5.73	6	149	5.11	6
				181	6.77	7	181	5.98	7
			40	115	6.88	7	115	6.44	7
				147	8.25	8.5	147	7.82	8.5
				179	8.61	9	179	7.88	9
			80	119	8.98	9.5	119	8.42	9.5
				135	10.98	11.5	135	10.55	11.5
				151	9.81	10.5	151	9.72	10.5
				167	9.74	10	167	9.24	10
				183	9.58	10	183	8.72	10
			160	143	11.96	12	143	11.73	12
				175	9.87	10	175	9.84	10
	U-NII-8 (6875~7125MHz)	a	20	185	6.05	6.5	185	5.33	6.5
				209	6.12	6.5	209	6.03	6.5
				233	3.33	4	233	3.75	4
		ax (HE)	20	185	7.01	7.5	185	6.13	7.5
				209	5.66	6	209	5.57	6
				233	3.1	4	233	3.62	4
			40	187	8.66	9	187	7.72	9
				227	7.88	8.5	227	8.03	8.5
			80	199	9.44	10	199	8.81	10
				215	9.43	10	215	8.91	10
			160	207	9.86	10	207	9.74	10

BT Only Support Wifi 2						
Bluetooth mode maximum output power	Frequency	Mode	Modulation	SISO-Wifi 2		
				CH	Avg. Power	Tune-Up Power
	BT 2.4GHz	BR	GFSK	0	6.86	7
				38	6.94	7
				78	6.82	7
		EDR	8DPSK	0	3.73	4.5
				38	4.08	4.5
				78	3.88	4.5
		BLE (1Mbps)	GFSK	0	6.69	7
				19	6.92	7
				39	6.81	7
		BLE (2Mbps)	GFSK	0	6.71	7
				19	6.93	7
				39	6.8	7

Maximum Output Power (Including tolerance) (dBm)				
Power State		P-sensor Off		P-sensor On
Test Position		Back	Left-side	All
Distance (mm)		8	13	5
WCDMA B2	RMC	23.5		
	HSDPA	23		
	HSUPA	23		
WCDMA B4	RMC	23.5		22
	HSDPA	22.5		21
	HSUPA	22.5		21
WCDMA B5	RMC	23.5		
	HSDPA	22.5		
	HSUPA	22.5		
LTE Band 2	QPSK	23		
LTE Band 4	QPSK	23		22
LTE Band 5	QPSK	23		
LTE Band 7	QPSK	23		18
LTE Band 12	QPSK	23		
LTE Band 13	QPSK	23		
LTE Band 25	QPSK	23		
LTE Band 26	QPSK	23		
LTE Band 38	QPSK	23		
LTE Band 41	QPSK	23		
LTE Band 66	QPSK	23		22

P-Sensor On

Band	WCDMA B4		
CHANNEL	1312	1413	1513
RMC	21.63	21.66	21.43
HSDPA Set 1	20.64	20.68	20.55
HSDPA Set 2	20.76	20.78	20.66
HSDPA Set 3	20.78	20.79	20.64
HSDPA Set 4	20.72	20.74	20.68
HSUPA Set 1	20.61	20.66	20.62
HSUPA Set 2	20.72	20.75	20.74
HSUPA Set 3	20.73	20.74	20.62
HSUPA Set 4	20.71	20.74	20.63
HSUPA Set 5	20.69	20.72	20.66
Note: Unit : dBm			

P-Sensor Off

Band	WCDMA B2		
CHANNEL	9262	9400	9538
RMC	23.11	23.26	23.13
HSDPA Set 1	22.81	22.91	22.89
HSDPA Set 2	22.79	22.92	22.85
HSDPA Set 3	22.17	22.32	22.26
HSDPA Set 4	22.19	22.32	22.31
HSUPA Set 1	22.79	22.96	22.87
HSUPA Set 2	22.89	22.91	22.88
HSUPA Set 3	21.92	21.99	21.98
HSUPA Set 4	22.81	22.91	22.91
HSUPA Set 5	22.78	22.91	22.88
Note: Unit : dBm			

Band	WCDMA B4		
CHANNEL	1312	1413	1513
RMC	22.98	23.19	23.02
HSDPA Set 1	22.39	22.43	22.35
HSDPA Set 2	22.36	22.48	22.34
HSDPA Set 3	22.45	22.47	22.41
HSDPA Set 4	22.46	22.49	22.44
HSUPA Set 1	22.44	22.49	22.43
HSUPA Set 2	21.7	21.72	21.66
HSUPA Set 3	21.91	22.01	21.93
HSUPA Set 4	21.65	21.70	21.61
HSUPA Set 5	22.46	22.49	22.41
Note: Unit : dBm			

Band	WCDMA B5		
CHANNEL	4132	4183	4233
RMC	22.85	22.87	22.82
HSDPA Set 1	22.16	22.26	22.18
HSDPA Set 2	22.11	22.23	22.13
HSDPA Set 3	22.01	22.03	21.99
HSDPA Set 4	21.98	22.12	22.05
HSUPA Set 1	22.24	22.25	22.19
HSUPA Set 2	21.34	21.42	21.21
HSUPA Set 3	21.21	21.24	20.94
HSUPA Set 4	21.85	22.23	22.04
HSUPA Set 5	22.16	22.27	22.22
Note: Unit : dBm			

P-Sensor On

Channel	Modulation	LTE Band 4							
		RB No.	RB Offset	Max Power(Conducted)					
				1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	20.81	20.67	20.70	20.65	20.78	21.44
		1	#Mid	20.94	20.93	21.04	20.96	20.91	21.25
		1	#Max	20.67	20.70	20.89	20.85	21.06	20.96
		50%	#0	20.92	20.91	20.78	20.91	20.87	21.09
		50%	#Mid	21.10	20.93	20.79	20.90	20.87	21.30
		50%	#Max	21.05	20.88	20.80	20.99	21.10	21.22
		100%	--	20.96	20.89	20.82	20.94	20.78	20.99
	16QAM	1	#0	20.75	20.79	20.66	20.58	20.67	20.96
		1	#Mid	20.76	20.41	20.73	20.89	20.72	21.19
		1	#Max	20.51	20.61	20.57	20.76	20.85	20.89
		50%	#0	20.92	20.09	19.89	19.94	20.84	20.75
		50%	#Mid	20.91	20.05	19.87	20.01	20.69	20.92
		50%	#Max	20.80	19.98	19.85	20.15	20.62	20.78
		100%	--	19.80	19.84	19.84	20.11	20.63	20.88
Mid	QPSK	1	#0	21.15	21.07	21.14	20.89	20.96	21.46
		1	#Mid	21.24	21.03	21.22	21.23	21.07	21.36
		1	#Max	21.10	20.92	21.13	20.71	20.71	21.18
		50%	#0	21.18	21.17	21.22	21.20	21.05	21.32
		50%	#Mid	21.23	21.24	21.14	21.19	21.12	21.31
		50%	#Max	21.30	21.24	21.07	21.06	20.97	21.41
		100%	--	21.19	21.20	21.19	21.20	20.79	21.23
	16QAM	1	#0	21.13	21.19	20.95	20.91	21.00	21.36
		1	#Mid	21.13	20.94	20.91	21.04	20.82	21.28
		1	#Max	20.98	21.02	20.73	20.73	20.81	21.07
		50%	#0	20.85	20.06	20.16	20.27	20.79	20.94
		50%	#Mid	20.94	20.25	20.14	20.16	20.91	20.99
		50%	#Max	20.96	20.25	20.10	20.05	20.89	20.98
		100%	--	19.99	20.05	20.22	20.06	20.91	20.96
High	QPSK	1	#0	21.02	21.05	20.95	20.96	21.13	21.37
		1	#Mid	21.16	21.10	21.07	21.14	21.06	21.25
		1	#Max	21.08	20.82	21.11	21.11	21.00	20.99
		50%	#0	21.12	21.08	21.19	21.30	21.12	21.31
		50%	#Mid	21.25	21.22	21.12	21.08	21.08	21.30
		50%	#Max	21.21	21.17	21.14	21.18	21.14	21.30
		100%	--	21.12	21.18	21.16	21.20	21.01	21.22
	16QAM	1	#0	21.17	20.95	20.93	21.06	21.09	21.28
		1	#Mid	21.22	21.07	21.08	21.04	20.80	21.19
		1	#Max	20.89	21.07	21.00	21.01	20.91	21.06
		50%	#0	20.62	20.18	20.22	20.26	20.65	20.91
		50%	#Mid	20.79	20.20	20.10	20.19	20.92	20.95
		50%	#Max	20.72	20.15	20.29	20.55	20.86	20.96
		100%	--	19.65	19.84	20.18	20.65	20.87	20.91

Channel	Modulation	LTE Band 7					
		RB No.	RB Offset	Max Power(Conducted)			
				5M	10M	15M	20M
Low	QPSK	1	#0	17.55	17.52	17.57	17.83
		1	#Mid	17.54	17.46	17.41	17.65
		1	#Max	17.54	17.47	17.46	17.69
		50%	#0	17.49	17.45	17.49	17.72
		50%	#Mid	17.49	17.47	17.46	17.69
		50%	#Max	17.48	17.42	17.45	17.68
		100%	--	17.51	17.40	17.45	17.65
	16QAM	1	#0	17.48	17.41	17.53	17.62
		1	#Mid	17.41	17.45	17.41	17.60
		1	#Max	17.58	17.43	17.42	17.64
		50%	#0	17.56	17.47	17.42	17.59
		50%	#Mid	17.52	17.51	17.53	17.61
		50%	#Max	17.48	17.51	17.42	17.56
		100%	--	17.55	17.50	17.50	17.57
Mid	QPSK	1	#0	17.59	17.63	17.69	17.89
		1	#Mid	17.58	17.61	17.55	17.79
		1	#Max	17.53	17.48	17.52	17.82
		50%	#0	17.60	17.50	17.60	17.80
		50%	#Mid	17.67	17.54	17.65	17.79
		50%	#Max	17.62	17.53	17.65	17.74
		100%	--	17.68	17.59	17.63	17.71
	16QAM	1	#0	17.56	17.47	17.55	17.64
		1	#Mid	17.56	17.43	17.46	17.76
		1	#Max	17.52	17.48	17.45	17.66
		50%	#0	17.59	17.61	17.49	17.60
		50%	#Mid	17.52	17.44	17.56	17.64
		50%	#Max	17.53	17.56	17.48	17.58
		100%	--	17.55	17.56	17.52	17.59
High	QPSK	1	#0	17.51	17.64	17.69	17.81
		1	#Mid	17.67	17.48	17.35	17.72
		1	#Max	17.59	17.40	17.68	17.74
		50%	#0	17.62	17.61	17.69	17.79
		50%	#Mid	17.59	17.55	17.59	17.61
		50%	#Max	17.64	17.63	17.64	17.70
		100%	--	17.61	17.58	17.58	17.69
	16QAM	1	#0	17.44	17.51	17.56	17.71
		1	#Mid	17.60	17.48	17.49	17.73
		1	#Max	17.51	17.41	17.50	17.70
		50%	#0	17.62	17.67	17.43	17.68
		50%	#Mid	17.55	17.63	17.57	17.69
		50%	#Max	17.50	17.68	17.60	17.69
		100%	--	17.46	17.52	17.59	17.70

Channel	Modulation	LTE Band 66							
		RB No.	RB Offset	Max Power(Conducted)					
				1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	21.20	21.61	21.59	21.34	21.30	21.77
		1	#Mid	21.35	21.59	21.58	21.65	21.52	21.67
		1	#Max	21.28	21.62	21.56	21.54	21.39	21.66
		50%	#0	21.23	21.20	21.09	21.07	21.48	21.68
		50%	#Mid	21.46	21.22	21.62	21.07	21.47	21.59
		50%	#Max	21.31	21.13	21.66	21.06	21.52	21.66
		100%	--	21.22	21.09	20.75	21.04	21.57	21.59
	16QAM	1	#0	21.10	20.75	20.99	21.14	21.32	21.41
		1	#Mid	20.99	21.11	21.00	21.27	21.26	21.46
		1	#Max	20.99	20.81	20.79	21.14	21.22	21.32
		50%	#0	21.12	20.89	20.98	21.13	21.38	21.42
		50%	#Mid	21.22	21.02	21.30	21.11	21.27	21.32
		50%	#Max	21.19	20.97	21.15	21.12	21.28	21.35
		100%	--	20.83	20.94	20.83	21.05	21.26	21.32
Mid	QPSK	1	#0	21.50	21.54	21.65	21.50	21.58	21.85
		1	#Mid	21.67	21.56	21.62	21.53	21.61	21.76
		1	#Max	21.48	21.11	21.61	21.50	21.50	21.70
		50%	#0	21.60	21.47	21.52	21.39	21.60	21.76
		50%	#Mid	21.67	21.41	21.62	21.24	21.69	21.70
		50%	#Max	21.63	21.36	21.60	21.16	21.66	21.67
		100%	--	21.67	21.47	21.35	21.32	21.65	21.69
	16QAM	1	#0	21.41	21.25	21.10	20.93	21.55	21.68
		1	#Mid	21.44	21.26	21.01	21.18	21.50	21.64
		1	#Max	21.46	21.30	21.05	20.89	21.18	21.63
		50%	#0	21.32	20.84	21.08	20.85	21.55	21.64
		50%	#Mid	21.57	20.91	21.27	20.78	21.56	21.63
		50%	#Max	21.51	21.06	21.31	20.73	21.54	21.59
		100%	--	20.82	20.95	21.07	20.77	21.51	21.56
High	QPSK	1	#0	21.39	21.37	21.42	21.54	21.61	21.78
		1	#Mid	21.50	21.45	21.45	21.19	21.49	21.74
		1	#Max	21.47	21.34	21.34	21.55	21.66	21.59
		50%	#0	21.54	21.67	21.59	21.36	21.67	21.69
		50%	#Mid	21.55	21.62	21.62	21.31	21.59	21.60
		50%	#Max	21.51	21.55	21.61	21.25	21.57	21.65
		100%	--	21.60	21.58	21.47	21.41	21.52	21.66
	16QAM	1	#0	21.54	21.50	21.56	21.22	21.44	21.57
		1	#Mid	21.43	21.22	21.14	21.24	21.26	21.60
		1	#Max	21.46	21.30	20.99	20.88	21.39	21.54
		50%	#0	21.42	20.63	21.38	20.70	21.39	21.58
		50%	#Mid	21.46	20.64	21.51	20.79	21.48	21.59
		50%	#Max	21.43	20.94	21.52	20.73	21.48	21.57
		100%	--	20.84	20.72	20.69	20.75	21.43	21.51

P-Sensor Off

Channel	Modulation	LTE Band 2							
		RB No.	RB Offset	Max Power(Conducted)					
				1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	21.41	21.14	21.34	21.18	21.48	22.32
		1	#Mid	21.34	21.12	21.31	21.12	21.44	22.28
		1	#Max	21.25	21.06	21.28	21.08	21.38	22.14
		50%	#0	20.47	20.11	20.28	20.34	20.36	21.56
		50%	#Mid	20.43	20.09	20.24	20.27	20.33	21.22
		50%	#Max	20.43	20.03	20.18	20.24	20.24	21.22
		100%	--	20.41	20.02	20.16	20.24	20.29	20.94
	16QAM	1	#0	20.49	20.18	20.18	20.21	21.34	21.43
		1	#Mid	20.41	20.08	20.12	20.15	21.31	21.30
		1	#Max	20.21	20.04	20.06	20.01	21.28	21.20
		50%	#0	19.87	19.37	19.36	19.41	20.33	20.25
		50%	#Mid	19.82	19.34	19.24	19.38	20.29	20.21
		50%	#Max	19.75	19.22	19.22	19.34	20.22	20.20
		100%	--	19.33	19.15	19.18	19.33	20.15	20.19
Mid	QPSK	1	#0	21.23	21.87	21.66	21.67	21.73	22.54
		1	#Mid	21.16	21.83	21.63	21.30	21.56	22.46
		1	#Max	21.04	21.82	21.58	21.27	21.44	22.35
		50%	#0	20.20	20.73	20.67	20.64	20.79	21.68
		50%	#Mid	20.15	20.75	20.72	20.72	20.80	21.28
		50%	#Max	20.11	20.68	20.62	20.64	20.80	21.24
		100%	--	20.08	20.70	20.64	20.73	20.65	21.19
	16QAM	1	#0	20.17	20.56	20.39	20.57	20.57	21.51
		1	#Mid	20.09	20.53	20.39	20.43	20.48	21.46
		1	#Max	20.05	20.44	20.30	20.33	20.34	21.38
		50%	#0	19.78	19.71	19.54	19.62	19.97	20.76
		50%	#Mid	19.72	19.67	19.48	19.79	19.95	20.74
		50%	#Max	19.66	19.68	19.43	19.62	19.94	20.71
		100%	--	19.15	19.73	19.44	19.65	19.87	20.66
High	QPSK	1	#0	21.06	21.78	21.82	21.84	21.87	22.29
		1	#Mid	21.04	21.64	21.73	21.51	21.66	22.24
		1	#Max	21.01	21.44	21.52	21.38	21.26	22.16
		50%	#0	20.08	20.70	20.69	20.64	20.47	21.15
		50%	#Mid	20.08	20.62	20.65	20.49	20.43	20.94
		50%	#Max	20.01	20.60	20.58	20.47	20.35	20.92
		100%	--	20.15	20.05	20.52	20.44	20.33	20.76
	16QAM	1	#0	20.05	20.58	20.39	20.76	20.69	21.07
		1	#Mid	20.03	20.53	20.36	20.74	20.44	20.96
		1	#Max	20.02	20.42	20.09	20.68	20.38	20.94
		50%	#0	19.59	19.88	19.66	19.75	19.61	20.11
		50%	#Mid	19.52	19.81	19.58	19.72	19.58	20.07
		50%	#Max	19.48	19.76	19.52	19.66	19.57	20.05
		100%	--	19.45	19.75	19.47	19.62	19.45	20.01

Channel	Modulation	LTE Band 4							
		RB No.	RB Offset	Max Power(Conducted)					
				1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	21.81	21.57	21.50	21.52	21.33	22.34
		1	#Mid	21.75	21.73	21.74	21.90	21.73	22.24
		1	#Max	21.86	21.52	21.60	21.55	21.59	22.20
		50%	#0	20.77	20.93	20.79	20.90	20.85	21.19
		50%	#Mid	20.73	20.87	20.92	20.91	20.93	21.30
		50%	#Max	20.87	20.81	20.89	20.81	20.88	21.23
		100%	--	20.92	20.81	20.90	20.85	20.92	21.30
	16QAM	1	#0	20.84	20.59	20.85	20.48	20.08	21.27
		1	#Mid	20.86	20.72	20.65	20.67	20.71	21.21
		1	#Max	20.78	20.65	20.60	20.54	20.45	21.11
		50%	#0	19.79	20.01	19.96	19.83	19.96	20.15
		50%	#Mid	19.92	20.12	20.10	19.94	19.86	20.25
		50%	#Max	19.89	20.07	20.02	19.94	19.84	20.21
		100%	--	19.99	19.90	19.91	19.84	19.80	20.19
Mid	QPSK	1	#0	22.16	22.01	21.94	21.66	21.95	22.49
		1	#Mid	21.74	22.04	22.03	21.90	22.09	22.35
		1	#Max	21.71	21.88	21.88	21.36	21.82	22.24
		50%	#0	21.19	21.27	21.15	21.14	21.12	21.42
		50%	#Mid	21.25	21.25	21.18	21.04	21.04	21.50
		50%	#Max	21.21	21.24	21.09	20.93	21.08	21.40
		100%	--	21.25	21.30	21.12	21.02	21.00	21.39
	16QAM	1	#0	20.99	20.93	20.81	20.81	21.01	21.48
		1	#Mid	20.91	20.85	20.81	20.95	20.89	21.43
		1	#Max	20.79	20.88	20.87	20.57	20.66	21.19
		50%	#0	20.17	20.34	20.21	20.13	20.10	20.49
		50%	#Mid	20.30	20.30	20.08	20.23	20.02	20.41
		50%	#Max	20.26	20.19	20.01	20.13	20.05	20.48
		100%	--	20.15	20.11	20.00	20.01	20.02	20.40
High	QPSK	1	#0	22.01	21.90	21.90	21.60	22.02	22.36
		1	#Mid	21.97	22.03	22.01	21.89	22.11	22.22
		1	#Max	21.89	22.05	22.02	21.68	22.01	22.10
		50%	#0	21.11	21.05	21.08	21.08	21.19	21.39
		50%	#Mid	21.07	21.07	21.20	20.99	21.02	21.34
		50%	#Max	21.02	21.15	21.12	20.99	21.01	21.28
		100%	--	21.16	21.04	21.05	21.02	21.08	21.35
	16QAM	1	#0	21.02	20.83	20.61	20.80	21.06	21.43
		1	#Mid	21.01	20.97	20.74	20.99	20.89	21.23
		1	#Max	20.99	20.99	20.71	20.91	20.85	21.14
		50%	#0	20.10	19.90	19.89	20.09	20.10	20.19
		50%	#Mid	20.22	19.92	19.92	20.11	20.06	20.20
		50%	#Max	20.09	19.98	19.86	20.01	20.05	20.20
		100%	--	20.00	19.84	19.97	19.78	20.06	20.18

Channel	Modulation	LTE Band 5					
		RB No.	RB Offset	Max Power(Conducted)			
				1.4M	3M	5M	10M
Low	QPSK	1	#0	21.86	22.00	21.94	22.21
		1	#Mid	21.99	22.05	22.02	22.14
		1	#Max	21.81	22.04	21.95	22.12
		50%	#0	20.91	21.22	21.22	21.37
		50%	#Mid	21.00	21.24	21.34	21.38
		50%	#Max	21.09	21.27	21.34	21.41
		100%	--	20.98	21.19	21.30	21.32
	16QAM	1	#0	20.83	21.05	21.01	21.05
		1	#Mid	20.75	21.01	21.05	21.15
		1	#Max	20.89	21.00	21.09	21.14
		50%	#0	19.94	20.02	20.20	20.27
		50%	#Mid	20.00	20.11	20.26	20.33
		50%	#Max	19.84	20.10	20.22	20.29
		100%	--	19.79	20.17	20.28	20.28
Mid	QPSK	1	#0	21.84	22.01	22.02	22.34
		1	#Mid	21.89	22.23	22.27	22.28
		1	#Max	21.81	21.83	21.95	22.30
		50%	#0	21.15	21.17	21.31	21.45
		50%	#Mid	21.08	21.13	21.42	21.57
		50%	#Max	21.14	21.11	21.38	21.59
		100%	--	21.15	21.19	21.32	21.54
	16QAM	1	#0	20.70	21.01	21.11	21.21
		1	#Mid	20.67	21.10	21.15	21.21
		1	#Max	20.73	21.11	21.01	21.19
		50%	#0	20.03	19.97	20.19	20.38
		50%	#Mid	20.02	20.11	20.16	20.38
		50%	#Max	20.03	20.03	20.31	20.37
		100%	--	19.68	20.06	20.35	20.35
High	QPSK	1	#0	21.90	22.21	22.22	22.25
		1	#Mid	21.91	22.09	22.12	22.15
		1	#Max	21.82	22.11	22.08	22.12
		50%	#0	21.08	21.03	21.09	21.20
		50%	#Mid	21.07	21.06	21.06	21.13
		50%	#Max	21.08	21.03	21.03	21.12
		100%	--	20.82	21.02	21.04	21.07
	16QAM	1	#0	20.72	21.18	21.16	21.19
		1	#Mid	20.72	21.07	21.10	21.16
		1	#Max	20.64	21.11	21.06	21.15
		50%	#0	20.18	20.16	20.23	20.37
		50%	#Mid	20.15	20.18	20.22	20.22
		50%	#Max	20.18	20.10	20.13	20.31
		100%	--	19.96	20.11	20.17	20.30

Channel	Modulation	LTE Band 7					
		RB No.	RB Offset	Max Power(Conducted)			
				5M	10M	15M	20M
Low	QPSK	1	#0	22.51	22.33	22.32	22.77
		1	#Mid	22.43	22.32	22.21	22.55
		1	#Max	22.49	22.11	22.05	22.54
		50%	#0	21.21	21.14	21.23	21.76
		50%	#Mid	21.32	21.31	21.44	21.69
		50%	#Max	21.29	21.28	21.34	21.63
		100%	--	21.22	21.24	21.43	21.65
	16QAM	1	#0	20.72	20.74	21.09	21.95
		1	#Mid	21.27	21.01	21.12	21.57
		1	#Max	20.81	20.92	21.14	21.52
		50%	#0	20.20	20.34	20.29	20.59
		50%	#Mid	20.32	20.19	20.09	20.47
		50%	#Max	20.29	20.48	20.11	20.51
		100%	--	20.22	20.39	20.08	20.52
Mid	QPSK	1	#0	22.59	22.59	22.59	22.85
		1	#Mid	22.54	22.51	22.47	22.80
		1	#Max	22.46	22.41	22.45	22.67
		50%	#0	21.37	21.45	21.39	21.77
		50%	#Mid	21.47	21.45	21.36	21.71
		50%	#Max	21.48	21.47	21.46	21.70
		100%	--	21.46	21.46	21.56	21.76
	16QAM	1	#0	21.15	21.09	21.44	21.95
		1	#Mid	21.36	21.31	21.31	21.60
		1	#Max	21.16	21.17	21.03	21.71
		50%	#0	20.34	20.61	20.41	20.88
		50%	#Mid	20.52	20.46	20.45	20.81
		50%	#Max	20.54	20.30	20.40	20.79
		100%	--	20.60	20.41	20.36	20.87
High	QPSK	1	#0	22.58	22.64	22.48	22.83
		1	#Mid	22.55	22.56	22.47	22.64
		1	#Max	22.57	22.50	22.45	22.61
		50%	#0	21.62	21.55	21.46	21.73
		50%	#Mid	21.69	21.54	21.56	21.70
		50%	#Max	21.68	21.64	21.68	21.69
		100%	--	21.68	21.60	21.67	21.69
	16QAM	1	#0	21.40	21.26	21.39	21.64
		1	#Mid	21.41	21.52	21.29	21.57
		1	#Max	21.43	21.45	21.46	21.59
		50%	#0	20.52	20.51	20.42	20.72
		50%	#Mid	20.62	20.37	20.40	20.61
		50%	#Max	20.62	20.57	20.35	20.72
		100%	--	20.63	20.49	20.38	20.71

Channel	Modulation	LTE Band 12					
		RB No.	RB Offset	Max Power(Conducted)			
				1.4M	3M	5M	10M
Low	QPSK	1	#0	21.54	21.48	21.57	22.67
		1	#Mid	21.61	21.79	22.01	22.41
		1	#Max	21.71	21.78	21.78	22.15
		50%	#0	20.62	20.84	20.94	21.53
		50%	#Mid	20.67	20.86	21.08	21.50
		50%	#Max	20.63	20.97	20.94	21.46
		100%	--	20.75	20.76	20.98	21.51
	16QAM	1	#0	20.60	20.51	20.44	20.97
		1	#Mid	20.76	20.50	20.63	21.25
		1	#Max	20.73	20.86	20.63	21.06
		50%	#0	19.41	19.54	19.86	20.39
		50%	#Mid	19.57	19.59	19.85	20.41
		50%	#Max	19.69	19.60	19.90	20.34
		100%	--	19.76	19.74	19.84	20.17
Mid	QPSK	1	#0	21.77	21.73	21.96	22.73
		1	#Mid	21.77	21.74	22.09	22.57
		1	#Max	21.89	21.62	21.70	22.18
		50%	#0	21.12	21.09	21.05	21.58
		50%	#Mid	20.06	20.99	21.14	21.53
		50%	#Max	20.01	20.95	21.06	21.57
		100%	--	20.98	21.01	21.10	21.55
	16QAM	1	#0	20.94	20.70	20.72	20.99
		1	#Mid	20.96	20.92	20.76	21.28
		1	#Max	20.67	20.69	20.66	21.19
		50%	#0	20.02	20.03	19.89	20.40
		50%	#Mid	20.02	19.65	19.99	20.52
		50%	#Max	20.06	20.00	19.90	20.37
		100%	--	19.75	19.60	19.96	20.24
High	QPSK	1	#0	21.73	21.95	21.61	22.51
		1	#Mid	21.70	21.83	22.21	22.39
		1	#Max	21.54	21.71	21.68	22.18
		50%	#0	21.09	21.16	21.10	21.53
		50%	#Mid	21.23	21.04	21.17	21.50
		50%	#Max	21.02	21.13	20.98	21.46
		100%	--	21.11	20.97	20.99	21.53
	16QAM	1	#0	20.99	20.90	20.55	20.99
		1	#Mid	20.78	20.71	20.81	21.25
		1	#Max	20.74	20.72	20.59	21.06
		50%	#0	20.05	19.81	19.94	20.39
		50%	#Mid	20.11	19.73	20.01	20.41
		50%	#Max	20.08	19.68	19.93	20.34
		100%	--	19.85	19.70	19.93	20.24

Channel	Modulation	LTE Band 13			
		RB No.	RB Offset	Max Power(Conducted)	
				5M	10M
Low	QPSK	1	#0	21.87	--
		1	#Mid	22.00	--
		1	#Max	21.73	--
		50%	#0	21.11	--
		50%	#Mid	21.16	--
		50%	#Max	21.10	--
		100%	--	21.10	--
	16QAM	1	#0	20.88	--
		1	#Mid	20.80	--
		1	#Max	20.86	--
		50%	#0	20.12	--
		50%	#Mid	20.08	--
		50%	#Max	20.00	--
		100%	--	20.01	--
Mid	QPSK	1	#0	22.09	22.85
		1	#Mid	22.07	22.66
		1	#Max	22.08	22.32
		50%	#0	21.22	21.61
		50%	#Mid	21.27	21.57
		50%	#Max	21.26	21.45
		100%	--	21.22	21.48
	16QAM	1	#0	20.93	21.33
		1	#Mid	20.97	21.54
		1	#Max	20.90	21.32
		50%	#0	20.14	20.72
		50%	#Mid	20.10	20.62
		50%	#Max	20.18	20.81
		100%	--	20.14	20.70
High	QPSK	1	#0	21.90	--
		1	#Mid	21.99	--
		1	#Max	22.05	--
		50%	#0	21.15	--
		50%	#Mid	21.25	--
		50%	#Max	21.14	--
		100%	--	21.20	--
	16QAM	1	#0	20.86	--
		1	#Mid	20.93	--
		1	#Max	20.88	--
		50%	#0	19.94	--
		50%	#Mid	20.00	--
		50%	#Max	19.88	--
		100%	--	20.14	--

Channel	Modulation	LTE Band 25							
		RB No.	RB Offset	Max Power(Conducted)					
				1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	21.45	21.53	21.44	21.25	21.53	22.51
		1	#Mid	21.44	21.51	21.40	21.22	21.46	22.35
		1	#Max	21.41	21.49	21.30	21.16	21.44	22.18
		50%	#0	20.58	20.41	20.40	20.45	20.42	21.74
		50%	#Mid	20.55	20.32	20.39	20.37	20.42	21.48
		50%	#Max	20.54	20.36	20.21	20.29	20.40	21.27
		100%	--	20.44	20.38	20.28	20.34	20.37	20.98
	16QAM	1	#0	20.56	20.30	20.27	20.25	21.46	21.49
		1	#Mid	20.53	20.25	20.26	20.19	21.41	21.34
		1	#Max	20.30	20.20	20.24	20.04	21.37	21.29
		50%	#0	20.08	19.46	19.40	19.45	20.46	20.35
		50%	#Mid	20.04	19.39	19.30	19.43	20.45	20.31
		50%	#Max	20.02	19.27	19.30	19.43	20.41	20.25
		100%	--	19.42	19.23	19.27	19.37	20.46	20.22
Mid	QPSK	1	#0	21.91	22.18	22.15	22.28	22.15	22.67
		1	#Mid	21.75	22.07	22.05	22.21	22.13	22.52
		1	#Max	21.69	21.94	22.00	21.67	21.97	22.39
		50%	#0	20.31	21.13	21.20	21.25	21.20	21.79
		50%	#Mid	20.27	21.10	21.14	21.26	21.17	21.59
		50%	#Max	20.18	21.09	21.06	21.00	20.96	21.32
		100%	--	20.24	21.09	21.16	21.16	20.91	21.29
	16QAM	1	#0	20.65	21.28	21.31	21.15	21.11	21.61
		1	#Mid	20.62	21.13	21.12	21.05	21.09	21.55
		1	#Max	20.60	20.82	20.78	20.62	20.69	21.49
		50%	#0	20.04	20.29	20.00	20.02	20.13	20.81
		50%	#Mid	19.86	20.13	19.97	20.05	20.11	20.82
		50%	#Max	19.75	20.08	19.94	19.78	20.14	20.80
		100%	--	19.23	20.03	19.86	19.79	20.12	20.82
High	QPSK	1	#0	21.18	22.33	21.92	21.87	21.96	22.49
		1	#Mid	21.16	22.14	21.82	21.53	21.75	22.32
		1	#Max	21.12	21.93	21.68	21.40	21.33	22.18
		50%	#0	20.36	20.93	20.96	20.73	20.56	21.27
		50%	#Mid	20.15	20.92	20.88	20.61	20.61	20.96
		50%	#Max	20.13	20.88	20.76	20.54	20.54	20.96
		100%	--	20.18	20.15	20.80	20.49	20.48	20.84
	16QAM	1	#0	20.24	20.93	20.76	20.86	20.74	21.14
		1	#Mid	20.18	20.84	20.49	20.81	20.50	20.98
		1	#Max	20.09	20.76	20.40	20.72	20.44	21.14
		50%	#0	19.81	19.98	19.99	19.82	19.66	20.19
		50%	#Mid	19.79	19.93	19.61	19.81	19.63	20.15
		50%	#Max	19.77	19.79	19.58	19.71	19.59	20.18
		100%	--	19.75	19.76	19.82	19.67	19.57	20.17

Channel	Modulation	LTE Band 26						
		RB No.	RB Offset	Max Power(Conducted)				
				1.4M	3M	5M	10M	15M
Low	QPSK	1	#0	21.98	22.13	22.20	22.17	22.59
		1	#Mid	22.00	22.24	22.45	22.23	22.34
		1	#Max	21.92	22.09	22.32	22.22	22.29
		50%	#0	21.05	21.33	21.48	21.52	21.62
		50%	#Mid	21.03	21.39	21.60	21.49	21.60
		50%	#Max	21.38	21.47	21.47	21.50	21.52
		100%	--	21.01	21.45	21.47	21.45	21.49
	16QAM	1	#0	20.89	21.32	21.19	21.15	21.48
		1	#Mid	20.93	21.25	21.27	21.12	21.35
		1	#Max	20.92	21.29	21.22	21.17	21.34
		50%	#0	20.54	20.43	20.45	20.36	20.75
		50%	#Mid	20.05	20.15	20.57	20.67	20.73
		50%	#Max	20.06	20.11	20.46	20.49	20.71
		100%	--	19.96	20.24	20.49	20.51	20.74
Mid	QPSK	1	#0	21.92	22.05	22.19	22.13	22.73
		1	#Mid	21.98	22.39	22.53	22.47	22.60
		1	#Max	21.82	21.98	22.22	22.16	22.52
		50%	#0	21.43	21.37	21.39	21.48	21.70
		50%	#Mid	21.46	21.43	21.49	21.49	21.64
		50%	#Max	21.42	21.39	21.42	21.48	21.60
		100%	--	21.06	21.38	21.38	21.45	21.54
	16QAM	1	#0	20.75	21.07	21.16	21.13	21.50
		1	#Mid	20.77	21.20	21.23	21.43	21.44
		1	#Max	20.87	21.32	21.17	21.19	21.46
		50%	#0	20.59	20.15	20.27	20.44	20.76
		50%	#Mid	20.04	20.15	20.42	20.56	20.74
		50%	#Max	20.51	20.41	20.46	20.46	20.73
		100%	--	19.87	20.24	20.61	20.50	20.75
High	QPSK	1	#0	22.02	22.45	22.41	22.30	22.55
		1	#Mid	22.03	22.28	22.22	22.23	22.35
		1	#Max	21.95	22.15	22.04	22.19	22.34
		50%	#0	21.16	21.54	21.50	21.48	21.56
		50%	#Mid	21.16	21.49	21.47	21.49	21.56
		50%	#Max	21.08	21.46	21.47	21.50	21.56
		100%	--	20.95	21.44	21.42	21.43	21.48
	16QAM	1	#0	20.91	21.30	21.23	21.22	21.31
		1	#Mid	20.85	21.28	21.29	21.26	21.30
		1	#Max	20.77	21.26	21.01	21.22	21.28
		50%	#0	20.57	20.18	20.33	20.47	20.69
		50%	#Mid	20.55	20.25	20.30	20.49	20.61
		50%	#Max	20.62	20.11	20.25	20.51	20.66
		100%	--	20.02	20.24	20.37	20.52	20.63

Channel	Modulation	LTE Band 38					
		RB No.	RB Offset	Max Power(Conducted)			
				5M	10M	15M	20M
Low	QPSK	1	#0	21.84	21.82	21.84	22.50
		1	#Mid	21.82	21.83	21.90	22.33
		1	#Max	21.58	21.64	21.95	22.26
		50%	#0	21.09	21.01	20.98	21.46
		50%	#Mid	21.02	21.04	20.94	21.45
		50%	#Max	20.94	20.97	20.97	21.43
		100%	--	20.92	20.98	20.88	21.08
	16QAM	1	#0	20.60	20.70	20.75	21.42
		1	#Mid	20.47	20.50	20.47	21.36
		1	#Max	20.36	20.55	20.62	21.18
		50%	#0	20.11	20.16	20.16	20.54
		50%	#Mid	19.84	20.19	20.26	20.44
		50%	#Max	19.93	20.28	20.15	20.41
		100%	--	20.18	20.26	20.16	20.34
Mid	QPSK	1	#0	21.95	21.99	22.05	22.65
		1	#Mid	22.03	22.07	22.09	22.61
		1	#Max	21.89	22.03	22.06	22.46
		50%	#0	20.92	21.02	21.01	21.83
		50%	#Mid	21.03	20.99	20.97	21.67
		50%	#Max	20.96	21.06	20.98	21.68
		100%	--	20.93	21.04	20.94	21.34
	16QAM	1	#0	20.43	20.73	20.83	21.29
		1	#Mid	20.58	20.79	20.49	21.21
		1	#Max	20.57	20.56	20.54	21.24
		50%	#0	19.86	20.17	20.41	20.69
		50%	#Mid	19.86	20.20	20.44	20.61
		50%	#Max	19.89	20.05	20.35	20.52
		100%	--	19.88	20.04	20.31	20.55
High	QPSK	1	#0	21.99	21.92	21.99	22.57
		1	#Mid	22.05	22.05	22.01	22.46
		1	#Max	21.93	22.03	22.15	22.39
		50%	#0	21.17	21.11	21.09	21.76
		50%	#Mid	21.26	21.33	21.10	21.66
		50%	#Max	21.19	21.20	21.18	21.44
		100%	--	21.17	21.26	20.91	21.30
	16QAM	1	#0	20.68	20.74	20.90	21.34
		1	#Mid	20.81	20.96	20.73	21.22
		1	#Max	20.76	20.74	20.83	21.10
		50%	#0	20.10	20.02	20.39	20.48
		50%	#Mid	20.29	20.46	20.41	20.51
		50%	#Max	20.32	20.12	20.31	20.44
		100%	--	20.43	20.11	20.32	20.48

Channel	Modulation	LTE Band 41					
		RB No.	RB Offset	Max Power(Conducted)			
				5M	10M	15M	20M
Low	QPSK	1	#0	22.24	22.34	22.35	22.71
		1	#Mid	22.21	22.10	22.12	22.61
		1	#Max	22.13	22.08	22.06	22.35
		50%	#0	21.23	21.28	21.33	21.64
		50%	#Mid	21.27	21.15	21.17	21.61
		50%	#Max	21.23	21.10	21.14	21.55
		100%	--	21.22	21.15	21.14	21.43
	16QAM	1	#0	20.80	21.07	20.95	21.49
		1	#Mid	20.94	20.87	20.61	21.40
		1	#Max	20.96	20.71	20.78	21.24
		50%	#0	20.19	20.32	20.28	20.59
		50%	#Mid	20.05	20.33	20.28	20.50
		50%	#Max	20.23	20.32	20.19	20.52
		100%	--	20.26	20.31	20.21	20.49
Low-Mid	QPSK	1	#0	22.21	22.25	22.15	22.65
		1	#Mid	22.17	22.07	22.05	22.52
		1	#Max	22.13	22.04	21.92	22.29
		50%	#0	21.13	21.26	21.29	21.53
		50%	#Mid	21.17	21.14	21.10	21.42
		50%	#Max	21.19	21.06	21.12	21.45
		100%	--	21.15	21.14	21.09	21.39
	16QAM	1	#0	20.77	21.00	20.85	21.35
		1	#Mid	20.94	20.83	20.51	21.29
		1	#Max	20.87	20.68	20.73	21.22
		50%	#0	20.13	20.26	20.26	20.51
		50%	#Mid	19.95	20.26	20.21	20.51
		50%	#Max	20.20	20.25	20.18	20.49
		100%	--	20.26	20.22	20.17	20.38
Mid	QPSK	1	#0	22.45	22.20	22.31	22.78
		1	#Mid	22.13	22.14	22.28	22.69
		1	#Max	22.11	22.10	22.19	22.58
		50%	#0	21.34	21.35	21.33	21.91
		50%	#Mid	21.28	21.33	21.32	21.90
		50%	#Max	21.25	21.31	21.26	21.80
		100%	--	21.24	21.30	21.24	21.63
	16QAM	1	#0	21.03	21.21	21.28	21.59
		1	#Mid	20.91	21.13	20.95	21.50
		1	#Max	20.89	21.07	21.00	21.28
		50%	#0	20.55	20.57	20.49	20.75
		50%	#Mid	20.51	20.58	20.59	20.74
		50%	#Max	20.49	20.42	20.48	20.66
		100%	--	20.35	20.45	20.49	20.64

High-Mid	QPSK	1	#0	22.26	22.15	22.19	22.64
		1	#Mid	22.06	22.11	22.26	22.59
		1	#Max	21.92	22.11	22.15	22.48
		50%	#0	21.31	21.33	21.16	21.79
		50%	#Mid	21.31	21.38	21.18	21.77
		50%	#Max	21.34	21.31	21.12	21.76
		100%	--	21.26	21.31	21.09	21.38
	16QAM	1	#0	20.97	21.18	21.10	21.40
		1	#Mid	20.97	21.01	20.90	21.33
		1	#Max	20.78	20.93	20.89	21.19
		50%	#0	20.43	20.53	20.42	20.58
		50%	#Mid	20.34	20.47	20.41	20.55
		50%	#Max	20.32	20.25	20.34	20.41
		100%	--	20.36	20.14	20.30	20.44
High	QPSK	1	#0	22.26	22.23	22.36	22.76
		1	#Mid	22.08	22.15	22.28	22.68
		1	#Max	21.99	22.11	22.17	22.56
		50%	#0	21.38	21.42	21.33	21.86
		50%	#Mid	21.34	21.39	21.30	21.85
		50%	#Max	21.34	21.38	21.26	21.77
		100%	--	21.33	21.37	21.24	21.49
	16QAM	1	#0	21.03	21.20	21.15	21.52
		1	#Mid	20.97	21.11	21.00	21.42
		1	#Max	20.85	21.03	20.93	21.22
		50%	#0	20.44	20.58	20.42	20.69
		50%	#Mid	20.36	20.54	20.49	20.68
		50%	#Max	20.37	20.34	20.44	20.59
		100%	--	20.45	20.22	20.40	20.61

Channel	Modulation	LTE Band 66							
		RB No.	RB Offset	Max Power(Conducted)					
				1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	21.83	21.76	21.67	21.68	21.66	22.53
		1	#Mid	22.05	21.91	21.94	22.01	21.96	22.50
		1	#Max	21.97	21.82	21.87	21.78	21.83	22.22
		50%	#0	21.09	21.05	20.97	20.97	21.04	21.45
		50%	#Mid	21.15	20.97	21.00	21.07	21.04	21.39
		50%	#Max	21.10	21.04	20.93	20.99	20.97	21.45
		100%	--	21.08	21.04	20.92	21.01	21.05	21.43
	16QAM	1	#0	20.96	20.53	20.86	20.44	20.85	21.32
		1	#Mid	20.81	20.69	20.91	20.89	20.77	21.28
		1	#Max	20.85	20.95	20.66	20.62	20.68	21.13
		50%	#0	20.05	20.04	20.08	20.16	20.09	20.33
		50%	#Mid	20.20	20.14	20.11	20.07	20.05	20.29
		50%	#Max	20.20	20.13	20.04	20.07	20.02	20.26
		100%	--	20.08	19.98	20.03	19.99	20.05	20.23
Mid	QPSK	1	#0	22.18	22.03	22.05	21.76	22.03	22.78
		1	#Mid	22.17	22.23	22.09	22.18	22.14	22.59
		1	#Max	22.12	22.09	21.92	21.56	21.90	22.31
		50%	#0	21.32	21.28	21.36	21.23	21.26	21.79
		50%	#Mid	21.37	21.27	21.37	21.22	21.23	21.62
		50%	#Max	21.23	21.26	21.20	21.11	21.09	21.57
		100%	--	21.27	21.31	21.21	21.16	21.01	21.52
	16QAM	1	#0	21.00	20.98	20.84	20.92	21.23	21.60
		1	#Mid	20.95	20.94	20.87	21.07	21.03	21.55
		1	#Max	20.83	21.01	21.36	20.71	20.80	21.42
		50%	#0	20.22	20.35	20.24	20.23	20.25	20.69
		50%	#Mid	20.32	20.35	20.40	20.19	20.23	20.60
		50%	#Max	20.27	20.44	20.22	20.18	20.15	20.58
		100%	--	20.24	20.27	20.21	20.02	20.11	20.51
High	QPSK	1	#0	22.12	22.00	22.07	21.85	22.13	22.75
		1	#Mid	22.17	22.05	22.14	22.13	22.21	22.31
		1	#Max	22.09	22.15	22.09	21.81	22.04	22.12
		50%	#0	21.14	21.13	21.16	21.24	21.21	21.56
		50%	#Mid	21.17	21.25	21.27	21.23	21.25	21.59
		50%	#Max	21.11	21.21	21.20	21.03	21.08	21.52
		100%	--	21.29	21.12	21.12	21.18	21.10	21.50
	16QAM	1	#0	21.25	21.02	20.77	20.87	21.18	21.47
		1	#Mid	21.04	21.17	20.91	21.03	20.91	21.50
		1	#Max	21.11	21.01	20.97	20.94	20.88	21.41
		50%	#0	20.19	19.93	20.02	20.42	20.20	20.48
		50%	#Mid	20.23	19.96	20.12	20.34	20.18	20.38
		50%	#Max	20.17	20.01	20.03	19.92	20.11	20.31
		100%	--	20.16	20.08	20.04	19.93	20.08	20.28

9. Proximity Sensor

9.1 Proximity sensor triggering distances

According the KDB 616217 Section 6.2, The following procedures should be applied to determine proximity sensor triggering distances for the back surface and individual edges of a tablet.

a) The relevant transmitter should be set to operate at its normal maximum output power.
b) The entire back surface or edge of the tablet is positioned below a flat phantom filled with the required tissue-equivalent medium, and positioned at least 20 mm further than the distance that triggers power reduction.
c) It should be ensured that the cables required for power measurements are not interfering with the proximity sensor. Cable losses should be properly compensated to report the measured power results.
d) The back surface or edge is moved toward the phantom in 3 mm steps until the sensor triggers.
e) The back surface or edge is then moved back (further away) from the phantom by at least 5 mm or until maximum output power is returned to the normal maximum level.
f) The back surface or edge is again moved toward the phantom, but in 1 mm steps, until it is at least 5 mm past the triggering point or touching the phantom. If 1 mm resolution is not suitable for the sensor triggering sensitivity, a KDB inquiry should be submitted to determine alternative test configurations.
g) If the tablet is not touching the phantom, it is moved in 3 mm steps until it touches the phantom to confirm that the sensor remains triggered and the maximum power stays reduced.
h) The process is then reversed by moving the tablet away from the phantom according to steps d) to g), to determine triggering release, until it is at least 10 mm beyond the point that triggers the return of normal maximum power.
i) The measured output power within 5 mm of the triggering points, or until the tablet is touching the phantom, for movements to and from the phantom should be tabulated in the SAR report.
j) If the sensor design and implementation allow additional variations for triggering distance tolerances, multiple samples should be tested to determine the most conservative distance required for SAR evaluation.
k) To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for movements to and from the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

9.2 Procedures for determining antenna and proximity sensor coverage

Proximity sensors are not normally designed to cover the entire back surface or edges of a tablet. The sensing regions are usually limited to areas near the sensor element. The following are used to determine if additional SAR measurements may be necessary due to sensor and antenna offset.

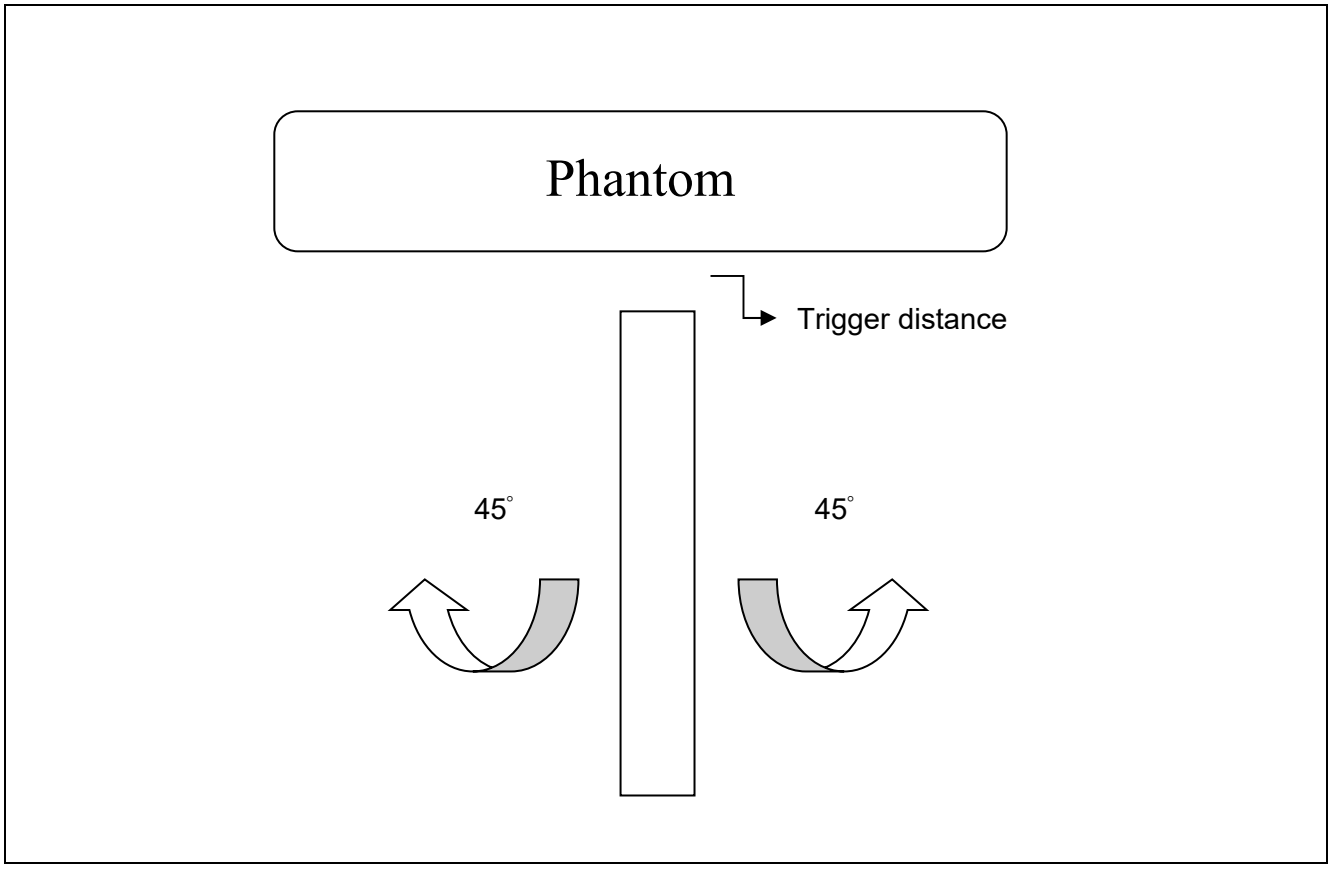
a) The back surface or edge of the tablet is positioned at a test separation distance less than or equal to the distance required for back surface or edge triggering, with both the antenna and sensor pad located at least 20 mm laterally outside the edge (boundary) of the phantom, along the direction of maximum antenna and sensor offset. For the back surface, if the direction of maximum offset is not aligned with the tablet coordinates (physical edges) the tablet test position would not be aligned with the phantom coordinates (orientations). Each applicable tablet edge should be positioned perpendicularly to the phantom to determine sensor coverage. For antennas and/or sensors located near the corner of a tablet, both adjacent edges must be considered.
b) The similar sequence of steps applied to determine sensor triggering distance in 6.2 are used to verify back surface and edge sensor coverage by moving the tablet (sensor and antenna) horizontally toward the phantom while maintaining the same vertical separation between the back surface or edge and the phantom.
c) After the exact location where triggering of power reduction is determined, with respect to the sensor and antenna, the tablet movement should be continued, in 3 mm increments, until both the sensor and antenna(s) are fully under the phantom and at least 20 mm inside the phantom edge.
d) The process is then repeated from the opposite direction, starting at the other end of the maximum antenna and sensor offset, by rotating the tablet 180 along the vertical axis.
e) The triggering points should be documented graphically, with the antenna and sensor clearly identified, along with all relevant dimensions.
f) If the subsequently measured peak SAR location for the antenna is not between the triggering points, established by the sensor coverage tests from opposite ends of the antenna and sensor, additional SAR tests may be required for conditions where only part of the back surface or edge of a tablet corresponding to the antenna is in proximity to the user and the sensor may not be triggering as desired. A KDB inquiry must be submitted by the test lab to determine if additional tests are required and the proper test configurations to use for testing. This may include situations where the sensor coverage region is too small for the antenna, the sensor is located too far away from the antenna, the sensor location is insufficient to cover multiple antennas or the antenna is at the corner of a tablet etc.

9.3 Procedures for determining tablet tilt angle influences to proximity sensor triggering

a) The influence of table tilt angles to proximity sensor triggering is determined by positioning each tablet edge that contains a transmitting antenna, perpendicular to the flat phantom, at the smallest sensor triggering test distance determined in 9.1 and 9.2 by rotating the tablet around the edge next to the phantom in ≤ 10 ° increments until the tablet is 45 ° or more from the vertical position at 0 °.

b) If sensor triggering is released and normal maximum output power is restored within the 45 ° range, the procedures in step a) should be repeated by reducing the tablet to phantom separation distance by 1 mm until the proximity sensor no longer releases triggering, and maximum output power remains in the reduced mode.

c) The smallest separation distance determined in steps a) and b), minus 1 mm, is the sensor triggering distance for tablet tilt coverage. The smallest separation distance determined in 9.1, 9.2 and 9.3 for each triggering condition minus 1 mm should be used in the SAR measurements.



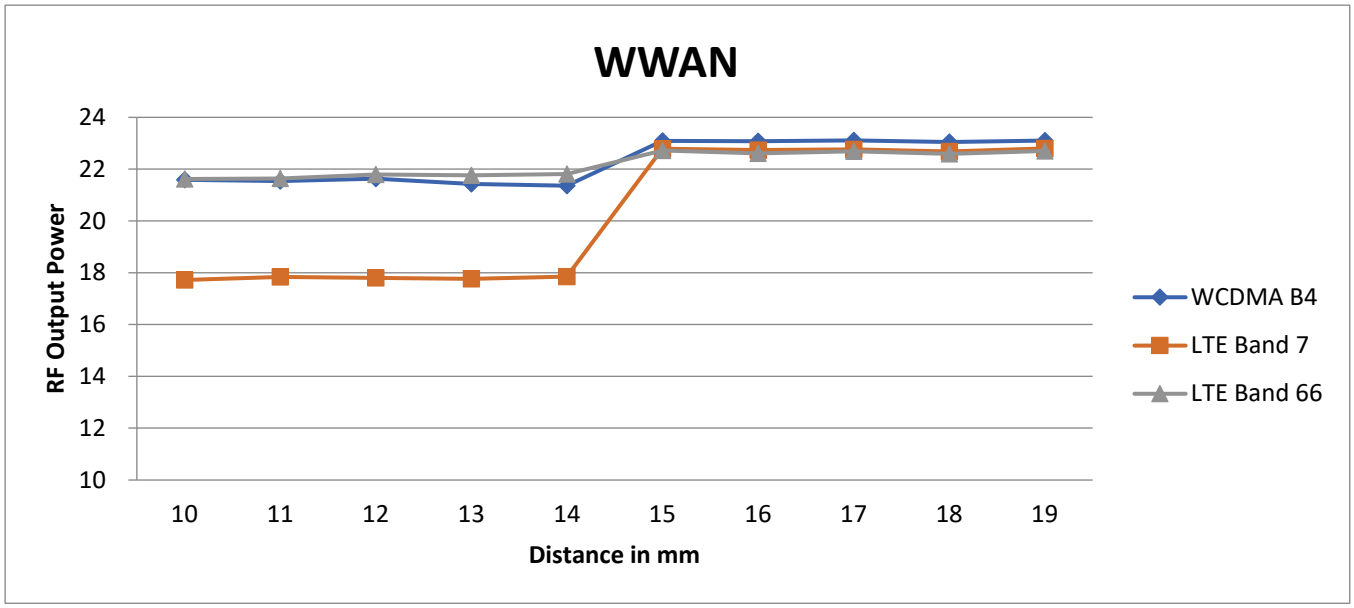
9.4 Summary of trigger distance

Mode	Left-side	
	Moving toward phantom	Moving from phantom
WWAN ANT	14mm	15mm

Note: The smallest separation distance determined in each triggering condition minus 1 mm should be used in the SAR measurements.

Left-side, DUT Moving Toward (Trigger) and Away (Release) from the phantom

Distance to DUT vs. Output Power in dBm										
Distance (mm)	10	11	12	13	14	15	16	17	18	19
WCDMA B4	21.59	21.54	21.63	21.43	21.36	23.09	23.08	23.11	23.05	23.10
LTE Band 7	17.72	17.84	17.80	17.76	17.85	22.79	22.74	22.76	22.68	22.80
LTE Band 66	21.62	21.64	21.79	21.76	21.81	22.72	22.61	22.69	22.59	22.70

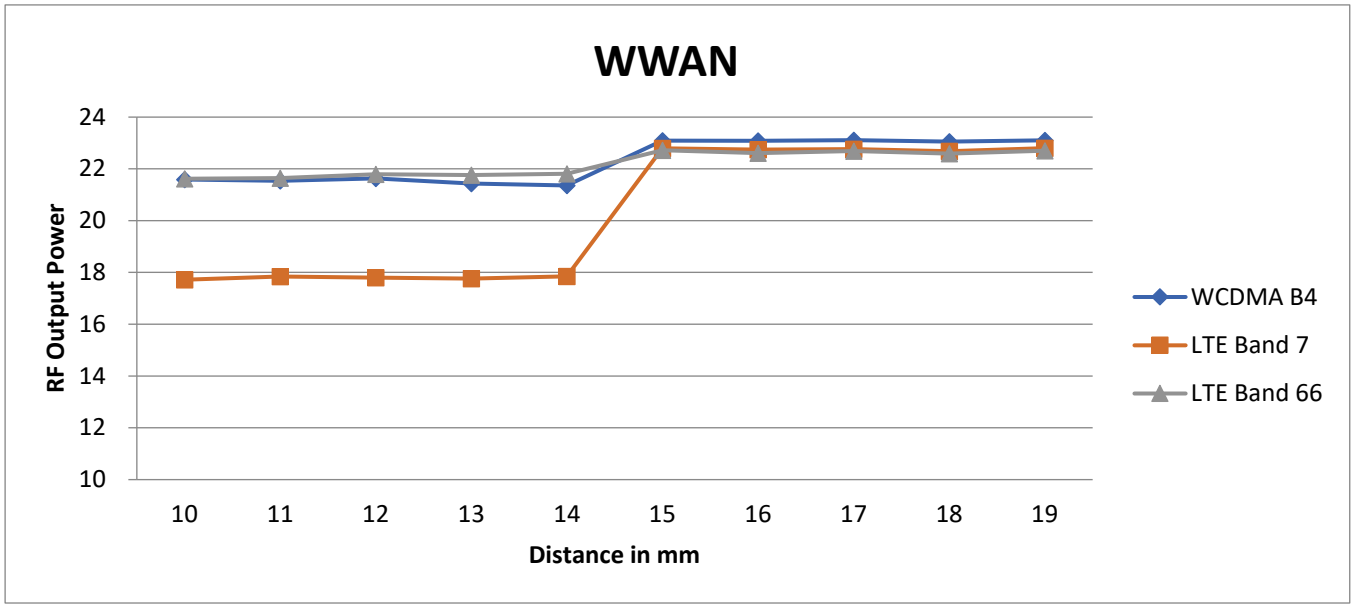


Mode	Back	
	Moving toward phantom	Moving from phantom
WWAN ANT	9mm	10mm

Note: The smallest separation distance determined in each triggering condition minus 1 mm should be used in the SAR measurements.

Back, DUT Moving Toward (Trigger) and Away (Release) from the phantom

Distance to DUT vs. Output Power in dBm										
Distance (mm)	5	6	7	8	9	10	11	12	13	14
WCDMA B4	21.60	21.55	21.61	21.39	21.27	23.12	23.03	23.10	23.11	23.12
LTE Band 7	17.66	17.87	17.84	17.82	17.88	22.83	22.78	22.79	22.59	22.75
LTE Band 66	21.69	21.54	21.69	21.75	21.83	22.68	22.63	22.67	22.71	22.63



10. Test Results

10.1 Test Results Summary

SAR MEASUREMENT									
Ambient Temperature (°C): 23.1±2				Relative Humidity (%): 58%					
Liquid Temperature (°C): 22.1±2				Depth of Liquid (cm): >15					
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	
Test Mode: WLAN2.4GHz_802.11b-1M_Wifi 1									
Front	5	6	2437	12.15	12.5	98	0.014	0.015	
Back	5	6	2437	12.15	12.5	98	0.172	0.190	
Left-side	5	1	2412	12.11	12.5	98	1.030	**1.149**	204
Left-side	5	6	2437	12.15	12.5	98	0.891	0.985	
Left-side	5	11	2462	11.72	12.5	98	0.727	0.887	
Top	5	6	2437	12.15	12.5	98	0.013	0.015	
Test Mode: WLAN2.4GHz_802.11b-1M_Wifi 2									
Front	5	6	2437	12.32	12.5	98	0.011	0.012	
Back	5	6	2437	12.32	12.5	98	0.193	0.205	
Right-side	5	1	2412	12.30	12.5	98	0.800	0.854	
Right-side	5	6	2437	12.32	12.5	98	1.030	1.095	
Right-side	5	11	2462	12.11	12.5	98	0.851	0.950	
Top	5	6	2437	12.32	12.5	98	0.008	0.009	
Test Mode: Bluetooth_BT-1M_Wifi 2									
Front	5	38	2440	6.94	7	77	0.00405	0.005	
Back	5	38	2440	6.94	7	77	0.051	0.067	
Right-side	5	38	2440	6.94	7	77	0.228	0.300	502
Top	5	38	2440	6.94	7	77	0.00196	0.003	

Note:

1. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required.
2. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in that exposure configuration.

SAR MEASUREMENT									
Ambient Temperature (°C): 22.8±2				Relative Humidity (%): 57%					
Liquid Temperature (°C): 21.8±2				Depth of Liquid (cm): >15					
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	
Test Mode: WLAN5GHz_802.11ac80-VHT0_Wifi 1									
Front	5	58	5290	12.18	12.5	98	0.042	0.047	
Back	5	58	5290	12.18	12.5	98	0.288	0.316	
Left-side	5	58	5290	12.18	12.5	98	1.020	**1.120**	218
Top	5	58	5290	12.18	12.5	98	0.155	0.170	
Test Mode: WLAN5GHz_802.11ac80-VHT0_Wifi 2									
Front	5	58	5290	12.45	12.5	98	0.018	0.018	
Back	5	58	5290	12.45	12.5	98	0.125	0.129	
Right-side	5	58	5290	12.45	12.5	98	0.960	0.991	
Top	5	58	5290	12.45	12.5	98	0.076	0.078	

Note:

1. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in that exposure configuration.
2. When multiple transmission modes have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected.
3. When the reported SAR of the highest measured maximum U-NII-2A for the exposure configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.

SAR MEASUREMENT									
Ambient Temperature (°C): 22.8±2				Relative Humidity (%): 57%					
Liquid Temperature (°C): 21.8±2				Depth of Liquid (cm): >15					
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	
Test Mode: WLAN5GHz_802.11ac80-VHT0_Wifi 1									
Front	5	138	5690	11.74	12	98	0.019	0.020	
Back	5	138	5690	11.74	12	98	0.223	0.241	
Left-side	5	106	5530	11.69	12	98	0.797	0.873	
Left-side	5	122	5610	11.41	12	98	0.719	0.840	
Left-side	5	138	5690	11.74	12	98	1.070	**1.159**	231
Top	5	138	5690	11.74	12	98	0.097	0.105	
Test Mode: WLAN5GHz_802.11ac80-VHT0_Wifi 2									
Front	5	138	5690	11.69	12	98	0.025	0.027	
Back	5	138	5690	11.69	12	98	0.153	0.168	
Right-side	5	106	5530	11.64	12	98	0.813	0.901	
Right-side	5	122	5610	11.35	12	98	0.871	1.032	
Right-side	5	138	5690	11.69	12	98	1.020	1.117	
Top	5	138	5690	11.69	12	98	0.087	0.095	

Note:

1. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in that exposure configuration.
2. When multiple transmission modes have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected.

SAR MEASUREMENT									
Ambient Temperature (°C): 22.8±2				Relative Humidity (%): 57%					
Liquid Temperature (°C): 21.8±2				Depth of Liquid (cm): >15					
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	
Test Mode: WLAN5GHz_802.11ac80-VHT0_Wifi 1									
Front	5	155	5775	10.98	11	98	0.014	0.014	
Back	5	155	5775	10.98	11	98	0.182	0.186	
Left-side	5	155	5775	10.98	11	98	0.708	0.725	
Top	5	155	5775	10.98	11	98	0.079	0.081	
Front	5	171	5855	10.72	11	98	0.011	0.012	
Back	5	171	5855	10.72	11	98	0.161	0.175	
Left-side	5	171	5855	10.72	11	98	0.814	**0.886**	221
Top	5	171	5855	10.72	11	98	0.105	0.114	
Test Mode: WLAN5GHz_802.11ac80-VHT0_Wifi 2									
Front	5	155	5775	10.93	11	98	0.013	0.014	
Back	5	155	5775	10.93	11	98	0.102	0.106	
Right-side	5	155	5775	10.93	11	98	0.693	0.718	
Top	5	155	5775	10.93	11	98	0.054	0.056	
Front	5	171	5855	10.92	11	98	0.019	0.020	
Back	5	171	5855	10.92	11	98	0.108	0.112	
Right-side	5	171	5855	10.92	11	98	0.611	0.635	
Top	5	171	5855	10.92	11	98	0.050	0.052	

Note:

1. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in that exposure configuration.
2. When multiple transmission modes have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected.

SAR MEASUREMENT										
Ambient Temperature (°C): 22.8±2						Relative Humidity (%): 55%				
Liquid Temperature (°C): 21.8±2						Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		APD (W/m^2)	Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	Meas-4cm^2	
Test Mode: WLAN6GHz_802.11ax160-HE0_Wifi 1										
Front	5	143	6665	11.96	12	99	0.021	0.021	0.180	
Back	5	143	6665	11.96	12	99	0.415	0.423	3.300	
Left-side	5	143	6665	11.96	12	99	0.688	**0.701**	5.470	276
Top	5	143	6665	11.96	12	99	0.106	0.108	0.947	
Test Mode: WLAN6GHz_802.11ax160-HE0_Wifi 2										
Front	5	143	6665	11.73	12	99	0.042	0.045	0.359	
Back	5	143	6665	11.73	12	99	0.226	0.243	1.850	
Right-side	5	143	6665	11.73	12	99	0.242	0.260	1.920	
Top	5	143	6665	11.73	12	99	0.071	0.076	0.640	
SAR MEASUREMENT										
Ambient Temperature (°C): 23.1±2						Relative Humidity (%): 56%				
Liquid Temperature (°C): 22.1±2						Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		Duty Cycle %	SAR (W/kg)		APD (W/m^2)	Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit		Meas-1g	Scaled-1g	Meas-4cm^2	
Test Mode: WLAN6GHz_802.11ax160-HE0_Wifi 1										
Left-side	5	15	6025	9.57	10	99	0.363	0.405	2.760	
Left-side	5	47	6185	9.47	10	99	0.613	0.699	4.630	
Left-side	5	111	6505	9.01	9.5	99	0.427	0.483	3.180	
Left-side	5	207	6985	9.86	10	99	0.136	0.142	1.180	
Test Mode: WLAN6GHz_802.11ax160-HE0_Wifi 2										
Right-side	5	15	6025	9.61	10	99	0.501	0.554	3.250	
Right-side	5	47	6185	9.92	10	99	0.325	0.334	2.600	
Right-side	5	111	6505	9.46	9.5	99	0.323	0.329	2.580	
Right-side	5	207	6985	9.74	10	99	0.312	0.335	2.500	

Note:

1. When multiple transmission modes have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected.

PD MEASUREMENT												
Ambient Temperature (°C): 23±2							Relative Humidity (%): 56%					
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		Duty Cycle %	psPDn+ (W/m^2)		psPDtot+ (W/m^2)		Uncertainty	Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit		Meas-4cm^2	Scaled-4cm^2	Meas-4cm^2	Scaled-4cm^2	Uncertainty Scaling Factor	
Test Mode: WLAN6GHz_802.11ax160-HE0_Wifi 1												
Left-side	5	47	6185	9.47	10	99	3.300	5.837	3.440	6.084	1.550	
Left-side	5	111	6505	9.01	9.5	99	3.340	5.853	3.500	6.134	1.550	
Left-side	5	143	6665	11.96	12	99	4.620	7.300	4.920	**7.774**	1.550	12
Test Mode: WLAN6GHz_802.11ax160-HE0_Wifi 2												
Right-side	5	15	6025	9.61	10	99	3.410	5.840	3.630	6.217	1.550	
Right-side	5	207	6985	9.74	10	99	3.970	6.598	4.100	6.815	1.550	

Note:

1. Per WLAN 6 GHz interim test procedure in Oct. 2020 TCBs Workshop notes. At least 5 channels for BW 160MHz should be tested.

SAR MEASUREMENT								
Ambient Temperature (°C): 22.9±2				Relative Humidity (%): 56%				
Liquid Temperature (°C): 21.9±2				Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: WCDMA B2_RMC								
Front	5	9400	1880	23.26	23.5	0.330	0.349	
Back	5	9262	1852.4	23.11	23.5	0.867	0.948	
Back	5	9400	1880	23.26	23.5	0.852	0.900	
Back	5	9538	1907.6	23.13	23.5	1.070	**1.165**	180
Left-side	5	9262	1852.4	23.11	23.5	0.793	0.868	
Left-side	5	9400	1880	23.26	23.5	0.930	0.983	
Left-side	5	9538	1907.6	23.13	23.5	0.765	0.833	
Bottom	5	9400	1880	23.26	23.5	0.064	0.067	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.

SAR MEASUREMENT								
Ambient Temperature (°C): 23.2±2				Relative Humidity (%): 54%				
Liquid Temperature (°C): 22.2±2				Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: WCDMA B4_RMC								
Front	5	1413	1732.6	21.66	22	0.311	0.336	
Back	5	1413	1732.6	21.66	22	0.713	0.771	
Back	8	1413	1732.6	23.19	23.5	0.658	0.707	
Left-side	5	1312	1712.4	21.63	22	0.887	0.966	
Left-side	5	1413	1732.6	21.66	22	0.850	0.919	
Left-side	5	1513	1752.6	21.43	22	0.914	**1.042**	177
Left-side	13	1413	1732.6	23.19	23.5	0.312	0.335	
Bottom	5	1413	1732.6	21.66	22	0.054	0.059	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.

SAR MEASUREMENT								
Ambient Temperature (°C): 22.8±2				Relative Humidity (%): 57%				
Liquid Temperature (°C): 21.8±2				Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
		Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: WCDMA B5_RMC								
Front	5	4183	836.6	22.87	23.5	0.192	0.222	
Back	5	4183	836.6	22.87	23.5	0.381	0.440	
Left-side	5	4132	826.4	22.85	23.5	0.736	0.855	
Left-side	5	4183	836.6	22.87	23.5	0.740	**0.856**	140
Left-side	5	4233	846.6	22.82	23.5	0.708	0.828	
Bottom	5	4183	836.6	22.87	23.5	0.069	0.080	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.

SAR MEASUREMENT										
Ambient Temperature (°C): 23.1±2						Relative Humidity (%): 55%				
Liquid Temperature (°C): 22.1±2						Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: LTE Band 7_20M_QPSK										
Front	5	1	0	21100	2535	17.89	18	0.275	0.282	
Back	5	1	0	21100	2535	17.89	18	0.671	0.688	
Back	8	1	0	20850	2510	22.77	23	0.942	0.993	
Back	8	1	0	21100	2535	22.85	23	0.879	0.910	
Back	8	1	0	21350	2560	22.83	23	0.747	0.777	
Left-side	5	1	0	20850	2510	17.83	18	1.040	1.082	
Left-side	5	1	0	21100	2535	17.89	18	1.100	**1.128**	165
Left-side	5	1	0	21350	2560	17.81	18	1.060	1.107	
Left-side	5	50	0	20850	2510	17.72	18	0.977	1.042	
Left-side	5	50	0	21100	2535	17.80	18	0.958	1.003	
Left-side	5	50	0	21350	2560	17.79	18	0.876	0.919	
Left-side	5	100	0	21100	2535	17.71	18	0.931	0.995	
Left-side	13	1	0	20850	2510	22.77	23	0.874	0.922	
Left-side	13	1	0	21100	2535	22.85	23	0.797	0.825	
Left-side	13	1	0	21350	2560	22.83	23	0.693	0.721	
Bottom	5	1	0	21100	2535	17.89	18	0.197	0.202	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.

SAR MEASUREMENT										
Ambient Temperature (°C): 22.8±2						Relative Humidity (%): 55%				
Liquid Temperature (°C): 21.8±2						Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: LTE Band 12_10M_QPSK										
Front	5	1	0	23095	707.5	22.73	23	0.212	0.226	
Back	5	1	0	23095	707.5	22.73	23	0.282	0.300	
Left-side	5	1	0	23060	704	22.67	23	0.337	0.364	
Left-side	5	1	0	23095	707.5	22.73	23	0.344	**0.366**	101
Left-side	5	1	0	23130	711	22.51	23	0.280	0.313	
Left-side	5	25	0	23095	707.5	21.58	22	0.240	0.264	
Bottom	5	1	0	23095	707.5	22.73	23	0.083	0.088	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.

SAR MEASUREMENT										
Ambient Temperature (°C): 22.8±2						Relative Humidity (%): 55%				
Liquid Temperature (°C): 21.8±2						Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: LTE Band 13_10M_QPSK										
Front	5	1	0	23230	782	22.85	23	0.286	0.296	
Back	5	1	0	23230	782	22.85	23	0.376	0.389	
Left-side	5	1	0	23230	782	22.85	23	0.682	**0.706**	104
Left-side	5	25	0	23230	782	21.61	22	0.464	0.508	
Bottom	5	1	0	23230	782	22.85	23	0.111	0.115	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.

SAR MEASUREMENT										
Ambient Temperature (°C): 22.9±2						Relative Humidity (%): 56%				
Liquid Temperature (°C): 21.9±2						Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: LTE Band 25_20M_QPSK										
Front	5	1	0	26365	1882.5	22.67	23	0.277	0.299	
Back	5	1	0	26140	1860	22.51	23	0.664	0.743	
Back	5	1	0	26365	1882.5	22.67	23	0.850	**0.917**	181
Back	5	1	0	26590	1905	22.49	23	0.801	0.901	
Back	5	50	0	26365	1882.5	21.79	22	0.657	0.690	
Back	5	100	0	26365	1882.5	21.29	22	0.645	0.760	
Left-side	5	1	0	26140	1860	22.51	23	0.686	0.768	
Left-side	5	1	0	26365	1882.5	22.67	23	0.783	0.845	
Left-side	5	1	0	26590	1905	22.49	23	0.618	0.695	
Bottom	5	1	0	26365	1882.5	22.67	23	0.039	0.042	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.
2. LTE Band 25 (1850 -1915 MHz) is covered by LTE Band 2 (1850 -1910 MHz)

SAR MEASUREMENT										
Ambient Temperature (°C): 22.8±2						Relative Humidity (%): 57%				
Liquid Temperature (°C): 21.8±2						Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: LTE Band 26_15M_QPSK										
Front	5	1	0	26865	831.5	22.73	23	0.178	0.189	
Back	5	1	0	26865	831.5	22.73	23	0.398	0.424	
Left-side	5	1	0	26865	831.5	22.59	23	0.635	0.698	
Left-side	5	1	0	26865	831.5	22.73	23	0.689	**0.733**	113
Left-side	5	1	0	26865	831.5	22.55	23	0.609	0.675	
Left-side	5	36	0	26865	831.5	21.70	22	0.473	0.507	
Bottom	5	1	0	26865	831.5	22.73	23	0.052	0.055	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.
2. LTE Band 26 (814 -849 MHz) is covered by LTE Band 5 (824 -849 MHz)

SAR MEASUREMENT										
Ambient Temperature (°C): 23.1±2						Relative Humidity (%): 55%				
Liquid Temperature (°C): 22.1±2						Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: LTE Band 41_20M_QPSK										
Front	5	1	0	40620	2593	22.78	23	0.314	0.330	
Back	5	1	0	40620	2593	22.78	23	0.564	0.593	
Left-side	5	1	0	39750	2506	22.71	23	0.720	0.770	
Left-side	5	1	0	40185	2549.5	22.65	23	1.000	1.084	
Left-side	5	1	0	40620	2593	22.78	23	1.040	**1.094**	108
Left-side	5	1	0	41055	2636.5	22.64	23	0.569	0.618	
Left-side	5	1	0	41490	2680	22.76	23	0.539	0.570	
Left-side	5	50	0	40620	2593	21.91	22	0.720	0.735	
Left-side	5	100	0	40620	2593	21.63	22	0.644	0.701	
Bottom	5	1	0	40620	2593	22.78	23	0.172	0.181	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.
2. LTE Band 41 (2496 -2690 MHz) is covered by LTE Band 38 (2570 -2620 MHz)

SAR MEASUREMENT										
Ambient Temperature (°C): 23.2±2						Relative Humidity (%): 54%				
Liquid Temperature (°C): 22.2±2						Depth of Liquid (cm): >15				
Test Position	Dist. (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR (W/kg)		Plot No.
				Ch.	MHz	Meas.	Tune-Up Limit	Meas-1g	Scaled-1g	
Test Mode: LTE Band 66_20M_QPSK										
Front	5	1	0	132322	1745	21.85	22	0.347	0.359	
Back	5	1	0	132322	1745	21.85	22	0.698	0.723	
Back	8	1	0	132322	1745	22.78	23	0.522	0.549	
Left-side	5	1	0	132072	1720	21.77	22	1.040	1.097	
Left-side	5	1	0	132322	1745	21.85	22	1.130	**1.170**	158
Left-side	5	1	0	132572	1770	21.78	22	0.940	0.989	
Left-side	5	50	0	132072	1720	21.68	22	1.000	1.076	
Left-side	5	50	0	132322	1745	21.76	22	1.050	1.110	
Left-side	5	50	0	132572	1770	21.69	22	0.857	0.920	
Left-side	5	100	0	132322	1745	21.69	22	0.954	1.025	
Left-side	13	1	0	132322	1745	22.78	23	0.330	0.347	
Bottom	5	1	0	132322	1745	21.85	22	0.032	0.033	

Note:

1. When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.
2. LTE Band 66 (1710 -1780 MHz) is covered by LTE Band 4 (1770 -1755 MHz)

10.2 Simultaneous Transmission

Simultaneous Transmission Configurations	
1	WLAN 2.4 GHz WIFI 1 + WLAN 2.4 GHz WIFI 2
2	WLAN 2.4 GHz WIFI 1 + Bluetooth WIFI 2
3	WLAN 5 GHz WIFI 1 + WLAN 5 GHz WIFI 2
4	WLAN 5 GHz WIFI 1 + WLAN 5 GHz WIFI 2 + Bluetooth WIFI 2
5	WLAN 6 GHz WIFI 1 + WLAN 6 GHz WIFI 2
6	WLAN 6 GHz WIFI 1 + WLAN 6 GHz WIFI 2 + Bluetooth WIFI 2

10.2.1 Simultaneous transmission test exclusion considerations

	2	3	4	5	6	7	8	2 + 3	2 + 8	4 + 5	4 + 5 + 8	6 + 7	6 + 7 + 8
Test Position	WLAN2.4GHz Wifi 1 (W/kg)	WLAN2.4GHz Wifi 2 (W/kg)	WLAN5GHz Wifi 1 (W/kg)	WLAN5GHz Wifi 2 (W/kg)	WLAN6GHz Wifi 1 (W/kg)	WLAN6GHz Wifi 2 (W/kg)	Bluetooth Wifi 2 (W/kg)	Σ 1-g SAR	Σ 1-g SAR	Σ 1-g SAR	Σ 1-g SAR	Σ 1-g SAR	Σ 1-g SAR
Front at 5 mm	0.015	0.012	0.047	0.027	0.021	0.045	0.005	0.027	0.020	0.074	0.079	0.066	0.071
Back at 5 mm	0.190	0.205	0.316	0.168	0.423	0.243	0.067	0.395	0.257	0.484	0.551	0.666	0.733
Left-side at 5 mm	1.149	-	1.159	-	0.701	-	-	1.149	1.149	1.159	1.159	0.701	0.701
Right-side at 5 mm	-	1.095	-	1.117	-	0.554	0.300	1.095	0.300	1.117	1.417	0.554	0.854
Top at 5 mm	0.015	0.009	0.170	0.095	0.108	0.076	0.003	0.024	0.018	0.265	0.268	0.184	0.187

Note: WWAN and WLAN do not operate in Simultaneous Transmission.

When the sum of SAR is larger than the limit, The ratio is determined by ***(SAR1 + SAR2)^1.5/Ri,*** rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

11. SAR measurement variability

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

Frequency		SAR 1g (W/kg)		
Channel	MHz	Original	First Repeated	
			Value	Ratio
1	2412	1.030	1.000	1.030
138	5690	1.070	0.960	1.115
9538	1907.6	1.070	1.040	1.029
1513	1752.6	0.914	0.889	1.028
21100	2535	1.100	1.060	1.038
26365	1882.5	0.850	0.766	1.110
40620	2593	1.040	0.970	1.072
132322	1745	1.130	1.080	1.046

Appendix

Appendix A. System Check Data

Appendix B. Highest measurement Data

Appendix C. Test Setup Photographs

Appendix D. Probe Calibration Data

Appendix E. Dipole Calibration Data

Appendix F. Product Photos-Please refer to the file: 2460573R-Product Photos