



SAR TEST REPORT

Product Name: Smart LTE Terminal

Model Number: MT200

FCC ID: 2AYEZ-MT200

Issued For : Telo Communication (Shenzhen) Co., Ltd

13th Floor, Building B, Union R&D Center, No. 381
Guangshen Road, Bao'an District, Shenzhen, China.

Issued By : Shenzhen LGT Test Service Co., Ltd.

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Report Number: LGT25H029HA02

Sample Received Date: Aug.12, 2025

Date of Test Aug.13, 2025 ~Aug. 28, 2025

Date of Issue Aug. 29, 2025

Head:0.765 W/kg

Max. SAR (1g)

Body:0.939 W/kg

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Revision History

Rev.	Issue Date	Contents
00	Aug. 29, 2025	Initial Issue



TEST REPORT CERTIFICATION

Applicant Telo Communication (Shenzhen) Co., Ltd
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Guangshen Road, Bao'an District, Shenzhen, China.

Product Name Smart LTE Terminal

Trademark TELOX

Model Number MT200

Sample number LGT2508158-3

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
ANSI/IEEE Std. C95.1-2019 FCC 47 CFR Part 2 (2.1093) IEEE 1528: 2013	PASS

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Manager





1. General Information

Environmental evaluation measurements of specific absorption rate (SAR) distributions in emulated human head and body tissues exposed to radio frequency (RF) radiation from wireless portable devices for compliance with the rules and regulations of the U.S. Federal Communications Commission (FCC).

1.1 EUT Description

Product Name	Smart LTE Terminal
Test Model Number	MT200
Series Number	N/A
Model Difference	N/A
Device Category	Portable
Product stage	Production unit
RF Exposure Environment	General Population / Uncontrolled
Hardware Version	N/A
Software Version	N/A
Frequency Range	GSM 850: 824 ~ 849 MHz PCS 1900: 1850 ~ 1910 MHz WCDMA Band II: 1850 ~ 1910 MHz WCDMA Band IV: 1710 ~ 1755 MHz WCDMA Band V: 824 ~ 849 MHz LTE Band 2: 1850 ~ 1910 MHz LTE Band 4: 1710 ~ 1755 MHz LTE Band 5: 824 ~ 849 MHz LTE Band 7: 2500 ~ 2570 MHz LTE Band 12: 699 ~ 716 MHz LTE Band 13: 777 ~ 787 MHz LTE Band 14: 788 ~ 798 MHz LTE Band 17: 704 ~ 716 MHz LTE Band 25: 1850 ~ 1915 MHz LTE Band 26: 814 ~ 824 MHz / 824 ~ 849 MHz LTE Band 38: 2570 ~ 2620 MHz LTE Band 40: 2305 ~ 2315 MHz / 2350 ~ 2360 MHz LTE Band 41: 2535 ~ 2655 MHz LTE Band 66: 1710 ~ 1780 MHz WLAN 802.11b/g/n20: 2412 MHz ~ 2462 MHz WLAN 802.11n40: 2422 MHz ~ 2452 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5150 ~ 5250 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5250 ~ 5350 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5470 ~ 5725 MHz Bluetooth: 2402 ~ 2480 MHz NFC: 13.56 MHz



Max. Reported SAR(1g): (Limit:1.6W/kg) Test distance: Head:0mm Body:10mm	Mode	Head (W/ kg)	Body Worn and Hotspot (W/ kg)
	GSM 850	0.298	0.545
	PCS 1900	0.391	0.450
	WCDMA Band II	0.555	0.916
	WCDMA Band IV	0.409	0.615
	WCDMA Band V	0.362	0.705
	LTE Band 2	0.465	0.858
	LTE Band 4	0.402	0.789
	LTE Band 5	0.631	0.717
	LTE Band 7	0.240	0.408
	LTE Band 12	0.465	0.766
	LTE Band 13	0.199	0.376
	LTE Band 14	0.679	0.939
	LTE Band 17	0.550	0.678
	LTE Band 25	0.394	0.893
	LTE Band 26	0.569	0.860
	LTE Band 38	0.126	0.726
	LTE Band 40	0.326	0.412
	LTE Band 41	0.329	0.758
	LTE Band 66	0.508	0.597
	2.4G WLAN	0.696	0.365
	5.2G WLAN	0.765	0.560
	5.3G WLAN	0.629	0.636
	5.6G WLAN	0.462	0.643
	Bluetooth ^{Note}	0.132	0.132
	NFC ^{Note}	0.000001	0.000001
	1g Sum SAR	1.444	1.582
Battery	Rated Voltage:3.85V Capacity: 15.4Ah		
Description test modes	SIM 1 and SIM 2 is a chipset unit and tested as single chipset, SIM 1 is used to tested / Only support single SIM Card.		
Operating Mode:	GSM: GSM Voice; GPRS/EGPRS Class 12 WCDMA: RMC, HSDPA, HSUPA Release 6 LTE: QPSK, 16QAM 2.4G WLAN: 802.11b(DSSS): CCK, DQPSK, DBPSK 802.11g(OFDM): BPSK, QPSK,16-QAM,64-QAM 802.11n(OFDM): BPSK, QPSK,16-QAM,64-QAM 5G WLAN: 802.11a(OFDM): BPSK, QPSK,16-QAM,64-QAM 802.11n(OFDM): BPSK, QPSK,16-QAM,64-QAM 802.11ac (OFDM): BPSK, QPSK,16-QAM,64-QAM,256-QAM Bluetooth: GFSK + π /4DQPSK+8DPSK BLE: GFSK NFC: ASK		
Antenna Specification	GSM/WCDMA/LTE: PIFA Antenna Bluetooth: PIFA Antenna WLAN: PIFA Antenna NFC: Coil Antenna		
Operating Mode	Maximum continuous output		
SIM Card	Support dual-SIM, dual standby, the multiple SIM card with two lines cannot trans mitting at the same time		
Hotspot Mode	Support		
DTM Mode	Not Support		
Note 1: The BT and NFC value was Estimated.			



1.2 Test Environment

Ambient conditions in the SAR laboratory:

Items	Required
Temperature (°C)	18-25
Humidity (%RH)	30-70

1.3 Test Factory

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate	FCC Registration No.: 746540
	IC Registration No.: CN0136



2. Test Standards and Limits

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	ANSI/IEEE Std. C95.1-2019	IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D01 v06	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
5	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
7	FCC KDB 941225 D01 v03r01	SAR Measurement Procedures for 3G Devices
8	FCC KDB 941225 D05 v02r05	SAR for LTE Devices
9	FCC KDB 941225 D06 v02r01	Hotspot Mode SAR
10	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
11	FCC KDB 248227 D01 Wi-Fi SAR v02r02	SAR Considerations for 802.11 Devices

(A). Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body Partial-Body Hands, Wrists, Feet and Ankles

0.4 8.0 20.0

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

Whole-Body Partial-Body Hands, Wrists, Feet and Ankles

0.08 1.6 4.0

NOTE: Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1 gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

Population/Uncontrolled Environments:

Are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Occupational/Controlled Environments:

Are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

NOTE
GENERAL POPULATION/UNCONTROLLED EXPOSURE
PARTIAL BODY LIMIT
1.6 W/kg



3. SAR Measurement System

3.1 Definition of Specific Absorption Rate (SAR)

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

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

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

SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

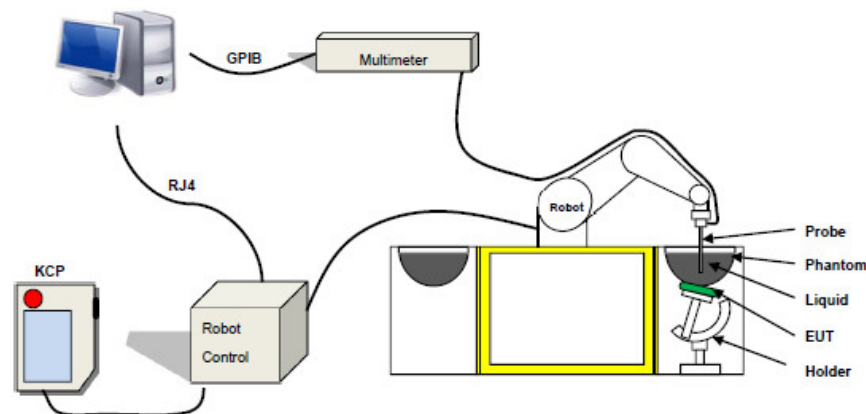
$$SAR = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue;

ρ is the mass density of the tissue and E is the RMS electrical field strength.

3.2 SAR System

MVG SAR System Diagram:



COMOSAR is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The COMOSAR system consists of the following items:

- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

The following figure shows the system.



The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR software computes the results to give a SAR value in a 1g or 1g mass.

3.2.1 Probe

For the measurements the Specific Dosimetric E-Field Probe 2225-EPGO-450 with following specifications is used

- Probe Length: 330 mm
- Length of Individual Dipoles: 2mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter: 2.5 mm
- Distance between dipole/probe extremity: 1 mm
- Dynamic range: 0.01-100 W/kg
- Probe linearity: 3%
- Axial Isotropy: < 0.10 dB
- Spherical Isotropy: < 0.10 dB
- Calibration range: 0.15 GHz to 7.5 GHz for head simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°



Figure 1-MVG COMOSAR Dosimetric E field Probe

3.2.2 Phantom

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

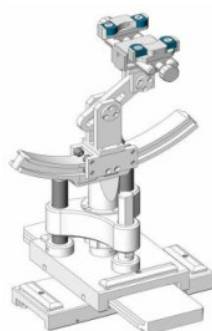


Figure-SN 06/22 SAM 148



Figure-SN 06/22 ELLI 51

3.2.3 Device Holder



The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5 mm distance, a positioning uncertainty of ± 0.5 mm would produce a SAR uncertainty of ± 20 %. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.



4. Tissue Simulating Liquids

4.1 Simulating Liquids Parameter Check

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values

The uncertainty due to the liquid conductivity and permittivity arises from two different sources. The first source of error is the deviation of the liquid conductivity from its target value (max _ 5 %) and the second source of error arises from the measurement procedures used to assess conductivity. The uncertainty shall be assessed using a rectangular probability For 1 g averaging, the maximum weighting coefficient for SAR is 0,5.

IEEE SCC-34/SC-2 RECOMMENDED TISSUE DIELECTRIC PARAMETERS

The head and body tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 have been incorporated in the following table.

Frequency	ϵ_r	σ 10g S/m
300	45.3	0.87
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
1800 to 2000	40.0	1.40
2100	39.8	1.49
2450	39.2	1.80
2600	39.0	1.96
3000	38.5	2.40
3500	37.9	2.91
4000	37.4	3.43
4500	36.8	3.94
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



LIQUID MEASUREMENT RESULTS

Date	Ambient		Simulating Liquid		Parameters	Target	Measured	Deviation %	Limited %
	Temp . [°C]	Humidity %	Frequency (MHz)	Temp. [°C]					
2025-08-17	20.1	48	750	19.8	Permittivity	41.90	42.26	0.86	±5
					Conductivity	0.89	0.88	-1.12	±5
2025-08-20	20.8	53	750	20.5	Permittivity	41.90	42.54	1.53	±5
					Conductivity	0.89	0.85	-4.49	±5
2025-08-18	23.1	47	835	22.7	Permittivity	41.50	42.43	2.24	±5
					Conductivity	0.90	0.94	4.44	±5
2025-08-13	20.8	60	835	20.4	Permittivity	41.50	41.96	1.11	±5
					Conductivity	0.90	0.93	3.33	±5
2025-08-15	22.8	55	1800	22.5	Permittivity	40.00	40.78	1.95	±5
					Conductivity	1.40	1.41	0.71	±5
2025-08-21	23.2	54	1800	23	Permittivity	40.00	40.61	1.53	±5
					Conductivity	1.40	1.36	-2.86	±5
2025-08-24	23.3	60	1900	23	Permittivity	40.00	40.06	0.15	±5
					Conductivity	1.40	1.43	2.14	±5
2025-08-27	23.2	55	1900	22.9	Permittivity	40.00	40.81	2.03	±5
					Conductivity	1.40	1.46	4.29	±5
2025-08-28	22.5	47	2450	22.2	Permittivity	39.20	40.24	2.65	±5
					Conductivity	1.80	1.79	-0.56	±5
2025-08-27	23.5	54	2600	20.2	Permittivity	39.00	39.18	0.46	±5
					Conductivity	1.96	1.92	-2.04	±5
2025-08-25	23.8	41	2600	23.5	Permittivity	39.00	39.44	1.13	±5
					Conductivity	1.96	1.94	-1.02	±5
2025-08-28	22.7	42	5200	22.4	Permittivity	36.00	36.78	2.17	±5
					Conductivity	4.66	4.67	0.21	±5
2025-08-16	23.2	44	5400	21.9	Permittivity	35.80	36.25	1.26	±5
					Conductivity	4.86	4.89	0.62	±5
2025-08-16	23.7	52	5600	23.4	Permittivity	35.55	36.56	2.84	±5
					Conductivity	5.07	5.03	-0.69	±5

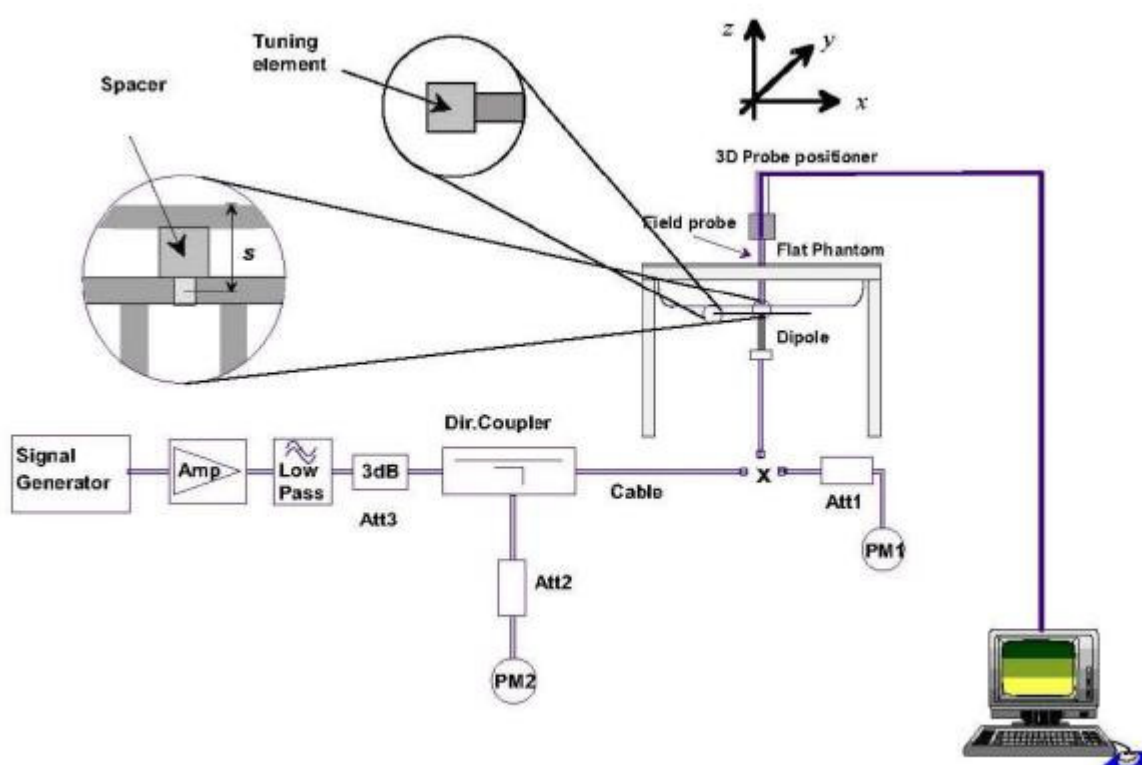


5. SAR System Validation

5.1 Validation System

Each MVG system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the MVG software, enable the user to conduct the system performance check and system validation. System kit includes a dipole, and dipole device holder.

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





5.2 Validation Result

Comparing to the original SAR value provided by MVG, the validation data should be within its specification of $\pm 10\%$.

Date	Freq.	Power	Tested Value	Normalized SAR	Target SAR	Tolerance	Limit
	(MHz)	(mW)	(W/Kg)	(W/kg)	1g(W/kg)	(%)	(%)
2025-08-17	750	100	0.827	8.27	8.51	-2.82	10
2025-08-20	750	100	0.847	8.47	8.51	-0.47	10
2025-08-18	835	100	0.926	9.26	9.63	-3.84	10
2025-08-13	835	100	0.965	9.65	9.63	0.21	10
2025-08-15	1800	100	3.683	36.83	36.60	0.63	10
2025-08-21	1800	100	3.657	36.57	36.60	-0.08	10
2025-08-24	1900	100	4.020	40.20	40.20	0.00	10
2025-08-27	1900	100	4.019	40.19	40.20	-0.02	10
2025-08-28	2450	100	5.316	53.16	52.98	0.34	10
2025-08-27	2600	100	5.598	55.98	56.15	-0.30	10
2025-08-25	2600	100	5.617	56.17	56.15	0.04	10
2025-08-28	5200	100	7.801	78.01	77.84	0.22	10
2025-08-16	5400	100	7.698	76.98	76.82	0.21	10
2025-08-16	5600	100	8.197	81.97	82.15	-0.22	10

Note:

1. The tolerance limit of System validation $\pm 10\%$.
2. The dipole input power (forward power) was 100 mW.
3. The results are normalized to 1 W input power.



6. SAR Evaluation Procedures

The procedure for assessing the average SAR value consists of the following steps:

The following steps are used for each test position

- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

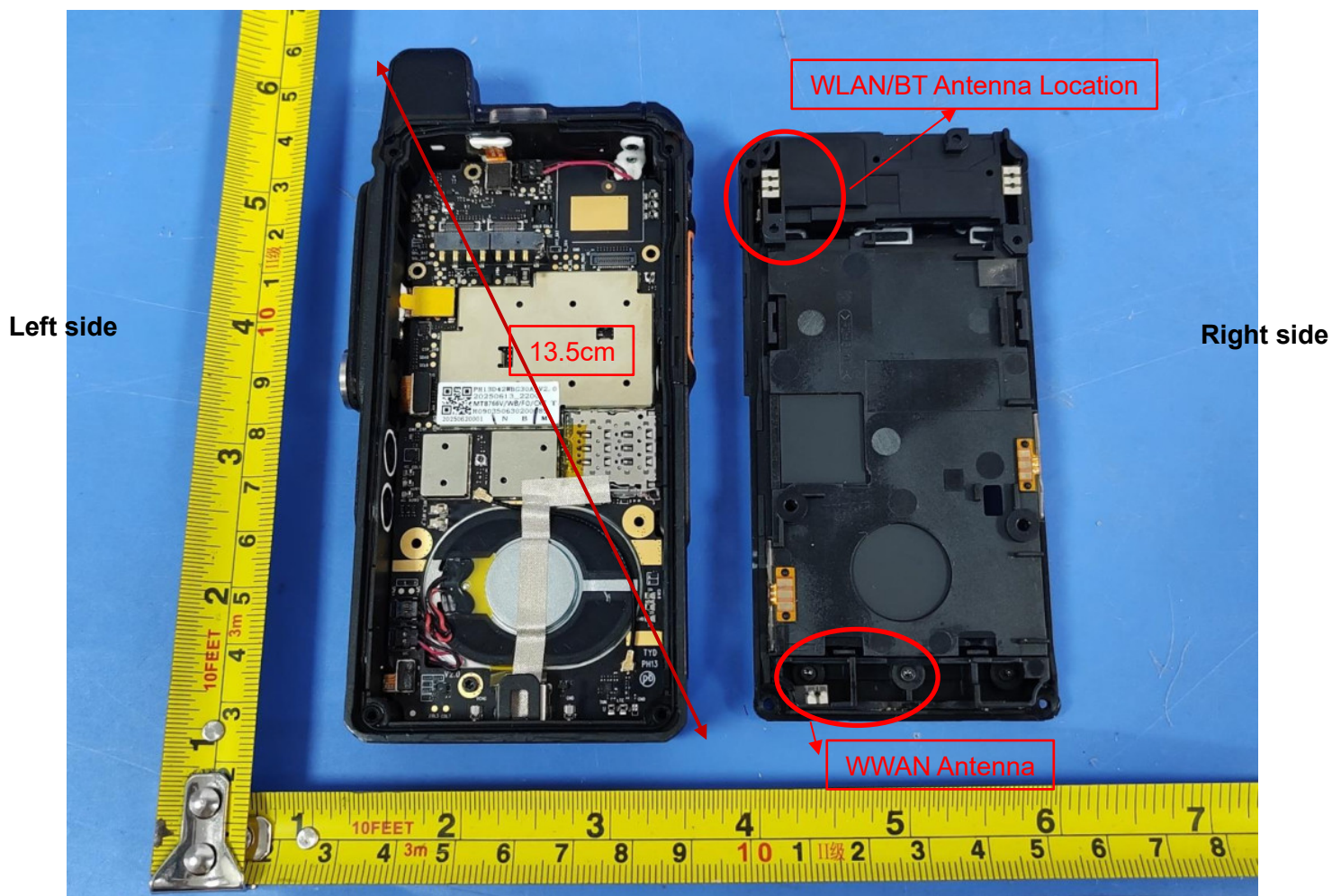
➤ Area Scan& Zoom Scan

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01 quoted below.

When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7. EUT Antenna Location Sketch

It is a Smart Lte Terminal, support GSM/WCDMA/LTE/WLAN/BT mode.



Antenna Separation Distance(mm)						
ANT	Back Side	Front Side	Left Side	Right Side	Top Side	Bottom Side
WLAN/BT	10	10	≤0.5	45	≤0.5	95
WWAN	10	10	≤0.5	40	105	≤0.5

Note 1: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.



7.1 SAR test exclusion consider table

The WWAN/WLAN/BT SAR evaluation of Maximum power (dBm) summing tolerance.

Exposure Position	Wireless Interface	GSM850	PCS1900	WCDMA II	WCDMA IV	WCDMA V
	Calculated Frequency (MHz)	848.8	1880	1880	1712.6	846.6
	Maximum Turn-up power (dBm)	26	31	24	25	24
	Maximum rated power(mW)	398.11	1258.93	251.19	316.23	251.19
Back Side	Separation distance (mm)	10	10	10	10	10
	exclusion threshold(mW)	32.56	21.88	21.88	22.92	32.60
	Testing required?	YES	YES	YES	YES	YES
Front Side	Separation distance (mm)	10	10	10	10	10
	exclusion threshold(mW)	32.56	21.88	21.88	22.92	32.60
	Testing required?	YES	YES	YES	YES	YES
Left Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	16.28	10.94	10.94	11.46	16.30
	Testing required?	YES	YES	YES	YES	YES
Right Edge	Separation distance (mm)	40	40	40	40	40
	exclusion threshold(mW)	130.25	87.52	87.52	91.70	130.42
	Testing required?	YES	YES	YES	YES	YES
Top Edge	Separation distance (mm)	105	105	105	105	105
	exclusion threshold(mW)	474.04	659.40	659.40	664.62	473.44
	Testing required?	NO	YES	NO	NO	NO
Bottom Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	16.28	10.94	10.94	11.46	16.30
	Testing required?	YES	YES	YES	YES	YES



Exposure Position	Wireless Interface	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 12
	Calculated Frequency (MHz)	1880	1720	829	2510	704
	Maximum Turn-up power (dBm)	25	25.5	23	19.5	25
	Maximum rated power(mW)	316.23	354.81	199.53	89.13	316.23
Back Side	Separation distance (mm)	10	10	10	10	10
	exclusion threshold(mW)	21.88	22.87	32.95	18.94	35.75
	Testing required?	YES	YES	YES	YES	YES
Front Side	Separation distance (mm)	10	10	10	10	10
	exclusion threshold(mW)	21.88	22.87	32.95	18.94	35.75
	Testing required?	YES	YES	YES	YES	YES
Left Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	10.94	11.44	16.47	9.47	17.88
	Testing required?	YES	YES	YES	YES	YES
Right Edge	Separation distance (mm)	40	40	40	40	40
	exclusion threshold(mW)	87.52	91.50	131.80	75.74	143.02
	Testing required?	YES	YES	YES	YES	YES
Top Edge	Separation distance (mm)	105	105	105	105	105
	exclusion threshold(mW)	659.40	664.37	468.71	644.68	436.91
	Testing required?	NO	NO	NO	NO	NO
Bottom Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	10.94	11.44	16.47	9.47	17.88
	Testing required?	YES	YES	YES	YES	YES



Exposure Position	Wireless Interface	LTE Band 13	LTE Band 14	LTE Band 17	LTE Band 25	LTE Band 26
	Calculated Frequency (MHz)	782	793	711	1882.5	819
	Maximum Turn-up power (dBm)	23	25	25.5	25	23.5
	Maximum rated power(mW)	199.53	316.23	354.81	316.23	223.87
Back Side	Separation distance (mm)	10	10	10	10	10
	exclusion threshold(mW)	33.92	33.69	35.58	21.87	33.15
	Testing required?	YES	YES	YES	YES	YES
Front Side	Separation distance (mm)	10	10	10	10	10
	exclusion threshold(mW)	33.92	33.69	35.58	21.87	33.15
	Testing required?	YES	YES	YES	YES	YES
Left Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	16.96	16.84	17.79	10.93	16.57
	Testing required?	YES	YES	YES	YES	YES
Right Edge	Separation distance (mm)	40	40	40	40	40
	exclusion threshold(mW)	135.70	134.75	142.31	87.46	132.60
	Testing required?	YES	YES	YES	YES	YES
Top Edge	Separation distance (mm)	105	105	105	105	105
	exclusion threshold(mW)	456.36	459.21	438.59	659.33	466.05
	Testing required?	NO	NO	NO	NO	NO
Bottom Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	16.96	16.84	17.79	10.93	16.57
	Testing required?	YES	YES	YES	YES	YES



Exposure Position	Wireless Interface	LTE Band 38	LTE Band 40	LTE Band 41	LTE Band 66	BT
	Calculated Frequency (MHz)	2595	2310	2595	1720	2441
	Maximum Turn-up power (dBm)	20.5	13.5	22	25.5	5
	Maximum rated power(mW)	112.20	22.39	158.49	354.81	3.16
Back Side	Separation distance (mm)	10	10	10	10	10
	exclusion threshold(mW)	18.62	19.74	18.62	22.87	19.20
	Testing required?	YES	YES	YES	YES	NO
Front Side	Separation distance (mm)	10	10	10	10	10
	exclusion threshold(mW)	18.62	19.74	18.62	22.87	19.20
	Testing required?	YES	YES	YES	YES	NO
Left Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	9.31	9.87	9.31	11.44	9.60
	Testing required?	YES	YES	YES	YES	NO
Right Edge	Separation distance (mm)	40	40	40	40	45
	exclusion threshold(mW)	74.49	78.95	74.49	91.50	86.41
	Testing required?	YES	NO	YES	YES	NO
Top Edge	Separation distance (mm)	105	105	105	105	5
	exclusion threshold(mW)	643.12	648.69	643.12	664.37	9.60
	Testing required?	NO	NO	NO	NO	NO
Bottom Edge	Separation distance (mm)	5	5	5	5	95
	exclusion threshold(mW)	9.31	9.87	9.31	11.44	546.01
	Testing required?	YES	YES	YES	YES	NO



Exposure Position	Wireless Interface	2.4G WLAN	5.2G WLAN	5.3G WLAN	5.6G WLAN
	Calculated Frequency (MHz)	2462	5240	5320	5500
	Maximum Turn-up power (dBm)	17	14.3	15	15
	Maximum rated power(mW)	50.12	26.92	31.62	31.62
Back Side	Separation distance (mm)	10	10	10	10
	exclusion threshold(mW)	19.12	13.11	13.01	12.79
	Testing required?	YES	YES	YES	YES
Front Side	Separation distance (mm)	10	10	10	10
	exclusion threshold(mW)	19.12	13.11	13.01	12.79
	Testing required?	YES	YES	YES	YES
Left Edge	Separation distance (mm)	5	5	5	5
	exclusion threshold(mW)	9.56	6.55	6.50	6.40
	Testing required?	YES	YES	YES	YES
Right Edge	Separation distance (mm)	45	45	45	45
	exclusion threshold(mW)	86.04	58.98	58.53	57.56
	Testing required?	NO	NO	NO	NO
Top Edge	Separation distance (mm)	5	5	5	5
	exclusion threshold(mW)	9.56	6.55	6.50	6.40
	Testing required?	YES	YES	YES	YES
Bottom Edge	Separation distance (mm)	95	95	95	95
	exclusion threshold(mW)	545.60	515.53	515.03	513.96
	Testing required?	NO	NO	NO	NO

Note:

1. maximum power is the source-based time-average power and represents the maximum RF output power among production units.
2. per KDB 447498 D01, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. per KDB 447498 D01, standalone SAR test exclusion threshold is applied; if the distance of the antenna to the user is <25mm, 25mm is user to determine SAR exclusion threshold
4. per KDB 447498 D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distance $\leq 50\text{mm}$ are determined by:

$$\frac{[(\text{max.power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance,}]}{}$$



mm)]*[$\sqrt{f(\text{GHz})}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, $f(\text{GHz})$ is the RF channel transmit frequency in GHz. Power and distance are rounded to the nearest mW and mm before calculation.

The result is rounded to one decimal place for comparison

For <50mm distance, we just calculate mW of the exclusion threshold value(3.0)to do compare

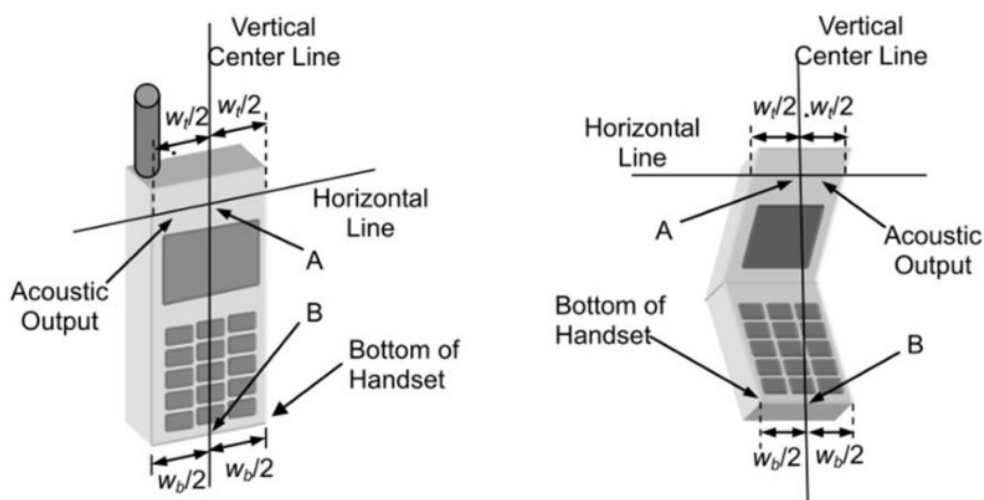
5. per KDB 447498 D01, at 100 MHz to 6GHz and for test separation distances >50mm, the SAR test exclusion threshold is determined according to the following
 - a)[threshold at 50mm in step 1]+(test separation distance -50mm)*($f(\text{MHz})/150$)]mW, at 100 MHz to 1500 MHz
 - b) [threshold at 50mm in step1]+(test separation distance -50mm) *10]mW at > 1500MHz and $\leq 6\text{GHz}$
6. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion 8.for each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of each of these configurations is less than 1/4db higher than those measured at the lower data rate than 11b mode, thus the SAR can be excluded.

8. EUT Test Position

This EUT was tested in Right Cheek, Right Titled, Left Cheek, Left Titled, Front Face and Rear Face.

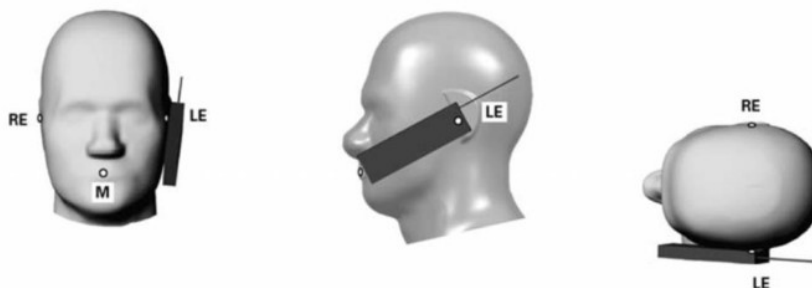
8.1 Define Two Imaginary Lines on the Handset

- (1) The vertical centerline passes through two points on the front side of the handset the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the handset.
- (2) The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- (3) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



Cheek Position

- 1) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- 2) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost





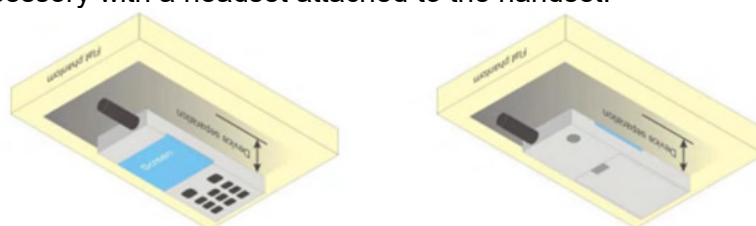
Title Position

- (1) To position the device in the “cheek” position described above.
- (2) While maintaining the device in the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until with the ear is lost.



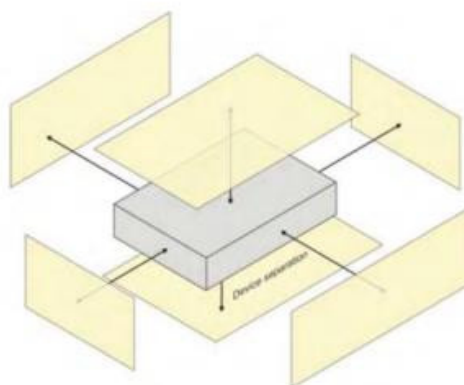
Body-worn Position Conditions:

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. When the same wireless transmission configuration is used for testing body-worn accessory and hotspot mode SAR, respectively, in voice and data mode, SAR results for the most conservative *test separation distance* configuration may be used to support both SAR conditions. When the *reported* SAR for a body-worn accessory, measured without a headset connected to the handset, is $> 1.2 \text{ W/kg}$, the highest *reported* SAR configuration for that wireless mode and frequency band should be repeated for the body-worn accessory with a headset attached to the handset.



8.2 Hotspot mode exposure position condition

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing function, the relevant hand and body exposure condition are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surface and edges with a transmitting antenna located within 25 mm from that surface or edge. When form factor of a handset is smaller than 9cm x 5cm, a test separation distance of 5mm (instead of 10mm) is required for testing hotspot mode. When the separate distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).





9. Uncertainty

9.1 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEEE 1528: 2013. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Uncertainty Component	Tol (+/- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+/-%)	10g Ui (+/-%)	vi
Measurement System								
Probe calibration	5.8	N	1	1	1	5.8	5.8	∞
Axial Isotropy	3.5	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	1.43	1.43	∞
Hemispherical Isotropy	5.9	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	2.41	2.41	∞
Boundary effect	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	4.7	R	$\sqrt{3}$	1	1	2.71	2.71	∞
System detection limits	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation response	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Readout Electronics	0.5	N	1	1	1	0.50	0.50	∞
Response Time	0	R	$\sqrt{3}$	1	1	0.00	0.00	∞
Integration Time	1.4	R	$\sqrt{3}$	1	1	1.81	1.81	∞
RF ambient conditions-Noise	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient conditions-reflections	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner mechanical tolerance	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation, Interpolation and Integration Algorithms for Max, SAR	2.3	R	$\sqrt{3}$	1	1	1.33	1.33	∞
Test sample Related								
Test sample positioning	2.6	N	1	1	1	2.60	2.60	11
Device holder uncertainty	3	N	1	1	1	3.00	3.00	7
Output Power Variation - SAR Drift Measurement	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
SAR scaling	2	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Phantom and tissue parameters								
Phantom uncertainty (shape and thickness uncertainty)	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	2	N	1	1	0.84	2.00	1.68	∞
Liquid Conductivity - Measurement Uncertainty)	4	N	1	0.78	0.71	3.12	2.84	5
Liquid Permittivity - Measurement Uncertainty	5	N	1	0.23	0.26	1.15	1.30	5
Liquid Conductivity (Temperature Uncertainty)	2.5	R	$\sqrt{3}$	0.78	0.71	1.13	1.02	∞
Liquid Permittivity (Temperature Uncertainty)	2.5	R	$\sqrt{3}$	0.23	0.26	0.33	0.38	∞
Combined Standard Uncertainty		RSS				10.47	10.34	
Expanded Uncertainty (95% Confidence interval)		K				20.95	20.69	



9.2 System validation Uncertainty

Uncertainty Component	Tol (+ - %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System								
Probe calibration	5.8	N	1	1	1	5.8	5.8	∞
Axial Isotropy	3.5	R	$\sqrt{3}$	1	1	2.02	2.02	∞
Hemispherical Isotropy	5.9	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Boundary effect	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	4.7	R	$\sqrt{3}$	1	1	0.71	0.71	∞
System detection limits	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation response	0	N	$\sqrt{3}$	0	0	0.00	0.00	∞
Readout Electronics	0.5	N	1	1	1	0.50	0.50	∞
Response Time	0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Integration Time	1.4	R	$\sqrt{3}$	0	0	0.00	0.00	∞
RF ambient conditions-Noise	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient conditions- reflections	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner mechanical tolerance	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation, Interpolation and Integration Algorithms for Max, SAR	2.3	R	$\sqrt{3}$	1	1	1.33	1.33	∞
Dipole								
Deviation of Experimental Source from Numerical Source	5	N	1	1	1	5.00	5.00	∞
Input Power and SAR Drift Measurement	0.5	R	$\sqrt{3}$	1	1	0.29	0.29	∞
Dipole Axis to Liquid Distance	2	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Phantom and Tissue Parameters								
Phantom uncertainty (shape and thickness uncertainty)	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	2	N	1	1	0.84	2.00	1.68	∞
Liquid Conductivity - Measurement Uncertainty)	4	N	1	0.78	0.71	3.12	2.84	5
Liquid Permittivity - Measurement Uncertainty	5	N	1	0.23	0.26	1.15	1.30	5
Liquid Conductivity (Temperature Uncertainty)	2.5	R	$\sqrt{3}$	0.78	0.71	1.13	1.02	∞
Liquid Permittivity (Temperature Uncertainty)	2.5	R	$\sqrt{3}$	0.23	0.26	0.33	0.38	∞
Combined Standard Uncertainty		RSS				10.16	10.03	
Expanded Uncertainty (95% Confidence interval)		K				20.32	20.06	



10. Conducted Power Measurement

10.1 Test Result

Burst Average Power (dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880.0	1909.8
GSM (GMSK, 1-Slot)	25.19	25.6	25.68	29.69	29.85	29.44
GPRS (GMSK, 1-Slot)	25.2	25.6	25.68	29.69	29.75	29.46
GPRS (GMSK, 2-Slot)	25.2	25.62	25.7	28.92	29.23	28.66
GPRS (GMSK, 3-Slot)	25.21	25.64	25.7	27.17	27.48	26.95
GPRS (GMSK, 4-Slot)	25.24	25.63	25.71	27.13	26.44	25.9
EGPRS (8PSK, 1-Slot)	25.21	25.61	25.68	29.48	29.68	29.44
EGPRS (8PSK, 2-Slot)	25.22	25.62	25.69	28.93	29.24	28.67
EGPRS (8PSK, 3-Slot)	25.23	25.63	25.7	27.17	27.48	26.95
EGPRS (8PSK, 4-Slot)	25.22	25.65	25.72	26.14	26.46	25.92
Remark: GPRS, CS4 coding scheme. EGPRS, MCS5 coding scheme. Multi-Slot Class 8, Support Max 4 downlink, 1 uplink, 5 working link Multi-Slot Class 10, Support Max 4 downlink, 2 uplink, 5 working link Multi-Slot Class 12, Support Max 4 downlink, 4 uplink, 5 working link						

Frame- Average Power(dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880.0	1909.8
GSM (GMSK, 1-Slot)	16.16	16.57	16.65	20.66	20.82	20.41
GPRS (GMSK, 1-Slot)	16.17	16.57	16.65	20.66	20.72	20.43
GPRS (GMSK, 2-Slot)	19.18	19.60	19.68	22.90	23.21	22.64
GPRS (GMSK, 3-Slot)	20.95	21.38	21.44	22.91	23.22	22.69
GPRS (GMSK, 4-Slot)	22.23	22.62	22.70	24.12	23.43	22.89
EGPRS (8PSK, 1-Slot)	16.18	16.58	16.65	20.45	20.65	20.41
EGPRS (8PSK, 2-Slot)	19.20	19.60	19.67	22.91	23.22	22.65
EGPRS (8PSK, 3-Slot)	20.97	21.37	21.44	22.91	23.22	22.69
EGPRS (8PSK, 4-Slot)	22.21	22.64	22.71	23.13	23.45	22.91
Remark: 1. SAR testing was performed on the maximum frame-averaged power mode. 2. The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum Burst - averaged power based on time slots. The calculated method is shown as below: Frame-averaged power = Burst averaged power (1 TX Slot) – 9.03 dB Frame-averaged power = Burst averaged power (2 TX Slots) – 6.02 dB Frame-averaged power = Burst averaged power (3 TX Slots) - 4.26 dB Frame-averaged power = Burst averaged power (4 TX Slots) – 3.01 dB						



WCDMA

Band	WCDMA Band 2			WCDMA Band 4			WCDMA Band 5		
Channel	9262	9400	9538	1312	1450	1513	4132	4182	4233
Frequency (MHz)	1852.4	1880	1907.6	1712.6	1740	1752.4	826.4	836.4	846.6
RMC 12.2Kbps	23.31	23.86	23.2	24.65	24.5	24.44	23.1	23.3	23.1
HSDPA Subtest-1	22.75	23.35	22.79	23.67	23.54	23.47	23.08	23.09	23.65
HSDPA Subtest-2	22.1	22.85	22.21	23.22	23.11	23.03	22.73	22.49	23.24
HSDPA Subtest-3	21.14	21.68	21.07	22.25	21.89	21.93	21.57	21.39	22.15
HSDPA Subtest-4	20.95	21.53	21.44	22.33	22.48	22.11	21.78	21.54	22
HSUPA Subtest-1	21.12	23.1	22.6	22.51	23.34	23.24	21.99	22.93	23.47
HSUPA Subtest-2	22.64	23.09	22.68	23.59	23.45	23.34	22.98	23.07	23.5
HSUPA Subtest-3	20.95	22	21.42	21.78	22.3	22.15	21.16	21.84	22.42
HSUPA Subtest-4	22.74	23.26	22.77	23.62	23.53	23.42	23.06	23.09	23.7
HSUPA Subtest-5	21.26	22.62	21.96	22.06	22.97	22.72	21.64	22.38	23.04

According to 3GPP 25.101 sub-clause 6.2.2, the maximum output power is allowed to be reduced by following the table.

Table 6.1A: UE maximum output power with HS-DPCCH and E-DCH

UE Transmit Channel Configuration	CM (db)	MPR (db)
For all combinations of ,DPDCH,DPCCH HS-DPDCH,E-DPDCH and E-DPCCH	$0 \leq CM \leq 3.5$	$MAX(CM-1,0)$
Note: CM=1 for $\beta_c/\beta_d=12/15$, $\beta_{hs}/\beta_c=24/15$.For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.		

The device supports MPR to solve linearity issues (ACLR or SEM) due to the higher peak-to average ratios (PAR) of the HSUPA signal. This prevents saturating the full range of the TX DAC inside of device and provides a reduced power output to the RF transceiver chip according to the Cubic Metric (a function of the combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH).

When E-DPDCH channels are present the beta gains on those channels are reduced firsts to try to get the power under the allowed limit. If the beta gains are lowered as far as possible, then a hard limiting is applied at the maximum allowed level.

The SW currently recalculates the cubic metric every time the beta gains on the E-DPDCH are reduced. The cubic metric will likely get lower each time this is done .However, there is no reported reduction of maximum output power in the HSUPA mode since the device also provides a compensation for the power back-off by increasing the gain of TX_AGC in the transceiver (PA) device.

The end effect is that the DUT output power is identical to the case where there is no MPR in the device.



2.4G WLAN

2.4GWIFI				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11b	1	2412	16.61	45.81
	6	2437	16.67	46.45
	11	2462	16.67	46.45
802.11g	1	2412	15.83	38.28
	6	2437	16.21	41.78
	11	2462	15.99	39.72
802.11 n-HT20	1	2412	15.7	37.15
	6	2437	16.14	41.11
	11	2462	15.96	39.45
802.11 n-HT40	3	2422	16.43	43.95
	6	2437	16.62	45.92
	9	2452	16.59	45.60

Bluetooth

BT				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	3.67	2.33
	39	2441	4.63	2.90
	78	2480	3.96	2.49
$\pi/4$ -QPSK(2Mbps)	0	2402	3.14	2.06
	39	2441	4.12	2.58
	78	2480	3.5	2.24
8DPSK(3Mbps)	0	2402	2.99	1.99
	39	2441	3.97	2.49
	78	2480	3.35	2.16

BLE

BLE				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	1.73	1.49
	19	2440	2.7	1.86
	39	2480	2.09	1.62
GFSK(2Mbps)	0	2402	1.91	1.55
	19	2440	2.75	1.88
	39	2480	2.22	1.67



WLAN (5.2Gband)

5.2G WLAN				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11a20	36	5180	13.46	22.18
	40	5200	13.73	23.60
	48	5240	14.1	25.70
802.11 n-HT20	36	5180	13.14	20.61
	40	5200	13.1	20.42
	48	5240	13.44	22.08
802.11 n-HT40	38	5190	13.38	21.78
	46	5230	13.43	22.03
802.11ac-VHT20	36	5180	13.31	21.43
	40	5200	13.06	20.23
	48	5240	13.58	22.80
802.11ac-VHT40	38	5190	13.47	22.23
	46	5230	13.43	22.03
802.11ac-VHT80	42	5210	13.7	23.44

WLAN (5.3G band)

5.3G WLAN				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11a20	52	5260	14.2	26.30
	60	5300	14.31	26.98
	64	5320	14.96	31.33
802.11 n-HT20	52	5260	13.51	22.44
	60	5300	13.8	23.99
	64	5320	14.34	27.16
802.11 n-HT40	54	5270	12.6	18.20
	62	5310	12.98	19.86
802.11ac-VHT20	52	5260	13.47	22.23
	60	5300	13.81	24.04
	64	5320	14.26	26.67
802.11ac-VHT40	54	5270	12.17	16.48
	62	5310	12.59	18.16
802.11ac-VHT80	58	5290	12.69	18.58



WLAN (5.6G band)

5.6G WLAN				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11a20	100	5500	14.5	28.18
	116	5580	14.24	26.55
	140	5700	14.14	25.94
802.11 n-HT20	100	5500	13.94	24.77
	116	5580	13.71	23.50
	140	5700	13.55	22.65
802.11 n-HT40	102	5510	13.11	20.46
	110	5550	12.97	19.82
	134	5670	12.63	18.32
802.11ac-VHT20	100	5500	14.17	26.12
	116	5580	13.59	22.86
	140	5700	13.48	22.28
802.11ac-VHT40	102	5510	13.17	20.75
	110	5550	12.96	19.77
	134	5670	12.56	18.03
802.11ac-VHT80	106	5530	12.67	18.49
	122	5610	12.47	17.66
	138	5690	14.5	28.18

NFC

NFC			
Mode	Filed (dBuV/m)	ERP(dBm)	ERP (mW)
NFC	56.63	-38.57	0.0001

Note: The power of this EUT NFC is -38.57dBm (0.0001mw), this power is less than the defined low power exclusion level (Pmax: 39 mW), so NFC is exemption.



LTE Conducted Power

General Note:

1. CMW500 base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05, smaller bandwidth SAR testing is not required.



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.87	24.41	23.98
1.4	1	2		24.04	24.53	24.16
1.4	1	5		23.86	24.39	24.02
1.4	3	0		24	24.44	23.97
1.4	3	1		23.98	24.46	23.96
1.4	3	2		23.99	24.42	24
1.4	6	0		22.9	23.36	22.94
1.4	1	0	16-QAM	23.11	23.22	23.12
1.4	1	2		23.17	23.39	23.27
1.4	1	5		23.09	23.23	23.13
1.4	3	0		23.22	23.61	23.19
1.4	3	1		23.21	23.58	23.18
1.4	3	2		23.22	23.63	23.19
1.4	6	0		22.08	22.58	22.16
3	1	0	QPSK	23.92	24.4	23.9
3	1	7		24.23	24.63	24.37
3	1	14		23.97	24.35	23.96
3	8	0		22.89	23.4	22.91
3	8	4		22.91	23.38	22.97
3	8	7		22.9	23.36	22.95
3	15	0		22.88	23.39	22.9
3	1	0	16-QAM	22.85	23.86	23.13
3	1	7		23.07	24.18	23.37
3	1	14		22.81	23.78	23.16
3	8	0		21.9	22.44	21.98
3	8	4		21.9	22.44	21.98
3	8	7		21.9	22.43	21.94
3	15	0		21.99	22.44	21.9



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.77	24.33	23.79
5	1	12		24.11	24.71	24.24
5	1	24		23.75	24.22	23.85
5	12	0		22.88	23.44	22.95
5	12	6		22.97	23.44	23.01
5	12	11		22.94	23.35	22.9
5	25	0		22.98	23.44	22.96
5	1	0	16-QAM	23.14	23.91	23.14
5	1	12		23.72	24.21	23.59
5	1	24		23.17	23.79	23.2
5	12	0		21.95	22.4	21.94
5	12	6		22.01	22.45	21.95
5	12	11		22	22.38	21.87
5	25	0		21.96	22.39	21.99
10	1	0	QPSK	23.9	24.5	23.8
10	1	24		24.02	24.54	23.95
10	1	49		24.03	24.3	23.91
10	25	0		22.92	23.49	23.01
10	25	12		23	23.42	22.94
10	25	24		23.03	23.36	22.94
10	50	0		22.95	23.41	22.94
10	1	0	16-QAM	23.09	23.33	23.3
10	1	24		23.2	23.49	23.45
10	1	49		23.21	23.15	23.39
10	25	0		21.92	22.48	22.03
10	25	12		21.98	22.45	22.01
10	25	24		22.02	22.38	21.97
10	50	0		22.01	22.42	21.97



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.6	24.21	23.75
15	1	37		24.15	24.55	24.03
15	1	74		24.15	23.91	23.71
15	36	0		22.9	23.37	22.92
15	36	18		23.1	23.39	22.94
15	36	39		23.23	23.23	22.81
15	75	0		23.07	23.3	22.88
15	1	0	16-QAM	23.01	23.49	22.99
15	1	38		23.49	23.76	23.32
15	1	75		23.53	23.19	23.02
15	36	0		21.98	22.38	21.98
15	36	18		22.19	22.39	22.01
15	36	39		22.36	22.19	21.88
15	75	0		22.1	22.31	21.88
20	1	0	QPSK	23.81	24.43	23.76
20	1	49		24.21	24.72	24.15
20	1	99		24.17	24.12	23.82
20	50	0		22.93	23.46	22.92
20	50	24		23.04	23.44	22.94
20	50	49		23.12	23.31	22.9
20	100	0		23	23.39	22.95
20	1	0	16-QAM	23.01	23.51	23.24
20	1	49		23.43	23.86	23.61
20	1	99		23.38	23.24	23.33
20	50	0		21.97	22.39	21.97
20	50	24		22.08	22.38	21.96
20	50	49		22.19	22.22	21.94
20	100	0		22.02	22.38	21.93



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	24.93	24.62	24.67
1.4	1	2		24.99	24.81	24.84
1.4	1	5		24.84	24.69	24.65
1.4	3	0		24.99	24.68	24.64
1.4	3	1		24.94	24.68	24.67
1.4	3	2		24.93	24.66	24.68
1.4	6	0		23.89	23.65	23.63
1.4	1	0	16-QAM	24.08	23.47	23.76
1.4	1	2		24.17	23.58	23.91
1.4	1	5		24.03	23.39	23.76
1.4	3	0		24.18	23.76	23.85
1.4	3	1		24.17	23.71	23.86
1.4	3	2		24.16	23.68	23.84
1.4	6	0		23.02	22.74	22.81
3	1	0	QPSK	24.93	24.22	24.55
3	1	7		25.09	24.37	24.98
3	1	14		24.85	24.25	24.59
3	8	0		23.92	23.11	23.66
3	8	4		23.91	23.21	23.68
3	8	7		23.84	23.17	23.68
3	15	0		23.8	23.22	23.66
3	1	0	16-QAM	24.11	22.99	24.13
3	1	7		24.4	23.36	24.4
3	1	14		23.8	23.03	24.03
3	8	0		22.61	22.12	22.76
3	8	4		22.71	22.15	22.68
3	8	7		22.79	22.34	22.72
3	15	0		22.75	22.22	22.73



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.71	23.82	24.07
5	1	12		24.76	24.29	24.55
5	1	24		24.45	24.17	24.05
5	12	0		23.63	23.07	23.38
5	12	6		23.42	23.22	23.39
5	12	11		23.23	23.25	23.34
5	25	0		23.23	23.19	23.37
5	1	0	16-QAM	23.47	23.17	23.25
5	1	12		23.5	23.66	23.72
5	1	24		23.21	23.51	23.32
5	12	0		22.22	22.14	22.4
5	12	6		22.25	22.33	22.39
5	12	11		22.25	22.37	22.35
5	25	0		22.24	22.22	22.41
10	1	0	QPSK	25.02	24.07	24.32
10	1	24		24.97	24.25	24.38
10	1	49		24.78	24.26	24.17
10	25	0		23.86	23.2	23.4
10	25	12		23.73	23.22	23.3
10	25	24		23.41	23.27	23.3
10	50	0		23.55	23.24	23.34
10	1	0	16-QAM	23.31	23.46	23.47
10	1	24		23.33	23.65	23.61
10	1	49		23.06	23.71	23.36
10	25	0		22.38	22.22	22.43
10	25	12		22.35	22.28	22.36
10	25	24		22.34	22.33	22.28
10	50	0		22.38	22.3	22.39



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	24.86	23.99	24.21
15	1	37		24.95	24.67	24.57
15	1	74		24.51	24.29	24.1
15	36	0		23.86	23.18	23.43
15	36	18		23.78	23.29	23.43
15	36	39		23.37	23.35	23.32
15	75	0		23.28	23.28	23.45
15	1	0	16-QAM	23.56	23.04	23.7
15	1	38		23.71	23.54	24.01
15	1	75		23.18	23.37	23.56
15	36	0		22.39	22.08	22.44
15	36	18		22.32	22.19	22.43
15	36	39		22.28	22.25	22.35
15	75	0		22.24	22.29	22.36
20	1	0	QPSK	24.9	23.93	24.18
20	1	49		25.15	24.3	24.74
20	1	99		24.71	24.05	24.56
20	50	0		23.91	23.13	23.74
20	50	24		23.87	23.16	23.78
20	50	49		23.53	23.16	23.7
20	100	0		23.65	23.18	23.52
20	1	0	16-QAM	23.75	23.32	24.06
20	1	49		24.05	23.75	24.25
20	1	99		23.55	23.45	23.93
20	50	0		22.34	22.16	22.55
20	50	24		22.37	22.25	22.69
20	50	49		22.37	22.18	22.63
20	100	0		22.43	22.19	22.56



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.28	21.63	21.56
1.4	1	2		22.42	21.78	21.7
1.4	1	5		22.27	21.59	21.62
1.4	3	0		22.36	21.67	21.55
1.4	3	1		22.34	21.66	21.58
1.4	3	2		22.3	21.61	21.62
1.4	6	0		21.37	20.65	20.6
1.4	1	0	16-QAM	21.52	20.55	20.73
1.4	1	2		21.62	20.7	20.88
1.4	1	5		21.49	20.48	20.82
1.4	3	0		21.56	20.83	20.78
1.4	3	1		21.57	20.82	20.79
1.4	3	2		21.52	20.81	20.79
1.4	6	0		20.5	19.82	19.76
3	1	0	QPSK	22.33	21.68	21.48
3	1	7		22.5	21.91	21.76
3	1	14		22.22	21.58	21.56
3	8	0		21.31	20.64	20.53
3	8	4		21.31	20.61	20.56
3	8	7		21.26	20.56	20.56
3	15	0		21.25	20.61	20.49
3	1	0	16-QAM	21.52	20.55	20.96
3	1	7		21.71	20.91	21.3
3	1	14		21.4	20.42	21.02
3	8	0		20.32	19.64	19.59
3	8	4		20.3	19.62	19.6
3	8	7		20.27	19.54	19.56
3	15	0		20.19	19.63	19.53



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.38	21.82	21.5
5	1	12		22.26	21.72	21.61
5	1	24		21.85	21.47	21.63
5	12	0		21.21	20.82	20.58
5	12	6		21.11	20.67	20.52
5	12	11		21.05	20.65	20.49
5	25	0		21.1	20.7	20.49
5	1	0	16-QAM	21.24	21.31	20.68
5	1	12		21.12	21.16	20.78
5	1	24		20.73	20.92	20.79
5	12	0		20.22	19.81	19.53
5	12	6		20.12	19.69	19.5
5	12	11		20.05	19.67	19.45
5	25	0		20.04	19.7	19.54
10	1	0	QPSK	22.17	21.61	21.34
10	1	24		22.55	21.88	21.85
10	1	49		21.98	21.42	21.5
10	25	0		21.27	20.65	20.53
10	25	12		21.29	20.69	20.6
10	25	24		21.16	20.6	20.49
10	50	0		21.22	20.65	20.52
10	1	0	16-QAM	21.57	21.19	20.73
10	1	24		21.74	21.49	21.2
10	1	49		21.37	21.03	20.9
10	25	0		20.28	19.64	19.48
10	25	12		20.25	19.64	19.53
10	25	24		20.17	19.56	19.43
10	50	0		20.17	19.56	19.55



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	18.4	17.98	18.15
5	1	12		18.91	18.45	18.57
5	1	24		18.6	18.11	18.23
5	12	0		17.6	17.12	17.31
5	12	6		17.7	17.18	17.33
5	12	11		17.7	17.18	17.29
5	25	0		17.64	17.13	17.28
5	1	0	16-QAM	18.05	17.36	17.57
5	1	12		18.54	17.7	17.97
5	1	24		18.2	17.51	17.63
5	12	0		16.6	16.06	16.36
5	12	6		16.67	16.15	16.4
5	12	11		16.7	16.08	16.31
5	25	0		16.63	16.19	16.38
10	1	0	QPSK	18.52	18.05	18.3
10	1	24		18.84	18.29	18.35
10	1	49		18.68	18.33	18.32
10	25	0		17.61	17.1	17.35
10	25	12		17.73	17.17	17.33
10	25	24		17.84	17.25	17.32
10	50	0		17.68	17.14	17.29
10	1	0	16-QAM	17.69	16.97	17.78
10	1	24		18.04	17.15	17.84
10	1	49		17.88	17.22	17.79
10	25	0		16.58	16.08	16.37
10	25	12		16.71	16.19	16.34
10	25	24		16.79	16.25	16.34
10	50	0		16.75	16.18	16.39



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	18.29	17.82	18.17
15	1	37		18.7	18.29	18.42
15	1	74		18.21	18.32	18.16
15	36	0		17.66	17.04	17.44
15	36	18		17.74	17.18	17.33
15	36	39		17.7	17.35	17.24
15	75	0		17.65	17.2	17.34
15	1	0	16-QAM	17.7	17.11	17.49
15	1	38		18.01	17.56	17.69
15	1	75		17.6	17.6	17.45
15	36	0		16.66	16.04	16.5
15	36	18		16.78	16.17	16.37
15	36	39		16.77	16.29	16.28
15	75	0		16.71	16.23	16.45
20	1	0	QPSK	18.5	17.89	18.28
20	1	49		19	18.26	18.55
20	1	99		18.48	18.25	18.32
20	50	0		17.63	17.08	17.39
20	50	24		17.75	17.18	17.36
20	50	49		17.75	17.28	17.32
20	100	0		17.69	17.16	17.28
20	1	0	16-QAM	17.64	17.37	17.52
20	1	49		18.18	17.86	17.74
20	1	99		17.59	17.76	17.49
20	50	0		16.56	16.03	16.39
20	50	24		16.69	16.18	16.36
20	50	49		16.66	16.3	16.29
20	100	0		16.71	16.18	16.34



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.89	23.91	23.86
1.4	1	2		24.01	24.07	24.06
1.4	1	5		23.99	24.14	24.17
1.4	3	0		22.97	22.86	23.06
1.4	3	1		22.94	22.93	23.06
1.4	3	2		23.05	22.91	23.03
1.4	6	0		22.99	22.87	23.01
1.4	1	0	16-QAM	23.1	22.78	23.26
1.4	1	2		23.13	22.84	23.47
1.4	1	5		23.17	22.97	23.57
1.4	3	0		21.93	21.83	22.04
1.4	3	1		21.9	21.9	22.04
1.4	3	2		22	21.93	22.04
1.4	6	0		22	21.85	22
3	1	0	QPSK	23.91	23.88	24.06
3	1	7		24.16	24.25	24.36
3	1	14		23.93	24.02	24.14
3	8	0		22.93	22.9	23.13
3	8	4		22.95	22.98	23.13
3	8	7		22.9	22.99	23.18
3	15	0		22.9	22.91	23.11
3	1	0	16-QAM	23.08	22.78	23.46
3	1	7		23.31	23.08	23.71
3	1	14		23.1	22.82	23.5
3	8	0		21.92	21.83	22.11
3	8	4		21.93	21.91	22.17
3	8	7		21.86	21.92	22.14
3	15	0		21.82	21.95	22.12



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.79	23.78	23.87
5	1	12		24.22	24.07	24.38
5	1	24		23.8	23.91	24.08
5	12	0		22.9	22.85	23.16
5	12	6		22.92	23	23.15
5	12	11		22.89	22.96	23.13
5	25	0		22.92	22.94	23.15
5	1	0	16-QAM	23.13	23.3	23.21
5	1	12		23.52	23.66	23.79
5	1	24		23.14	23.43	23.35
5	12	0		21.89	21.84	22.09
5	12	6		21.92	21.96	22.08
5	12	11		21.9	21.9	22.09
5	25	0		21.92	21.89	22.17
10	1	0	QPSK	24.51	23.99	24.12
10	1	24		24.64	24.17	24.27
10	1	49		24.51	24.04	24.12
10	25	0		24.49	23.94	24.21
10	25	12		24.4	23.96	24.22
10	25	24		24	24.02	24.22
10	50	0		23.01	23.06	23.23
10	1	0	16-QAM	22.84	23.07	23.3
10	1	24		22.98	23.14	23.36
10	1	49		22.81	23.16	23.3
10	25	0		23.11	23.11	23.36
10	25	12		23.11	23.1	23.37
10	25	24		23.11	23.12	23.37
10	50	0		22.17	22.15	22.36



LTE Band 13 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.84	22.44	22.39
5	1	12		22.55	22.11	21.96
5	1	24		21.67	21.13	21.14
5	12	0		21.78	21.21	21.13
5	12	6		21.76	21.3	21.05
5	12	11		21.68	21.19	21.11
5	25	0		21.91	21.51	21.42
5	1	0	16-QAM	21.96	21.79	21.54
5	1	12		21.76	21.4	21.31
5	1	24		20.68	20.08	20.16
5	12	0		20.74	20.13	20.17
5	12	6		20.74	20.15	20.03
5	12	11		20.71	20.2	20.07
5	25	0		22.18	22.05	22.67
10	1	0	QPSK	/	22.67	/
10	1	24		/	22.93	/
10	1	49		/	22.64	/
10	25	0		/	21.71	/
10	25	12		/	21.78	/
10	25	24		/	21.84	/
10	50	0		/	21.81	/
10	1	0	16-QAM	/	22.24	/
10	1	24		/	22.55	/
10	1	49		/	21.88	/
10	25	0		/	20.35	/
10	25	12		/	20.49	/
10	25	24		/	20.42	/
10	50	0		/	20.27	/



LTE Band 14 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.44	24.39	24.3
5	1	12		24.11	24.2	23.91
5	1	24		23.04	23.17	22.82
5	12	0		23.14	23.23	22.9
5	12	6		23.07	23.23	22.91
5	12	11		23.1	23.23	22.88
5	25	0		23.43	23.25	22.93
5	1	0	16-QAM	23.9	23.72	23.46
5	1	12		23.64	23.5	23.2
5	1	24		21.99	22.04	21.74
5	12	0		22.1	21.94	21.86
5	12	6		22.06	22.11	21.89
5	12	11		22.06	22.07	21.78
5	25	0		23.97	23.77	24.12
10	1	0	QPSK	/	24.12	/
10	1	24		/	24.34	/
10	1	49		/	24.62	/
10	25	0		/	23.24	/
10	25	12		/	23.24	/
10	25	24		/	23.41	/
10	50	0		/	23.3	/
10	1	0	16-QAM	/	22.88	/
10	1	24		/	23.2	/
10	1	49		/	23.4	/
10	25	0		/	22.21	/
10	25	12		/	22.21	/
10	25	24		/	22.38	/
10	50	0		/	22.25	/



LTE Band 17 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.69	24.68	24.75
5	1	12		24.83	24.84	24.99
5	1	24		24.91	25	25.16
5	12	0		23.69	23.72	23.8
5	12	6		23.77	23.78	23.82
5	12	11		23.67	23.74	23.81
5	25	0		23.67	23.7	23.81
5	1	0	16-QAM	24.04	23.8	23.52
5	1	12		24.23	24.01	23.75
5	1	24		24.31	24.13	23.8
5	12	0		22.71	22.68	22.79
5	12	6		22.79	22.78	22.77
5	12	11		22.7	22.69	22.84
5	25	0		22.63	22.71	22.76
10	1	0	QPSK	24.7	24.61	24.73
10	1	24		25.03	25.02	25.18
10	1	49		24.75	24.79	24.95
10	25	0		23.74	23.8	23.98
10	25	12		23.83	23.85	24.02
10	25	24		23.82	23.77	23.98
10	50	0		23.79	23.77	24.02
10	1	0	16-QAM	23.94	23.92	24.19
10	1	24		24.31	24.45	24.74
10	1	49		24.03	24.1	24.34
10	25	0		22.69	22.79	22.94
10	25	12		22.71	22.86	22.98
10	25	24		22.73	22.74	22.96
10	50	0		22.79	22.72	22.98



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.4	23.89	23.46
1.4	1	2		23.89	24.09	23.74
1.4	1	5		23.94	23.5	23.58
1.4	3	0		22.63	23.11	22.64
1.4	3	1		22.85	23.05	22.64
1.4	3	2		23.02	22.81	22.5
1.4	6	0		22.81	22.99	22.57
1.4	1	0	16-QAM	22.68	23.31	22.66
1.4	1	2		23.18	23.51	23.05
1.4	1	5		23.23	22.86	22.8
1.4	3	0		21.69	22.19	21.63
1.4	3	1		21.91	22.11	21.67
1.4	3	2		22.03	21.91	21.52
1.4	6	0		21.84	22.03	21.59
3	1	0	QPSK	24.15	24.08	23.65
3	1	7		24.33	24.29	23.95
3	1	14		24.11	23.91	23.73
3	8	0		22.95	23.54	22.7
3	8	4		22.73	23.53	22.72
3	8	7		22.91	23.24	22.7
3	15	0		22.69	23.38	22.67
3	1	0	16-QAM	22.58	23.48	22.86
3	1	7		22.89	23.77	23.31
3	1	14		22.53	23.4	22.89
3	8	0		21.61	22.33	21.73
3	8	4		21.66	22.15	21.74
3	8	7		21.6	22.19	21.74
3	15	0		21.67	22.41	21.67



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.03	24.02	23.49
5	1	12		24.42	24.33	23.84
5	1	24		23.83	23.95	23.58
5	12	0		23.09	23.56	22.65
5	12	6		23.18	23.57	22.72
5	12	11		23.18	23.44	22.66
5	25	0		23.13	23.57	22.7
5	1	0	16-QAM	23.45	23.53	22.88
5	1	12		23.87	23.82	23.25
5	1	24		23.51	23.41	22.95
5	12	0		21.61	22.49	21.7
5	12	6		21.93	22.52	21.77
5	12	11		21.9	22.41	21.73
5	25	0		22	22.55	21.71
10	1	0	QPSK	24.06	24.2	23.55
10	1	24		23.83	24.17	23.73
10	1	49		23.77	23.94	23.69
10	25	0		22.65	23.16	22.68
10	25	12		22.72	23.04	22.66
10	25	24		22.79	22.97	22.69
10	50	0		22.68	23.06	22.7
10	1	0	16-QAM	22.81	23.07	22.96
10	1	24		22.94	23.03	23.16
10	1	49		23.01	22.79	23.11
10	25	0		21.64	22.15	21.75
10	25	12		21.72	22.03	21.71
10	25	24		21.79	21.98	21.7
10	50	0		21.76	22.07	21.68



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.62	24.16	23.46
15	1	37		24.04	24.31	23.79
15	1	74		23.86	23.78	23.64
15	36	0		22.68	23.19	22.69
15	36	18		22.8	23.1	22.67
15	36	39		22.85	22.92	22.64
15	75	0		22.76	23.07	22.64
15	1	0	16-QAM	22.74	23.24	22.93
15	1	38		23.07	23.42	23.31
15	1	75		23.07	22.85	23.03
15	36	0		21.7	22.15	21.68
15	36	18		21.85	22.05	21.66
15	36	39		21.9	21.88	21.65
15	75	0		21.74	22.08	21.62
20	1	0	QPSK	24.1	24.55	24.13
20	1	49		24.26	24.75	24.15
20	1	99		24.1	24.52	23.83
20	50	0		24.16	24.52	23.8
20	50	24		24.18	24.53	24.15
20	50	49		24.16	24.55	24.13
20	100	0		23.13	23.51	23.01
20	1	0	16-QAM	22.99	23.71	22.88
20	1	49		23.15	23.77	23
20	1	99		22.97	23.65	22.87
20	50	0		23.3	23.72	22.95
20	50	24		23.29	23.72	22.92
20	50	49		23.35	23.7	22.97
20	100	0		22.29	22.72	21.83



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.55	22.68	22.52
1.4	1	2		22.73	22.85	22.68
1.4	1	5		22.57	22.7	22.53
1.4	3	0		22.6	22.65	22.62
1.4	3	1		22.59	22.69	22.65
1.4	3	2		22.54	22.7	22.57
1.4	6	0		21.57	21.7	21.62
1.4	1	0	16-QAM	21.42	21.86	21.78
1.4	1	2		21.57	22	21.83
1.4	1	5		21.44	21.9	21.75
1.4	3	0		21.73	21.88	21.86
1.4	3	1		21.75	21.88	21.86
1.4	3	2		21.75	21.87	21.84
1.4	6	0		20.75	20.87	20.76
3	1	0	QPSK	22.53	22.64	22.61
3	1	7		22.86	22.98	22.85
3	1	14		22.64	22.58	22.53
3	8	0		21.49	21.63	21.61
3	8	4		21.56	21.71	21.65
3	8	7		21.54	21.69	21.6
3	15	0		21.5	21.62	21.58
3	1	0	16-QAM	21.45	22.07	21.82
3	1	7		21.75	22.32	22.15
3	1	14		21.47	22.06	21.77
3	8	0		20.5	20.69	20.65
3	8	4		20.53	20.71	20.67
3	8	7		20.58	20.68	20.6
3	15	0		20.58	20.67	20.54



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.54	22.43	22
5	1	12		22.74	22.92	22.71
5	1	24		22.62	22.57	22.45
5	12	0		21.62	21.57	21.56
5	12	6		21.55	21.7	21.53
5	12	11		21.58	21.68	21.53
5	25	0		21.45	21.7	21.63
5	1	0	16-QAM	21.48	21.78	21.64
5	1	12		21.7	22.23	22
5	1	24		21.56	21.92	21.48
5	12	0		20.28	20.52	20.55
5	12	6		20.54	20.64	20.67
5	12	11		20.43	20.6	20.51
5	25	0		20.22	20.7	20.54
10	1	0	QPSK	/	22.4	/
10	1	24		/	23.04	/
10	1	49		/	22.56	/
10	25	0		/	21.51	/
10	25	12		/	21.64	/
10	25	24		/	21.65	/
10	50	0		/	21.62	/
10	1	0	16-QAM	/	21.97	/
10	1	24		/	22.39	/
10	1	49		/	22.16	/
10	25	0		/	20.47	/
10	25	12		/	20.62	/
10	25	24		/	20.6	/
10	50	0		/	20.53	/



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.54	21.93	21.72
1.4	1	2		22.71	22.06	21.92
1.4	1	5		22.56	21.85	21.73
1.4	3	0		22.59	21.85	21.83
1.4	3	1		22.54	21.91	21.79
1.4	3	2		22.53	21.95	21.79
1.4	6	0		21.58	20.91	20.8
1.4	1	0	16-QAM	21.43	21.07	20.96
1.4	1	2		21.59	21.21	21.08
1.4	1	5		21.4	21.01	21.02
1.4	3	0		21.73	21.12	21.02
1.4	3	1		21.67	21.1	21.04
1.4	3	2		21.75	21.12	21.07
1.4	6	0		20.73	20.06	19.96
3	1	0	QPSK	22.51	21.69	21.93
3	1	7		22.36	21.84	22
3	1	14		21.79	21.42	21.84
3	8	0		21.36	21.06	20.92
3	8	4		21.16	20.9	20.82
3	8	7		20.97	20.78	20.73
3	15	0		21.16	20.92	20.78
3	1	0	16-QAM	21.58	21.21	21.03
3	1	7		21.39	21.19	21.16
3	1	14		20.68	20.59	20.99
3	8	0		20.31	19.91	19.83
3	8	4		20.1	19.91	19.76
3	8	7		19.93	19.79	19.67
3	15	0		20.16	19.91	19.8



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.44	21.75	21.5
5	1	12		22.7	22.02	21.86
5	1	24		22.19	21.58	21.71
5	12	0		21.47	20.83	20.73
5	12	6		21.51	20.88	20.74
5	12	11		21.41	20.74	20.65
5	25	0		21.45	20.82	20.75
5	1	0	16-QAM	21.81	21.18	21.12
5	1	12		22.04	21.46	21.37
5	1	24		21.57	20.98	20.99
5	12	0		20.44	19.89	19.71
5	12	6		20.43	19.88	19.75
5	12	11		20.32	19.82	19.52
5	25	0		20.48	19.81	19.69
10	1	0	QPSK	22.59	21.56	21.24
10	1	24		22.42	21.42	21.71
10	1	49		22.06	21.19	21.41
10	25	0		21.45	21.03	20.76
10	25	12		21.32	20.87	20.7
10	25	24		21.19	20.88	20.68
10	50	0		21.33	20.93	20.68
10	1	0	16-QAM	21.16	21.49	20.44
10	1	24		20.86	21.22	20.7
10	1	49		20.47	20.79	20.54
10	25	0		20.36	20.07	19.65
10	25	12		20.28	19.9	19.68
10	25	24		20.23	19.89	19.64
10	50	0		20.29	19.93	19.74



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.55	21.87	21.69
15	1	37		22.91	22.09	22.22
15	1	74		22.47	21.76	21.78
15	36	0		21.53	20.85	20.74
15	36	18		21.55	20.88	20.77
15	36	39		21.5	20.81	20.75
15	75	0		21.5	20.8	20.71
15	1	0	16-QAM	21.46	21.35	20.92
15	1	38		21.75	21.49	21.37
15	1	75		21.36	21.21	20.95
15	36	0		20.52	19.9	19.74
15	36	18		20.5	19.89	19.78
15	36	39		20.49	19.83	19.73
15	75	0		20.55	19.84	19.66



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	19.66	19.84	19.41
5	1	12		20.03	20.09	19.68
5	1	24		19.67	19.7	19.36
5	12	0		18.85	18.94	18.54
5	12	6		18.93	18.97	18.56
5	12	11		18.84	18.82	18.47
5	25	0		18.83	18.89	18.52
5	1	0	16-QAM	19.36	19.18	18.79
5	1	12		19.74	19.42	19.05
5	1	24		19.36	19.05	18.74
5	12	0		17.8	17.91	17.58
5	12	6		17.91	17.92	17.6
5	12	11		17.83	17.78	17.5
5	25	0		17.81	17.9	17.48
10	1	0	QPSK	19.79	20.11	19.48
10	1	24		19.91	20.04	19.68
10	1	49		19.87	19.71	19.35
10	25	0		18.83	18.94	18.56
10	25	12		18.87	18.91	18.54
10	25	24		18.9	18.84	18.48
10	50	0		18.82	18.87	18.5
10	1	0	16-QAM	19.35	19.26	18.56
10	1	24		19.48	19.23	18.63
10	1	49		19.35	18.9	18.43
10	25	0		17.87	17.95	17.61
10	25	12		17.88	17.93	17.56
10	25	24		17.94	17.84	17.51
10	50	0		17.86	17.94	17.49



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	19.59	19.91	19.52
15	1	37		19.99	20	19.67
15	1	74		19.52	19.33	19.26
15	36	0		18.88	19.03	18.67
15	36	18		18.96	18.89	18.54
15	36	39		18.94	18.78	18.45
15	75	0		18.9	18.9	18.58
15	1	0	16-QAM	18.93	19.17	18.73
15	1	38		19.32	19.25	18.88
15	1	75		18.9	18.64	18.5
15	36	0		17.94	18.05	17.78
15	36	18		18.01	17.93	17.62
15	36	39		18	17.79	17.53
15	75	0		17.93	17.93	17.6
20	1	0	QPSK	19.71	19.97	19.62
20	1	49		20.1	20.15	19.75
20	1	99		19.69	19.51	19.45
20	50	0		18.88	19.05	18.63
20	50	24		18.95	18.92	18.56
20	50	49		18.93	18.79	18.51
20	100	0		18.88	18.88	18.53
20	1	0	16-QAM	19.27	19.21	18.81
20	1	49		19.63	19.31	18.91
20	1	99		19.26	18.7	18.62
20	50	0		17.88	18.1	17.57
20	50	24		17.95	17.98	17.52
20	50	49		17.93	17.85	17.47
20	100	0		17.9	17.88	17.56



LTE Band 40 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	12.92	13.02	12.92
5	1	12		13.23	13.14	13.25
5	1	24		12.99	13.13	12.98
5	12	0		12.05	12.1	12.07
5	12	6		12.02	12.04	12.05
5	12	11		11.99	12.06	11.99
5	25	0		12	12.09	12.04
5	1	0	16-QAM	12.57	12.53	12.28
5	1	12		12.94	12.66	12.61
5	1	24		12.65	12.61	12.34
5	12	0		11.09	11.18	11.11
5	12	6		11.12	11.09	11.12
5	12	11		11.05	11.16	11.09
5	25	0		11	11.14	11.05
10	1	0	QPSK	/	12.97	/
10	1	24		/	13.25	/
10	1	49		/	12.98	/
10	25	0		/	12.04	/
10	25	12		/	12.02	/
10	25	24		/	11.99	/
10	50	0		/	12.04	/
10	1	0	16-QAM	/	12.27	/
10	1	24		/	12.58	/
10	1	49		/	12.31	/
10	25	0		/	11.03	/
10	25	12		/	11.06	/
10	25	24		/	10.99	/
10	50	0		/	11.1	/



LTE Band 40 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	12.7	12.56	12.46
5	1	12		12.69	12.76	12.66
5	1	24		12.45	12.42	12.27
5	12	0		11.67	11.63	11.52
5	12	6		11.62	11.6	11.59
5	12	11		11.52	11.51	11.44
5	25	0		11.6	11.57	11.47
5	1	0	16-QAM	11.66	11.88	11.82
5	1	12		11.64	12.07	12
5	1	24		11.42	11.72	11.66
5	12	0		10.75	10.62	10.6
5	12	6		10.61	10.61	10.6
5	12	11		10.58	10.55	10.48
5	25	0		10.64	10.64	10.52
10	1	0	QPSK	/	12.59	/
10	1	24		/	12.82	/
10	1	49		/	12.5	/
10	25	0		/	11.69	/
10	25	12		/	11.67	/
10	25	24		/	11.64	/
10	50	0		/	11.64	/
10	1	0	16-QAM	/	12.24	/
10	1	24		/	12.52	/
10	1	49		/	12.16	/
10	25	0		/	10.75	/
10	25	12		/	10.7	/
10	25	24		/	10.65	/
10	50	0		/	10.63	/



LTE Band 41 Maximum Average Power [dBm]								
BW [MHz]	RB Size	RB Offset	Mod	Lowest1	Lowest2	Middle	Highest 1	Highest 2
5	1	0	QPSK	20.98	20.56	21.54	21.11	21.17
5	1	12		21.34	20.92	21.66	21.23	21.38
5	1	24		21.19	20.78	21.41	20.99	21.16
5	12	0		20.14	19.74	20.57	20.16	20.15
5	12	6		20.23	19.84	20.60	20.20	20.20
5	12	11		20.27	19.87	20.50	20.11	20.16
5	25	0		20.20	19.81	20.50	20.10	20.19
5	1	0	16-QAM	20.32	19.92	21.21	20.79	20.43
5	1	12		20.67	20.26	21.37	20.95	20.67
5	1	24		20.56	20.16	21.07	20.67	20.47
5	12	0		19.20	18.83	19.57	19.18	19.12
5	12	6		19.29	18.91	19.60	19.23	19.20
5	12	11		19.31	18.93	19.48	19.10	19.17
5	25	0		19.21	18.84	19.47	19.08	19.26
10	1	0	QPSK	21.11	20.70	21.75	21.33	21.16
10	1	24		21.58	21.15	21.71	21.30	21.30
10	1	49		21.43	21.02	21.40	20.97	21.21
10	25	0		20.33	19.94	20.66	20.27	20.23
10	25	12		20.38	19.99	20.56	20.15	20.18
10	25	24		20.49	20.08	20.49	20.10	20.28
10	50	0		20.37	19.96	20.60	20.19	20.22
10	1	0	16-QAM	20.57	20.17	20.92	20.52	20.14
10	1	24		21.01	20.61	20.89	20.49	20.33
10	1	49		20.92	20.51	20.55	20.15	20.19
10	25	0		19.37	18.99	19.67	19.28	19.29
10	25	12		19.44	19.06	19.60	19.22	19.24
10	25	24		19.58	19.20	19.50	19.13	19.31
10	50	0		19.42	19.04	19.60	19.21	19.27



LTE Band 41 Maximum Average Power [dBm]								
BW [MHz]	RB Size	RB Offset	Mod	Lowest1	Lowest2	Middle	Highest 1	Highest 2
15	1	0	QPSK	20.88	20.47	21.57	21.14	20.95
15	1	37		21.60	21.17	21.68	21.27	21.45
15	1	74		21.25	20.83	21.03	20.63	21.05
15	36	0		20.29	19.89	20.73	20.33	20.20
15	36	18		20.47	20.07	20.63	20.23	20.15
15	36	39		20.51	20.11	20.46	20.05	20.15
15	75	0		20.38	19.99	20.61	20.21	20.17
15	1	0	16-QAM	20.09	19.69	20.86	20.46	20.15
15	1	38		20.97	20.55	20.94	20.52	20.46
15	1	75		20.58	20.17	20.32	19.92	20.24
15	36	0		19.41	19.03	19.72	19.33	19.26
15	36	18		19.58	19.20	19.61	19.22	19.25
15	36	39		19.64	19.27	19.47	19.08	19.25
15	75	0		19.45	19.07	19.59	19.21	19.26
20	1	0	QPSK	21.03	20.61	21.70	21.27	21.08
20	1	49		21.59	21.16	21.79	21.37	21.43
20	1	99		21.40	20.99	21.22	20.80	21.20
20	50	0		20.33	19.93	20.69	20.29	20.16
20	50	24		20.45	20.06	20.61	20.21	20.22
20	50	49		20.57	20.17	20.50	20.10	20.23
20	100	0		20.42	20.02	20.59	20.20	20.13
20	1	0	16-QAM	20.46	20.06	20.87	20.47	20.27
20	1	49		21.07	20.66	20.98	20.57	20.55
20	1	99		20.87	20.47	20.40	19.99	20.38
20	50	0		19.39	19.01	19.74	19.36	19.15
20	50	24		19.50	19.11	19.65	19.28	19.17
20	50	49		19.61	19.22	19.52	19.14	19.22
20	100	0		19.47	19.09	19.57	19.18	19.23



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	24.7	24.65	24.75
1.4	1	2		24.82	24.81	24.93
1.4	1	5		24.65	24.66	24.8
1.4	3	0		24.84	24.69	24.67
1.4	3	1		24.81	24.71	24.72
1.4	3	2		24.78	24.69	24.74
1.4	6	0		23.73	23.65	23.76
1.4	1	0	16-QAM	23.87	23.45	23.79
1.4	1	2		23.96	23.6	23.86
1.4	1	5		23.87	23.46	23.77
1.4	3	0		23.96	23.83	23.72
1.4	3	1		24	23.83	23.56
1.4	3	2		23.99	23.86	23.74
1.4	6	0		22.9	22.84	22.56
3	1	0	QPSK	24.79	24.24	24.14
3	1	7		24.91	24.8	24.35
3	1	14		24.72	24.59	24.24
3	8	0		23.73	23.6	23.21
3	8	4		23.74	23.64	23.33
3	8	7		23.65	23.56	23.27
3	15	0		23.68	23.59	23.2
3	1	0	16-QAM	23.61	23.83	23.35
3	1	7		23.91	24.27	23.64
3	1	14		23.49	23.72	23.43
3	8	0		22.72	22.61	22.24
3	8	4		22.7	22.46	22.27
3	8	7		22.69	22.5	22.28
3	15	0		22.76	22.44	22.19



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.97	23.89	23.48
5	1	12		24.05	24.34	24.01
5	1	24		23.73	23.78	24.01
5	12	0		22.96	23.18	22.85
5	12	6		22.98	23.18	22.96
5	12	11		22.97	23.08	22.93
5	25	0		22.96	23.15	22.84
5	1	0	16-QAM	23.34	23.06	22.81
5	1	12		23.41	23.61	23.3
5	1	24		23.06	23.04	23.26
5	12	0		22.07	22.16	21.92
5	12	6		22.09	22.21	22.05
5	12	11		22.05	22.1	22
5	25	0		22	22.19	21.89
10	1	0	QPSK	24.55	24.13	24.03
10	1	24		24.14	24.27	24.24
10	1	49		23.89	24.1	24.34
10	25	0		23.17	23.26	23.15
10	25	12		23.1	23.21	23.13
10	25	24		23.14	23.21	23.18
10	50	0		23.16	23.2	23.19
10	1	0	16-QAM	23.63	23.34	22.82
10	1	24		23.51	23.49	23.11
10	1	49		23.37	23.29	23.14
10	25	0		22.22	22.23	22.17
10	25	12		22.16	22.22	22.16
10	25	24		22.16	22.24	22.17
10	50	0		22.22	22.27	22.15



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	24.21	24.08	23.7
15	1	37		24.24	24.46	24.19
15	1	74		23.79	24.01	24.17
15	36	0		23.13	23.22	23.03
15	36	18		23.08	23.23	23.13
15	36	39		23.04	23.21	23.19
15	75	0		23.08	23.23	23.07
15	1	0	16-QAM	23.32	23.11	23.14
15	1	38		23.42	23.5	23.66
15	1	75		22.97	23.07	23.55
15	36	0		22.15	22.16	22
15	36	18		22.11	22.16	22.11
15	36	39		22.09	22.12	22.17
15	75	0		22.08	22.28	22.1
20	1	0	QPSK	24.59	24.04	23.96
20	1	49		25	24.43	24.49
20	1	99		24.42	24.03	24.18
20	50	0		23.7	23.24	23.2
20	50	24		23.73	23.2	23.24
20	50	49		23.63	23.24	23.24
20	100	0		23.65	23.2	23.22
20	1	0	16-QAM	23.71	23.57	23.29
20	1	49		24.13	23.97	23.83
20	1	99		23.54	23.58	23.48
20	50	0		22.35	22.17	22.16
20	50	24		22.44	22.22	22.22
20	50	49		22.24	22.19	22.19
20	100	0		22.18	22.16	22.26



10.2 Tune Up Power

Mode	GSM850	GSM1900
GSM/PCS	25±1dBm	28.9±1dBm
GPRS (1 Slot)	25±1dBm	28.9±1dBm
GPRS (2 Slot)	25±1dBm	28.5±1dBm
GPRS (3 Slot)	25±1dBm	26.5±1dBm
GPRS (4 Slot)	25±1dBm	26.17±1dBm
EDGE (1 Slot)	25±1dBm	28.9±1dBm
EDGE (2 Slot)	25±1dBm	28.5±1dBm
EDGE (3 Slot)	25±1dBm	26.5±1dBm
EDGE (4 Slot)	25±1dBm	25.5±1dBm

Mode	WCDMA Band II	WCDMA Band IV	WCDMA Band V
RMR	23±1dBm	24±1dBm	22.5±1dBm
HSDPA Subtest-1	22.5±1dBm	23±1dBm	23±1dBm
HSDPA Subtest-2	22±1dBm	22.5±1dBm	22.5±1dBm
HSDPA Subtest-3	21±1dBm	21.5±1dBm	21.5±1dBm
HSDPA Subtest-4	21±1dBm	21.5±1dBm	21.5±1dBm
HSUPA Subtest-1	22.5±1dBm	22.5±1dBm	22.5±1dBm
HSUPA Subtest-2	22.5±1dBm	23±1dBm	23±1dBm
HSUPA Subtest-3	21.5±1dBm	21.5±1dBm	21.5±1dBm
HSUPA Subtest-4	22.5±1dBm	23±1dBm	23±1dBm
HSUPA Subtest-5	22±1dBm	22±1dBm	22.5±1dBm

Mode	BT
GFSK	4±1dBm
$\pi/4$ -DQPSK	3.5±1dBm
8DPSK	3±1dBm

Mode	BLE
GFSK(1Mbps)	2±1dBm
GFSK(2Mbps)	2±1dBm

Mode	NFC
NFC	-38±1dBm



Mode	2.4G WLAN
802.11b	16±1dBm
802.11g	15.5±1dBm
802.11n(HT20)	15.5±1dBm
802.11n(HT40)	16±1dBm

Mode	5.2G WLAN
802.11a	13.3±1dBm
802.11 n-HT20	12.5±1dBm
802.11 n-HT40	12.5±1dBm
802.11 ac-VHT20	13±1dBm
802.11 ac-VHT40	12.5±1dBm
802.11 ac-VHT80	13±1dBm

Mode	5.3G WLAN
802.11a	14±1dBm
802.11 n-HT20	13.5±1dBm
802.11 n-HT40	12±1dBm
802.11 ac-VHT20	13.5±1dBm
802.11 ac-VHT40	12±1dBm
802.11 ac-VHT80	12±1dBm

Mode	5.6G WLAN
802.11a	13.6±1dBm
802.11 n-HT20	13±1dBm
802.11 n-HT40	12.5±1dBm
802.11 ac-VHT20	13.5±1dBm
802.11 ac-VHT40	12.5±1dBm
802.11 ac-VHT80	12±1dBm



BW[MHz]	RB Size	Mode	Band 2	Band 4	Band 5	Band 7	Band 12	Band 13	Band 14	Band 17
1.4	1	QPSK	24±1dBm	24±1dBm	21.5±1dBm	N/A	23.5±1dBm	N/A	N/A	N/A
1.4	3		23.5±1dBm	24±1dBm	21.5±1dBm	N/A	22.5±1dBm	N/A	N/A	N/A
1.4	6		22.5±1dBm	23±1dBm	20.5±1dBm	N/A	22.5±1dBm	N/A	N/A	N/A
1.4	1	16-QAM	22.5±1dBm	23.5±1dBm	21±1dBm	N/A	23±1dBm	N/A	N/A	N/A
1.4	3		23±1dBm	23.5±1dBm	21±1dBm	N/A	21.5±1dBm	N/A	N/A	N/A
1.4	6		22±1dBm	22.5±1dBm	20±1dBm	N/A	21.5±1dBm	N/A	N/A	N/A
3	1	QPSK	24±1dBm	24.5±1dBm	22±1dBm	N/A	23.5±1dBm	N/A	N/A	N/A
3	8		22.5±1dBm	23±1dBm	20.5±1dBm	N/A	22.5±1dBm	N/A	N/A	N/A
3	15		22.5±1dBm	23±1dBm	20.5±1dBm	N/A	22.5±1dBm	N/A	N/A	N/A
3	1	16-QAM	23.5±1dBm	23.5±1dBm	21±1dBm	N/A	23±1dBm	N/A	N/A	N/A
3	8		21.5±1dBm	22±1dBm	19.5±1dBm	N/A	21.5±1dBm	N/A	N/A	N/A
3	15		21.5±1dBm	22±1dBm	19.5±1dBm	N/A	21.5±1dBm	N/A	N/A	N/A
5	1	QPSK	24±1dBm	24±1dBm	21.5±1dBm	18±1dBm	23.5±1dBm	22±1dBm	23.5±1dBm	24.5±1dBm
5	12		22.5±1dBm	23±1dBm	20.5±1dBm	17±1dBm	22.5±1dBm	21±1dBm	22.5±1dBm	23±1dBm
5	25		22.5±1dBm	22.5±1dBm	20.5±1dBm	17±1dBm	22.5±1dBm	21±1dBm	22.5±1dBm	23±1dBm
5	1	16-QAM	23.5±1dBm	23±1dBm	20.5±1dBm	18±1dBm	23±1dBm	21±1dBm	23±1dBm	23.5±1dBm
5	12		21.5±1dBm	21.5±1dBm	19.5±1dBm	16±1dBm	21.5±1dBm	20±1dBm	21.5±1dBm	22±1dBm
5	25		21.5±1dBm	21.5±1dBm	19.5±1dBm	16±1dBm	21.5±1dBm	22±1dBm	23±1dBm	22±1dBm
10	1	QPSK	24±1dBm	24.5±1dBm	22±1dBm	18±1dBm	23.8±1dBm	22±1dBm	24±1dBm	24.5±1dBm
10	25		22.5±1dBm	23±1dBm	20.5±1dBm	17±1dBm	23.5±1dBm	21±1dBm	22.5±1dBm	23.5±1dBm
10	50		22.5±1dBm	23±1dBm	20.5±1dBm	17±1dBm	22.5±1dBm	21±1dBm	22.5±1dBm	23.5±1dBm
10	1	16-QAM	22.5±1dBm	23±1dBm	21±1dBm	17.5±1dBm	22.5±1dBm	22±1dBm	22.5±1dBm	24±1dBm
10	25		21.5±1dBm	21.5±1dBm	19.5±1dBm	16±1dBm	22.5±1dBm	19.5±1dBm	21.5±1dBm	22±1dBm
10	50		21.5±1dBm	21.5±1dBm	19.5±1dBm	16±1dBm	21.5±1dBm	19.5±1dBm	21.5±1dBm	22±1dBm
15	1	QPSK	24±1dBm	24±1dBm	N/A	18±1dBm	N/A	N/A	N/A	N/A
15	36		22.5±1dBm	23±1dBm	N/A	17±1dBm	N/A	N/A	N/A	N/A
15	75		22.5±1dBm	22.5±1dBm	N/A	17±1dBm	N/A	N/A	N/A	N/A
15	1	16-QAM	23±1dBm	23.5±1dBm	N/A	17.5±1dBm	N/A	N/A	N/A	N/A
15	36		21.5±1dBm	21.5±1dBm	N/A	16±1dBm	N/A	N/A	N/A	N/A
15	75		21.5±1dBm	21.5±1dBm	N/A	16±1dBm	N/A	N/A	N/A	N/A
20	1	QPSK	24±1dBm	24.2±1dBm	N/A	18.5±1dBm	N/A	N/A	N/A	N/A
20	50		22.5±1dBm	23±1dBm	N/A	17±1dBm	N/A	N/A	N/A	N/A
20	100		22.5±1dBm	23±1dBm	N/A	17±1dBm	N/A	N/A	N/A	N/A
20	1	16-QAM	23±1dBm	23.5±1dBm	N/A	17.5±1dBm	N/A	N/A	N/A	N/A
20	50		21.5±1dBm	22±1dBm	N/A	16±1dBm	N/A	N/A	N/A	N/A
20	100		21.5±1dBm	22±1dBm	N/A	16±1dBm	N/A	N/A	N/A	N/A



BW[MHz]	RB Size	Mode	Band 25	Band 26(814-824)	Band 26(824-849)	Band 38	Band 40(2305-2315)	Band 40(2350-2360)	Band 41	Band 66
1.4	1	QPSK	23.5±1dBm	22±1dBm	22±1dBm	N/A	N/A	N/A	N/A	24±1dBm
1.4	3		22.5±1dBm	22±1dBm	22±1dBm	N/A	N/A	N/A	N/A	24±1dBm
1.4	6		22±1dBm	21±1dBm	21±1dBm	N/A	N/A	N/A	N/A	23±1dBm
1.4	1	16-QAM	23±1dBm	21.5±1dBm	21±1dBm	N/A	N/A	N/A	N/A	23±1dBm
1.4	3		21.5±1dBm	21±1dBm	21±1dBm	N/A	N/A	N/A	N/A	23.5±1dBm
1.4	6		21.5±1dBm	20±1dBm	20±1dBm	N/A	N/A	N/A	N/A	22±1dBm
3	1	QPSK	23.5±1dBm	22±1dBm	22±1dBm	N/A	N/A	N/A	N/A	24±1dBm
3	8		23±1dBm	21±1dBm	20.5±1dBm	N/A	N/A	N/A	N/A	23±1dBm
3	15		22.5±1dBm	21±1dBm	20.5±1dBm	N/A	N/A	N/A	N/A	23±1dBm
3	1	16-QAM	23±1dBm	21.5±1dBm	21±1dBm	N/A	N/A	N/A	N/A	23.5±1dBm
3	8		21.5±1dBm	20±1dBm	19.5±1dBm	N/A	N/A	N/A	N/A	22±1dBm
3	15		21.5±1dBm	20±1dBm	19.5±1dBm	N/A	N/A	N/A	N/A	22±1dBm
5	1	QPSK	23.5±1dBm	22±1dBm	22±1dBm	19.5±1dBm	12.5±1dBm	12±1dBm	21±1dBm	23.5±1dBm
5	12		23±1dBm	21±1dBm	21±1dBm	18±1dBm	11.5±1dBm	11±1dBm	20±1dBm	22.5±1dBm
5	25		23±1dBm	21±1dBm	20.5±1dBm	18±1dBm	11.5±1dBm	11±1dBm	20±1dBm	22.5±1dBm
5	1	16-QAM	23±1dBm	21.5±1dBm	21.5±1dBm	19±1dBm	12±1dBm	11.5±1dBm	20.5±1dBm	23±1dBm
5	12		22±1dBm	20±1dBm	19.5±1dBm	17±1dBm	10.5±1dBm	10±1dBm	19±1dBm	21.5±1dBm
5	25		22±1dBm	20±1dBm	19.5±1dBm	17±1dBm	10.5±1dBm	10±1dBm	18.5±1dBm	21.5±1dBm
10	1	QPSK	23.5±1dBm	22.2±1dBm	22±1dBm	19.5±1dBm	12.5±1dBm	12±1dBm	21±1dBm	24±1dBm
10	25		22.5±1dBm	21±1dBm	20.5±1dBm	18±1dBm	11.5±1dBm	11±1dBm	20±1dBm	22.5±1dBm
10	50		22.5±1dBm	21±1dBm	20.5±1dBm	18±1dBm	11.5±1dBm	11±1dBm	20±1dBm	22.5±1dBm
10	1	16-QAM	22.5±1dBm	21.5±1dBm	20.5±1dBm	18.5±1dBm	12±1dBm	12±1dBm	20.5±1dBm	23±1dBm
10	25		21.5±1dBm	20±1dBm	19.5±1dBm	17±1dBm	10.5±1dBm	10±1dBm	19±1dBm	21.5±1dBm
10	50		21.5±1dBm	20±1dBm	19.5±1dBm	17±1dBm	10.5±1dBm	10±1dBm	19±1dBm	21.5±1dBm
15	1	QPSK	23.5±1dBm	N/A	22±1dBm	19.5±1dBm	N/A	N/A	21±1dBm	23.5±1dBm
15	36		22.5±1dBm	N/A	21±1dBm	18.5±1dBm	N/A	N/A	20±1dBm	22.5±1dBm
15	75		22.5±1dBm	N/A	21±1dBm	18±1dBm	N/A	N/A	20±1dBm	22.5±1dBm
15	1	16-QAM	22.5±1dBm	N/A	21±1dBm	18.5±1dBm	N/A	N/A	20±1dBm	23±1dBm
15	36		21.5±1dBm	N/A	20±1dBm	17.5±1dBm	N/A	N/A	19±1dBm	21.5±1dBm
15	75		21.5±1dBm	N/A	20±1dBm	17±1dBm	N/A	N/A	19±1dBm	21.5±1dBm
20	1	QPSK	24±1dBm	N/A	N/A	19.5±1dBm	N/A	N/A	21±1dBm	24.5±1dBm
20	50		23.6±1dBm	N/A	N/A	18.5±1dBm	N/A	N/A	20±1dBm	23±1dBm
20	100		23±1dBm	N/A	N/A	18±1dBm	N/A	N/A	20±1dBm	23±1dBm
20	1	16-QAM	23±1dBm	N/A	N/A	19±1dBm	N/A	N/A	20.5±1dBm	23.5±1dBm
20	50		23±1dBm	N/A	N/A	17.5±1dBm	N/A	N/A	19±1dBm	21.5±1dBm
20	100		22±1dBm	N/A	N/A	17±1dBm	N/A	N/A	19±1dBm	21.5±1dBm



11. EUT and Test Setup Photo

11.1 EUT Photos

Front side

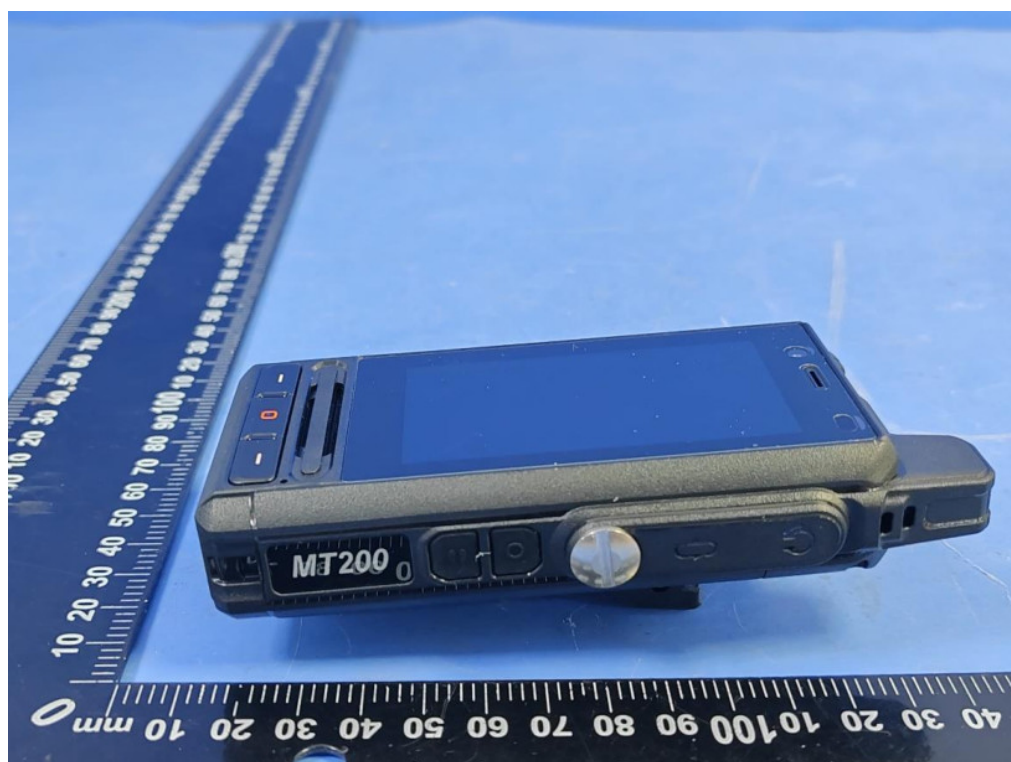


Back side





Right Edge

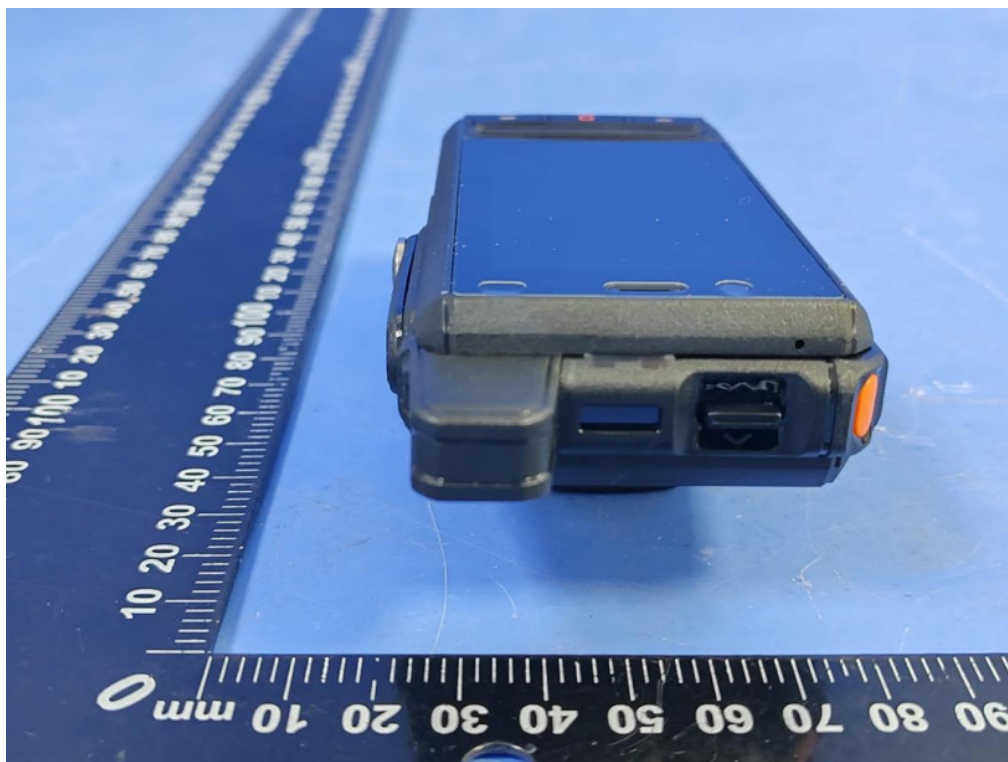


Left Edge





Top Edge



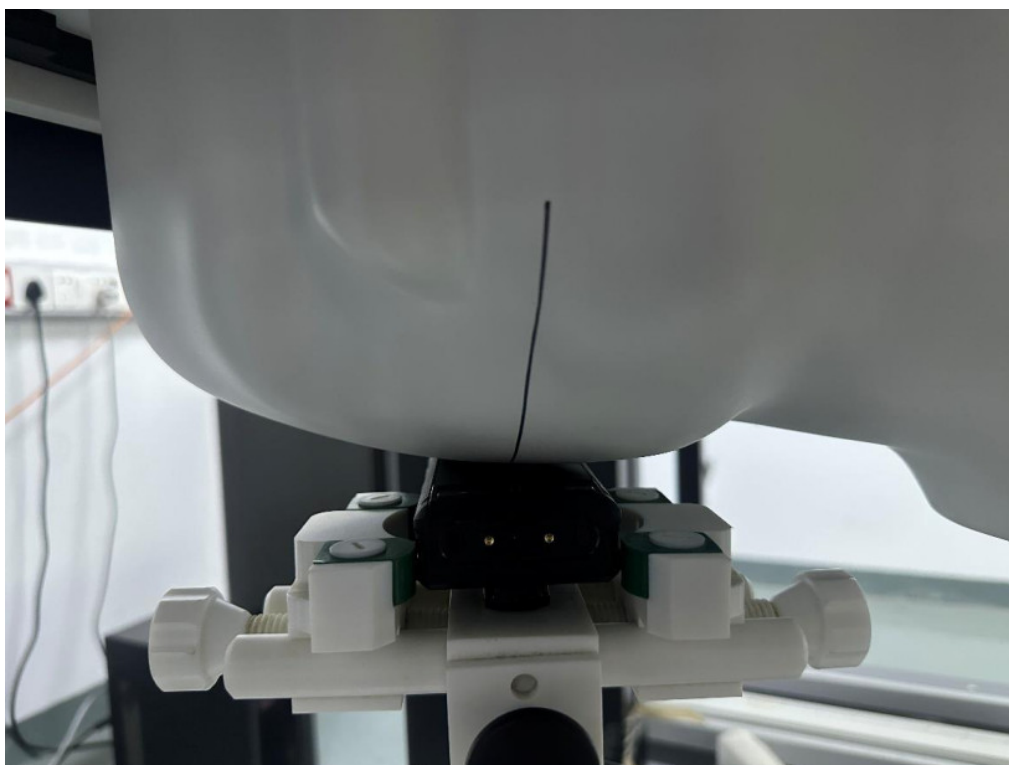
Bottom Edge





11.2 Setup Photos

Right Touch

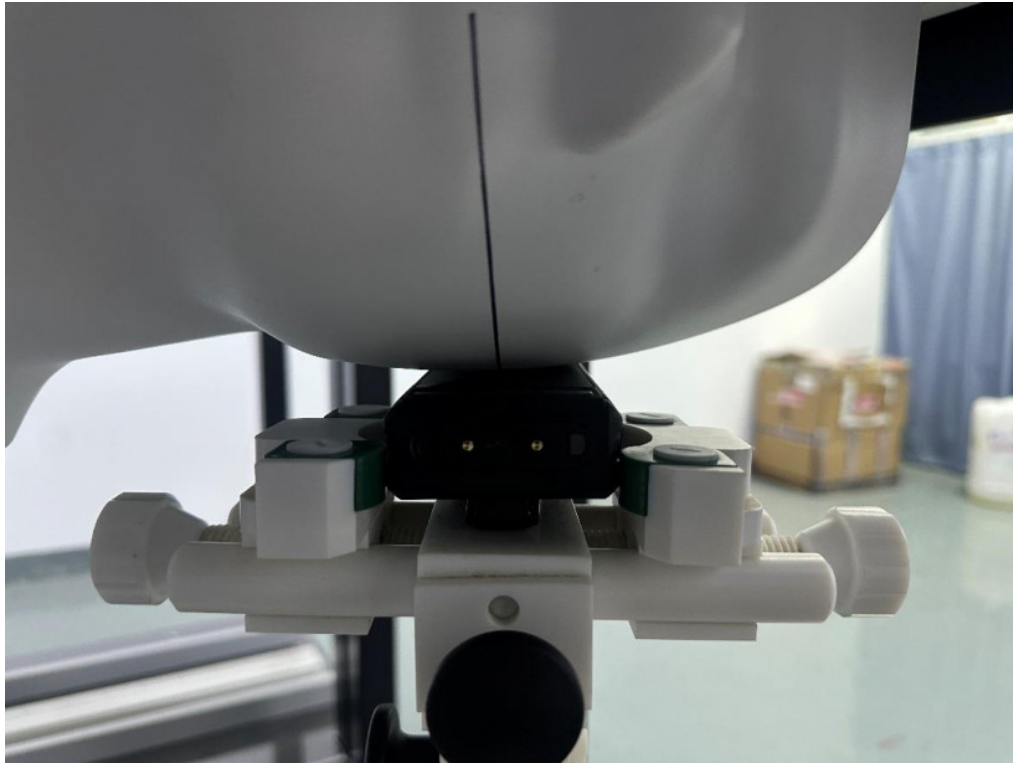


Right Tilt

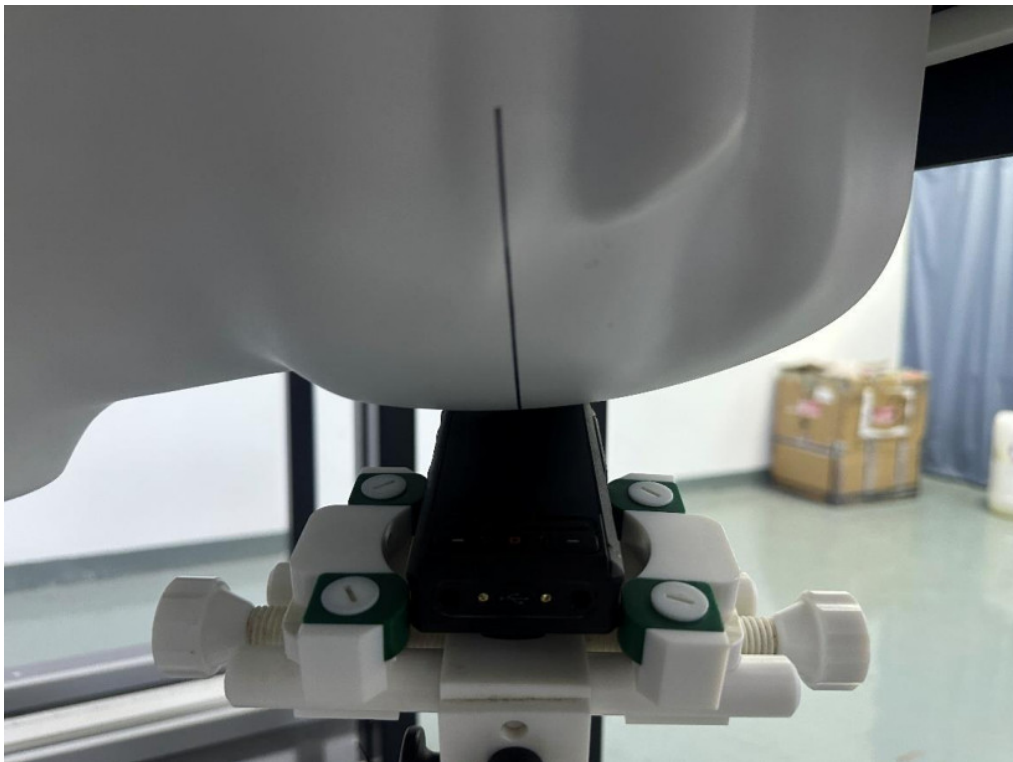




Left Touch

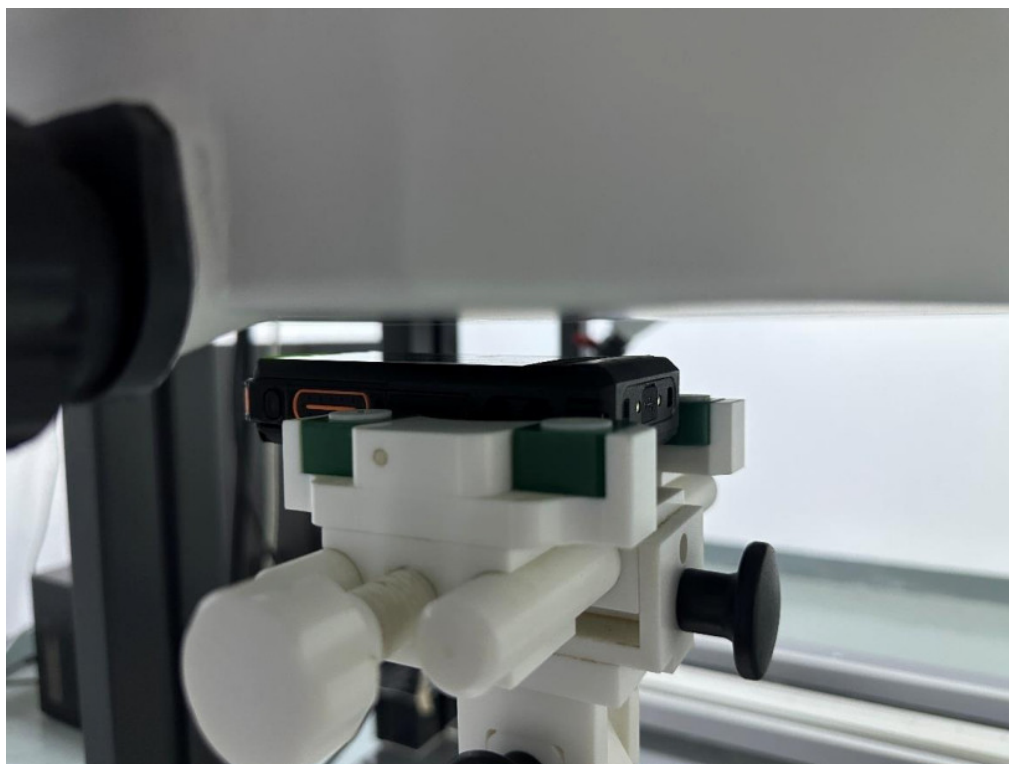


Left Tilt

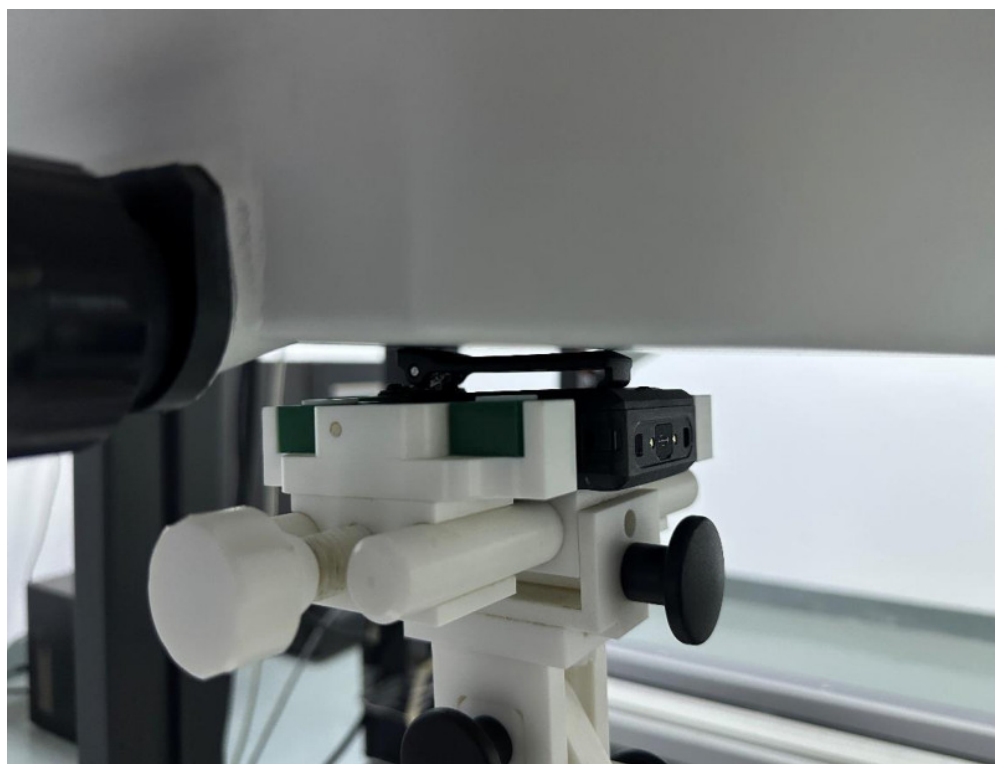




Body Front side (separation distance is 10mm)

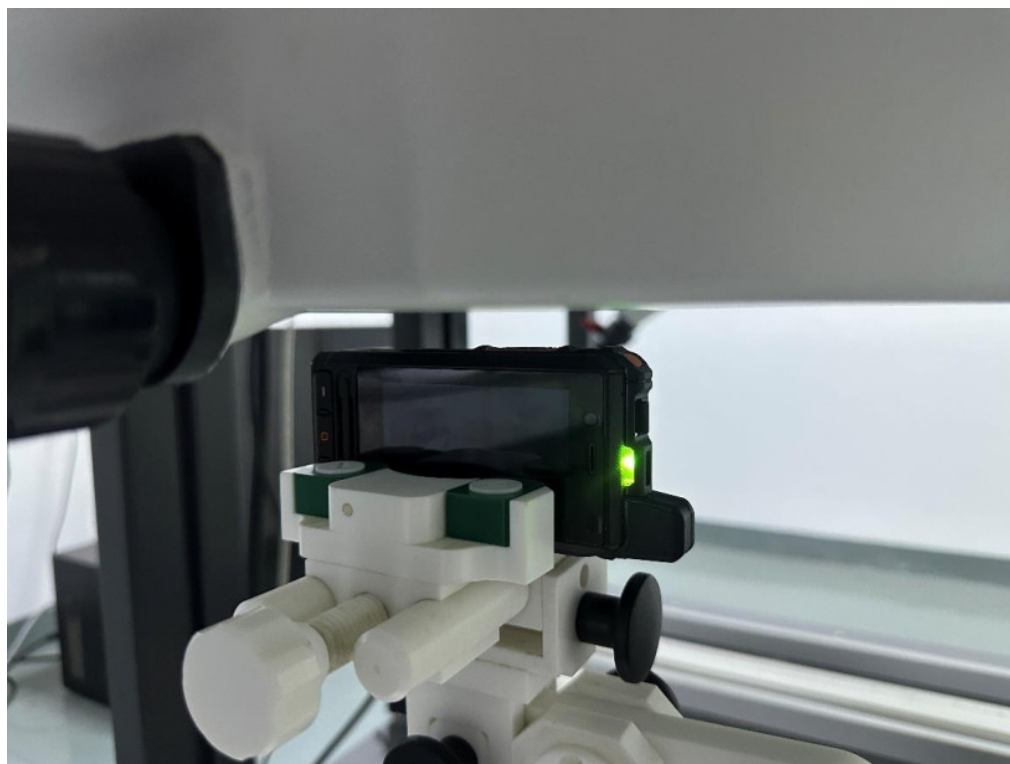


Body Back side (separation distance 0mm)

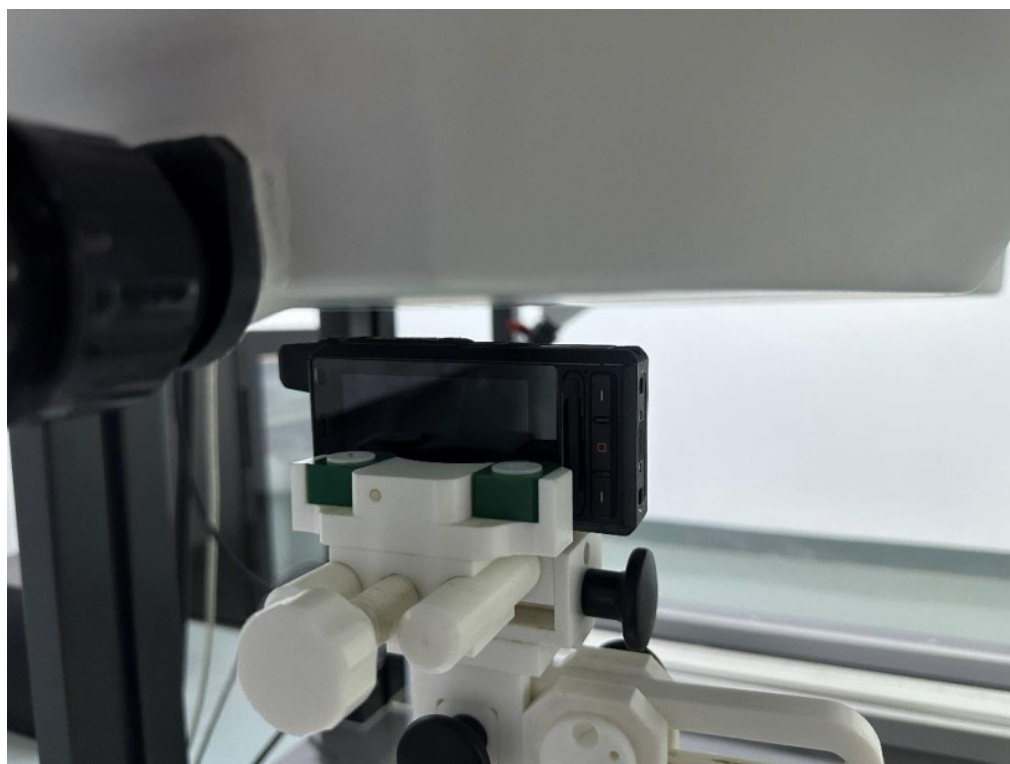




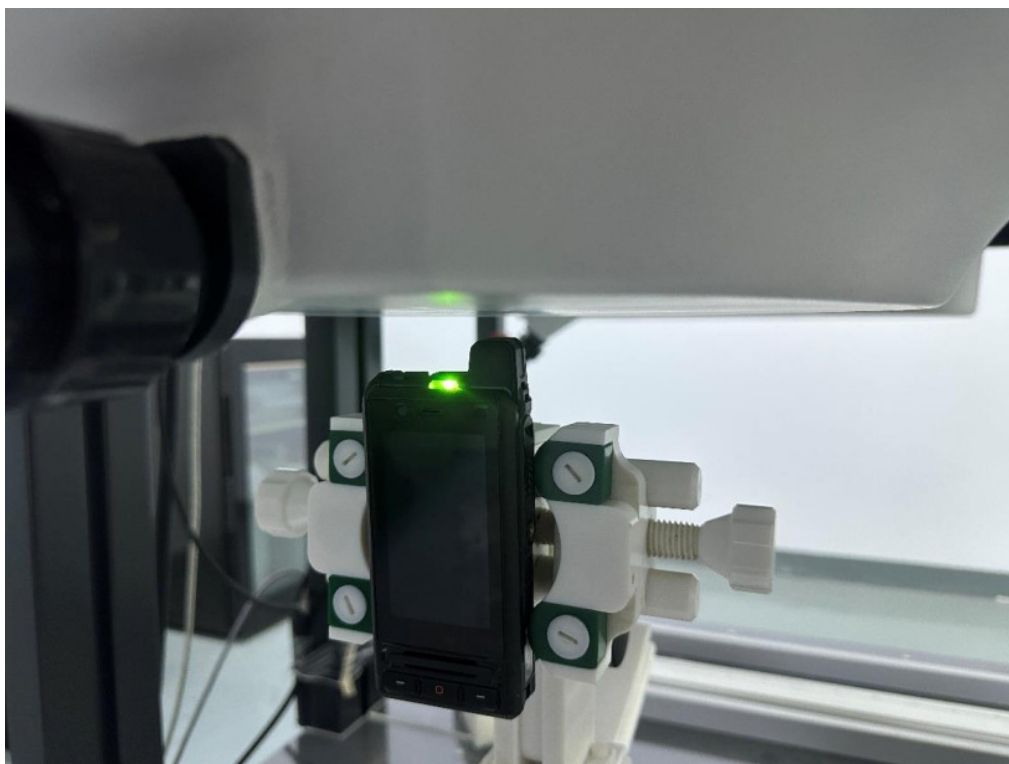
Body Left side (separation distance is 10mm)



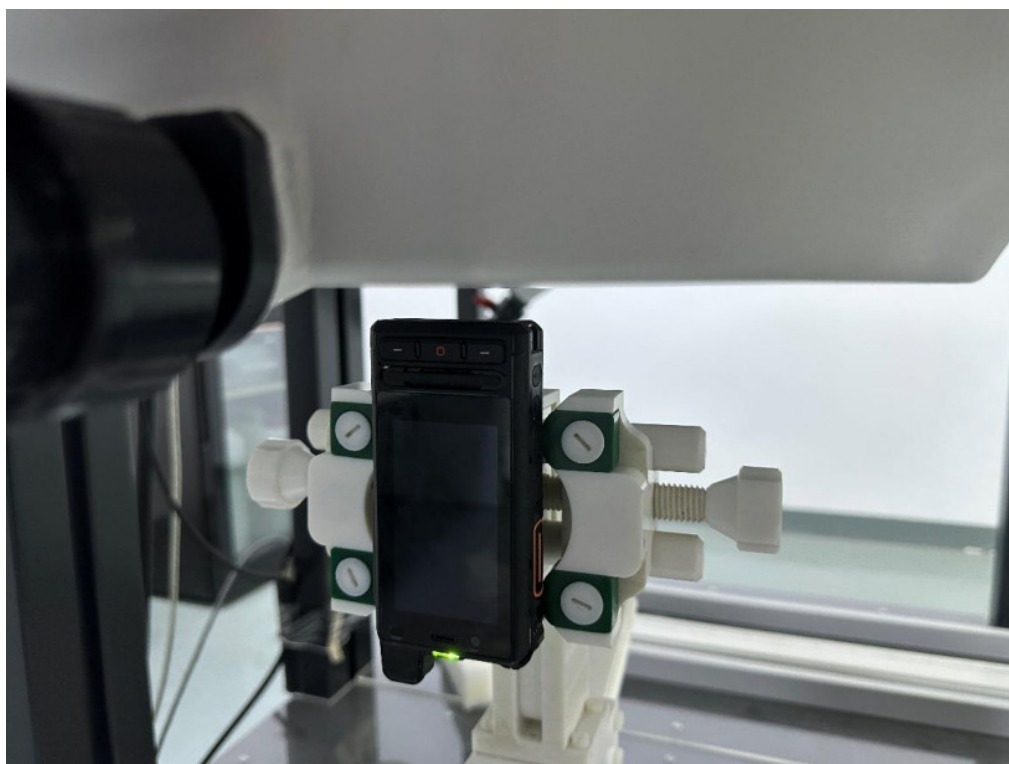
Body Right side (separation distance is 10mm)



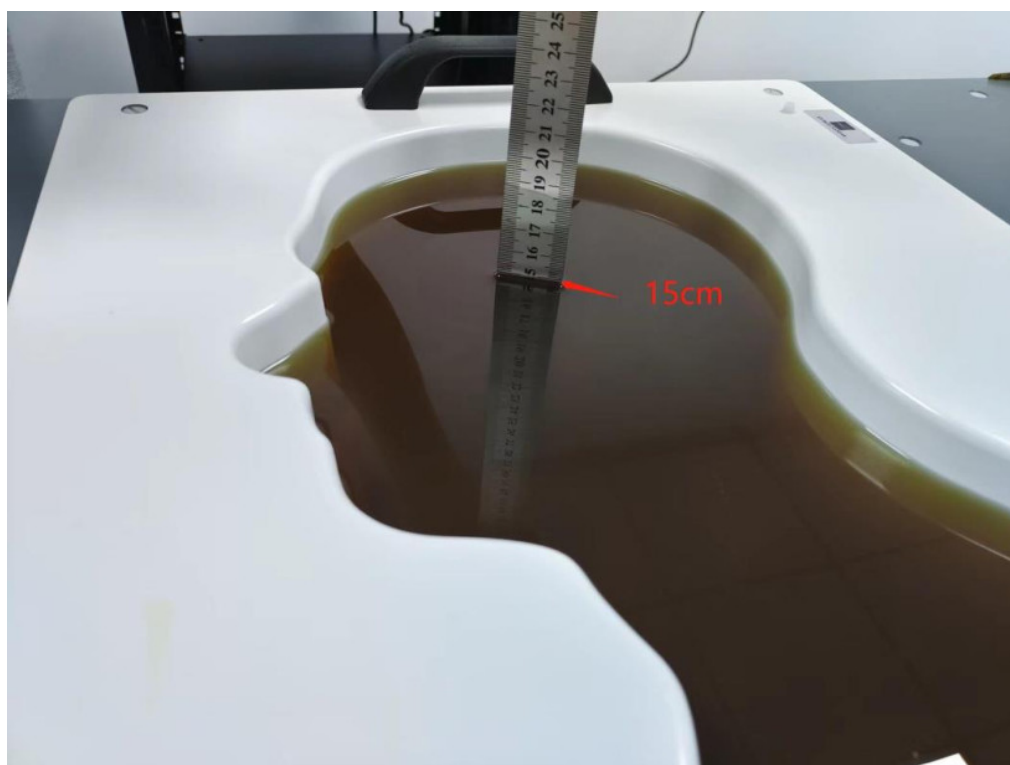
Body Top side (separation distance is 10mm)



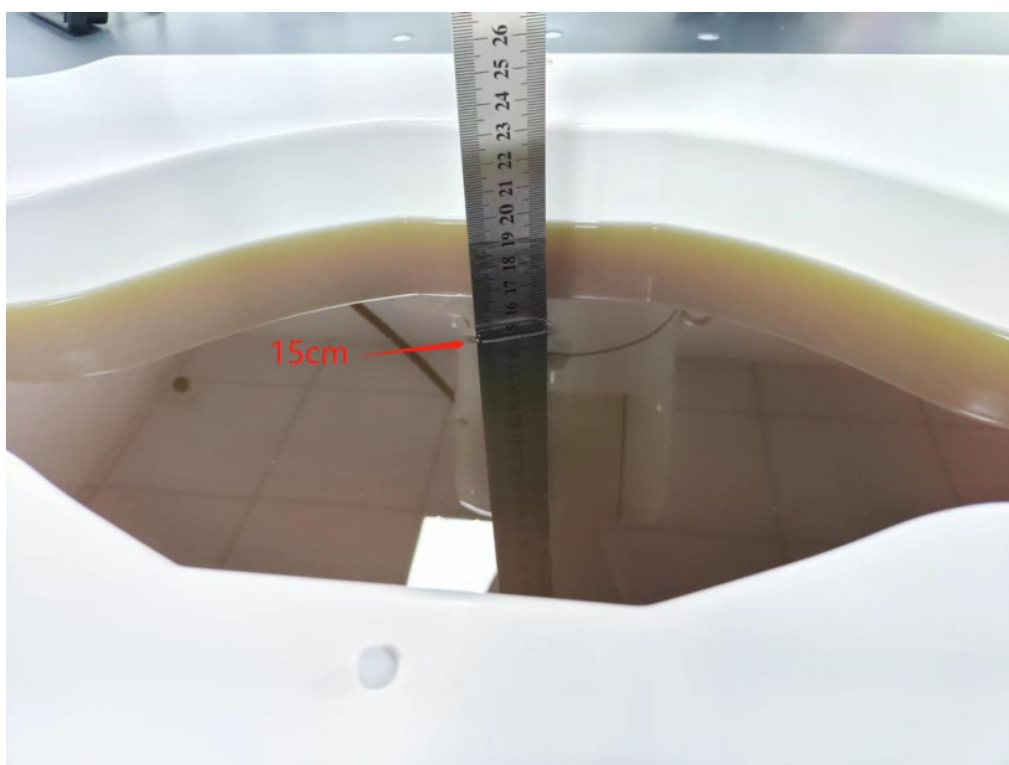
Body Bottom side (separation distance is 10mm)



Liquid depth (15 cm)



Liquid depth (15 cm)





12. SAR Result Summary

12.1 Head SAR

Band	Model	Test Position	Freq.	SAR (1g) (W/kg)	Power Drift (%)	Max. Turn- up Power (dBm)	Meas. Output Power (dBm)	Scaling Factor	Scaled SAR (W/Kg)	Meas. No.
GSM850	GSM	Right Cheek	848.8	0.277	-1.43	26.00	25.68	1.076	0.298	1
		Right Tilt	848.8	0.141	-3.11	26.00	25.68	1.076	0.152	/
		Left Cheek	848.8	0.183	-0.92	26.00	25.68	1.076	0.197	/
		Left Tilt	848.8	0.092	-0.11	26.00	25.68	1.076	0.099	/
PCS 1900	GSM	Right Cheek	1880	0.387	3.49	29.90	29.85	1.012	0.391	3
		Right Tilt	1880	0.199	0.25	29.90	29.85	1.012	0.201	/
		Left Cheek	1880	0.254	2.55	29.90	29.85	1.012	0.257	/
		Left Tilt	1880	0.129	-3.27	29.90	29.85	1.012	0.130	/
WCDMA Band II	RMC	Right Cheek	1880	0.537	1.36	24.00	23.86	1.033	0.555	5
		Right Tilt	1880	0.27	0.36	24.00	23.86	1.033	0.279	/
		Left Cheek	1880	0.532	-2.41	24.00	23.86	1.033	0.549	/
		Left Tilt	1880	0.272	1.23	24.00	23.86	1.033	0.281	/
WCDMA Band IV	RMC	Right Cheek	1712.6	0.377	-2.29	25.00	24.65	1.084	0.409	7
		Right Tilt	1712.6	0.191	-3.52	25.00	24.65	1.084	0.207	/
		Left Cheek	1712.6	0.25	-1.21	25.00	24.65	1.084	0.271	/
		Left Tilt	1712.6	0.129	-3.17	25.00	24.65	1.084	0.140	/
WCDMA Band V	HSUPA Subtest- 4	Right Cheek	846.6	0.338	-3.60	24.00	23.70	1.072	0.362	9
		Right Tilt	846.6	0.17	2.24	24.00	23.70	1.072	0.182	/
		Left Cheek	846.6	0.221	-2.03	24.00	23.70	1.072	0.237	/
		Left Tilt	846.6	0.115	0.07	24.00	23.70	1.072	0.123	/
2.4G WLAN	802.11b	Right Cheek	2462	0.645	2.02	17.00	16.67	1.079	0.696	11
		Right Tilt	2462	0.325	-1.65	17.00	16.67	1.079	0.351	/
		Left Cheek	2462	0.631	-3.83	17.00	16.67	1.079	0.681	/
		Left Tilt	2462	0.319	-1.32	17.00	16.67	1.079	0.344	/
5.2G WLAN	802.11a	Right Cheek	5180	0.629	0.11	14.30	13.46	1.213	0.763	/
		Right Cheek	5200	0.670	-1.70	14.30	13.73	1.140	0.764	/
		Right Cheek	5240	0.731	3.14	14.30	14.10	1.047	0.765	13
		Right Tilt	5240	0.367	-1.03	14.30	14.10	1.047	0.384	/
		Left Cheek	5240	0.48	-0.91	14.30	14.10	1.047	0.503	/
		Left Tilt	5240	0.241	-0.42	14.30	14.10	1.047	0.252	/
5.3G WLAN	802.11a	Right Cheek	5320	0.623	-0.53	15.00	14.96	1.009	0.629	15
		Right Tilt	5320	0.312	-2.07	15.00	14.96	1.009	0.315	/
		Left Cheek	5320	0.408	-3.95	15.00	14.96	1.009	0.412	/
		Left Tilt	5320	0.207	1.61	15.00	14.96	1.009	0.209	/
5.6G WLAN	802.11a	Right Cheek	5500	0.451	2.06	14.60	14.50	1.023	0.462	17
		Right Tilt	5500	0.228	-2.96	14.60	14.50	1.023	0.233	/
		Left Cheek	5500	0.297	3.13	14.60	14.50	1.023	0.304	/
		Left Tilt	5500	0.149	2.70	14.60	14.50	1.023	0.152	/



Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Freq.	Result 1g (W/Kg)	Power Drift (%)	Max. Turn-up Power (dBm)	Meas. Output Power (dBm)	Scaling Factor	Scaled SAR (W/Kg)	Meas. No.
LTE Band 2	20M	QPSK	1	0	Right Cheek	1880	0.436	-1.42	25.00	24.72	1.067	0.465	19
			50	0	Right Cheek	1880	0.392	1.42	25.00	24.72	1.067	0.418	/
			1	0	Right Tilt	1880	0.261	3.51	25.00	24.72	1.067	0.278	/
			50	0	Right Tilt	1880	0.237	0.84	25.00	24.72	1.067	0.253	/
			1	0	Left Cheek	1880	0.433	-3.25	25.00	24.72	1.067	0.462	/
			50	0	Left Cheek	1880	0.395	-3.54	25.00	24.72	1.067	0.421	/
			1	0	Left Tilt	1880	0.263	-1.92	25.00	24.72	1.067	0.281	/
			50	0	Left Tilt	1880	0.238	1.84	25.00	24.72	1.067	0.254	/
LTE Band 4	20M	QPSK	1	0	Right Cheek	1720	0.371	-3.62	25.50	25.15	1.084	0.402	21
			50	0	Right Cheek	1720	0.335	-1.86	25.50	25.15	1.084	0.363	/
			1	0	Right Tilt	1720	0.226	3.69	25.50	25.15	1.084	0.245	/
			50	0	Right Tilt	1720	0.205	-2.70	25.50	25.15	1.084	0.222	/
			1	0	Left Cheek	1720	0.368	-3.04	25.50	25.15	1.084	0.399	/
			50	0	Left Cheek	1720	0.336	1.64	25.50	25.15	1.084	0.364	/
			1	0	Left Tilt	1720	0.225	0.41	25.50	25.15	1.084	0.244	/
			50	0	Left Tilt	1720	0.205	0.33	25.50	25.15	1.084	0.222	/
LTE Band 5	10M	QPSK	1	0	Right Cheek	829	0.569	-3.88	23.00	22.55	1.109	0.631	23
			25	0	Right Cheek	829	0.512	1.83	23.00	22.55	1.109	0.568	/
			1	0	Right Tilt	829	0.344	3.04	23.00	22.55	1.109	0.382	/
			25	0	Right Tilt	829	0.311	-3.95	23.00	22.55	1.109	0.345	/
			1	0	Left Cheek	829	0.566	2.88	23.00	22.55	1.109	0.628	/
			25	0	Left Cheek	829	0.513	-3.59	23.00	22.55	1.109	0.569	/
			1	0	Left Tilt	829	0.34	-3.03	23.00	22.55	1.109	0.377	/
			25	0	Left Tilt	829	0.307	3.34	23.00	22.55	1.109	0.341	/
LTE Band 7	20M	QPSK	1	0	Right Cheek	2510	0.214	1.68	19.50	19.00	1.122	0.240	25
			50	0	Right Cheek	2510	0.192	-1.52	19.50	19.00	1.122	0.215	/
			1	0	Right Tilt	2510	0.132	2.24	19.50	19.00	1.122	0.148	/
			50	0	Right Tilt	2510	0.12	-3.39	19.50	19.00	1.122	0.135	/
			1	0	Left Cheek	2510	0.213	1.78	19.50	19.00	1.122	0.239	/
			50	0	Left Cheek	2510	0.197	-2.05	19.50	19.00	1.122	0.221	/
			1	0	Left Tilt	2510	0.129	0.48	19.50	19.00	1.122	0.145	/
			50	0	Left Tilt	2510	0.118	-2.30	19.50	19.00	1.122	0.132	/
LTE Band 12	10M	QPSK	1	0	Right Cheek	704	0.428	1.87	25.00	24.64	1.086	0.465	27
			25	0	Right Cheek	704	0.387	3.41	25.00	24.64	1.086	0.420	/
			1	0	Right Tilt	704	0.26	1.53	25.00	24.64	1.086	0.282	/
			25	0	Right Tilt	704	0.234	1.72	25.00	24.64	1.086	0.254	/
			1	0	Left Cheek	704	0.426	-2.02	25.00	24.64	1.086	0.463	/
			25	0	Left Cheek	704	0.386	3.89	25.00	24.64	1.086	0.419	/
			1	0	Left Tilt	704	0.256	-0.91	25.00	24.64	1.086	0.278	/
			25	0	Left Tilt	704	0.235	-2.90	25.00	24.64	1.086	0.255	/



LTE Band 13	10M	QPSK	1	0	Right Cheek	782	0.196	1.91	23.00	22.93	1.016	0.199	29
			25	0	Right Cheek	782	0.179	-0.80	23.00	22.93	1.016	0.182	/
			1	0	Right Tilt	782	0.118	2.25	23.00	22.93	1.016	0.120	/
			25	0	Right Tilt	782	0.108	-2.51	23.00	22.93	1.016	0.110	/
			1	0	Left Cheek	782	0.195	-0.51	23.00	22.93	1.016	0.198	/
			25	0	Left Cheek	782	0.178	0.00	23.00	22.93	1.016	0.181	/
			1	0	Left Tilt	782	0.12	-3.81	23.00	22.93	1.016	0.122	/
			25	0	Left Tilt	782	0.108	1.21	23.00	22.93	1.016	0.110	/
LTE Band 14	10M	QPSK	1	0	Right Cheek	793	0.622	-0.61	25.00	24.62	1.091	0.679	31
			25	0	Right Cheek	793	0.56	-0.71	25.00	24.62	1.091	0.611	/
			1	0	Right Tilt	793	0.376	3.75	25.00	24.62	1.091	0.410	/
			25	0	Right Tilt	793	0.338	3.15	25.00	24.62	1.091	0.369	/
			1	0	Left Cheek	793	0.617	-0.31	25.00	24.62	1.091	0.673	/
			25	0	Left Cheek	793	0.559	-3.73	25.00	24.62	1.091	0.610	/
			1	0	Left Tilt	793	0.373	-1.20	25.00	24.62	1.091	0.407	/
			25	0	Left Tilt	793	0.337	1.82	25.00	24.62	1.091	0.368	/
LTE Band 17	10M	QPSK	1	0	Right Cheek	711	0.511	2.85	25.50	25.18	1.076	0.550	33
			25	0	Right Cheek	711	0.46	0.97	25.50	25.18	1.076	0.495	/
			1	0	Right Tilt	711	0.307	2.49	25.50	25.18	1.076	0.330	/
			25	0	Right Tilt	711	0.277	2.96	25.50	25.18	1.076	0.298	/
			1	0	Left Cheek	711	0.505	-1.62	25.50	25.18	1.076	0.544	/
			25	0	Left Cheek	711	0.458	3.22	25.50	25.18	1.076	0.493	/
			1	0	Left Tilt	711	0.304	-0.08	25.50	25.18	1.076	0.327	/
			25	0	Left Tilt	711	0.279	-1.76	25.50	25.18	1.076	0.300	/
LTE Band 25	20M	QPSK	1	0	Right Cheek	1882.5	0.372	0.51	25.00	24.75	1.059	0.394	35
			50	0	Right Cheek	1882.5	0.335	3.55	25.00	24.75	1.059	0.355	/
			1	0	Right Tilt	1882.5	0.225	3.01	25.00	24.75	1.059	0.238	/
			50	0	Right Tilt	1882.5	0.203	-3.08	25.00	24.75	1.059	0.215	/
			1	0	Left Cheek	1882.5	0.368	-2.00	25.00	24.75	1.059	0.390	/
			50	0	Left Cheek	1882.5	0.335	0.19	25.00	24.75	1.059	0.355	/
			1	0	Left Tilt	1882.5	0.221	0.74	25.00	24.75	1.059	0.234	/
			50	0	Left Tilt	1882.5	0.201	3.08	25.00	24.75	1.059	0.213	/
LTE Band 26	15M	QPSK	1	0	Right Cheek	819	0.512	-0.73	23.50	23.04	1.112	0.569	37
			36	0	Right Cheek	819	0.463	0.91	23.50	23.04	1.112	0.515	/
			1	0	Right Tilt	819	0.31	2.67	23.50	23.04	1.112	0.345	/
			36	0	Right Tilt	819	0.28	1.45	23.50	23.04	1.112	0.311	/
			1	0	Left Cheek	819	0.507	0.32	23.50	23.04	1.112	0.564	/
			36	0	Left Cheek	819	0.46	-3.09	23.50	23.04	1.112	0.511	/
			1	0	Left Tilt	819	0.305	-2.26	23.50	23.04	1.112	0.339	/
			36	0	Left Tilt	819	0.278	3.55	23.50	23.04	1.112	0.309	/
LTE Band 38	20M	QPSK	1	0	Right Cheek	2595	0.116	2.69	20.50	20.15	1.084	0.126	39
			50	0	Right Cheek	2595	0.105	-3.26	20.50	20.15	1.084	0.114	/
			1	0	Right Tilt	2595	0.07	0.37	20.50	20.15	1.084	0.076	/
			50	0	Right Tilt	2595	0.063	1.29	20.50	20.15	1.084	0.068	/
			1	0	Left Cheek	2595	0.117	-3.48	20.50	20.15	1.084	0.127	/
			50	0	Left Cheek	2595	0.106	2.42	20.50	20.15	1.084	0.115	/
			1	0	Left Tilt	2595	0.074	0.67	20.50	20.15	1.084	0.080	/
			50	0	Left Tilt	2595	0.065	1.89	20.50	20.15	1.084	0.070	/



LTE Band 40	10M	QPSK	1	0	Right Cheek	2355	0.308	1.05	13.50	13.25	1.059	0.326	41
			50	0	Right Cheek	2355	0.281	2.91	13.50	13.25	1.059	0.298	/
			1	0	Right Tilt	2355	0.187	2.93	13.50	13.25	1.059	0.198	/
			50	0	Right Tilt	2355	0.169	2.76	13.50	13.25	1.059	0.179	/
			1	0	Left Cheek	2355	0.308	3.05	13.50	13.25	1.059	0.326	/
			50	0	Left Cheek	2355	0.28	-3.73	13.50	13.25	1.059	0.297	/
			1	0	Left Tilt	2355	0.189	1.73	13.50	13.25	1.059	0.200	/
			50	0	Left Tilt	2355	0.168	-0.37	13.50	13.25	1.059	0.178	/
LTE Band 41	20M	QPSK	1	0	Right Cheek	2595	0.313	1.98	22.00	21.79	1.050	0.329	43
			50	0	Right Cheek	2595	0.281	-2.31	22.00	21.79	1.050	0.295	/
			1	0	Right Tilt	2595	0.188	0.19	22.00	21.79	1.050	0.197	/
			50	0	Right Tilt	2595	0.169	1.67	22.00	21.79	1.050	0.177	/
			1	0	Left Cheek	2595	0.31	-0.52	22.00	21.79	1.050	0.325	/
			50	0	Left Cheek	2595	0.281	1.66	22.00	21.79	1.050	0.295	/
			1	0	Left Tilt	2595	0.187	-2.79	22.00	21.79	1.050	0.196	/
			50	0	Left Tilt	2595	0.172	-2.13	22.00	21.79	1.050	0.181	/
LTE Band 66	20M	QPSK	1	0	Right Cheek	1720	0.453	3.28	25.50	25.00	1.122	0.508	45
			50	0	Right Cheek	1720	0.407	1.12	25.50	25.00	1.122	0.457	/
			1	0	Right Tilt	1720	0.275	-2.15	25.50	25.00	1.122	0.309	/
			50	0	Right Tilt	1720	0.247	-2.84	25.50	25.00	1.122	0.277	/
			1	0	Left Cheek	1720	0.45	-0.47	25.50	25.00	1.122	0.505	/
			50	0	Left Cheek	1720	0.407	2.44	25.50	25.00	1.122	0.457	/
			1	0	Left Tilt	1720	0.271	-0.35	25.50	25.00	1.122	0.304	/
			50	0	Left Tilt	1720	0.246	0.54	25.50	25.00	1.122	0.276	/

Note:

1. Per KDB 447498 D01, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.

a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.

b. Scaled SAR(W/kg) = Measured SAR(W/kg) *Tune-up Scaling Factor

2. Per KDB 865664 D01, Repeated measurement is not required when the original highest measured SAR is <0.80 W/kg.



12.2 Body-worn and Hotspot SAR

Band	Model	Test Position	Freq.	SAR (1g) (W/kg)	Power Drift (%)	Max. Turn-up Power (dBm)	Meas. Output Power (dBm)	Scaling Factor	Scaled SAR (W/Kg)	Meas. No.
GSM850	EGPRS (8PSK, 4-Slot)	Front Side	848.8	0.294	1.20	26.00	25.72	1.067	0.314	/
		Back Side	848.8	0.511	-2.15	26.00	25.72	1.067	0.545	2
		Left Side	848.8	0.254	1.95	26.00	25.72	1.067	0.271	/
		Right Side	848.8	0.211	-2.70	26.00	25.72	1.067	0.225	/
		Top Side	848.8	0.137	1.74	26.00	25.72	1.067	0.146	/
		Bottom Side	848.8	0.125	-3.97	26.00	25.72	1.067	0.133	/
PCS 1900	EGPRS (8PSK, 4-Slot)	Front Side	1850.2	0.254	2.80	27.17	27.13	1.009	0.256	/
		Back Side	1850.2	0.446	3.81	27.17	27.13	1.009	0.450	4
		Left Side	1850.2	0.219	-0.36	27.17	27.13	1.009	0.221	/
		Right Side	1850.2	0.184	-3.22	27.17	27.13	1.009	0.186	/
		Top Side	1850.2	0.121	0.01	27.17	27.13	1.009	0.122	/
		Bottom Side	1850.2	0.109	3.99	27.17	27.13	1.009	0.110	/
WCDMA Band II	RMC	Front Side	1880	0.525	1.98	24.00	23.86	1.033	0.542	/
		Back Side	1852.4	0.756	-0.96	24.00	23.31	1.172	0.886	/
		Back Side	1880	0.887	-2.30	24.00	23.86	1.033	0.916	6
		Back Side	1907.6	0.760	-2.72	24.00	23.20	1.202	0.914	/
		Left Side	1880	0.443	-3.30	24.00	23.86	1.033	0.458	/
		Right Side	1880	0.296	0.40	24.00	23.86	1.033	0.306	/
		Bottom Side	1880	0.765	-3.27	24.00	23.86	1.033	0.790	/
WCDMA Band IV	RMC	Front Side	1712.6	0.325	-1.12	25.00	24.65	1.084	0.352	/
		Back Side	1712.6	0.567	-2.01	25.00	24.65	1.084	0.615	8
		Left Side	1712.6	0.278	1.95	25.00	24.65	1.084	0.301	/
		Right Side	1712.6	0.234	1.19	25.00	24.65	1.084	0.254	/
		Bottom Side	1712.6	0.14	3.75	25.00	24.65	1.084	0.152	/
WCDMA Band V	RMC	Front Side	846.6	0.377	2.34	24.00	23.70	1.072	0.404	/
		Back Side	846.6	0.658	3.82	24.00	23.70	1.072	0.705	10
		Left Side	846.6	0.326	-0.22	24.00	23.70	1.072	0.349	/
		Right Side	846.6	0.271	-3.84	24.00	23.70	1.072	0.290	/
		Bottom Side	846.6	0.16	1.66	24.00	23.70	1.072	0.171	/
2.4GHz WLAN	802.11b	Front Side	2462	0.338	1.53	17.00	16.67	1.079	0.365	12
		Back Side	2462	0.230	0.89	17.00	16.67	1.079	0.248	/
		Left Side	2462	0.114	1.86	17.00	16.67	1.079	0.123	/
		Right Side	2462	0.097	-0.39	17.00	16.67	1.079	0.105	/
		Top Side	2462	0.064	3.37	17.00	16.67	1.079	0.069	/
5.2GHz WLAN	802.11a	Front Side	5240	0.535	0.56	14.30	14.10	1.047	0.560	14
		Back Side	5240	0.265	-2.57	14.30	14.10	1.047	0.277	/
		Left Side	5240	0.219	1.39	14.30	14.10	1.047	0.229	/
		Right Side	5240	0.146	0.90	14.30	14.10	1.047	0.153	/
		Top Side	5240	0.13	2.46	14.30	14.10	1.047	0.136	/
5.3GHz WLAN	802.11a	Front Side	5320	0.630	-1.68	15.00	14.96	1.009	0.636	16
		Back Side	5320	0.309	-2.63	15.00	14.96	1.009	0.312	/
		Left Side	5320	0.263	1.48	15.00	14.96	1.009	0.265	/
		Right Side	5320	0.171	3.09	15.00	14.96	1.009	0.173	/
		Top Side	5320	0.151	-0.69	15.00	14.96	1.009	0.152	/
5.6GHz WLAN	802.11a	Front Side	5500	0.628	-2.59	14.60	14.50	1.023	0.643	18
		Back Side	5500	0.308	3.14	14.60	14.50	1.023	0.315	/
		Left Side	5500	0.261	-0.78	14.60	14.50	1.023	0.267	/
		Right Side	5500	0.172	0.55	14.60	14.50	1.023	0.176	/
		Top Side	5500	0.152	-0.64	14.60	14.50	1.023	0.156	/



Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Freq.	Result 1g (W/Kg)	Power Drift (%)	Max. Turn-up Power (dBm)	Meas. Output Power (dBm)	Scaling Factor	Scaled SAR (W/Kg)	Meas. No.
LTE Band 2	20M	QPSK	1	0	Front side	1880	0.496	2.08	25.00	24.72	1.067	0.529	/
			50	0	Front side	1880	0.442	-1.21	23.50	23.46	1.009	0.446	/
			1	0	Back Side	1860	0.701	3.71	25.00	24.21	1.199	0.841	/
			1	0	Back Side	1880	0.804	2.33	25.00	24.72	1.067	0.858	20
			1	0	Back Side	1900	0.705	-3.15	25.00	24.15	1.216	0.857	/
			50	0	Back Side	1880	0.712	1.31	23.50	23.46	1.009	0.719	/
			1	0	Left Side	1880	0.565	2.68	25.00	24.72	1.067	0.603	/
			50	0	Left Side	1880	0.498	-2.19	23.50	23.46	1.009	0.503	/
			1	0	Right Side	1880	0.58	-2.90	25.00	24.72	1.067	0.619	/
			50	0	Right Side	1880	0.513	0.71	23.50	23.46	1.009	0.518	/
			1	0	Bottom Side	1880	0.565	-0.71	25.00	24.72	1.067	0.603	/
			50	0	Bottom Side	1880	0.502	1.54	23.50	23.46	1.009	0.507	/
LTE Band 4	20M	QPSK	1	0	Front side	1720	0.549	2.92	25.20	25.15	1.012	0.555	/
			50	0	Front side	1720	0.485	3.01	24.00	23.91	1.021	0.495	/
			1	0	Back Side	1720	0.780	1.08	25.20	25.15	1.012	0.789	22
			50	0	Back Side	1720	0.687	3.17	24.00	23.91	1.021	0.701	/
			1	0	Left Side	1720	0.625	-0.56	25.20	25.15	1.012	0.632	/
			50	0	Left Side	1720	0.55	2.34	24.00	23.91	1.021	0.562	/
			1	0	Right Side	1720	0.644	-0.36	25.20	25.15	1.012	0.651	/
			50	0	Right Side	1720	0.571	-0.30	24.00	23.91	1.021	0.583	/
			1	0	Bottom Side	1720	0.625	0.83	25.20	25.15	1.012	0.632	/
			50	0	Bottom Side	1720	0.55	3.05	24.00	23.91	1.021	0.562	/
LTE Band 5	10M	QPSK	1	0	Front side	829	0.452	0.67	23.00	22.55	1.109	0.501	/
			25	0	Front side	829	0.4	1.50	21.50	21.29	1.050	0.420	/
			1	0	Back Side	829	0.646	-3.90	23.00	22.55	1.109	0.717	24
			25	0	Back Side	829	0.571	-0.52	21.50	21.29	1.050	0.599	/
			1	0	Left Side	829	0.52	-3.59	23.00	22.55	1.109	0.577	/
			25	0	Left Side	829	0.46	3.81	21.50	21.29	1.050	0.483	/
			1	0	Right Side	829	0.533	3.74	23.00	22.55	1.109	0.591	/
			25	0	Right Side	829	0.473	1.29	21.50	21.29	1.050	0.496	/
			1	0	Bottom Side	829	0.523	-3.39	23.00	22.55	1.109	0.580	/
			25	0	Bottom Side	829	0.463	-2.48	21.50	21.29	1.050	0.486	/
LTE Band 7	20M	QPSK	1	0	Front side	2510	0.259	-3.98	19.50	19.00	1.122	0.291	/
			50	0	Front side	2510	0.232	-0.47	18.00	17.75	1.059	0.246	/
			1	0	Back Side	2510	0.364	-1.21	19.50	19.00	1.122	0.408	26
			50	0	Back Side	2510	0.323	-3.30	18.00	17.75	1.059	0.342	/
			1	0	Left Side	2510	0.292	1.51	19.50	19.00	1.122	0.328	/
			50	0	Left Side	2510	0.26	-1.61	18.00	17.75	1.059	0.275	/
			1	0	Right Side	2510	0.299	-1.78	19.50	19.00	1.122	0.335	/
			50	0	Right Side	2510	0.266	-2.80	18.00	17.75	1.059	0.282	/
			1	0	Bottom Side	2510	0.293	3.82	19.50	19.00	1.122	0.329	/
			50	0	Bottom Side	2510	0.258	0.67	18.00	17.75	1.059	0.273	/
LTE Band 12	10M	QPSK	1	0	Front side	704	0.517	-1.20	24.80	24.64	1.038	0.536	/
			25	0	Front side	704	0.456	2.08	24.50	24.49	1.002	0.457	/
			1	0	Back Side	704	0.738	3.28	24.80	24.64	1.038	0.766	28
			25	0	Back Side	704	0.652	-0.22	24.50	24.49	1.002	0.654	/
			1	0	Left Side	704	0.593	-1.87	24.80	24.64	1.038	0.615	/
			25	0	Left Side	704	0.526	3.36	24.50	24.49	1.002	0.527	/
			1	0	Right Side	704	0.605	0.78	24.80	24.64	1.038	0.628	/
			25	0	Right Side	704	0.536	-2.94	24.50	24.49	1.002	0.537	/
			1	0	Bottom Side	704	0.593	0.17	24.80	24.64	1.038	0.615	/
			25	0	Bottom Side	704	0.525	0.86	24.50	24.49	1.002	0.526	/
	10M	QPSK	1	0	Front side	782	0.263	0.12	23.00	22.93	1.016	0.267	/



LTE Band 13			25	0	Front side	782	0.236	-1.71	22.00	21.84	1.038	0.245	/
			1	0	Back Side	782	0.370	-1.29	23.00	22.93	1.016	0.376	30
			25	0	Back Side	782	0.33	1.67	22.00	21.84	1.038	0.342	/
			1	0	Left Side	782	0.3	2.32	23.00	22.93	1.016	0.305	/
			25	0	Left Side	782	0.267	-1.12	22.00	21.84	1.038	0.277	/
			1	0	Right Side	782	0.304	3.34	23.00	22.93	1.016	0.309	/
			25	0	Right Side	782	0.273	3.82	22.00	21.84	1.038	0.283	/
			1	0	Bottom Side	782	0.3	-2.65	23.00	22.93	1.016	0.305	/
			25	0	Bottom Side	782	0.265	-1.68	22.00	21.84	1.038	0.275	/
LTE Band 14	10M	QPSK	1	0	Front side	793	0.604	-1.01	25.00	24.62	1.091	0.659	/
			25	0	Front side	793	0.536	3.26	23.50	23.41	1.021	0.547	/
			1	0	Back Side	793	0.860	-3.34	25.00	24.62	1.091	0.939	32
			25	0	Back Side	793	0.762	-2.43	23.50	23.41	1.021	0.778	/
			1	0	Left Side	793	0.688	-0.46	25.00	24.62	1.091	0.751	/
			25	0	Left Side	793	0.609	1.31	23.50	23.41	1.021	0.622	/
			1	0	Right Side	793	0.708	-1.09	25.00	24.62	1.091	0.773	/
			25	0	Right Side	793	0.625	-1.53	23.50	23.41	1.021	0.638	/
			1	0	Bottom Side	793	0.691	1.96	25.00	24.62	1.091	0.754	/
			25	0	Bottom Side	793	0.612	-2.31	23.50	23.41	1.021	0.625	/
LTE Band 17	10M	QPSK	1	0	Front side	711	0.443	-1.01	25.50	25.18	1.076	0.477	/
			25	0	Front side	711	0.393	-2.99	24.50	24.02	1.117	0.439	/
			1	0	Back Side	711	0.630	-3.71	25.50	25.18	1.076	0.678	34
			25	0	Back Side	711	0.555	0.46	24.50	24.02	1.117	0.620	/
			1	0	Left Side	711	0.508	1.87	25.50	25.18	1.076	0.547	/
			25	0	Left Side	711	0.452	3.96	24.50	24.02	1.117	0.505	/
			1	0	Right Side	711	0.521	-2.43	25.50	25.18	1.076	0.561	/
			25	0	Right Side	711	0.461	1.01	24.50	24.02	1.117	0.515	/
			1	0	Bottom Side	711	0.507	0.11	25.50	25.18	1.076	0.546	/
LTE Band 25	20M	QPSK	25	0	Bottom Side	711	0.448	-2.87	24.50	24.02	1.117	0.500	/
			1	0	Front side	0.515	3.30	25.00	24.75	1.059	0.546	0.515	/
			50	0	Front side	0.457	-0.60	24.60	24.55	1.012	0.462	0.457	/
			1	0	Back Side	0.730	-2.10	25.00	24.26	1.186	0.866	0.730	/
			1	0	Back Side	0.843	-0.92	25.00	24.75	1.059	0.893	0.843	36
			1	0	Back Side	0.733	-2.86	25.00	24.15	1.216	0.891	0.733	/
			50	0	Back Side	0.742	-1.03	24.60	24.55	1.012	0.751	0.742	/
			1	0	Left Side	0.588	3.73	25.00	24.75	1.059	0.623	0.588	/
			50	0	Left Side	0.517	-2.97	24.60	24.55	1.012	0.523	0.517	/
			1	0	Right Side	0.604	-1.72	25.00	24.75	1.059	0.640	0.604	/
			50	0	Right Side	0.536	-0.64	24.60	24.55	1.012	0.542	0.536	/
			1	0	Bottom Side	0.589	-0.17	25.00	24.75	1.059	0.624	0.589	/
			50	0	Bottom Side	0.521	1.77	24.60	24.55	1.012	0.527	0.521	/
LTE Band 26	15M	QPSK	1	0	Front side	0.58	-2.14	23.20	23.04	1.038	0.602	0.58	/
			36	0	Front side	0.513	-3.80	22.00	21.65	1.084	0.556	0.513	/
			1	0	Back Side	0.829	0.04	23.20	23.04	1.038	0.860	0.829	38
			36	0	Back Side	0.734	-2.77	22.00	21.65	1.084	0.796	0.734	/
			1	0	Left Side	0.667	-3.87	23.20	23.04	1.038	0.692	0.667	/
			36	0	Left Side	0.588	2.77	22.00	21.65	1.084	0.637	0.588	/
			1	0	Right Side	0.683	-4.00	23.20	23.04	1.038	0.709	0.683	/
			36	0	Right Side	0.602	-2.09	22.00	21.65	1.084	0.653	0.602	/
			1	0	Bottom Side	0.667	-3.52	23.20	23.04	1.038	0.692	0.667	/
LTE Band 38	20M	QPSK	36	0	Bottom Side	0.589	-3.85	22.00	21.65	1.084	0.638	0.589	/
			1	0	Front side	0.473	-1.49	20.50	20.15	1.084	0.513	0.473	/
			50	0	Front side	0.421	0.88	19.50	19.05	1.109	0.467	0.421	/
			1	0	Back Side	0.670	-2.36	20.50	20.15	1.084	0.726	0.670	40
			50	0	Back Side	0.592	-1.95	19.50	19.05	1.109	0.657	0.592	/
			1	0	Left Side	0.54	2.08	20.50	20.15	1.084	0.585	0.54	/
			50	0	Left Side	0.48	0.67	19.50	19.05	1.109	0.532	0.48	/



			1	0	Right Side	0.553	-0.36	20.50	20.15	1.084	0.599	0.553	/
			50	0	Right Side	0.49	3.23	19.50	19.05	1.109	0.543	0.49	/
			1	0	Bottom Side	0.539	-1.93	20.50	20.15	1.084	0.584	0.539	/
			50	0	Bottom Side	0.476	3.44	19.50	19.05	1.109	0.528	0.476	/
LTE Band 40	10M	QPSK	1	0	Front side	2355	0.276	-3.29	13.50	13.25	1.059	0.292	/
			50	0	Front side	2355	0.246	0.61	12.50	12.04	1.112	0.273	/
			1	0	Back Side	2355	0.389	0.68	13.50	13.25	1.059	0.412	42
			50	0	Back Side	2355	0.347	-3.80	12.50	12.04	1.112	0.386	/
			1	0	Left Side	2355	0.312	1.52	13.50	13.25	1.059	0.330	/
			50	0	Left Side	2355	0.28	-3.30	12.50	12.04	1.112	0.311	/
			1	0	Right Side	2355	0.32	-0.44	13.50	13.25	1.059	0.339	/
			50	0	Right Side	2355	0.286	3.39	12.50	12.04	1.112	0.318	/
			1	0	Bottom Side	2355	0.314	-3.79	13.50	13.25	1.059	0.333	/
			50	0	Bottom Side	2355	0.278	-2.78	12.50	12.04	1.112	0.309	/
LTE Band 41	20M	QPSK	1	0	Front side	2595	0.509	-1.37	22.00	21.79	1.050	0.534	/
			50	0	Front side	2595	0.451	0.40	21.00	20.69	1.074	0.484	/
			1	0	Back Side	2595	0.722	3.16	22.00	21.79	1.050	0.758	44
			50	0	Back Side	2595	0.637	-1.75	21.00	20.69	1.074	0.684	/
			1	0	Left Side	2595	0.582	1.52	22.00	21.79	1.050	0.611	/
			50	0	Left Side	2595	0.514	-3.12	21.00	20.69	1.074	0.552	/
			1	0	Right Side	2595	0.593	-3.16	22.00	21.79	1.050	0.622	/
			50	0	Right Side	2595	0.526	-0.15	21.00	20.69	1.074	0.565	/
			1	0	Bottom Side	2595	0.581	-2.14	22.00	21.79	1.050	0.610	/
			50	0	Bottom Side	2595	0.513	2.79	21.00	20.69	1.074	0.551	/
LTE Band 66	20M	QPSK	1	0	Front side	1720	0.377	-0.80	25.50	25.00	1.122	0.423	/
			50	0	Front side	1720	0.336	-0.39	24.00	23.73	1.064	0.358	/
			1	0	Back Side	1720	0.532	3.30	25.50	25.00	1.122	0.597	46
			50	0	Back Side	1720	0.47	-1.27	24.00	23.73	1.064	0.500	/
			1	0	Left Side	1720	0.425	-0.84	25.50	25.00	1.122	0.477	/
			50	0	Left Side	1720	0.375	2.51	24.00	23.73	1.064	0.399	/
			1	0	Right Side	1720	0.436	-3.14	25.50	25.00	1.122	0.489	/
			50	0	Right Side	1720	0.388	-0.09	24.00	23.73	1.064	0.413	/
			1	0	Bottom Side	1720	0.426	0.57	25.50	25.00	1.122	0.478	/
			50	0	Bottom Side	1720	0.377	1.16	24.00	23.73	1.064	0.401	/

Note:

- The test separation of all above table Back side is 0mm, other side is 10mm.
- Per KDB 447498 D01, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - Scaled SAR(W/kg) = Measured SAR(W/kg) *Tune-up Scaling Factor
- When the user enables the personal Wireless router functions for the handsets, actual operations include simultaneous transmission of both the Wi-Fi transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. The "Portable Hotspot" feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.



12.3 Repeated SAR

Band	Mode	Test Position	Ch.	Result 1g (W/Kg)	Power Drift (%)	Max. Turn-up Power (dBm)	Meas. Output Power (dBm)	Scaling Factor	Scaled SAR (W/Kg)
WCDMA Band II	RMC	Back Side	1852.4	0.756	-1.63	24.00	23.31	1.172	0.886
		Back Side	1880	0.887	-2.94	24.00	23.86	1.033	0.916
		Back Side	1907.6	0.760	2.42	24.00	23.20	1.202	0.914

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Freq.	Result 1g (W/Kg)	Power Drift (%)	Max. Turn-up Power (dBm)	Meas. Output Power (dBm)	Scaling Factor	Scaled SAR (W/Kg)
LTE Band 2	20M	QPSK	1	0	Back Side	1860	0.701	-2.13	25.00	24.21	1.199	0.841
			1	0	Back Side	1880	0.804	1.87	25.00	24.72	1.067	0.858
			1	0	Back Side	1900	0.705	2.35	25.00	24.15	1.216	0.857
LTE Band 25	20M	QPSK	1	0	Back Side	1860	0.730	3.53	25.00	24.26	1.186	0.866
			1	0	Back Side	1882.5	0.843	1.25	25.00	24.75	1.059	0.893
			1	0	Back Side	1905	0.733	-3.53	25.00	24.15	1.216	0.891

12.4 Repeated SAR measurement

Band	Mode	Test Position	Ch.	Original Measured SAR 1g(W/kg)	1 st Repeated SAR 1g	Ratio
WCDMA Band II	RMC	Back Side	1852	0.756	0.744	1.016
		Back Side	1880	0.887	0.881	1.006
		Back Side	1908	0.760	0.756	1.005

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Freq.	Original Measured SAR 1g(W/kg)	1 st Repeated SAR 1g	Ratio
LTE Band 2	20M	QPSK	1	0	Back Side	1860	0.701	0.681	1.030
			1	0	Back Side	1880	0.804	0.804	1.000
			1	0	Back Side	1900	0.705	0.692	1.019
LTE Band 25	20M	QPSK	1	0	Back Side	1860	0.730	0.704	1.037
			1	0	Back Side	1882.5	0.843	0.843	1.000
			1	0	Back Side	1905	0.733	0.731	1.002

Note:

1. Per KDB 865664 D01, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/Kg.
2. Per KDB 865664 D01, if the ratio of largest to smallest SAR for the original and first repeated measurement is ≤ 1.2 and the measured SAR < 1.45 W/Kg, only one repeated measurement is required.
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.
4. The ratio is the difference in percentage between original and repeated measured SAR.



12.5 Simultaneous Multi-band Transmission Evaluation

Application Simultaneous Transmission information:

Position	Simultaneous State
Head	1. GSM + 2.4GHz WLAN/5G WLAN+NFC
	2. GSM + Bluetooth+NFC
	3. WCDMA + 2.4GHz WLAN/5G WLAN+NFC
	4. WCDMA + Bluetooth+NFC
	5. LTE + 2.4GHz WLAN/5G WLAN+NFC
	6. LTE + Bluetooth+NFC
Body	1. GSM + 2.4GHz WLAN/5G WLAN+NFC
	2. GSM + Bluetooth+NFC
	3. WCDMA + 2.4GHz WLAN/5G WLAN+NFC
	4. WCDMA + Bluetooth+NFC
	5. LTE + 2.4GHz WLAN/5G WLAN+NFC
	6. LTE + Bluetooth+NFC

NOTE:

1. Bluetooth and WLAN can't simultaneous transmission at the same time.
2. For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
3. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
4. KDB 447498 / 4.3.2 (2) when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:
 - a) $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f} \text{ (GHz)} / x] \text{ W/kg}$ for test separation distances $\leq 50 \text{ mm}$;
Where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
 - b) 0.4 W/Kg for 1-g SAR and 1.0 W/Kg for 10-g SAR, when the separation distance is $>50 \text{ mm}$.

Estimated SAR		Maximum Turn-up Power		Antenna to user(mm)	Frequency(GHz)	Stand Alone SAR(1g) [W/kg]
		dBm	mW			
BT	Head	5	3.162	5	2.441	0.132
	Body			5	2.441	0.132
NFC	Head	-37	0.000	5	0.01356	0.000001
	Body			5	0.01356	0.000001



Simultaneous Mode	Position	Mode	Max. 1-g SAR	1-g Sum SAR
			(W/kg)	(W/kg)
GSM + 2.4G WLAN + NFC	Head	GSM	0.391	1.087
		NFC	0.000001	
		2.4G WLAN	0.696	
	Body	GSM	0.545	0.910
		NFC	0.000001	
		2.4G WLAN	0.365	
GSM + Bluetooth + NFC	Head	GSM	0.391	0.523
		NFC	0.000001	
		BT	0.132	
	Body	GSM	0.545	0.677
		NFC	0.000001	
		BT	0.132	
GSM + 5G WLAN + NFC	Head	GSM	0.391	1.156
		NFC	0.000001	
		5G WLAN	0.765	
	Body	GSM	0.545	1.188
		NFC	0.000001	
		5G WLAN	0.643	
WCDMA + 2.4G WLAN + NFC	Head	WCDMA	0.555	1.251
		NFC	0.000001	
		2.4G WLAN	0.696	
	Body	WCDMA	0.916	1.281
		NFC	0.000001	
		2.4G WLAN	0.365	
WCDMA + Bluetooth + NFC	Head	WCDMA	0.555	0.687
		NFC	0.000001	
		BT	0.132	
	Body	WCDMA	0.916	1.048
		NFC	0.000001	
		BT	0.132	
WCDMA + 5G WLAN + NFC	Head	WCDMA	0.555	1.320
		NFC	0.000001	
		5G WLAN	0.765	
	Body	WCDMA	0.916	1.559
		NFC	0.000001	
		5G WLAN	0.643	
LTE + 2.4G WLAN + NFC	Head	LTE	0.679	1.375
		NFC	0.000001	
		2.4G WLAN	0.696	
	Body	LTE	0.936	1.301
		NFC	0.000001	
		2.4G WLAN	0.365	
LTE + Bluetooth + NFC	Head	LTE	0.679	0.811
		NFC	0.000001	
		BT	0.132	



	Body	LTE	0.936	1.068
		NFC	0.000001	
		BT	0.132	
LTE + 5G WLAN + NFC	Head	LTE	0.679	1.444
		NFC	0.000001	
		5G WLAN	0.765	
	Body	LTE	0.939	1.582
		NFC	0.000001	
		5G WLAN	0.643	

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna.

When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR-1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR-1g 1.6 W/kg), SAR test exclusion is determined by the SPLSR.



13. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
750MHz Dipole	MVG	DIP0G750	SN 06/22 DIP0G750-638	2025.05.20	2028.05.19
835MHz Dipole	MVG	DIP0G835	SN 06/22 DIP0G835-639	2025.05.20	2028.05.19
1800MHz Dipole	MVG	DIP1G800	SN 06/22 DIP1G800-640	2025.05.20	2028.05.19
1900MHz Dipole	MVG	DIP1G900	SN 06/22 DIP1G900-641	2025.05.20	2028.05.19
2450MHz Dipole	MVG	DIP2G450	SN 06/22 DIP2G450-645	2025.05.20	2028.05.19
2600MHz Dipole	MVG	DIP2G600	SN 06/22 DIP2G600-646	2025.05.20	2028.05.19
5000MHz Dipole	MVG	DIP5G000	SN 06/22 DIP5G000-653	2025.05.22	2028.05.21
E-Field Probe	MVG	SSE2	2225-EPGO-450	2025.06.06	2026.06.05
Liquid Calibration Kit	MVG	OCPG 87	SN 06/22 OCPG87	2025.06.02	2026.06.01
Antenna	MVG	ANTA 73	SN 06/22 ANTA 73	N/A	N/A
Ellipsoid Phantom	MVG	ELLI 51	SN 06/22 ELLI 51	N/A	N/A
Phantom	MVG	SAM 148	SN 06/22 SAM148	N/A	N/A
Phone holder	MVG	MSH 117	SN 06/22 MSH 117	N/A	N/A
Laptop positioner	MVG	LSH 36	SN 06/22 LSH 38	N/A	N/A
Directional coupler	SHW	SHWDCP	202203280013	N/A	N/A
Network Analyzer	ZVL	R&S	116184	2025.03.05	2026.03.04
Multi Meter	DMM6500	Keithley	4527252	2025.03.06	2026.03.05
Signal Generator	Keysight	N5182B	MY59100717	2025.03.05	2026.03.04
Wireless Communication Test Set	R&S	CMW500	137737	2025.03.05	2026.03.04
Power Sensor	R&S	Z11	116184	2025.03.05	2026.03.04
Electronic Temperature hygrometer	N/A	ST-W2318	N/A	2025.03.05	2026.03.04
Temperature hygrometer	N/A	TP101	N/A	2025.03.05	2026.03.04



Appendix A. System Validation Plots

System Performance Check Data (750MHz)

Type: Phone measurement (Complete)

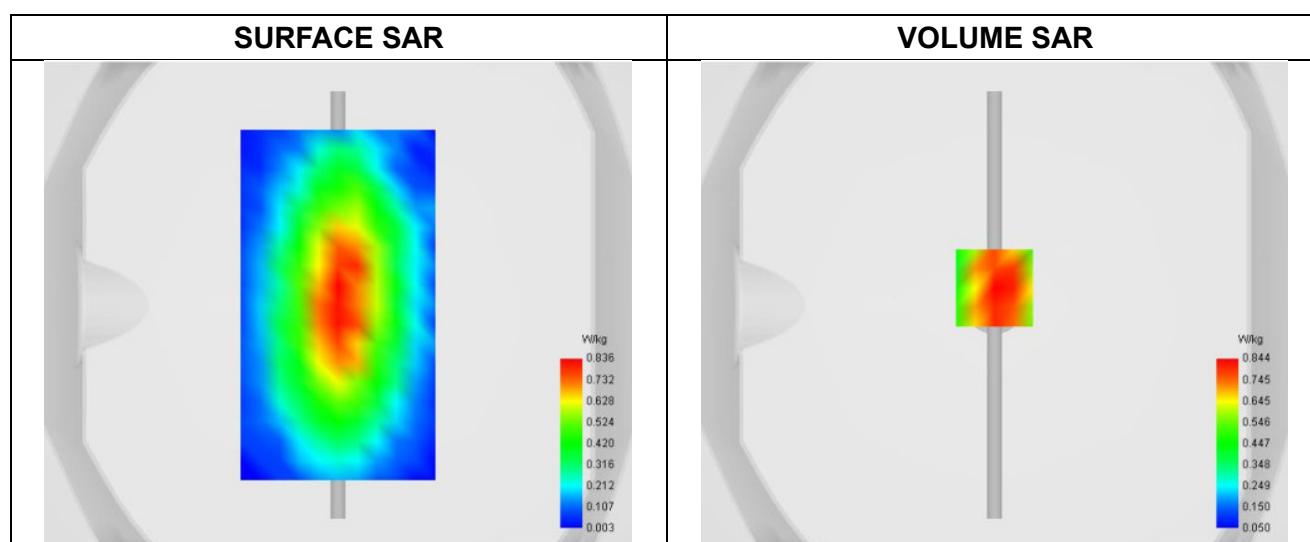
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2025-08-17

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW750
Channels	Middle
Signal	CW
Frequency (MHz)	750.000
Relative permittivity	42.26
Conductivity (S/m)	0.88
Probe	2225-EPGO-450
ConvF	1.08
Crest factor:	1:1

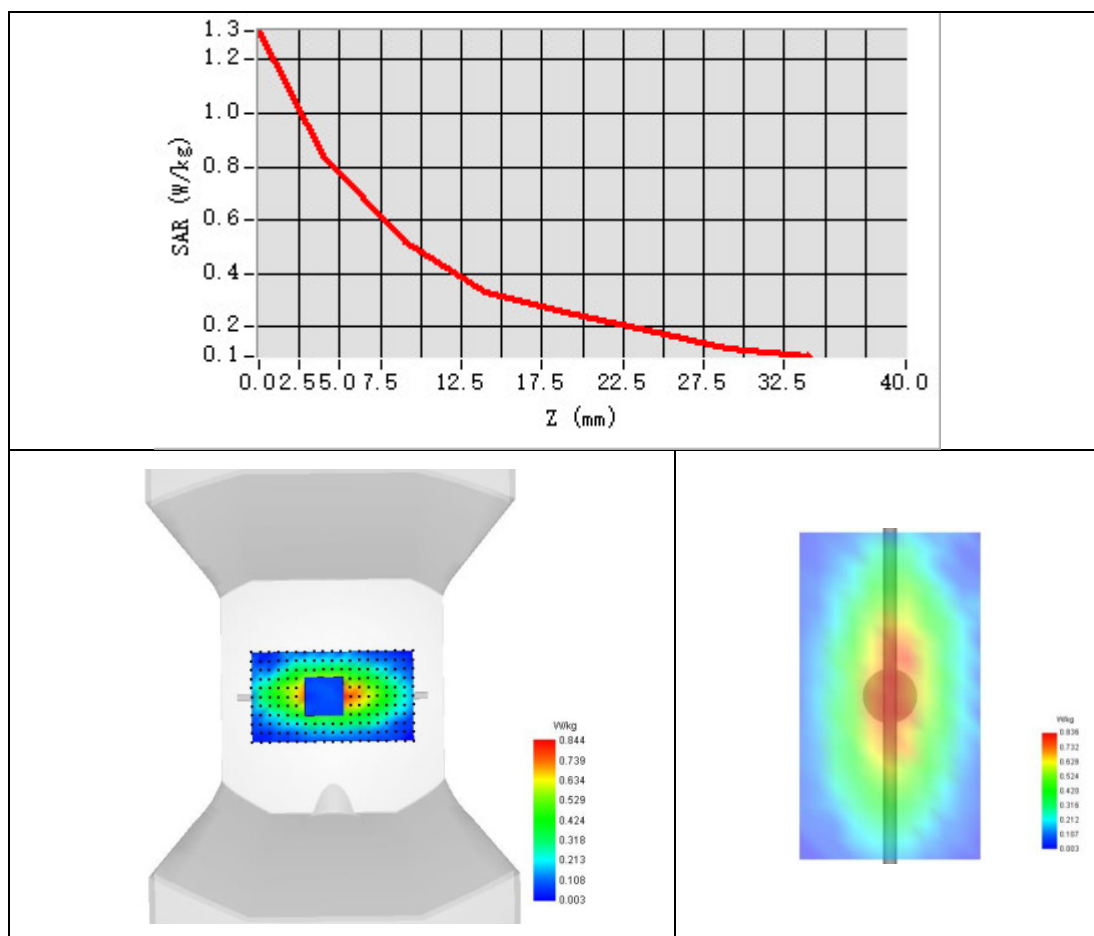


Maximum location: X=0.00, Y=7.00 ; SAR Peak: 1.29 W/kg

SAR 10g (W/Kg)	0.562
SAR 1g (W/Kg)	0.827



Z Axis Scan





System Performance Check Data (750MHz)

Type: Phone measurement (Complete)

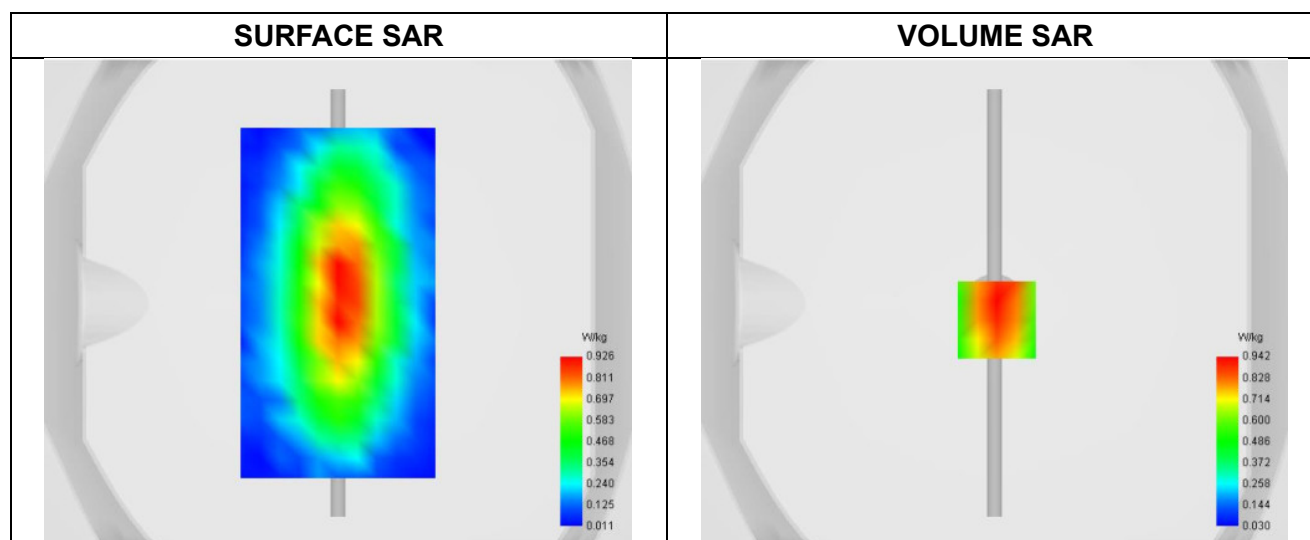
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2025-08-20

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW750
Channels	Middle
Signal	CW
Frequency (MHz)	750.000
Relative permittivity	42.54
Conductivity (S/m)	0.85
Probe	2225-EPGO-450
ConvF	1.08
Crest factor:	1:1

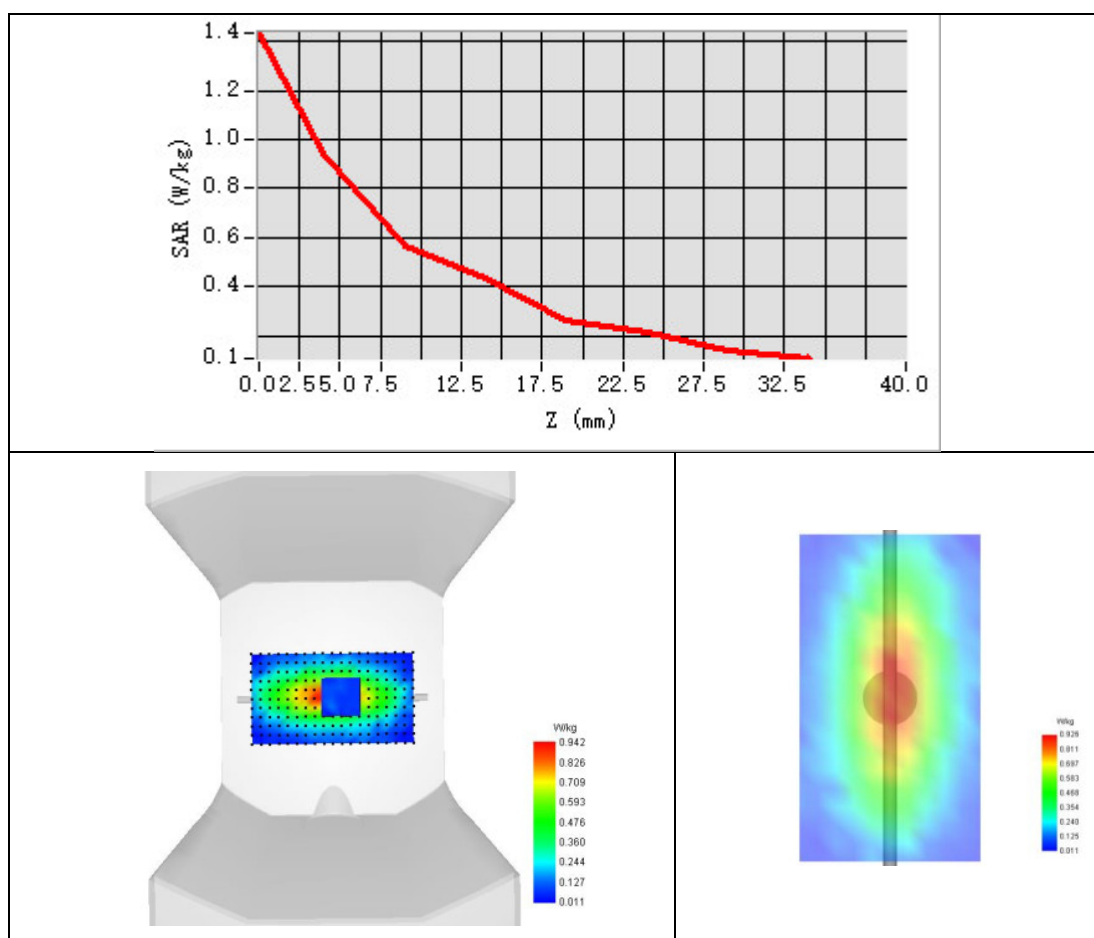


Maximum location: X=1.00, Y=-7.00 ; SAR Peak: 1.41 W/kg

SAR 10g (W/Kg)	0.586
SAR 1g (W/Kg)	0.847



Z Axis Scan





System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

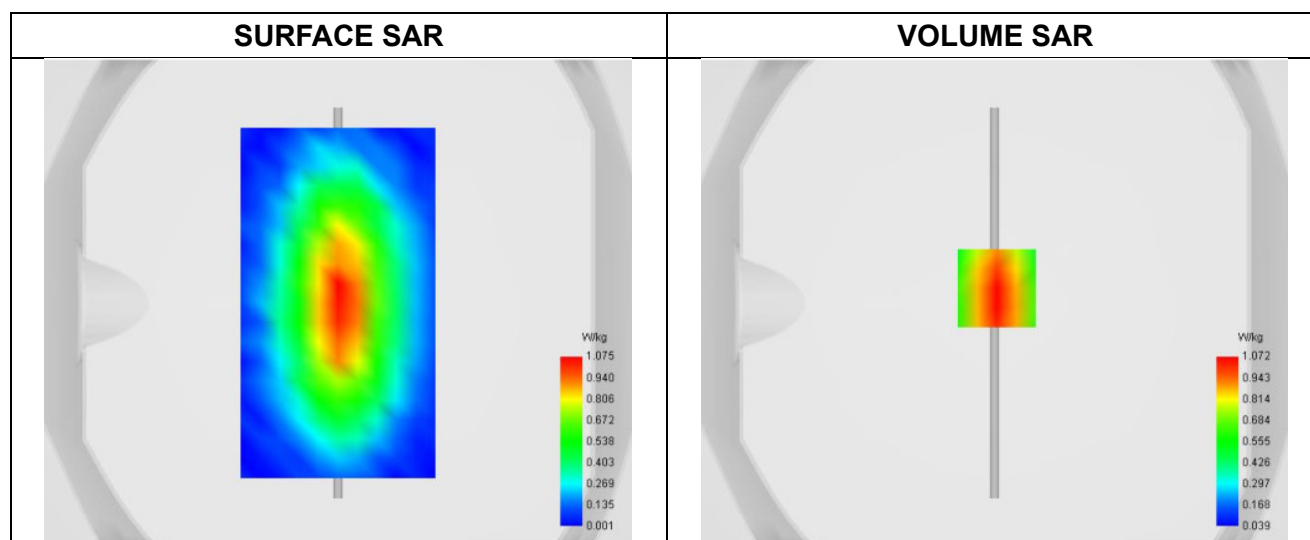
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2025-08-18

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW835
Channels	Middle
Signal	CW
Frequency (MHz)	835.000
Relative permittivity	42.43
Conductivity (S/m)	0.94
Probe	2225-EPGO-450
ConvF	1.02
Crest factor:	1:1

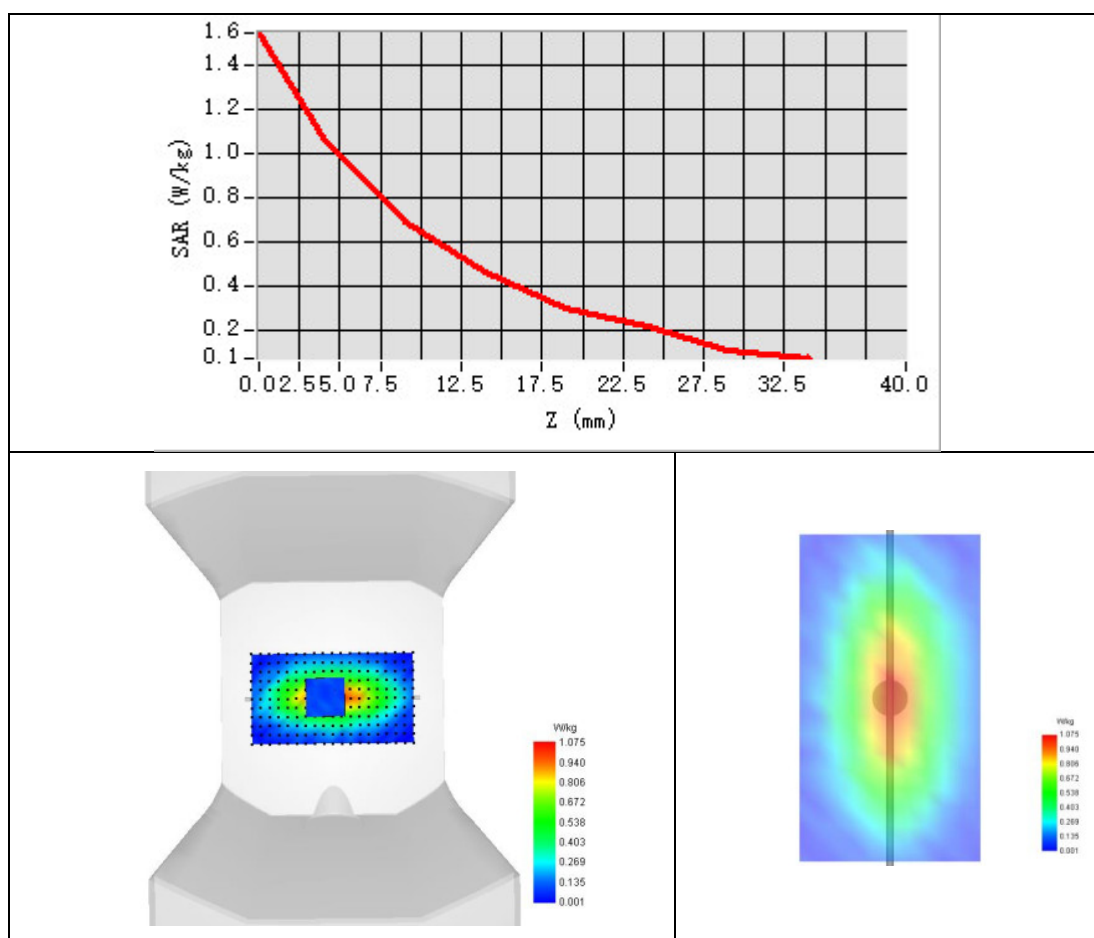


Maximum location: X=1.00, Y=6.00 ; SAR Peak: 1.57 W/kg

SAR 10g (W/Kg)	0.579
SAR 1g (W/Kg)	0.926



Z Axis Scan





System Performance Check Data (835MHz)

Type: Phone measurement (Complete)

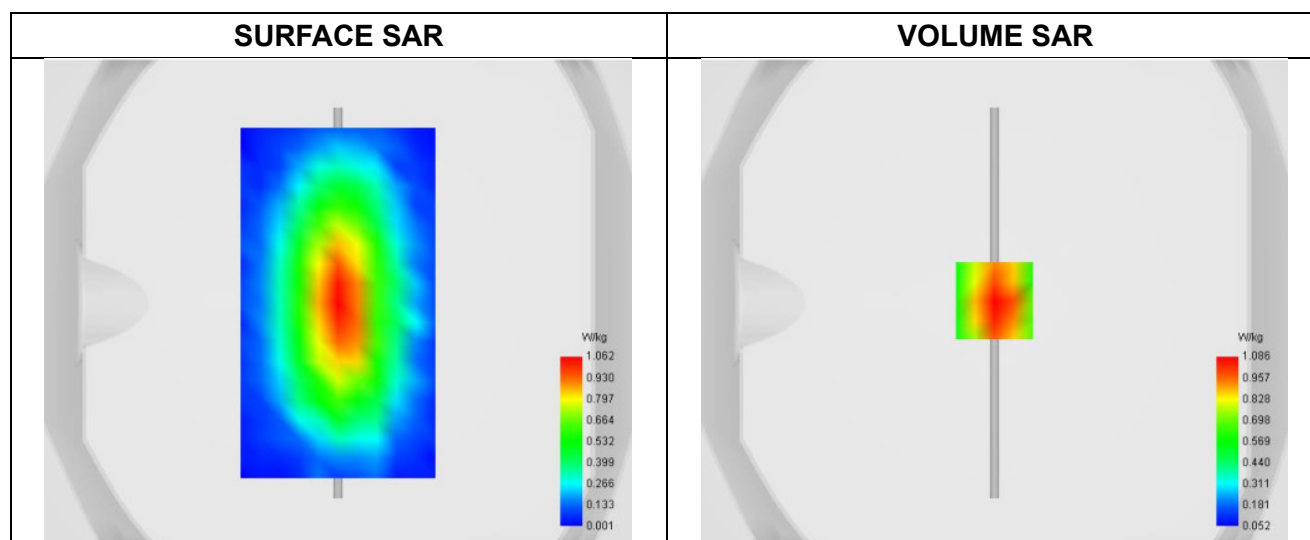
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2025-08-13

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW835
Channels	Middle
Signal	CW
Frequency (MHz)	835.000
Relative permittivity	41.96
Conductivity (S/m)	0.93
Probe	2225-EPGO-450
ConvF	1.02
Crest factor:	1:1

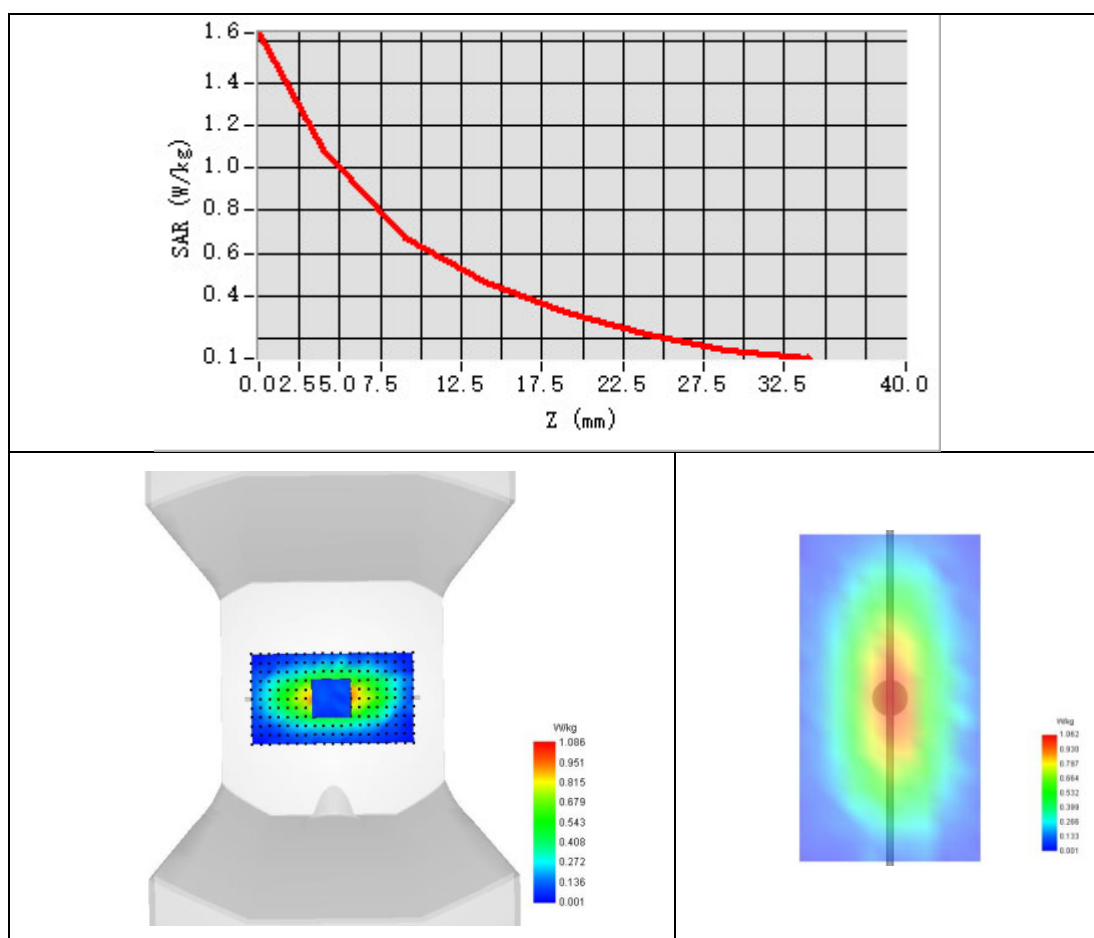


Maximum location: X=0.00, Y=1.00 ; SAR Peak: 1.63 W/kg

SAR 10g (W/Kg)	0.597
SAR 1g (W/Kg)	0.965



Z Axis Scan





System Performance Check Data (1800MHz)

Type: Phone measurement (Complete)

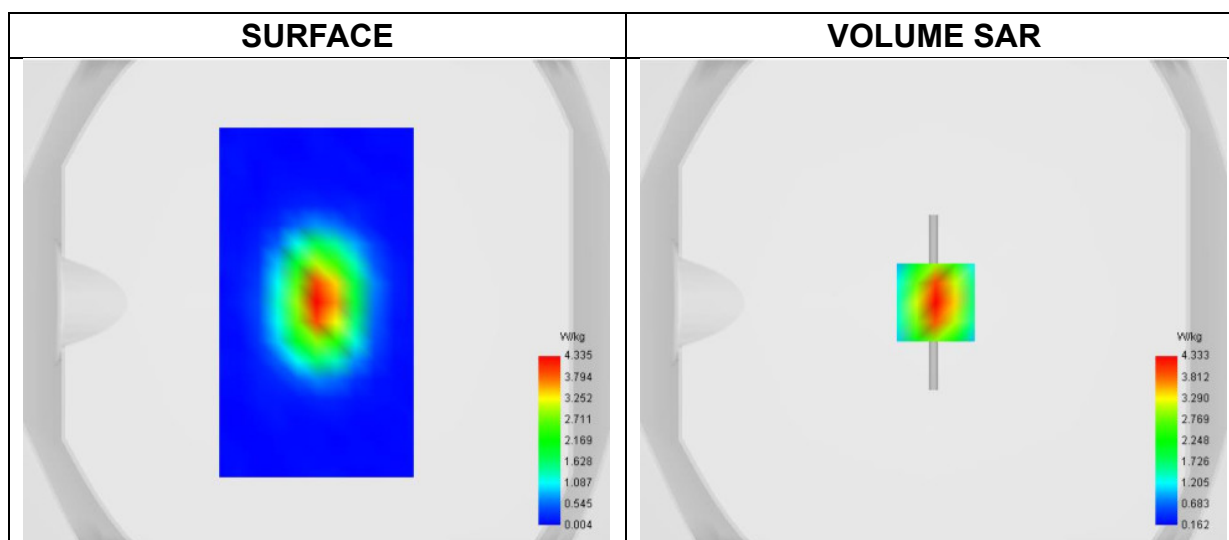
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement:2025-08-15

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Channels	Middle
Signal	CW
Frequency (MHz)	1800.000
Relative permittivity	40.78
Conductivity (S/m)	1.41
Probe	2225-EPGO-450
ConvF	1.21
Crest factor:	1:1

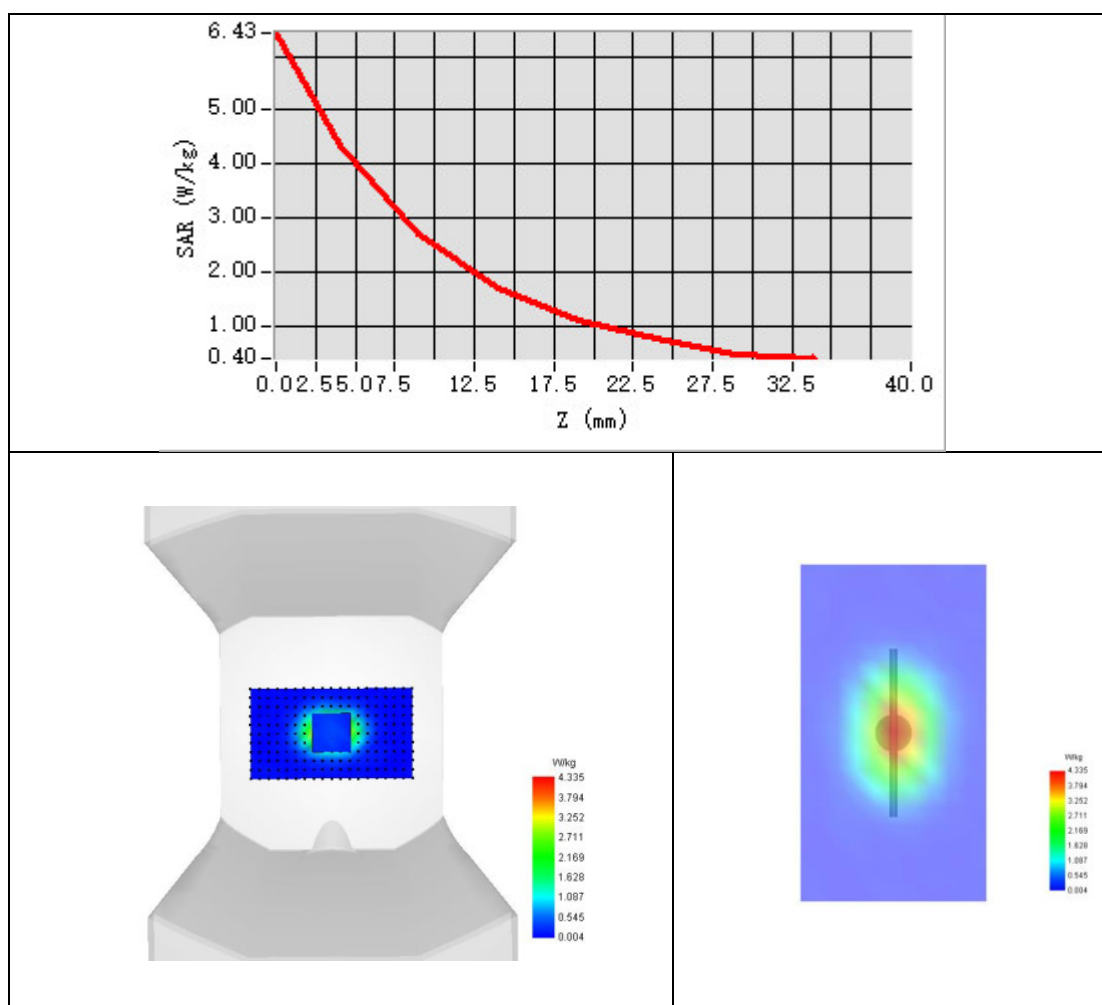


Maximum location: X=1.00, Y=0.00 ; SAR Peak: 6.42 W/kg

SAR 10g (W/Kg)	1.928
SAR 1g (W/Kg)	3.683



Z Axis Scan





System Performance Check Data (1800MHz)

Type: Phone measurement (Complete)

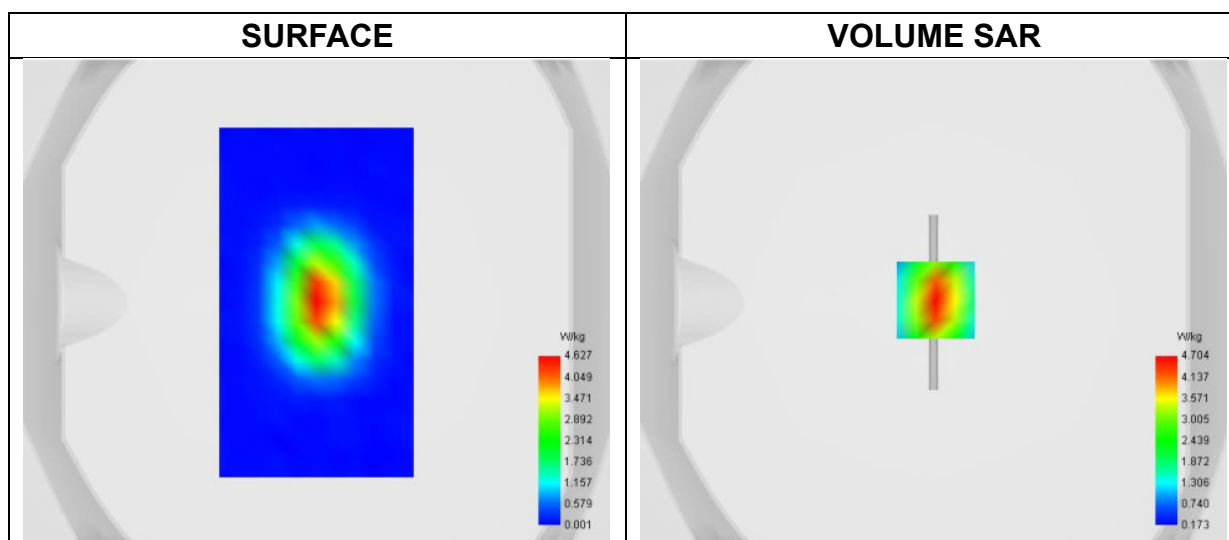
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement:2025-08-21

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Channels	Middle
Signal	CW
Frequency (MHz)	1800.000
Relative permittivity	40.61
Conductivity (S/m)	1.36
Probe	2225-EPGO-450
ConvF	1.21
Crest factor:	1:1

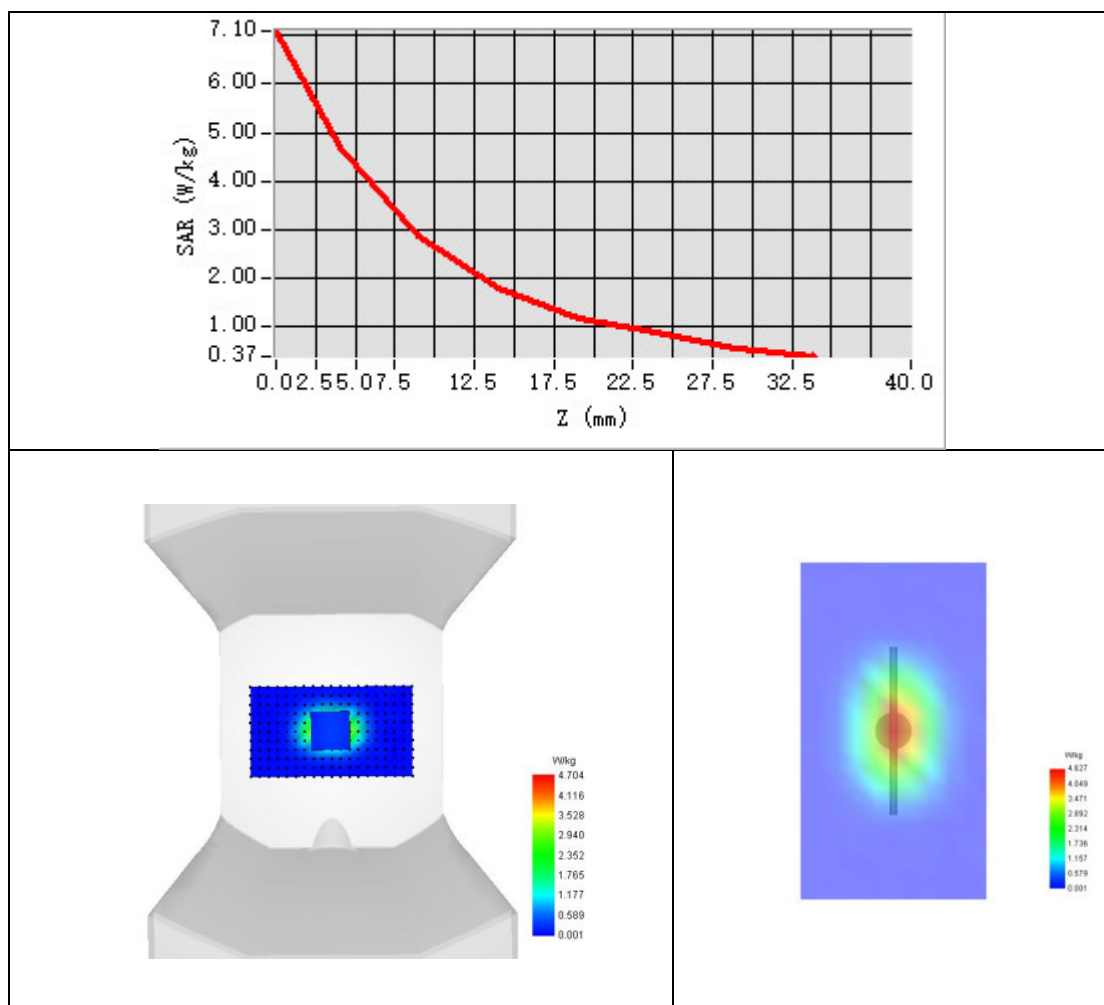


Maximum location: X=1.00, Y=1.00 ; SAR Peak: 7.06 W/kg

SAR 10g (W/Kg)	1.909
SAR 1g (W/Kg)	3.657



Z Axis Scan





System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)

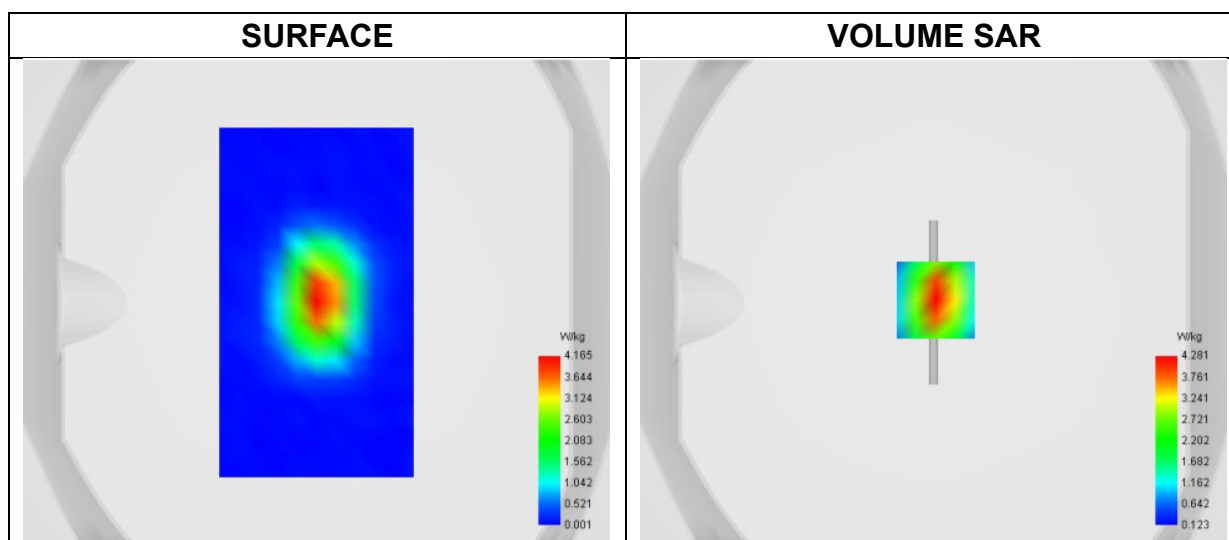
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement:2025-08-24

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels	Middle
Signal	CW
Frequency (MHz)	1900.000
Relative permittivity	40.06
Conductivity (S/m)	1.43
Probe	2225-EPGO-450
ConvF	1.34
Crest factor:	1:1

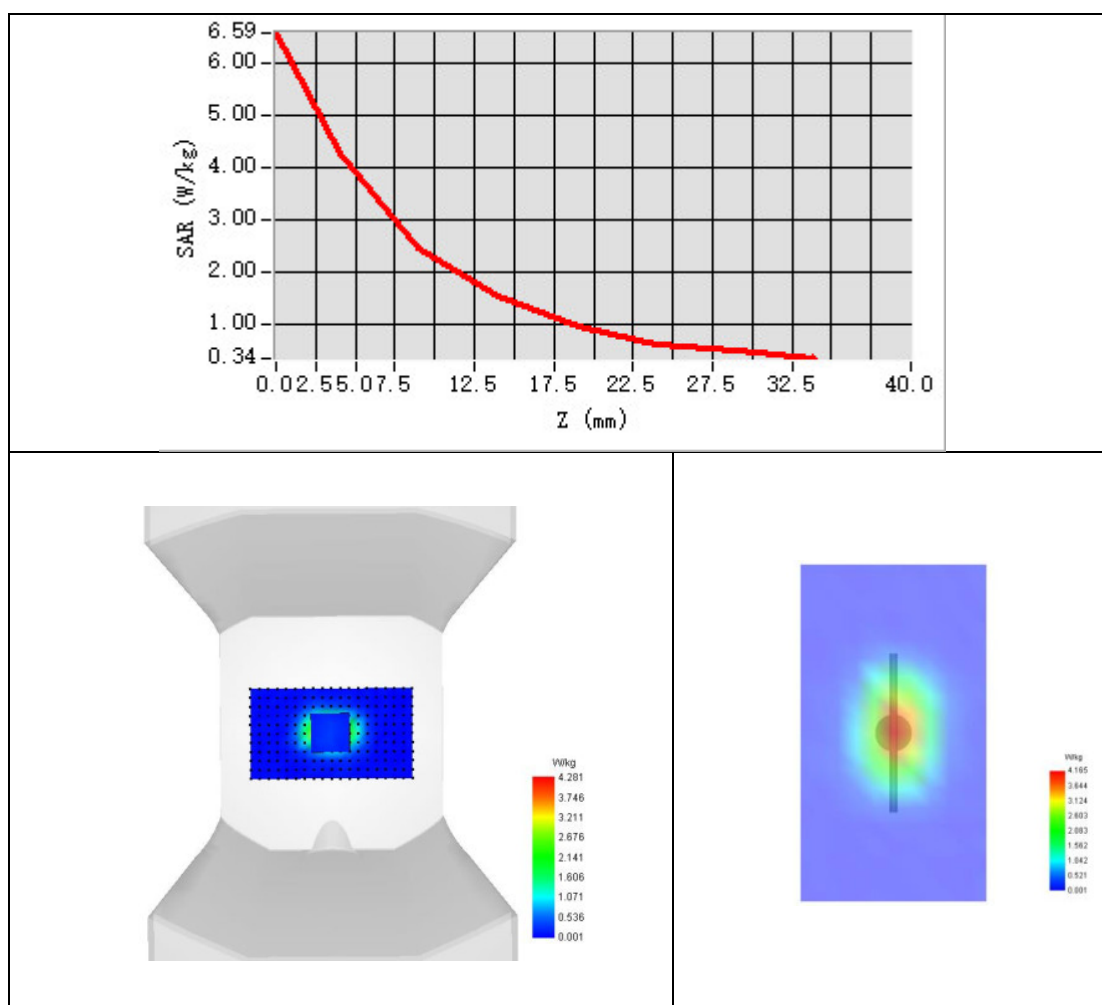


Maximum location: X=1.00, Y=1.00 ; SAR Peak: 6.79 W/kg

SAR 10g (W/Kg)	2.069
SAR 1g (W/Kg)	4.020



Z Axis Scan





System Performance Check Data (1900MHz)

Type: Phone measurement (Complete)

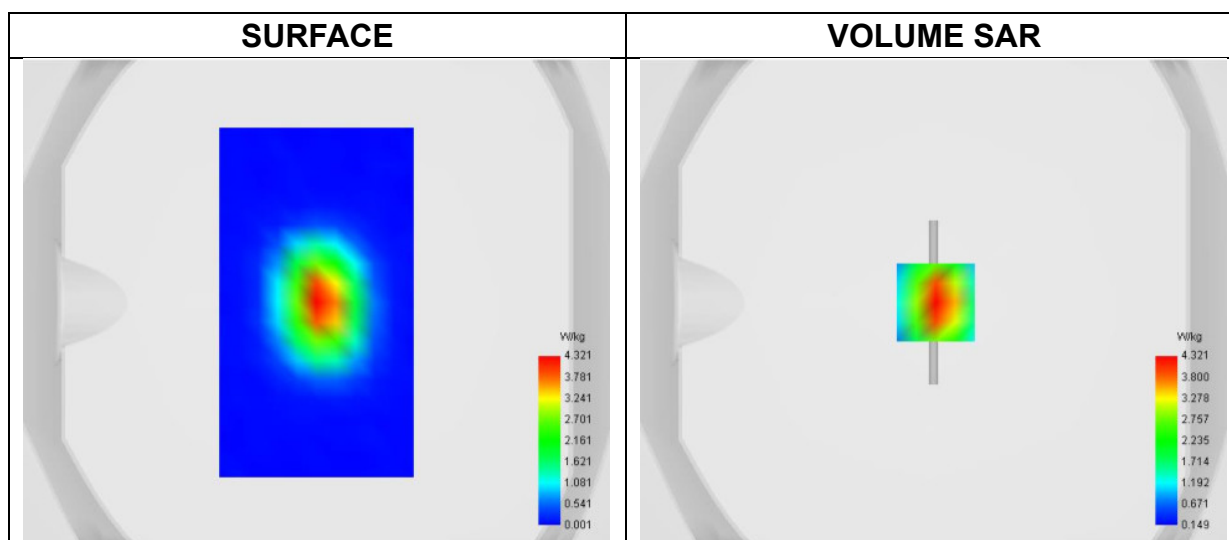
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement:2025-08-27

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels	Middle
Signal	CW
Frequency (MHz)	1900.000
Relative permittivity	40.81
Conductivity (S/m)	1.46
Probe	2225-EPGO-450
ConvF	1.34
Crest factor:	1:1

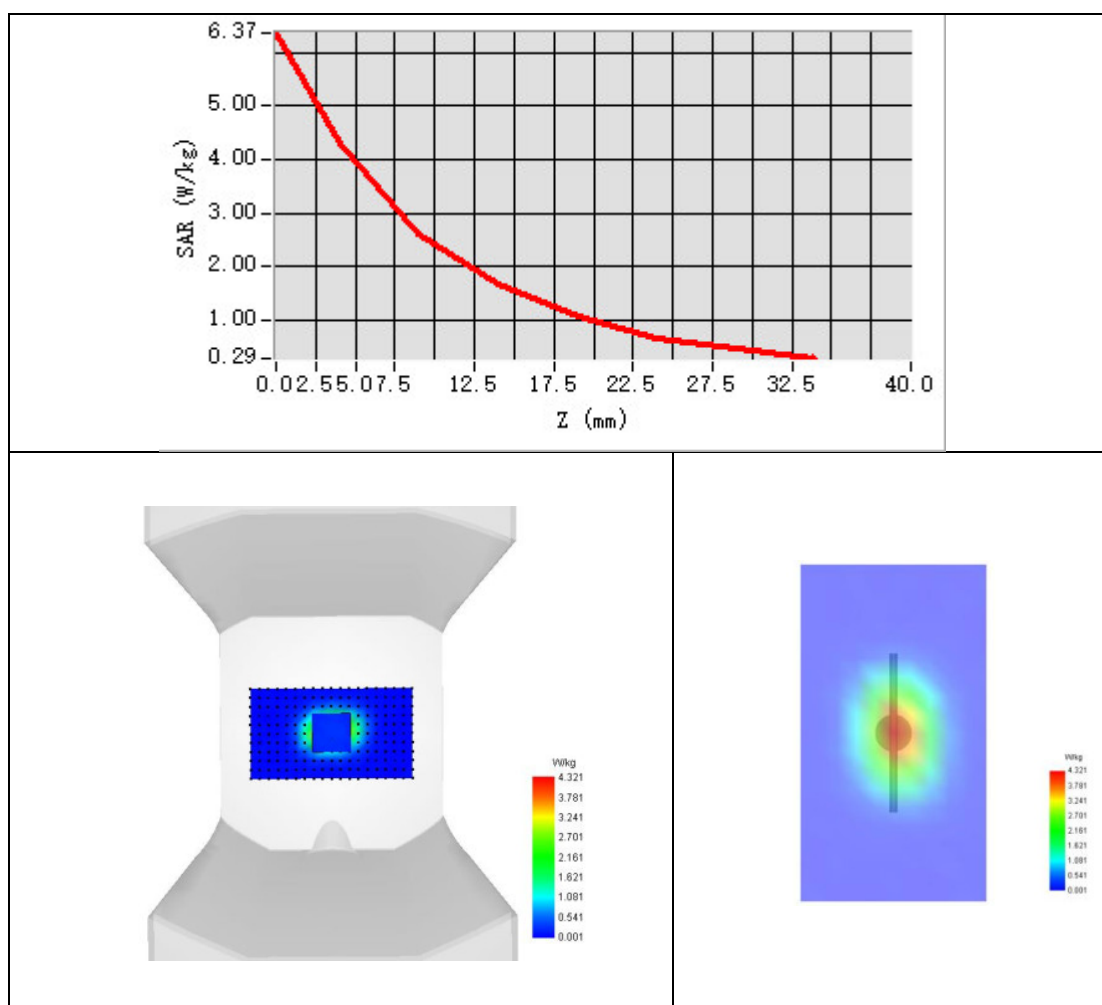


Maximum location: X=1.00, Y=0.00 ; SAR Peak: 6.42 W/kg

SAR 10g (W/Kg)	2.064
SAR 1g (W/Kg)	4.019



Z Axis Scan





System Performance Check Data (2450MHz)

Type: Phone measurement (Complete)

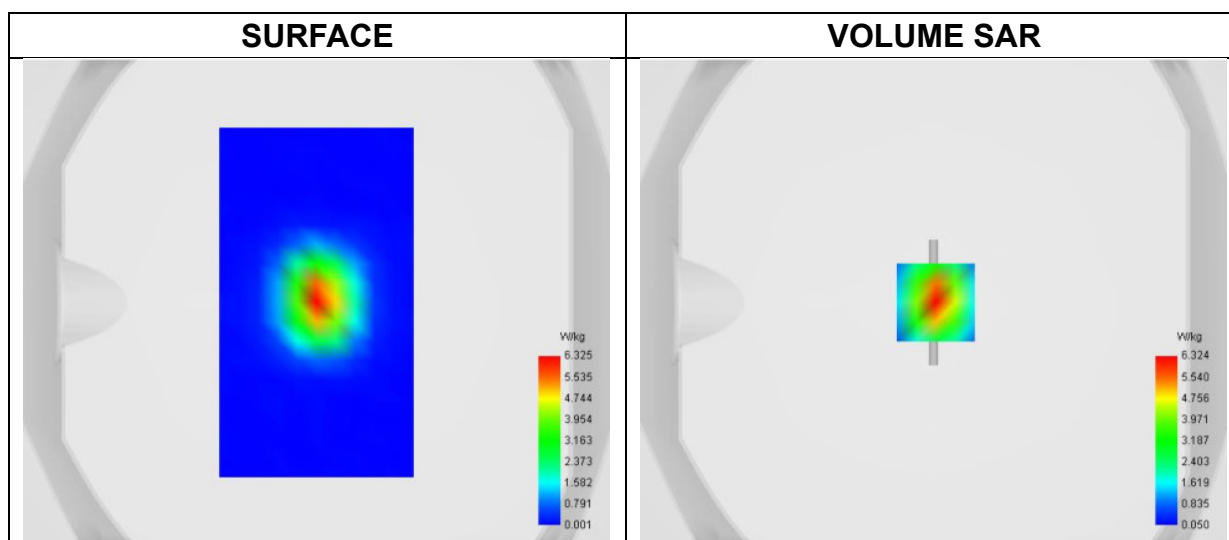
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement:2025-08-28

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW2450
Channels	Middle
Signal	CW
Frequency (MHz)	2450.000
Relative permittivity	40.24
Conductivity (S/m)	1.79
Probe	2225-EPGO-450
ConvF	1.51
Crest factor:	1:1

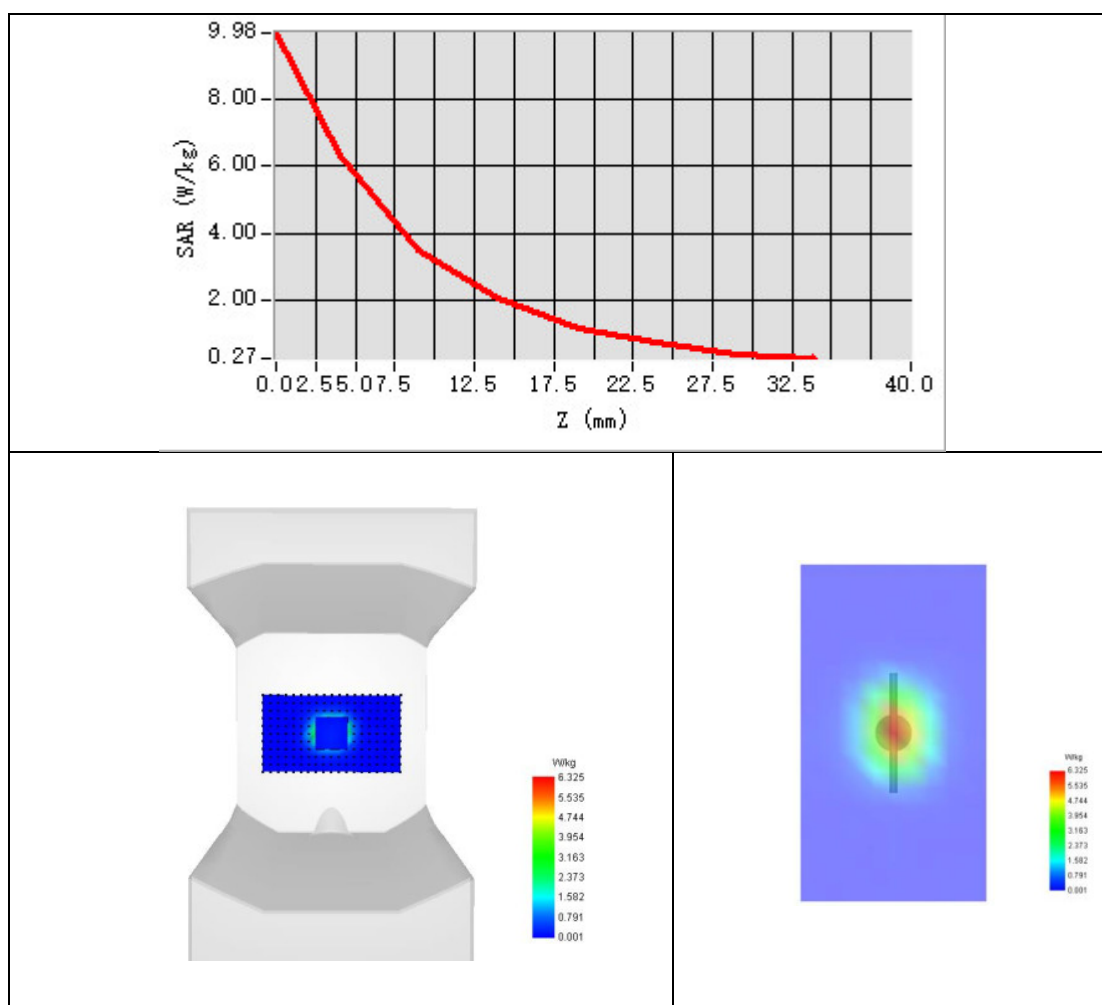


Maximum location: X=1.00, Y=0.00 ; SAR Peak: 9.92 W/kg

SAR 10g (W/Kg)	2.461
SAR 1g (W/Kg)	5.316



Z Axis Scan





System Performance Check Data (2600MHz)

Type: Phone measurement (Complete)

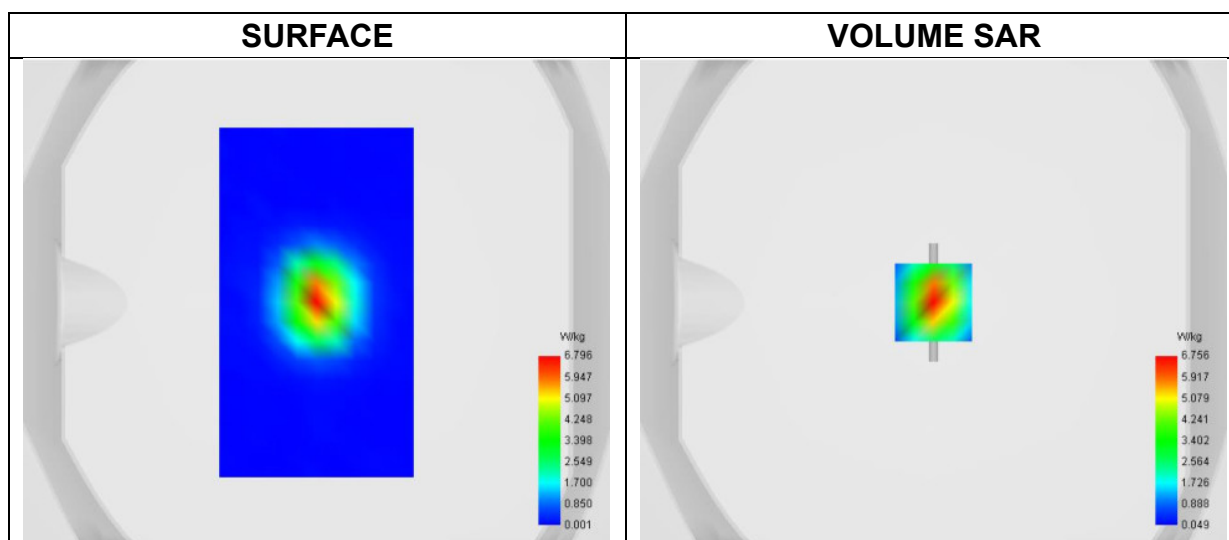
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement:2025-08-27

Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Channels	Middle
Signal	CW
Frequency (MHz)	2600.000
Relative permittivity	39.18
Conductivity (S/m)	1.92
Probe	2225-EPGO-450
ConvF	1.44
Crest factor:	1:1



Maximum location: X=0.00, Y=0.00 ; SAR Peak: 10.62 W/kg

SAR 10g (W/Kg)	2.549
SAR 1g (W/Kg)	5.598