



SAR TEST REPORT

Product Name: MindOne

Model Number: MindOne-D01, D01, D01-GB, Mindone, AB05, D02

FCC ID: 2BTCD-MINDONE

Issued For : iKKO Technology Co., Limited

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Date of Test Oct. 10, 2025~Nov. 27, 2025

Date of Issue Nov. 27, 2025

Head: 1.120 W/kg

Max. SAR (1g)

Body: 1.024 W/kg

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Revision History

Rev.	Issue Date	Contents
00	Nov. 27, 2025	Initial Issue



TEST REPORT CERTIFICATION

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Product Name MindOne
Trademark ikko
Model Number MindOne-D01, D01, D01-GB, Mindone, AB05, D02
Sample number LGT2510023

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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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	MindOne		
Test Model Number	MindOne-D01		
Series Number	D01, D01-GB, Mindone, AB05, D02		
Model Difference	Only the models are different.		
Device Category	Portable		
Product stage	Production unit		
RF Exposure Environment	General Population / Uncontrolled		
Hardware Version	G251_MB_V02		
Software Version	G251_SW_V01		
Frequency Range	GSM 850: 824 ~ 849 MHz PCS 1900: 1850 ~ 1910 MHz WCDMA Band II: 1850 ~ 1910 MHz WCDMA Band V: 824 ~ 849 MHz LTE Band 2:1850 ~1910MHz LTE Band 4:1710 ~1755MHz LTE Band 5:824 ~ 849MHz LTE Band 7:2500 ~ 2570MHz LTE Band 12:699~716MHz LTE Band 13:777~787MHz LTE Band 17:704 ~ 716MHz LTE Band 38:2570~2620MHz LTE Band 40:2305~2315MHz/2350-2360MHz LTE Band 41:2496~2690MHz LTE Band 66:1710~1780MHz 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 WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5725 ~ 5850 MHz Bluetooth: 2402 ~ 2480 MHz NFC: 13.56MHz		
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	0.154	0.236
	PCS 1900	0.343	0.520
	WCDMA Band II	0.493	0.469
	WCDMA Band V	0.240	0.295
	LTE Band 2	0.472	0.220
	LTE Band 4	0.459	0.362
	LTE Band 5	0.114	0.114
	LTE Band 7	1.120	0.418
	LTE Band 12	0.099	0.077
	LTE Band 13	0.122	0.122
	LTE Band 17	0.099	0.096



	LTE Band 38	1.030	0.299
	LTE Band 40	0.726	0.552
	LTE Band 41	0.874	0.313
	LTE Band 66	0.947	1.024
	2.4G WLAN	0.234	0.148
	5.2G WLAN	0.416	0.196
	5.3G WLAN	0.160	0.160
	5.6G WLAN	0.453	0.319
	5.8G WLAN	0.445	0.059
	Bluetooth ^{Note}	0.112	0.112
	NFC ^{Note}	0.0000006	0.0000006
1-g Sum SAR		1.57	1.343
Battery	Rated Voltage:3.87V Capacity: 2200mAh		
Description test modes	SIM 1 and SIM 2 is a chipset unit and tested as single chipset, SIM 1 is used to tested.		
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
	CAB ID: 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

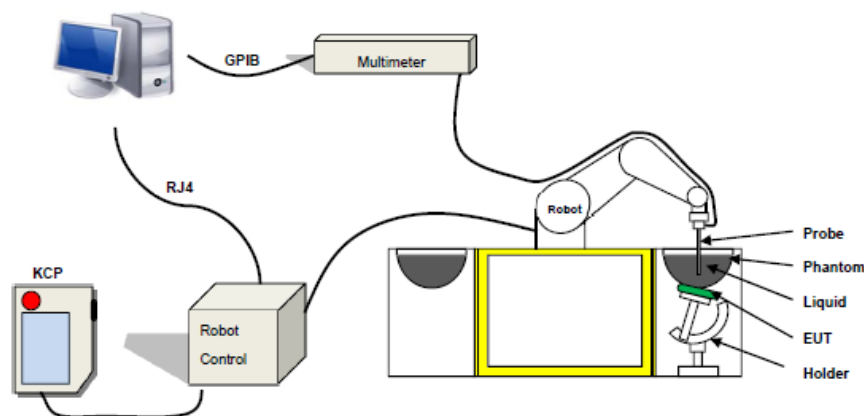
$$SAR = \frac{\sigma E^2}{\rho}$$

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.

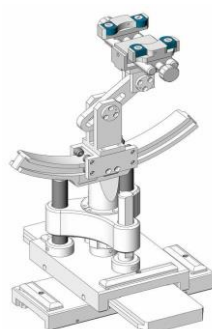


Figure-SN 06/22 SAM 148



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]					
2025-10-23	22.2	59	750	21.9	Permittivity	41.90	42.61	1.69	±5
					Conductivity	0.89	0.86	-3.37	±5
2025-10-26	22.4	43	750	22.2	Permittivity	41.90	42.84	2.24	±5
					Conductivity	0.89	0.86	-3.37	±5
2025-10-29	22.7	45	835	22.5	Permittivity	41.50	42.67	2.82	±5
					Conductivity	0.90	0.87	-3.33	±5
2025-10-11	20.8	55	1800	20.5	Permittivity	40.00	41.05	2.62	±5
					Conductivity	1.40	1.44	2.86	±5
2025-10-12	22.1	40	1900	21.8	Permittivity	40.00	40.25	0.63	±5
					Conductivity	1.40	1.34	-4.29	±5
2025-11-08	23.8	52	2300	21.5	Permittivity	39.47	40.00	1.35	±5
					Conductivity	1.67	1.69	1.40	±5
2025-11-08	23.2	51	2450	22.9	Permittivity	39.20	39.54	0.87	±5
					Conductivity	1.80	1.88	4.44	±5
2025-11-13	23.6	47	2600	21.8	Permittivity	38.93	39.89	2.46	±5
					Conductivity	1.93	1.96	1.38	±5
2025-11-16	24	45	2600	23.7	Permittivity	38.93	39.58	1.66	±5
					Conductivity	1.93	2.00	3.45	±5
2025-11-13	23	54	5200	22.7	Permittivity	36.00	36.24	0.67	±5
					Conductivity	4.66	4.67	0.21	±5
2025-11-13	23.9	43	5400	19.9	Permittivity	35.80	36.55	2.09	±5
					Conductivity	4.86	4.83	-0.62	±5
2025-11-14	21.6	60	5600	21.4	Permittivity	35.55	35.79	0.68	±5
					Conductivity	5.07	5.09	0.49	±5
2025-11-14	21.7	52	5800	21.4	Permittivity	35.30	35.50	0.57	±5
					Conductivity	5.27	5.30	0.57	±5

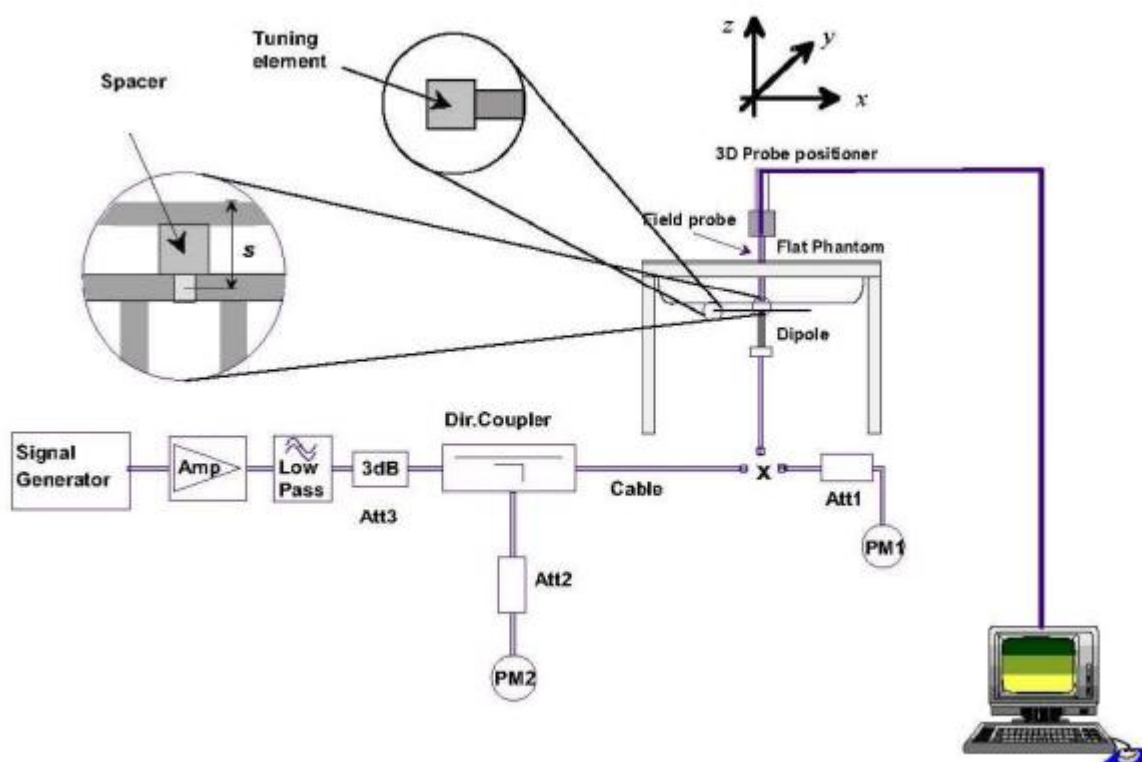


5. SAR System Validation

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	Power drift	Tested Value	Normalized SAR	Target SAR	Tolerance
	(MHz)	(mW)	(%)	(W/Kg)	(W/kg)	1g(W/kg)	(%)
2025-10-23	750	100	0.864	8.64	8.51	1.53	10
2025-10-26	750	100	0.890	8.90	8.51	4.58	10
2025-10-29	835	100	0.948	9.48	9.63	-1.56	10
2025-10-11	1800	100	3.699	36.99	36.60	1.07	10
2025-10-12	1900	100	4.042	40.42	40.20	0.55	10
2025-11-08	2300	100	4.909	49.09	49.29	-0.41	10
2025-11-08	2450	100	5.296	52.96	52.98	-0.04	10
2025-11-13	2600	100	5.578	55.78	56.15	-0.66	10
2025-11-16	2600	100	5.582	55.82	56.15	-0.59	10
2025-11-13	5200	100	7.791	77.91	77.84	0.09	10
2025-11-13	5400	100	7.696	76.96	76.82	0.18	10
2025-11-14	5600	100	8.232	82.32	82.15	0.21	10
2025-11-14	5800	100	8.086	80.86	80.51	0.43	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.

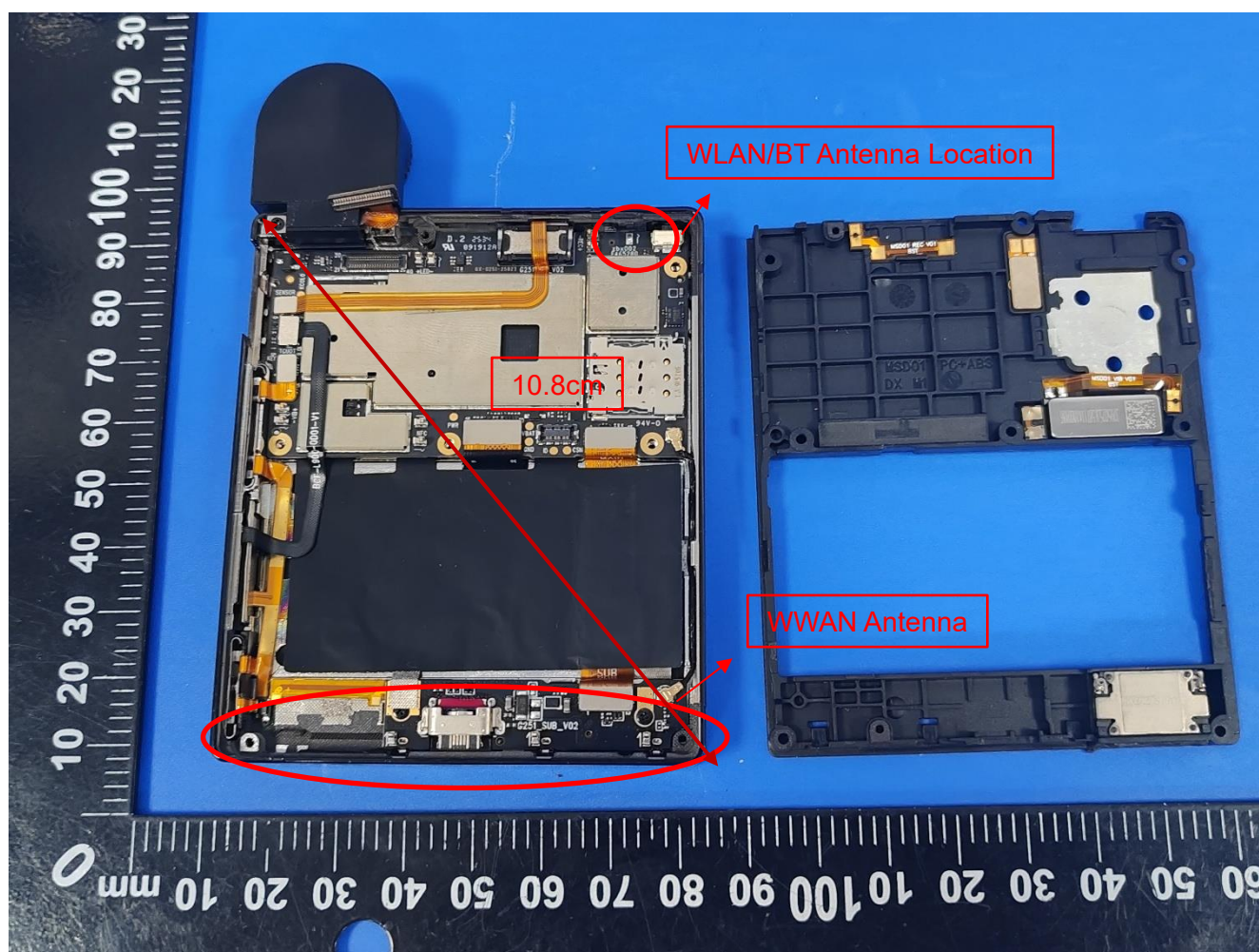
➤ Area Scan & Zoom Scan

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 MindOne, support GSM/WCDMA/LTE/WLAN/BT mode.



(Back view)

Antenna Separation Distance(mm)						
ANT	Back Side	Front Side	Left Side	Right Side	Top Side	Bottom Side
WLAN/BT	≤5	≤5	≤5	55	≤5	75
WWAN	≤5	≤5	≤5	≤5	77	≤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 V	LTE Band 2
	Calculated Frequency (MHz)	848.8	1850.2	1852.4	826.4	1860
	Maximum Turn-up power (dBm)	33.5	30.3	23	24.8	23
	Maximum rated power(mW)	2238.72	1071.52	199.53	302.00	199.53
Back Side	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	16.28	11.03	11.02	16.50	11.00
	Testing required?	YES	YES	YES	YES	YES
Front Side	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	16.28	11.03	11.02	16.50	11.00
	Testing required?	YES	YES	YES	YES	YES
Left Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	16.28	11.03	11.02	16.50	11.00
	Testing required?	YES	YES	YES	YES	YES
Right Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	16.28	11.03	11.02	16.50	11.00
	Testing required?	YES	YES	YES	YES	YES
Top Edge	Separation distance (mm)	77	77	77	77	77
	exclusion threshold(mW)	315.60	380.28	380.21	313.76	379.99
	Testing required?	YES	YES	NO	NO	NO
Bottom Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	16.28	11.03	11.02	16.50	11.00
	Testing required?	YES	YES	YES	YES	YES



Exposure Position	Wireless Interface	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 12	LTE Band 13
	Calculated Frequency (MHz)	1732.5	829	2560	707.5	782
	Maximum Turn-up power (dBm)	23	24	21.5	24.3	24.8
	Maximum rated power(mW)	199.53	251.19	141.25	269.15	302.00
Back Side	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	11.40	16.47	9.38	17.83	16.96
	Testing required?	YES	YES	YES	YES	YES
Front Side	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	11.40	16.47	9.38	17.83	16.96
	Testing required?	YES	YES	YES	YES	YES
Left Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	11.40	16.47	9.38	17.83	16.96
	Testing required?	YES	YES	YES	YES	YES
Right Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	11.40	16.47	9.38	17.83	16.96
	Testing required?	YES	YES	YES	YES	YES
Top Edge	Separation distance (mm)	77	77	77	77	77
	exclusion threshold(mW)	383.96	313.97	363.75	305.68	310.38
	Testing required?	NO	NO	NO	NO	NO
Bottom Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	11.40	16.47	9.38	17.83	16.96
	Testing required?	YES	YES	YES	YES	YES



Exposure Position	Wireless Interface	LTE Band 17	LTE Band 38	LTE Band 40	LTE Band 41	LTE Band 66
	Calculated Frequency (MHz)	709	2595	2310	2680	1770
	Maximum Turn-up power (dBm)	24.3	22	21	22.1	22.2
	Maximum rated power(mW)	269.15	158.49	125.89	162.18	165.96
Back Side	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	17.81	9.31	9.87	9.16	11.27
	Testing required?	YES	YES	YES	YES	YES
Front Side	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	17.81	9.31	9.87	9.16	11.27
	Testing required?	YES	YES	YES	YES	YES
Left Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	17.81	9.31	9.87	9.16	11.27
	Testing required?	YES	YES	YES	YES	YES
Right Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	17.81	9.31	9.87	9.16	11.27
	Testing required?	YES	YES	YES	YES	YES
Top Edge	Separation distance (mm)	77	77	77	77	77
	exclusion threshold(mW)	305.76	363.12	368.69	361.63	382.75
	Testing required?	NO	NO	NO	NO	NO
Bottom Edge	Separation distance (mm)	5	5	5	5	5
	exclusion threshold(mW)	17.81	9.31	9.87	9.16	11.27
	Testing required?	YES	YES	YES	YES	YES



Exposure Position	Wireless Interface	BT	2.4G WLAN	5.2G WLAN	5.3G WLAN
	Calculated Frequency (MHz)	2440	2437	5810	5260
	Maximum Turn-up power (dBm)	6	17.3	14	13
	Maximum rated power(mW)	3.98	53.70	25.12	19.95
Back Side	Separation distance (mm)	5	5	5	5
	exclusion threshold(mW)	9.60	9.61	6.22	6.54
	Testing required?	NO	YES	YES	YES
Front Side	Separation distance (mm)	5	5	5	5
	exclusion threshold(mW)	9.60	9.61	6.22	6.54
	Testing required?	NO	YES	YES	YES
Left Edge	Separation distance (mm)	5	5	5	5
	exclusion threshold(mW)	9.60	9.61	6.22	6.54
	Testing required?	NO	YES	YES	YES
Right Edge	Separation distance (mm)	55	55	55	55
	exclusion threshold(mW)	146.03	146.09	112.23	115.40
	Testing required?	NO	NO	NO	NO
Top Edge	Separation distance (mm)	5	5	5	5
	exclusion threshold(mW)	9.60	9.61	6.22	6.54
	Testing required?	NO	YES	YES	YES
Bottom Edge	Separation distance (mm)	75	75	75	75
	exclusion threshold(mW)	346.03	346.09	312.23	315.40
	Testing required?	NO	NO	NO	NO



Exposure Position	Wireless Interface	5.6G WLAN	5.8G WLAN
	Calculated Frequency (MHz)	5700	5785
	Maximum Turn-up power (dBm)	13.5	13.8
	Maximum rated power(mW)	22.39	23.99
Back Side	Separation distance (mm)	5	5
	exclusion threshold(mW)	6.28	6.24
	Testing required?	YES	YES
Front Side	Separation distance (mm)	5	5
	exclusion threshold(mW)	6.28	6.24
	Testing required?	YES	YES
Left Edge	Separation distance (mm)	5	5
	exclusion threshold(mW)	6.28	6.24
	Testing required?	YES	YES
Right Edge	Separation distance (mm)	55	55
	exclusion threshold(mW)	112.83	112.36
	Testing required?	NO	NO
Top Edge	Separation distance (mm)	5	5
	exclusion threshold(mW)	6.28	6.24
	Testing required?	YES	YES
Bottom Edge	Separation distance (mm)	75	75
	exclusion threshold(mW)	312.83	312.36
	Testing required?	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 $\leq 6\text{GHz}$

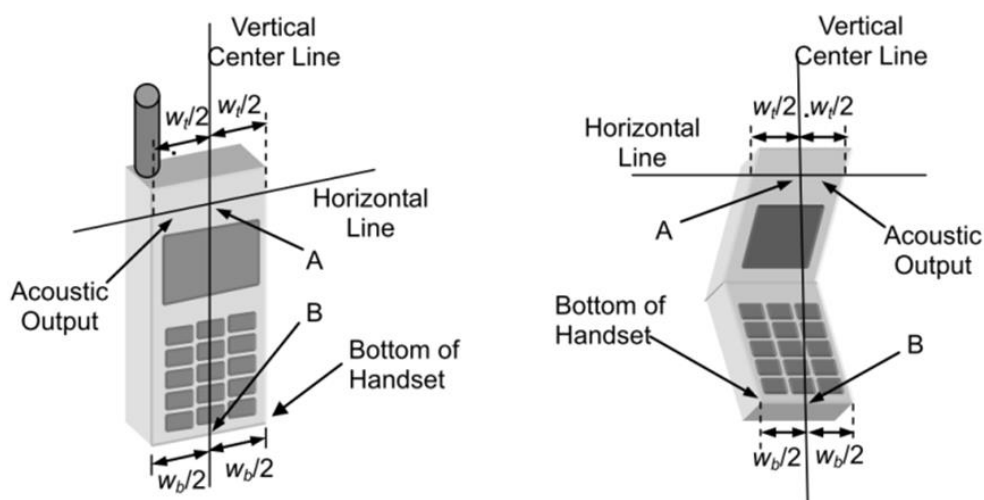
6. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion 8.for each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4db 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.

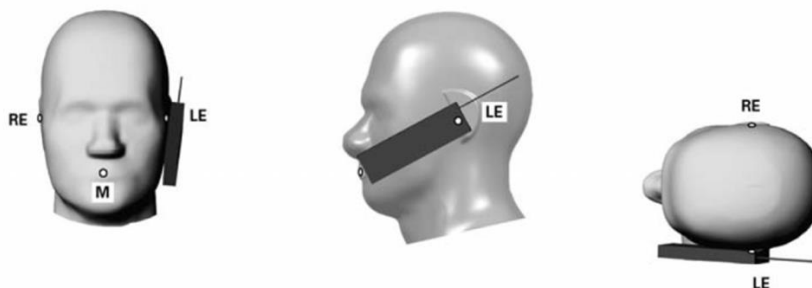
8.1 Define Two Imaginary Lines on the Handset

- (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





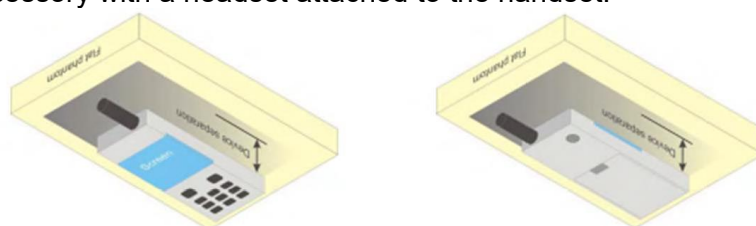
Title Position

- (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.



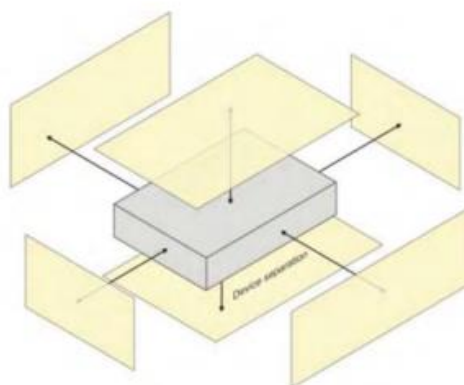
Body-worn Position Conditions:

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)	32.73	33.16	33.33	30.02	29.64	29.25
GPRS (GMSK, 1-Slot)	32.72	33.16	33.32	29.97	29.57	29.19
GPRS (GMSK, 2-Slot)	31.95	32.33	32.53	29.00	28.57	28.20
GPRS (GMSK, 3-Slot)	30.28	30.57	30.85	27.21	26.78	26.41
GPRS (GMSK, 4-Slot)	29.24	29.52	29.79	26.43	25.97	25.60
EGPRS (8PSK, 1-Slot)	28.36	28.27	29.00	27.23	26.72	26.58
EGPRS (8PSK, 2-Slot)	27.59	27.35	27.63	26.28	25.97	25.08
EGPRS (8PSK, 3-Slot)	24.99	25.03	26.02	24.54	23.60	23.75
EGPRS (8PSK, 4-Slot)	24.12	23.85	24.42	22.90	22.24	22.10
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)	23.70	24.13	24.30	20.99	20.61	20.22
GPRS (GMSK, 1-Slot)	23.69	24.13	24.29	20.94	20.54	20.16
GPRS (GMSK, 2-Slot)	25.93	26.31	26.51	22.98	22.55	22.18
GPRS (GMSK, 3-Slot)	26.02	26.31	26.59	22.95	22.52	22.15
GPRS (GMSK, 4-Slot)	26.23	26.51	26.78	23.42	22.96	22.59
EGPRS (8PSK, 1-Slot)	19.33	19.24	19.97	18.20	17.69	17.55
EGPRS (8PSK, 2-Slot)	21.57	21.33	21.61	20.26	19.95	19.06
EGPRS (8PSK, 3-Slot)	20.73	20.77	21.76	20.28	19.34	19.49
EGPRS (8PSK, 4-Slot)	21.11	20.84	21.41	19.89	19.23	19.09
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 5		
Channel	9262	9400	9538	4132	4182	4233
Frequency (MHz)	1852.4	1880	1907.6	826.4	836.4	846.6
RMC 12.2Kbps	22.65	22.36	21.97	24.53	24.18	24.1
HSDPA Subtest-1	21.71	21.46	21.06	23.52	23.21	23.12
HSDPA Subtest-2	21.07	20.62	20.53	23.24	22.85	22.66
HSDPA Subtest-3	19.88	19.49	19.42	22.02	21.83	21.34
HSDPA Subtest-4	20.2	19.93	19.09	21.76	21.82	21.75
HSUPA Subtest-1	21.03	21.2	20.8	22.84	23.03	22.94
HSUPA Subtest-2	21.62	21.19	20.81	23.43	23.13	23.05
HSUPA Subtest-3	19.81	19.96	19.82	21.64	21.99	22.14
HSUPA Subtest-4	21.67	21.35	20.98	23.53	23.19	23.12
HSUPA Subtest-5	20.33	20.65	20.26	22.39	22.55	22.54

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	16.77	47.53
	6	2437	17.13	51.64
	11	2462	16.61	45.81
802.11g	1	2412	11.64	14.59
	6	2437	11.41	13.84
	11	2462	10.83	12.11
802.11 n-HT20	1	2412	11.2	13.18
	6	2437	11.28	13.43
	11	2462	10.66	11.64
802.11 n-HT40	3	2422	11.49	14.09
	6	2437	11.39	13.77
	9	2452	11.23	13.27

Bluetooth

BT				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	3.14	2.06
	39	2441	4.04	2.54
	78	2480	3.24	2.11
$\pi/4$ -QPSK(2Mbps)	0	2402	2.21	1.66
	39	2441	3.21	2.09
	78	2480	2.43	1.75
8DPSK(3Mbps)	0	2402	2.06	1.61
	39	2441	3.07	2.03
	78	2480	2.32	1.71

BLE

BLE				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	4.8	3.02
	19	2440	5.5	3.55
	39	2480	4.65	2.92
GFSK(2Mbps)	0	2402	4.87	3.07
	19	2440	5.69	3.71
	39	2480	4.96	3.13



WLAN (5.2Gband)

5.2G WLAN				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11a20	36	5180	13.61	22.96
	40	5200	12.82	19.14
	48	5240	12.62	18.28
802.11 n-HT20	36	5180	11.79	15.10
	40	5200	11.68	14.72
	48	5240	10.51	11.25
802.11 n-HT40	38	5190	11.32	13.55
	46	5230	10.98	12.53
802.11ac-VHT20	36	5180	11.43	13.90
	40	5200	11.25	13.34
	48	5240	11.1	12.88
802.11ac-VHT40	38	5190	11.39	13.77
	46	5230	11.04	12.71
802.11ac-VHT80	42	5210	10.99	12.56

WLAN (5.3G band)

5.3G WLAN				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11a20	52	5260	12.75	18.84
	60	5300	12.45	17.58
	64	5320	12.22	16.67
802.11 n-HT20	52	5260	11.43	13.90
	60	5300	11.29	13.46
	64	5320	10.97	12.50
802.11 n-HT40	54	5270	11.03	12.68
	62	5310	10.68	11.69
802.11ac-VHT20	52	5260	11.07	12.79
	60	5300	10.86	12.19
	64	5320	10.48	11.17
802.11ac-VHT40	54	5270	11	12.59
	62	5310	10.69	11.72
802.11ac-VHT80	58	5290	10.67	11.67



WLAN (5.6G band)

5.6G WLAN				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11a20	100	5500	11.34	13.61
	116	5580	11.84	15.28
	140	5700	13.12	20.51
802.11 n-HT20	100	5500	10.13	10.30
	116	5580	10.65	11.61
	140	5700	9.84	9.64
802.11 n-HT40	102	5510	9.22	8.36
	110	5550	9.49	8.89
	134	5670	11.01	12.62
802.11ac-VHT20	100	5500	9.6	9.12
	116	5580	10.25	10.59
	140	5700	11.32	13.55
802.11ac-VHT40	102	5510	9.11	8.15
	110	5550	9.52	8.95
	134	5670	11.03	12.68
802.11ac-VHT80	106	5530	9.25	8.41
	122	5610	10.63	11.56
	138	5690	11.34	13.61

WLAN (5.8G band)

5.8G WLAN				
Mode	Channel Number	Frequency (MHz)	Output Power (dBm)	Output Power (mW)
802.11a20	149	5745	13.39	21.83
	157	5785	13.55	22.65
	165	5825	13.48	22.28
802.11 n-HT20	149	5745	11.37	13.71
	157	5785	11.72	14.86
	165	5825	11.81	15.17
802.11 n-HT40	151	5755	11.67	14.69
	159	5795	11.8	15.14
802.11ac-VHT20	149	5745	11.63	14.55
	157	5785	11.93	15.60
	165	5825	11.9	15.49
802.11ac-VHT40	151	5755	11.56	14.32
	159	5795	11.72	14.86
802.11ac-VHT80	155	5775	11.56	14.32

NFC

Mode	E-Filed (dBuV/m)	Output Power (dBm)
ASK	56.63	-38.57

Note: The power of this EUT NFC is -38.57dBm (0.00014mw), 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	22.66	22.13	22.43
1.4	1	2		22.07	22.13	21.91
1.4	1	5		21.78	22.15	21.66
1.4	3	0		20.99	20.88	20.93
1.4	3	1		20.98	21.14	20.96
1.4	3	2		20.84	21.24	20.70
1.4	6	0		20.92	21.07	20.79
1.4	1	0	16-QAM	21.54	21.08	20.76
1.4	1	2		21.61	21.14	20.82
1.4	1	5		21.53	21.11	20.81
1.4	3	0		21.91	21.19	20.93
1.4	3	1		21.89	21.24	20.99
1.4	3	2		21.91	21.20	20.92
1.4	6	0		20.91	20.24	19.92
3	1	0	QPSK	21.99	21.73	21.45
3	1	7		22.03	21.87	21.56
3	1	14		21.93	21.76	21.46
3	8	0		21.21	20.92	20.68
3	8	4		21.26	20.99	20.78
3	8	7		21.20	21.04	20.70
3	15	0		21.16	20.94	20.74
3	1	0	16-QAM	21.49	20.92	20.45
3	1	7		21.54	21.09	20.52
3	1	14		21.39	21.05	20.43
3	8	0		20.25	19.96	19.70
3	8	4		20.30	20.03	19.79
3	8	7		20.25	20.04	19.72
3	15	0		20.25	20.01	19.85



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.28	21.92	21.69
5	1	12		22.31	22.06	21.79
5	1	24		22.13	22.08	21.66
5	12	0		21.24	20.97	20.83
5	12	6		21.31	21.08	20.82
5	12	11		21.23	21.10	20.80
5	25	0		21.23	21.05	20.82
5	1	0	16-QAM	21.83	21.30	21.13
5	1	12		21.90	21.48	21.20
5	1	24		21.72	21.46	21.12
5	12	0		20.30	19.97	19.89
5	12	6		20.36	20.05	19.88
5	12	11		20.27	20.07	19.85
5	25	0		20.30	20.13	19.85
10	1	0	QPSK	22.33	21.96	21.86
10	1	24		22.24	22.15	21.90
10	1	49		21.96	22.21	21.81
10	25	0		21.13	20.93	20.93
10	25	12		21.18	21.09	20.86
10	25	24		21.12	21.16	20.72
10	50	0		21.15	21.12	20.85
10	1	0	16-QAM	21.79	21.15	20.80
10	1	24		21.68	21.31	20.82
10	1	49		21.46	21.40	20.76
10	25	0		20.21	19.99	20.00
10	25	12		20.28	20.13	19.92
10	25	24		20.16	20.22	19.77
10	50	0		20.16	20.13	19.90



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.23	21.78	21.90
15	1	37		22.13	22.08	21.87
15	1	74		21.83	22.15	21.77
15	36	0		21.11	20.84	20.91
15	36	18		21.04	21.06	20.87
15	36	39		20.88	21.14	20.72
15	75	0		21.05	21.05	20.85
15	1	0	16-QAM	21.38	21.23	21.14
15	1	38		21.19	21.56	21.10
15	1	75		20.95	21.64	20.96
15	36	0		20.07	19.93	20.00
15	36	18		20.04	20.14	19.98
15	36	39		19.88	20.20	19.78
15	75	0		20.04	20.05	19.87
20	1	0	QPSK	22.66	21.90	21.56
20	1	49		22.77	22.00	21.63
20	1	99		22.62	21.92	21.54
20	50	0		22.75	21.97	21.69
20	50	24		22.72	21.95	21.68
20	50	49		22.68	21.92	21.67
20	100	0		21.77	20.99	20.69
20	1	0	16-QAM	21.97	21.47	21.79
20	1	49		21.32	21.39	21.34
20	1	99		21.11	21.39	21.06
20	50	0		19.97	19.96	19.98
20	50	24		19.99	20.20	20.06
20	50	49		19.88	20.27	19.76
20	100	0		19.95	20.09	19.83



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.83	22.27	22.32
1.4	1	2		21.82	22.35	22.38
1.4	1	5		21.76	22.25	22.29
1.4	3	0		21.86	22.38	22.33
1.4	3	1		21.87	22.42	22.33
1.4	3	2		21.85	22.35	22.36
1.4	6	0		20.87	21.38	21.34
1.4	1	0	16-QAM	20.98	21.20	21.38
1.4	1	2		20.97	21.23	21.47
1.4	1	5		20.92	21.19	21.47
1.4	3	0		21.10	21.58	21.55
1.4	3	1		21.15	21.60	21.56
1.4	3	2		21.11	21.57	21.53
1.4	6	0		20.06	20.64	20.61
3	1	0	QPSK	21.61	22.13	22.06
3	1	7		21.81	22.24	22.23
3	1	14		21.77	22.09	22.16
3	8	0		20.89	21.33	21.34
3	8	4		20.92	21.38	21.42
3	8	7		20.92	21.43	21.39
3	15	0		20.89	21.39	21.37
3	1	0	16-QAM	20.58	21.69	21.32
3	1	7		20.71	21.75	21.47
3	1	14		20.61	21.64	21.43
3	8	0		19.83	20.45	20.39
3	8	4		19.93	20.46	20.44
3	8	7		19.97	20.45	20.42
3	15	0		20.07	20.46	20.36



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.88	22.42	22.26
5	1	12		22.05	22.46	22.42
5	1	24		22.03	22.38	22.41
5	12	0		20.88	21.39	21.35
5	12	6		21.03	21.52	21.44
5	12	11		21.06	21.50	21.44
5	25	0		21.02	21.49	21.42
5	1	0	16-QAM	21.28	21.84	21.87
5	1	12		21.43	21.92	22.02
5	1	24		21.46	21.82	22.00
5	12	0		19.90	20.51	20.41
5	12	6		20.03	20.59	20.47
5	12	11		20.06	20.58	20.52
5	25	0		20.09	20.48	20.44
10	1	0	QPSK	21.96	22.58	22.27
10	1	24		22.19	22.60	22.36
10	1	49		22.38	22.53	22.47
10	25	0		20.98	21.45	21.23
10	25	12		21.16	21.54	21.40
10	25	24		21.17	21.50	21.45
10	50	0		21.14	21.53	21.39
10	1	0	16-QAM	21.16	21.46	21.74
10	1	24		21.40	21.51	21.82
10	1	49		21.57	21.39	21.93
10	25	0		20.06	20.49	20.31
10	25	12		20.19	20.62	20.48
10	25	24		20.27	20.57	20.51
10	50	0		20.19	20.52	20.42



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	21.95	22.38	22.25
15	1	37		22.39	22.53	22.34
15	1	74		22.49	22.33	22.45
15	36	0		21.02	21.45	21.22
15	36	18		21.27	21.48	21.34
15	36	39		21.34	21.47	21.41
15	75	0		21.24	21.48	21.37
15	1	0	16-QAM	21.06	21.92	21.46
15	1	38		21.47	22.04	21.58
15	1	75		21.62	21.85	21.64
15	36	0		20.07	20.53	20.31
15	36	18		20.29	20.57	20.43
15	36	39		20.35	20.58	20.52
15	75	0		20.31	20.51	20.36
20	1	0	QPSK	22.29	22.84	22.75
20	1	49		22.40	22.65	22.40
20	1	99		22.50	22.35	22.40
20	50	0		21.18	21.50	21.22
20	50	24		21.48	21.56	21.39
20	50	49		21.48	21.59	21.48
20	100	0		21.30	21.50	21.33
20	1	0	16-QAM	21.69	22.11	22.06
20	1	49		21.85	21.92	21.69
20	1	99		21.87	21.60	21.71
20	50	0		20.28	20.54	20.28
20	50	24		20.56	20.56	20.45
20	50	49		20.56	20.61	20.55
20	100	0		20.36	20.55	20.37



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.68	23.44	23.29
1.4	1	2		23.78	23.51	23.38
1.4	1	5		23.68	23.36	23.29
1.4	3	0		23.68	23.51	23.37
1.4	3	1		23.70	23.51	23.38
1.4	3	2		23.67	23.48	23.33
1.4	6	0		22.79	22.58	22.43
1.4	1	0	16-QAM	22.73	22.60	22.14
1.4	1	2		22.82	22.66	22.22
1.4	1	5		22.76	22.58	22.08
1.4	3	0		22.85	22.70	22.46
1.4	3	1		22.89	22.75	22.50
1.4	3	2		22.79	22.70	22.51
1.4	6	0		21.98	21.76	21.67
3	1	0	QPSK	23.45	23.33	23.18
3	1	7		23.53	23.36	23.21
3	1	14		23.46	23.23	23.22
3	8	0		22.62	22.47	22.31
3	8	4		22.69	22.55	22.42
3	8	7		22.66	22.50	22.34
3	15	0		22.66	22.46	22.30
3	1	0	16-QAM	22.85	22.49	21.96
3	1	7		22.94	22.56	22.07
3	1	14		22.84	22.41	22.01
3	8	0		21.74	21.58	21.32
3	8	4		21.79	21.61	21.40
3	8	7		21.72	21.54	21.40
3	15	0		21.72	21.50	21.43



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.69	23.55	23.28
5	1	12		23.82	23.59	23.37
5	1	24		23.70	23.53	23.36
5	12	0		22.71	22.49	22.39
5	12	6		22.75	22.58	22.45
5	12	11		22.75	22.55	22.39
5	25	0		22.75	22.57	22.35
5	1	0	16-QAM	23.19	22.93	22.58
5	1	12		23.31	22.91	22.70
5	1	24		23.24	22.80	22.71
5	12	0		21.72	21.58	21.45
5	12	6		21.81	21.58	21.48
5	12	11		21.79	21.49	21.47
5	25	0		21.74	21.64	21.41
10	1	0	QPSK	23.85	23.65	23.54
10	1	24		23.89	23.61	23.46
10	1	49		23.78	23.47	23.47
10	25	0		22.75	22.57	22.44
10	25	12		22.80	22.60	22.43
10	25	24		22.69	22.51	22.38
10	50	0		22.71	22.58	22.42
10	1	0	16-QAM	22.57	23.11	22.63
10	1	24		22.64	23.03	22.60
10	1	49		22.57	22.86	22.65
10	25	0		21.72	21.66	21.48
10	25	12		21.83	21.71	21.49
10	25	24		21.77	21.56	21.42
10	50	0		21.74	21.60	21.47



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	20.50	20.61	20.99
5	1	12		20.66	20.66	21.08
5	1	24		20.68	20.62	21.01
5	12	0		19.58	19.58	20.04
5	12	6		19.64	19.63	20.11
5	12	11		19.61	19.56	20.08
5	25	0		19.60	19.56	20.09
5	1	0	16-QAM	19.97	19.85	20.29
5	1	12		20.19	19.94	20.38
5	1	24		20.15	19.86	20.32
5	12	0		18.58	18.52	19.00
5	12	6		18.66	18.53	19.12
5	12	11		18.64	18.48	19.12
5	25	0		18.62	18.54	18.99
10	1	0	QPSK	20.62	20.70	21.11
10	1	24		20.84	20.69	21.20
10	1	49		21.00	20.66	21.18
10	25	0		19.70	19.67	20.06
10	25	12		19.76	19.65	20.16
10	25	24		19.81	19.58	20.19
10	50	0		19.77	19.61	20.15
10	1	0	16-QAM	19.47	20.03	20.22
10	1	24		19.69	20.04	20.31
10	1	49		19.82	20.04	20.25
10	25	0		18.70	18.64	19.08
10	25	12		18.77	18.64	19.15
10	25	24		18.84	18.55	19.14
10	50	0		18.76	18.57	19.08



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	20.55	20.60	20.93
15	1	37		20.92	20.66	21.13
15	1	74		21.14	20.68	21.08
15	36	0		19.73	19.66	20.04
15	36	18		19.86	19.70	20.17
15	36	39		19.97	19.60	20.19
15	75	0		19.86	19.66	20.12
15	1	0	16-QAM	19.62	19.99	20.10
15	1	38		19.94	20.02	20.25
15	1	75		20.20	20.08	20.20
15	36	0		18.63	18.64	19.09
15	36	18		18.84	18.68	19.19
15	36	39		18.93	18.59	19.23
15	75	0		18.88	18.60	19.05
20	1	0	QPSK	20.40	20.60	20.73
20	1	49		20.98	20.71	21.20
20	1	99		21.15	20.65	21.11
20	50	0		19.74	19.63	19.96
20	50	24		19.98	19.68	20.13
20	50	49		20.18	19.57	20.18
20	100	0		19.99	19.55	20.10
20	1	0	16-QAM	19.65	19.85	19.95
20	1	49		20.18	19.97	20.39
20	1	99		20.28	19.95	20.22
20	50	0		18.78	18.58	18.88
20	50	24		19.02	18.68	19.08
20	50	49		19.21	18.55	19.09
20	100	0		18.97	18.49	19.02



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.74	23.79	23.51
1.4	1	2		23.80	23.93	23.68
1.4	1	5		23.73	23.86	23.56
1.4	3	0		23.61	23.74	23.66
1.4	3	1		23.63	23.78	23.67
1.4	3	2		23.62	23.75	23.63
1.4	6	0		22.81	22.90	22.73
1.4	1	0	16-QAM	22.33	22.77	22.68
1.4	1	2		22.42	22.82	22.71
1.4	1	5		22.40	22.77	22.66
1.4	3	0		22.66	22.86	22.81
1.4	3	1		22.69	22.89	22.84
1.4	3	2		22.70	22.82	22.77
1.4	6	0		21.87	21.99	21.83
3	1	0	QPSK	23.42	23.59	23.49
3	1	7		23.54	23.66	23.62
3	1	14		23.46	23.61	23.61
3	8	0		22.65	22.73	22.68
3	8	4		22.73	22.86	22.77
3	8	7		22.67	22.80	22.67
3	15	0		22.60	22.76	22.68
3	1	0	16-QAM	22.68	22.71	22.29
3	1	7		22.83	22.78	22.37
3	1	14		22.79	22.67	22.24
3	8	0		21.58	21.72	21.65
3	8	4		21.65	21.79	21.68
3	8	7		21.60	21.75	21.61
3	15	0		21.57	21.70	21.67



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.66	23.82	23.70
5	1	12		23.78	23.94	23.73
5	1	24		23.76	23.89	23.65
5	12	0		22.73	22.74	22.84
5	12	6		22.79	22.87	22.84
5	12	11		22.69	22.86	22.76
5	25	0		22.70	22.84	22.83
5	1	0	16-QAM	22.97	23.04	22.91
5	1	12		23.16	23.13	23.03
5	1	24		23.22	23.01	22.92
5	12	0		21.66	21.64	21.89
5	12	6		21.71	21.78	21.83
5	12	11		21.65	21.78	21.69
5	25	0		21.67	21.81	21.77
10	1	0	QPSK	23.74	23.87	23.83
10	1	24		23.89	24.06	23.89
10	1	49		23.98	23.98	23.81
10	25	0		22.84	22.65	22.70
10	25	12		22.85	22.85	22.83
10	25	24		23.03	22.79	22.70
10	50	0		22.99	22.78	22.67
10	1	0	16-QAM	22.75	22.61	23.15
10	1	24		22.99	22.71	23.13
10	1	49		23.00	22.65	23.13
10	25	0		21.83	21.68	21.67
10	25	12		21.91	21.80	21.83
10	25	24		22.00	21.75	21.67
10	50	0		21.96	21.72	21.64



LTE Band 13 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.15	24.18	24.18
5	1	12		24.32	24.35	24.41
5	1	24		24.28	24.53	24.33
5	12	0		23.27	23.21	23.21
5	12	6		23.32	23.32	23.36
5	12	11		23.35	23.37	23.28
5	25	0		23.31	23.30	23.22
5	1	0	16-QAM	23.51	23.54	23.49
5	1	12		23.82	23.61	23.49
5	1	24		23.77	23.46	23.41
5	12	0		22.22	22.17	22.15
5	12	6		22.31	22.28	22.29
5	12	11		22.35	22.29	22.16
5	25	0		22.29	22.33	22.08
10	1	0	QPSK	/	24.22	/
10	1	24		/	24.38	/
10	1	49		/	24.53	/
10	25	0		/	23.26	/
10	25	12		/	23.39	/
10	25	24		/	23.47	/
10	50	0		/	23.36	/
10	1	0	16-QAM	/	23.46	/
10	1	24		/	23.73	/
10	1	49		/	23.62	/
10	25	0		/	22.28	/
10	25	12		/	22.42	/
10	25	24		/	22.39	/
10	50	0		/	22.33	/



LTE Band 17 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.80	23.91	23.76
5	1	12		23.95	23.94	23.78
5	1	24		23.93	23.84	23.66
5	12	0		22.80	22.78	22.91
5	12	6		22.94	22.90	22.86
5	12	11		23.00	22.74	22.75
5	25	0		22.89	22.76	22.84
5	1	0	16-QAM	23.22	23.05	22.96
5	1	12		23.37	23.08	23.05
5	1	24		23.25	23.02	22.93
5	12	0		21.71	21.70	21.91
5	12	6		21.90	21.78	21.84
5	12	11		21.89	21.68	21.78
5	25	0		21.84	21.74	21.81
10	1	0	QPSK	23.91	23.88	23.92
10	1	24		24.09	23.97	23.93
10	1	49		23.99	23.81	23.84
10	25	0		22.71	22.71	22.71
10	25	12		22.88	22.85	22.87
10	25	24		22.67	22.70	22.68
10	50	0		22.71	22.69	22.71
10	1	0	16-QAM	22.66	23.19	23.01
10	1	24		22.72	23.15	22.98
10	1	49		22.69	23.16	22.91
10	25	0		21.61	21.70	21.69
10	25	12		21.81	21.81	21.84
10	25	24		21.70	21.63	21.69
10	50	0		21.59	21.59	21.71



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	20.85	21.57	21.45
5	1	12		20.96	21.72	21.54
5	1	24		20.85	21.63	21.41
5	12	0		19.84	20.64	20.43
5	12	6		19.92	20.71	20.49
5	12	11		19.86	20.69	20.42
5	25	0		19.83	20.66	20.45
5	1	0	16-QAM	20.12	20.89	21.02
5	1	12		20.21	21.08	21.09
5	1	24		20.10	20.99	20.98
5	12	0		18.83	19.69	19.48
5	12	6		18.90	19.76	19.49
5	12	11		18.84	19.75	19.45
5	25	0		18.87	19.66	19.46
10	1	0	QPSK	20.89	21.60	21.60
10	1	24		20.97	21.77	21.55
10	1	49		20.95	21.69	21.46
10	25	0		19.84	20.65	20.51
10	25	12		19.90	20.72	20.52
10	25	24		19.90	20.68	20.45
10	50	0		19.89	20.69	20.50
10	1	0	16-QAM	19.81	21.06	20.70
10	1	24		19.89	21.22	20.71
10	1	49		19.90	21.15	20.56
10	25	0		18.90	19.74	19.57
10	25	12		18.91	19.81	19.56
10	25	24		18.96	19.75	19.52
10	50	0		18.88	19.71	19.52



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	20.78	21.48	21.68
15	1	37		20.96	21.77	21.64
15	1	74		21.02	21.65	21.43
15	36	0		19.86	20.61	20.57
15	36	18		19.97	20.71	20.55
15	36	39		19.98	20.67	20.42
15	75	0		19.93	20.67	20.52
15	1	0	16-QAM	20.25	20.63	20.84
15	1	38		20.37	20.90	20.80
15	1	75		20.48	20.78	20.58
15	36	0		18.91	19.73	19.57
15	36	18		19.03	19.81	19.55
15	36	39		19.08	19.76	19.43
15	75	0		18.93	19.66	19.56
20	1	0	QPSK	20.76	21.35	21.64
20	1	49		21.05	21.83	21.72
20	1	99		21.21	21.59	21.35
20	50	0		19.90	20.58	20.62
20	50	24		20.03	20.74	20.60
20	50	49		20.11	20.65	20.42
20	100	0		20.00	20.61	20.55
20	1	0	16-QAM	20.00	20.51	20.81
20	1	49		20.32	20.99	20.88
20	1	99		20.45	20.77	20.50
20	50	0		18.95	19.59	19.71
20	50	24		19.12	19.73	19.68
20	50	49		19.18	19.66	19.51
20	100	0		19.00	19.65	19.54



LTE Band 40 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	20.44	20.43	20.59
5	1	12		20.60	20.63	20.81
5	1	24		20.59	20.64	20.76
5	12	0		19.47	19.52	19.64
5	12	6		19.53	19.65	19.71
5	12	11		19.51	19.61	19.73
5	25	0		19.51	19.60	19.68
5	1	0	16-QAM	19.74	19.80	20.19
5	1	12		19.91	20.00	20.42
5	1	24		19.89	20.01	20.37
5	12	0		18.48	18.59	18.68
5	12	6		18.53	18.68	18.74
5	12	11		18.49	18.70	18.78
5	25	0		18.58	18.62	18.69
10	1	0	QPSK	/	20.47	/
10	1	24		/	20.70	/
10	1	49		/	20.82	/
10	25	0		/	19.55	/
10	25	12		/	19.65	/
10	25	24		/	19.67	/
10	50	0		/	19.64	/
10	1	0	16-QAM	/	19.43	/
10	1	24		/	19.66	/
10	1	49		/	19.78	/
10	25	0		/	18.60	/
10	25	12		/	18.69	/
10	25	24		/	18.74	/
10	50	0		/	18.65	/



LTE Band 40 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	20.50	20.55	20.63
5	1	12		20.67	20.76	20.77
5	1	24		20.62	20.70	20.72
5	12	0		19.54	19.61	19.63
5	12	6		19.64	19.70	19.69
5	12	11		19.63	19.66	19.65
5	25	0		19.58	19.60	19.63
5	1	0	16-QAM	19.83	20.14	19.90
5	1	12		20.00	20.35	20.05
5	1	24		19.97	20.32	19.99
5	12	0		18.54	18.61	18.61
5	12	6		18.65	18.68	18.65
5	12	11		18.66	18.64	18.64
5	25	0		18.55	18.61	18.69
10	1	0	QPSK	/	20.56	/
10	1	24		/	20.76	/
10	1	49		/	20.79	/
10	25	0		/	19.62	/
10	25	12		/	19.69	/
10	25	24		/	19.71	/
10	50	0		/	19.67	/
10	1	0	16-QAM	/	20.01	/
10	1	24		/	20.20	/
10	1	49		/	20.26	/
10	25	0		/	18.67	/
10	25	12		/	18.74	/
10	25	24		/	18.70	/
10	50	0		/	18.65	/



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	19.99	21.34	20.66
5	1	12		20.17	21.55	20.76
5	1	24		20.04	21.43	20.59
5	12	0		18.97	20.40	19.76
5	12	6		19.08	20.48	19.76
5	12	11		19.12	20.43	19.67
5	25	0		19.05	20.40	19.69
5	1	0	16-QAM	19.55	20.65	20.05
5	1	12		19.72	20.82	20.15
5	1	24		19.60	20.71	19.98
5	12	0		18.01	19.38	18.83
5	12	6		18.09	19.43	18.78
5	12	11		18.11	19.41	18.70
5	25	0		18.03	19.44	18.72
10	1	0	QPSK	20.04	21.35	21.01
10	1	24		20.18	21.53	20.89
10	1	49		20.33	21.52	20.77
10	25	0		18.98	20.41	19.92
10	25	12		19.12	20.50	19.88
10	25	24		19.21	20.47	19.71
10	50	0		19.15	20.44	19.85
10	1	0	16-QAM	18.98	20.80	20.18
10	1	24		19.11	21.00	20.05
10	1	49		19.22	20.97	19.93
10	25	0		18.03	19.47	18.97
10	25	12		18.19	19.57	18.94
10	25	24		18.26	19.56	18.74
10	50	0		18.13	19.44	18.91



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	19.94	21.21	21.29
15	1	37		20.23	21.54	21.17
15	1	74		20.42	21.46	20.86
15	36	0		19.02	20.35	20.18
15	36	18		19.19	20.45	20.08
15	36	39		19.38	20.47	19.88
15	75	0		19.21	20.38	20.08
15	1	0	16-QAM	19.37	20.35	20.53
15	1	38		19.66	20.67	20.34
15	1	75		19.85	20.59	20.05
15	36	0		18.07	19.44	19.16
15	36	18		18.26	19.54	19.08
15	36	39		18.46	19.57	18.88
15	75	0		18.26	19.39	19.11
20	1	0	QPSK	20.36	21.56	21.90
20	1	49		20.37	21.58	21.29
20	1	99		20.57	21.36	20.82
20	50	0		18.95	20.32	20.36
20	50	24		19.32	20.47	20.26
20	50	49		19.55	20.42	19.92
20	100	0		19.29	20.35	20.20
20	1	0	16-QAM	19.60	20.75	21.04
20	1	49		19.60	20.76	20.49
20	1	99		19.79	20.54	20.01
20	50	0		18.05	19.33	19.40
20	50	24		18.41	19.49	19.28
20	50	49		18.60	19.46	19.00
20	100	0		18.31	19.37	19.19



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	20.92	21.15	20.86
1.4	1	2		20.95	21.25	20.92
1.4	1	5		20.89	21.11	20.83
1.4	3	0		20.90	21.28	20.95
1.4	3	1		20.90	21.27	20.93
1.4	3	2		20.89	21.24	20.93
1.4	6	0		19.94	20.27	19.94
1.4	1	0	16-QAM	20.08	20.37	19.77
1.4	1	2		20.11	20.42	19.85
1.4	1	5		20.04	20.39	19.74
1.4	3	0		20.13	20.55	20.14
1.4	3	1		20.17	20.59	20.17
1.4	3	2		20.12	20.53	20.17
1.4	6	0		19.20	19.51	19.19
3	1	0	QPSK	20.66	21.08	20.77
3	1	7		20.78	21.14	20.91
3	1	14		20.68	21.05	20.79
3	8	0		19.89	20.20	19.98
3	8	4		19.94	20.32	20.04
3	8	7		19.96	20.29	19.96
3	15	0		19.89	20.30	20.03
3	1	0	16-QAM	20.18	20.30	19.73
3	1	7		20.30	20.40	19.83
3	1	14		20.19	20.26	19.65
3	8	0		18.95	19.31	19.00
3	8	4		19.02	19.37	19.06
3	8	7		19.02	19.31	19.00
3	15	0		18.99	19.25	19.09



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	20.94	21.36	21.05
5	1	12		21.09	21.41	21.11
5	1	24		21.08	21.34	20.97
5	12	0		19.96	20.34	20.08
5	12	6		20.11	20.41	20.11
5	12	11		20.07	20.38	20.06
5	25	0		20.05	20.36	20.08
5	1	0	16-QAM	20.56	20.71	20.47
5	1	12		20.75	20.82	20.53
5	1	24		20.74	20.71	20.42
5	12	0		18.98	19.31	19.15
5	12	6		19.14	19.36	19.20
5	12	11		19.13	19.37	19.11
5	25	0		19.03	19.43	19.07
10	1	0	QPSK	21.04	21.40	21.44
10	1	24		21.25	21.43	21.32
10	1	49		21.41	21.42	21.13
10	25	0		20.02	20.26	20.26
10	25	12		20.16	20.38	20.27
10	25	24		20.26	20.45	20.12
10	50	0		20.14	20.36	20.25
10	1	0	16-QAM	19.91	20.89	20.64
10	1	24		20.14	20.90	20.49
10	1	49		20.29	20.90	20.28
10	25	0		19.05	19.34	19.34
10	25	12		19.24	19.49	19.30
10	25	24		19.27	19.53	19.20
10	50	0		19.19	19.42	19.26



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	20.95	21.38	21.47
15	1	37		21.33	21.45	21.37
15	1	74		21.52	21.44	21.02
15	36	0		20.02	20.30	20.39
15	36	18		20.25	20.38	20.32
15	36	39		20.33	20.42	20.16
15	75	0		20.22	20.38	20.27
15	1	0	16-QAM	20.14	20.49	20.97
15	1	38		20.52	20.58	20.86
15	1	75		20.72	20.53	20.52
15	36	0		19.12	19.30	19.48
15	36	18		19.33	19.36	19.39
15	36	39		19.44	19.43	19.21
15	75	0		19.26	19.45	19.31
20	1	0	QPSK	21.36	21.80	21.93
20	1	49		21.47	21.39	21.53
20	1	99		21.52	21.41	21.00
20	50	0		20.15	20.27	20.52
20	50	24		20.43	20.49	20.50
20	50	49		20.55	20.51	20.26
20	100	0		20.31	20.40	20.39
20	1	0	16-QAM	20.67	21.18	21.17
20	1	49		20.76	20.80	20.85
20	1	99		20.79	20.78	20.33
20	50	0		19.24	19.38	19.55
20	50	24		19.50	19.54	19.51
20	50	49		19.64	19.58	19.27
20	100	0		19.37	19.46	19.38



10.2 Tune up Power

Mode	GSM850		
	LOW	MID	HIGH
GSM/PCS	32±1dBm	32.3±1dBm	32.5±1dBm
GPRS (1 Slot)	32±1dBm	32.3±1dBm	32.5±1dBm
GPRS (2 Slot)	31±1dBm	31.5±1dBm	31.8±1dBm
GPRS (3 Slot)	29.5±1dBm	29.8±1dBm	30±1dBm
GPRS (4 Slot)	28.5±1dBm	28.7±1dBm	29±1dBm
EDGE (1 Slot)	27.5±1dBm	27.5±1dBm	28.3±1dBm
EDGE (2 Slot)	26±1dBm	26.5±1dBm	27±1dBm
EDGE (3 Slot)	24±1dBm	24.3±1dBm	25.3±1dBm
EDGE (4 Slot)	23.3±1dBm	23±1dBm	23.5±1dBm

Mode	GSM1900		
	LOW	MID	HIGH
GSM/PCS	29.3±1dBm	29±1dBm	28.5±1dBm
GPRS (1 Slot)	29±1dBm	29±1dBm	28.3±1dBm
GPRS (2 Slot)	28.3±1dBm	28±1dBm	27.5±1dBm
GPRS (3 Slot)	26.5±1dBm	26±1dBm	25.5±1dBm
GPRS (4 Slot)	25.5±1dBm	25.2±1dBm	25±1dBm
EDGE (1 Slot)	26.5±1dBm	26±1dBm	26±1dBm
EDGE (2 Slot)	25.5±1dBm	25±1dBm	224.3±1dBm
EDGE (3 Slot)	23.7±1dBm	23±1dBm	23±1dBm
EDGE (4 Slot)	22±1dBm	21.5±1dBm	21.3±1dBm

Mode	WCDMA Band 2		
	LOW	MID	HIGH
RMC	22±1dBm	21.5±1dBm	21±1dBm
HSDPA Subtest-1	21±1dBm	20.5±1dBm	20.3±1dBm
HSDPA Subtest-2	20.3±1dBm	20±1dBm	19.8±1dBm
HSDPA Subtest-3	19±1dBm	18.8±1dBm	18.5±1dBm
HSDPA Subtest-4	19.5±1dBm	19±1dBm	18.3±1dBm
HSUPA Subtest-1	20.3±1dBm	20.5±1dBm	20±1dBm
HSUPA Subtest-2	21±1dBm	20.5±1dBm	20±1dBm
HSUPA Subtest-3	19±1dBm	19±1dBm	19±1dBm
HSUPA Subtest-4	21±1dBm	20.5±1dBm	20±1dBm
HSUPA Subtest-5	19.5±1dBm	20±1dBm	19.5±1dBm



Mode	WCDMA Band 5		
	LOW	MID	HIGH
RMC	23.8±1dBm	23.3±1dBm	23.3±1dBm
HSDPA Subtest-1	22.7±1dBm	2.5±1dBm	22.3±1dBm
HSDPA Subtest-2	22.5±1dBm	22±1dBm	22±1dBm
HSDPA Subtest-3	21.3±1dBm	21±1dBm	20.5±1dBm
HSDPA Subtest-4	21±1dBm	21±1dBm	21±1dBm
HSUPA Subtest-1	22±1dBm	22.3±1dBm	22±1dBm
HSUPA Subtest-2	22.5±1dBm	22.3±1dBm	22.3±1dBm
HSUPA Subtest-3	21±1dBm	21.2±1dBm	21.5±1dBm
HSUPA Subtest-4	22.8±1dBm	22.5±1dBm	21.3±1dBm
HSUPA Subtest-5	21.5±1dBm	21.7±1dBm	21.8±1dBm

Mode	NFC
NFC	-38.5±1dBm

Mode	BT
GFSK	3.3±1dBm
$\pi/4$ -DQPSK	2.5±1dBm
8DPSK	2.3±1dBm

Mode	BLE
GFSK(1Mbps)	4.8±1dBm
GFSK(2Mbps)	5±1dBm

Mode	2.4G WLAN
802.11b	16.3±1dBm
802.11g	11±1dBm
802.11n(HT20)	10.5±1dBm
802.11n(HT40)	10.7±1dBm

Mode	5.2G WLAN
802.11a	13±1dBm
802.11 n-HT20	11±1dBm
802.11 n-HT40	10.5±1dBm
802.11 ac-VHT20	10.5±1dBm
802.11 ac-VHT40	10.5±1dBm
802.11 ac-VHT80	10.2±1dBm



Mode	5.3G WLAN
802.11a	12±1dBm
802.11 n-HT20	10.5±1dBm
802.11 n-HT40	10.3±1dBm
802.11 ac-VHT20	10.3±1dBm
802.11 ac-VHT40	10.3±1dBm
802.11 ac-VHT80	10±1dBm

Mode	5.6G WLAN
802.11a	12.3±1dBm
802.11 n-HT20	10±1dBm
802.11 n-HT40	10.3±1dBm
802.11 ac-VHT20	10.5±1dBm
802.11 ac-VHT40	10.3±1dBm
802.11 ac-VHT80	10±1dBm

Mode	5.8G WLAN
802.11a	12.8±1dBm
802.11 n-HT20	11±1dBm
802.11 n-HT40	11±1dBm
802.11 ac-VHT20	11±1dBm
802.11 ac-VHT40	11±1dBm
802.11 ac-VHT80	11±1dBm



BW[MHz]	RB Size	Mode	Band 2	Band 4	Band 7	Band 38	Band 41	Band 66
1.4	1	QPSK	22±1dBm	21.5±1dBm	N/A	N/A	N/A	20.5±1dBm
1.4	3		20.5±1dBm	21.5±1dBm	N/A	N/A	N/A	20.58±1dBm
1.4	6		20.3±1dBm	20.5±1dBm	N/A	N/A	N/A	19.5±1dBm
1.4	1	16-QAM	21±1dBm	20.5±1dBm	N/A	N/A	N/A	19.5±1dBm
1.4	3		21±1dBm	21±1dBm	N/A	N/A	N/A	19.8±1dBm
1.4	6		20±1dBm	20±1dBm	N/A	N/A	N/A	19±1dBm
3	1	QPSK	21.3±1dBm	21.5±1dBm	N/A	N/A	N/A	20.3±1dBm
3	8		20.5±1dBm	20.5±1dBm	N/A	N/A	N/A	19.5±1dBm
3	15		20.3±1dBm	20.5±1dBm	N/A	N/A	N/A	19.5±1dBm
3	1	16-QAM	20.8±1dBm	21±1dBm	N/A	N/A	N/A	19.5±1dBm
3	8		19.5±1dBm	19.5±1dBm	N/A	N/A	N/A	18.5±1dBm
3	15		19.5±1dBm	19.5±1dBm	N/A	N/A	N/A	18.5±1dBm
5	1	QPSK	21.5±1dBm	21.5±1dBm	20.3±1dBm	21±1dBm	20.7±1dBm	20.5±1dBm
5	12		20.5±1dBm	21±1dBm	19.3±1dBm	20±1dBm	19.5±1dBm	19.5±1dBm
5	25		20.5±1dBm	20.7±1dBm	19.3±1dBm	20±1dBm	19.5±1dBm	19.5±1dBm
5	1	16-QAM	21±1dBm	21.3±1dBm	19.5±1dBm	20.3±1dBm	20±1dBm	20±1dBm
5	12		19.5±1dBm	20±1dBm	18.3±1dBm	19±1dBm	18.5±1dBm	18.5±1dBm
5	25		19.5±1dBm	19.7±1dBm	18.3±1dBm	19±1dBm	18.5±1dBm	18.5±1dBm
10	1	QPSK	21.5±1dBm	22±1dBm	20.5±1dBm	21±1dBm	20.7±1dBm	20.5±1dBm
10	25		20.3±1dBm	21±1dBm	19.3±1dBm	20±1dBm	19.7±1dBm	19.5±1dBm
10	50		20.3±1dBm	21±1dBm	19.3±1dBm	20±1dBm	19.5±1dBm	19.5±1dBm
10	1	16-QAM	21±1dBm	21±1dBm	19.5±1dBm	20.5±1dBm	20.3±1dBm	20±1dBm
10	25		19.5±1dBm	20±1dBm	18.3±1dBm	19±1dBm	19±1dBm	19±1dBm
10	50		19.5±1dBm	20±1dBm	18.3±1dBm	19±1dBm	18.5±1dBm	18.5±1dBm
15	1	QPSK	21.5±1dBm	22±1dBm	20.3±1dBm	21±1dBm	20.7±1dBm	20.8±1dBm
15	36		20.3±1dBm	20.5±1dBm	19.3±1dBm	20±1dBm	19.7±1dBm	19.5±1dBm
15	75		20.3±1dBm	20.5±1dBm	19.3±1dBm	20±1dBm	19.5±1dBm	19.5±1dBm
15	1	16-QAM	21±1dBm	21.3±1dBm	19.5±1dBm	20±1dBm	20±1dBm	20±1dBm
15	36		19.3±1dBm	20±1dBm	18.5±1dBm	19±1dBm	19±1dBm	18.5±1dBm
15	75		19.3±1dBm	20±1dBm	18.3±1dBm	19±1dBm	18.5±1dBm	18.5±1dBm



20	1	LOW	QPSK	22±1dBm	21.7±1dBm	20.2±1dBm	20.3±1dBm	19.6±1dBm	20.7±1dBm
20		MID		21.3±1dBm	22±1dBm	20±1dBm	21±1dBm	20.8±1dBm	21±1dBm
20		HIGH		21±1dBm	22±1dBm	20.5±1dBm	21±1dBm	21.1±1dBm	21.2±1dBm
20	50	LOW		22±1dBm	20.7±1dBm	19.3±1dBm	19.3±1dBm	18.7±1dBm	19.7±1dBm
20		MID		21.2±1dBm	21±1dBm	18.8±1dBm	20±1dBm	19.8±1dBm	19.7±1dBm
20		HIGH		21±1dBm	20.7±1dBm	19.3±1dBm	20±1dBm	19.5±1dBm	19.6±1dBm
20	100	LOW		21±1dBm	20.5±1dBm	19.2±1dBm	19.2±1dBm	18.5±1dBm	19.5±1dBm
20		MID		20.2±1dBm	20.7±1dBm	18.8±1dBm	20±1dBm	19.5±1dBm	19.5±1dBm
20		HIGH		20±1dBm	20.5±1dBm	19.3±1dBm	19.8±1dBm	19.5±1dBm	19.5±1dBm
20	1	LOW	16-QAM	22±1dBm	21±1dBm	19.5±1dBm	19.5±1dBm	19±1dBm	20±1dBm
20		MID		20.3±1dBm	21.3±1dBm	19±1dBm	20±1dBm	20±1dBm	20.3±1dBm
20		HIGH		21±1dBm	21.3±1dBm	19.5±1dBm	20±1dBm	20.3±1dBm	20.3±1dBm
20	50	LOW		22±1dBm	20±1dBm	18.5±1dBm	18.3±1dBm	18±1dBm	19±1dBm
20		MID		21±1dBm	20±1dBm	18±1dBm	19±1dBm	18.7±1dBm	19±1dBm
20		HIGH		21±1dBm	20±1dBm	18.3±1dBm	19±1dBm	18.5±1dBm	19±1dBm
20	100	LOW		21±1dBm	19.5±1dBm	18±1dBm	18.2±1dBm	17.5±1dBm	18.5±1dBm
20		MID		20.2±1dBm	19.7±1dBm	17.8±1dBm	19±1dBm	18.5±1dBm	18.5±1dBm
20		HIGH		20±1dBm	19.5±1dBm	18.3±1dBm	19±1dBm	18.3±1dBm	18.5±1dBm

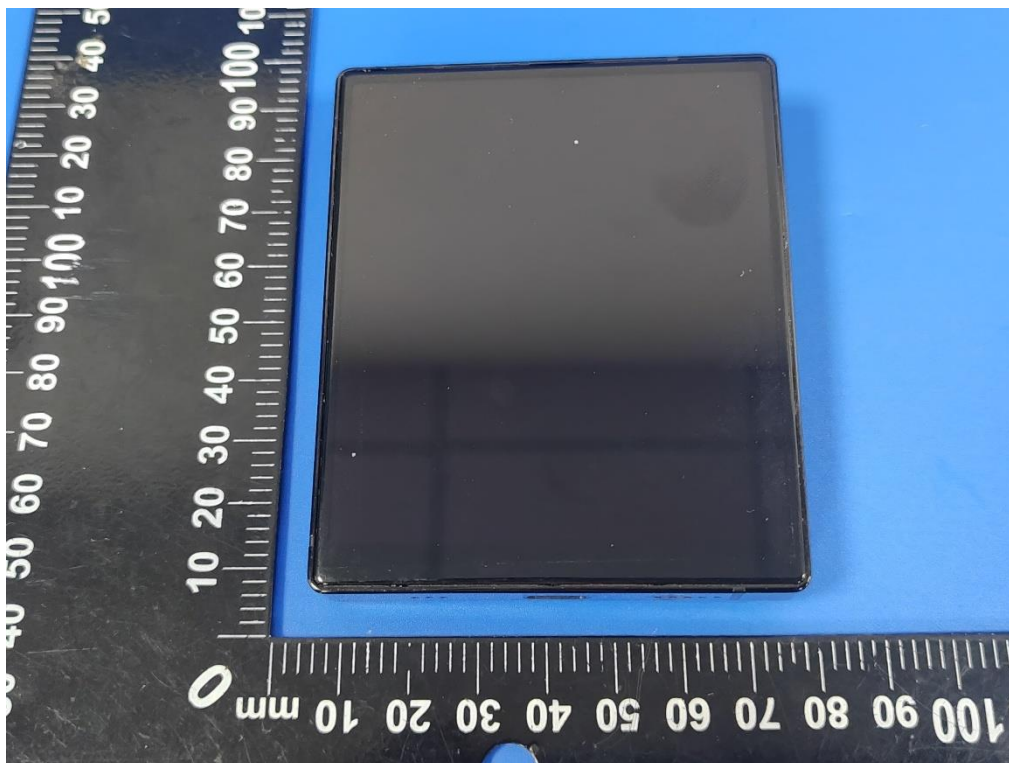


BW[MHz]	RB Size		Mode	Band 5	Band 12	Band 13	Band 17	Band 40	Band 40
1.4	1		QPSK	23±1dBm	23±1dBm	N/A	N/A	N/A	N/A
1.4	3			23±1dBm	23±1dBm	N/A	N/A	N/A	N/A
1.4	6			22±1dBm	22±1dBm	N/A	N/A	N/A	N/A
1.4	1		16-QAM	22±1dBm	22±1dBm	N/A	N/A	N/A	N/A
1.4	3			22±1dBm	22±1dBm	N/A	N/A	N/A	N/A
1.4	6			21±1dBm	21±1dBm	N/A	N/A	N/A	N/A
3	1		QPSK	22.7±1dBm	23±1dBm	N/A	N/A	N/A	N/A
3	8			22±1dBm	22±1dBm	N/A	N/A	N/A	N/A
3	15			22±1dBm	22±1dBm	N/A	N/A	N/A	N/A
3	1		16-QAM	22±1dBm	23±1dBm	N/A	N/A	N/A	N/A
3	8			21±1dBm	21±1dBm	N/A	N/A	N/A	N/A
3	15			21±1dBm	21±1dBm	N/A	N/A	N/A	N/A
5	1		QPSK	23±1dBm	23±1dBm	23.7±1dBm	23±1dBm	20±1dBm	20±1dBm
5	12			22±1dBm	22±1dBm	22.5±1dBm	22.3±1dBm	19±1dBm	19±1dBm
5	25			22±1dBm	22±1dBm	22.5±1dBm	22±1dBm	19±1dBm	19±1dBm
5	1		16-QAM	22.5±1dBm	22.5±1dBm	23±1dBm	22.5±1dBm	19.5±1dBm	19.5±1dBm
5	12			21±1dBm	21±1dBm	21.5±1dBm	21±1dBm	18±1dBm	18±1dBm
5	25			21±1dBm	21±1dBm	21.5±1dBm	21±1dBm	18±1dBm	18±1dBm
10	1	LOW	QPSK	23±1dBm	23.2±1dBm	N/A	23.3±1dBm	N/A	N/A
10		MID		23±1dBm	23.3±1dBm	23.8±1dBm	23.2±1dBm	20±1dBm	20±1dBm
10		HIGH		22.7±1dBm	23±1dBm	N/A	23.2±1dBm	N/A	N/A
10	25	LOW		22±1dBm	22.3±1dBm	N/A	22±1dBm	N/A	N/A
10		MID		21.9±1dBm	22±1dBm	22.7±1dBm	22±1dBm	19±1dBm	19±1dBm
10		HIGH		21.7±1dBm	22±1dBm	N/A	22±1dBm	N/A	N/A
10	50	LOW		22±1dBm	22.2±1dBm	N/A	22±1dBm	N/A	N/A
10		MID		21.8±1dBm	22±1dBm	22.5±1dBm	22±1dBm	19±1dBm	19±1dBm
10		HIGH		21.7±1dBm	22±1dBm	N/A	22±1dBm	N/A	N/A
10	1	LOW	16-QAM	22±1dBm	22.3±1dBm	N/A	22±1dBm	N/A	N/A
10		MID		22.3±1dBm	22±1dBm	23±1dBm	22.3±1dBm	19±1dBm	19.5±1dBm
10		HIGH		22±1dBm	22.3±1dBm	N/A	22.3±1dBm	N/A	N/A
10	25	LOW		21±1dBm	21.3±1dBm	N/A	21±1dBm	N/A	N/A
10		MID		21±1dBm	21±1dBm	21.5±1dBm	21±1dBm	18±1dBm	18±1dBm
10		HIGH		20.8±1dBm	21±1dBm	N/A	21±1dBm	N/A	N/A
10	50	LOW		21±1dBm	21±1dBm	N/A	21±1dBm	N/A	N/A
10		MID		21±1dBm	21±1dBm	21.5±1dBm	21±1dBm	18±1dBm	18±1dBm
10		HIGH		20.7±1dBm	21±1dBm	N/A	21±1dBm	N/A	N/A

11. EUT and Test Setup Photo

11.1 EUT Photos

Front side



Back side

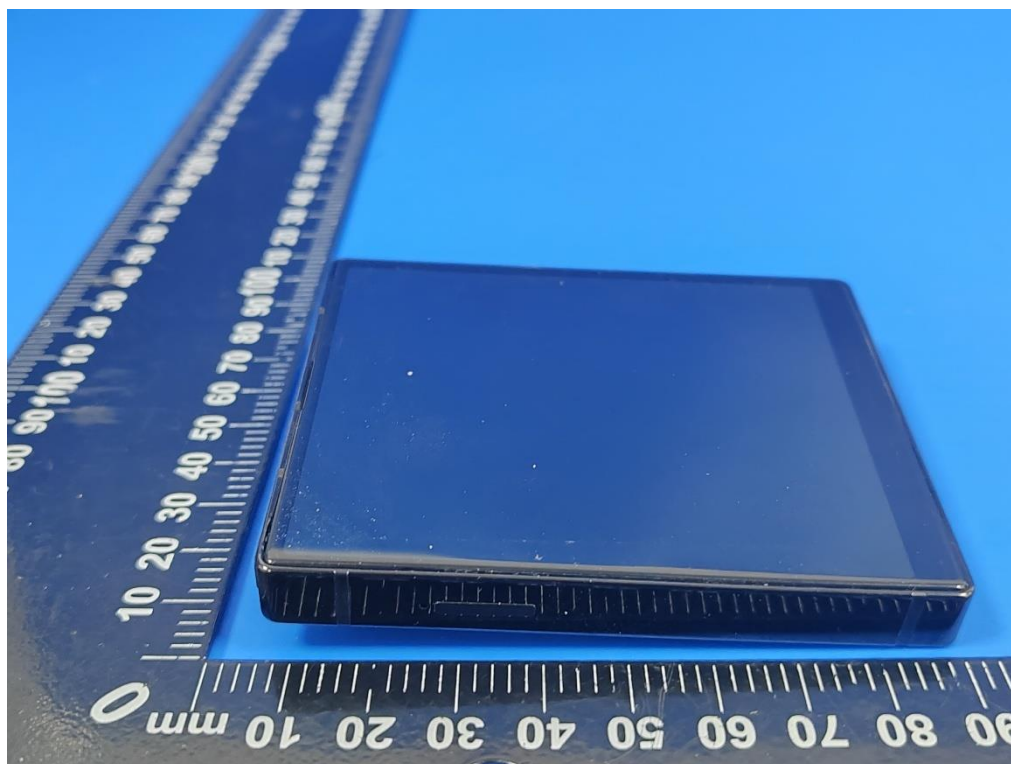




Right Edge



Left Edge

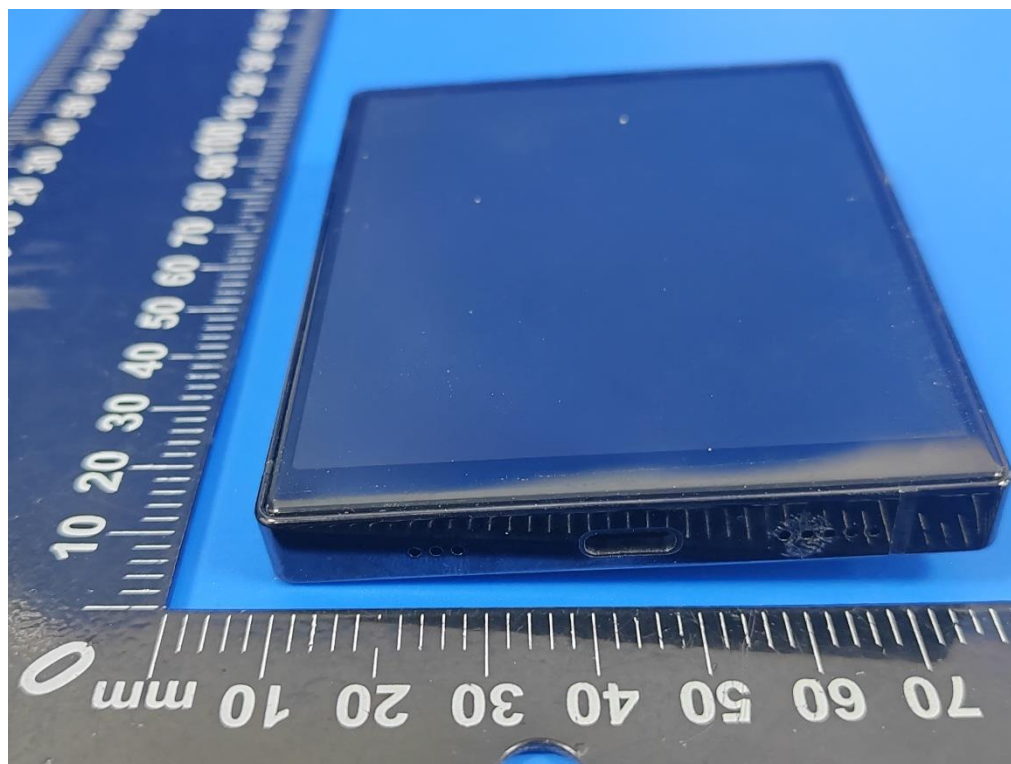




Top Edge



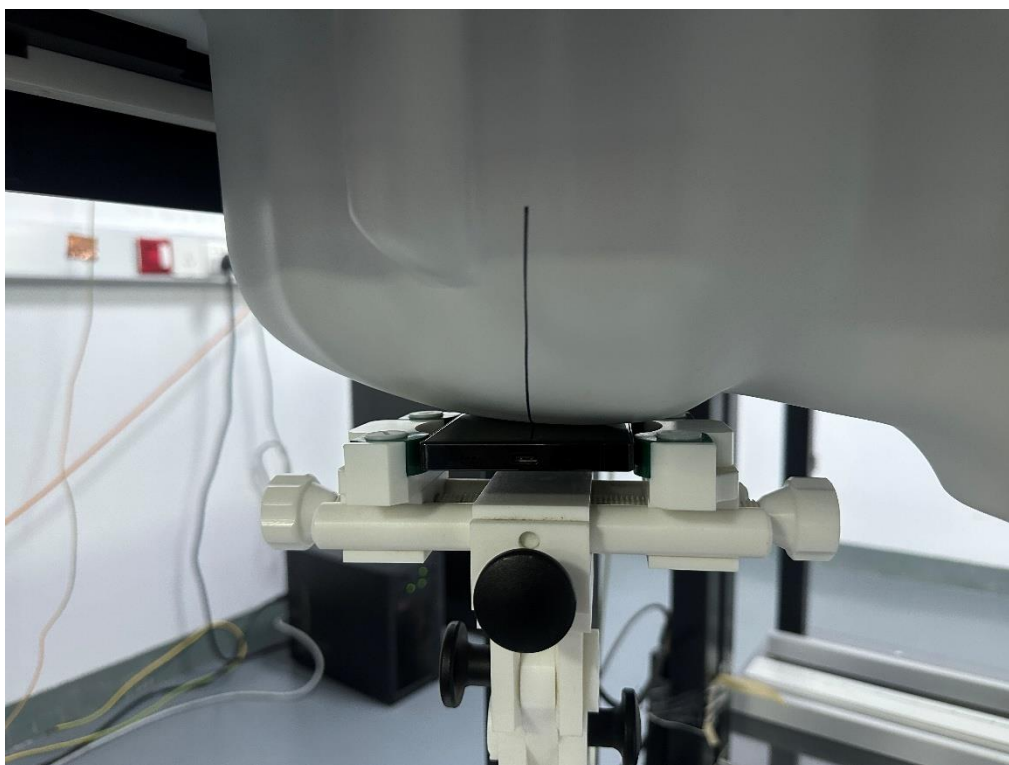
Bottom Edge



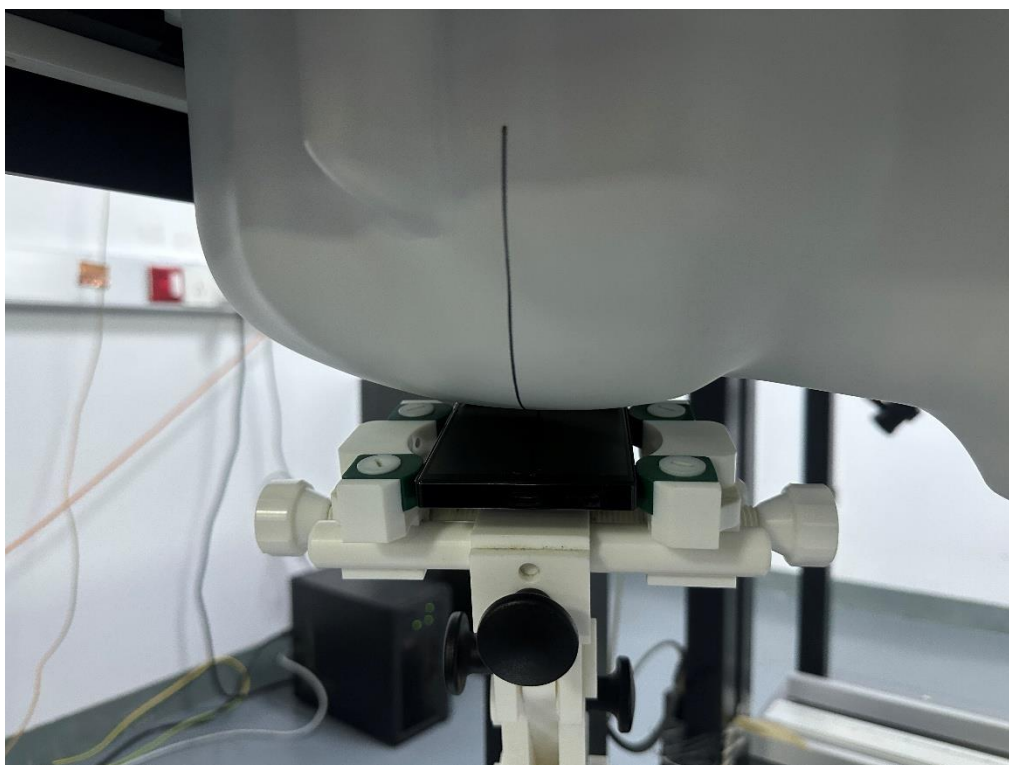


11.2 Setup Photos

Right Touch

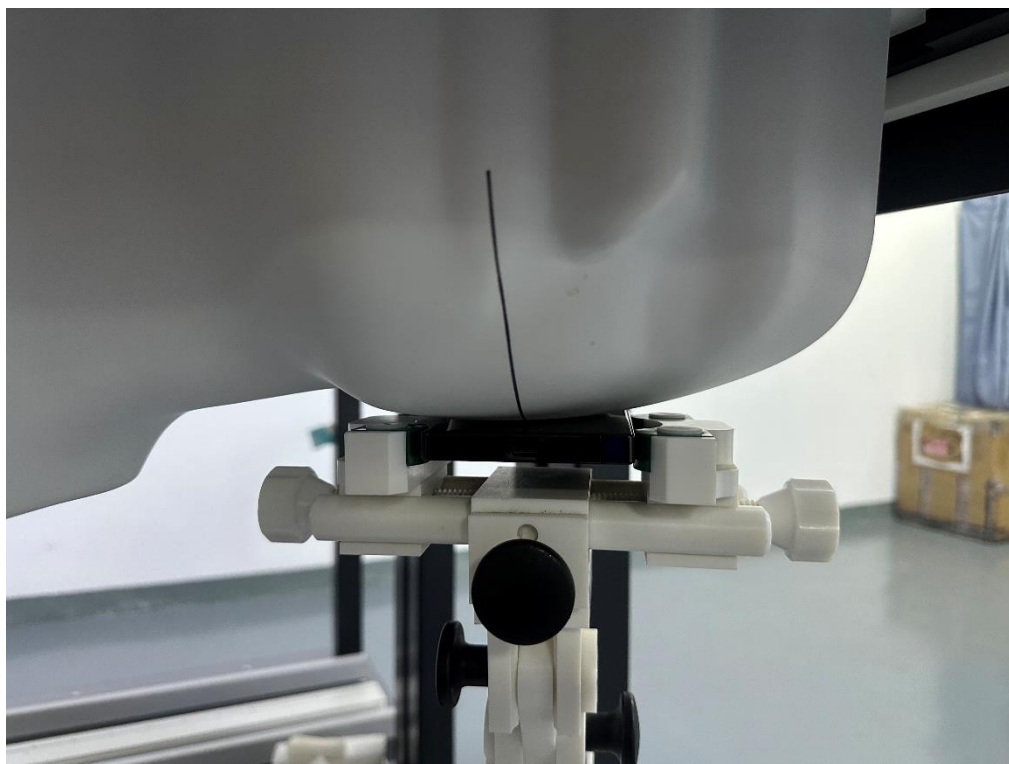


Right Tilt

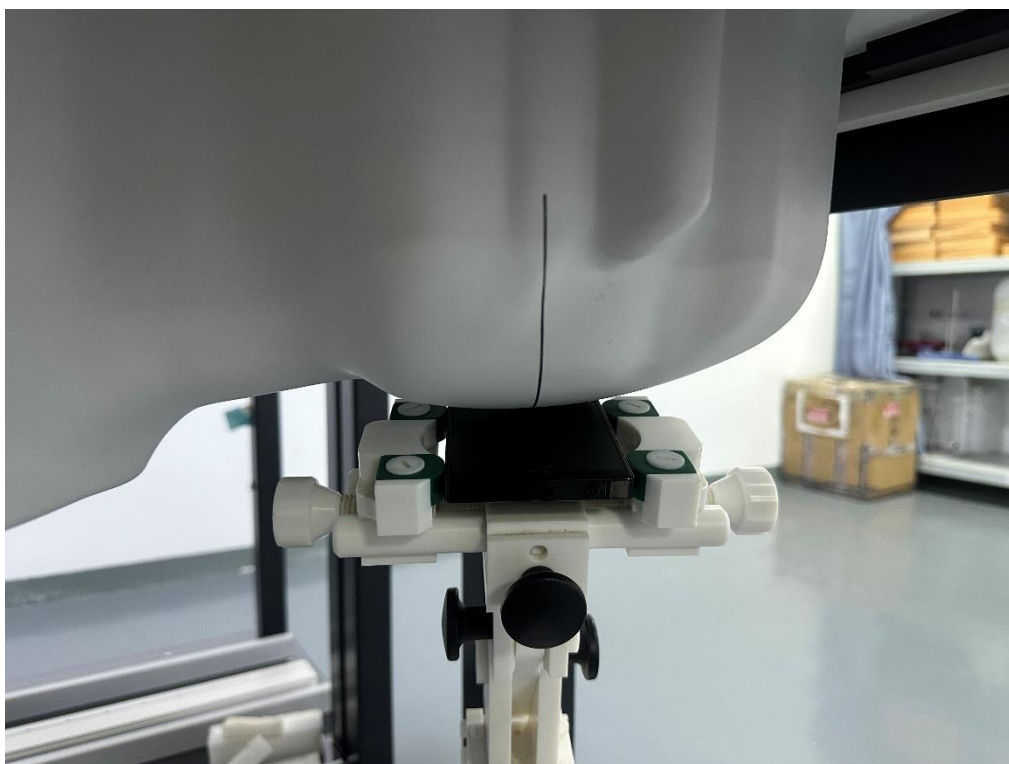




Left Touch

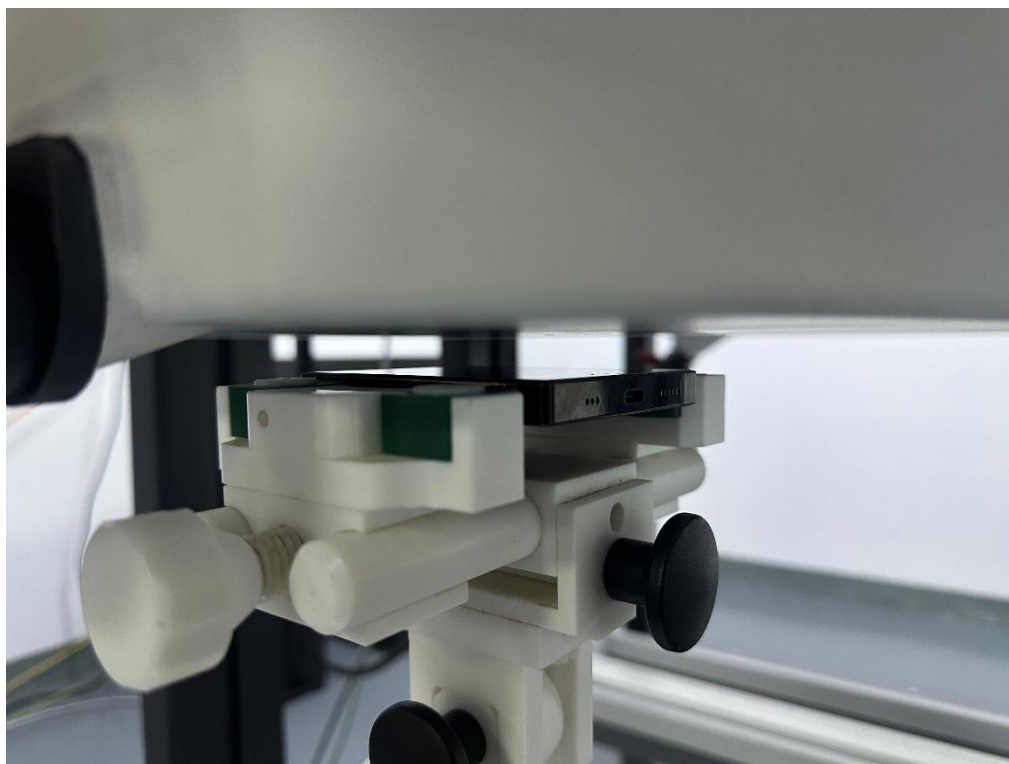


Left Tilt

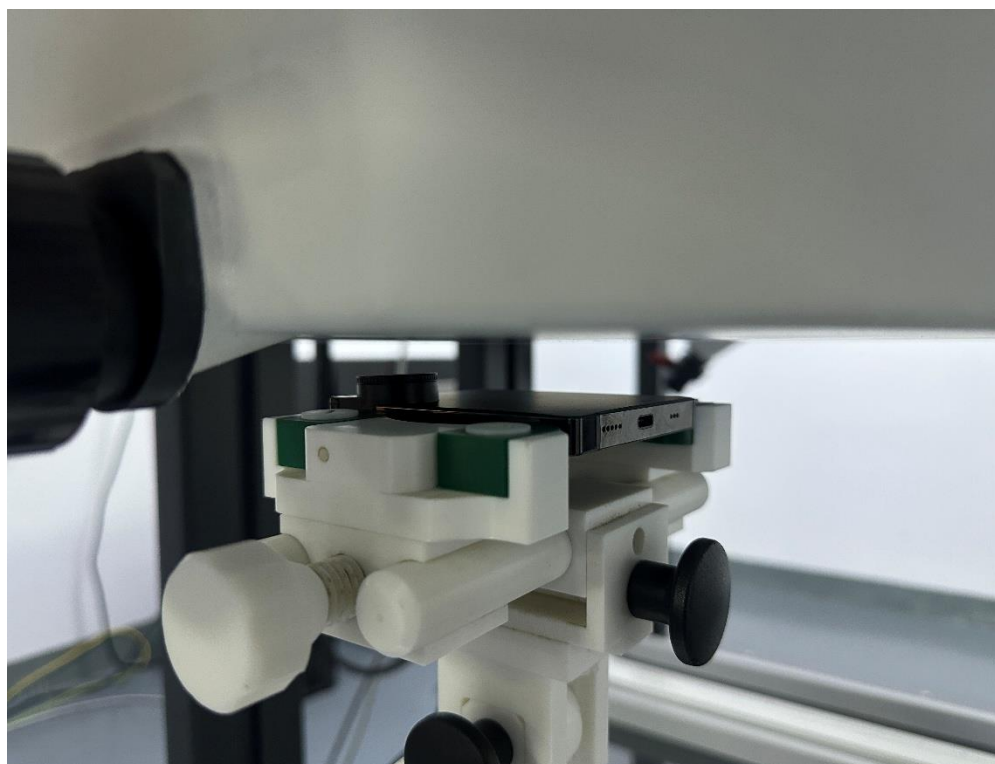




Body Front side (separation distance is 10mm)

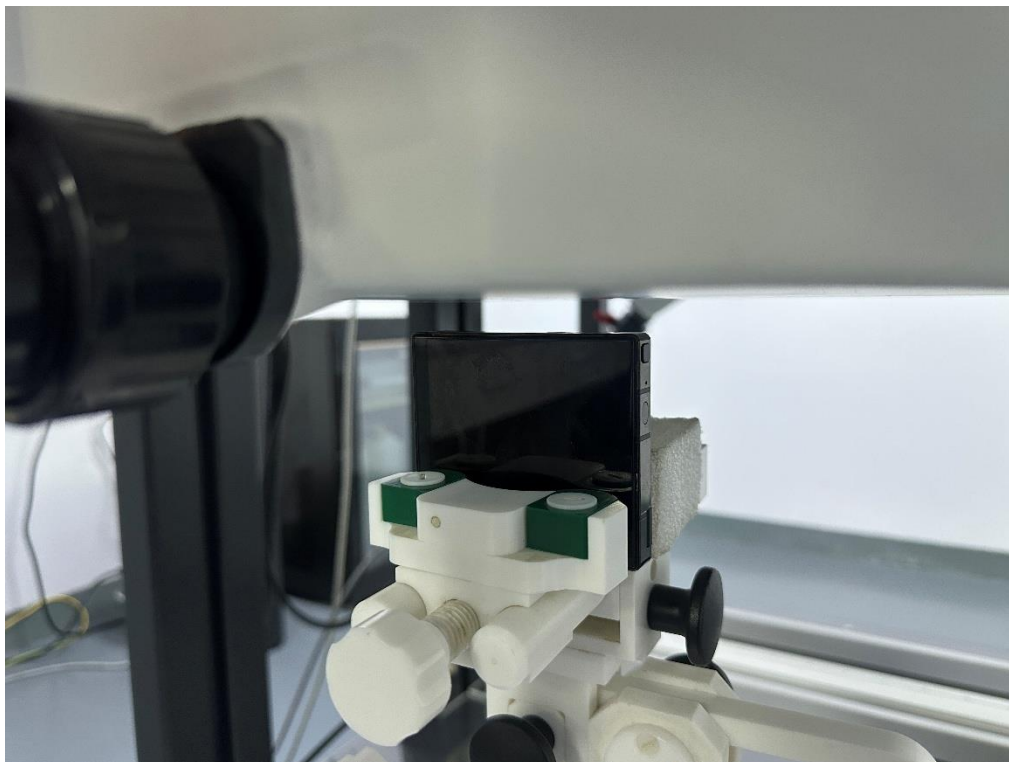


Body Back side (separation distance 10mm)

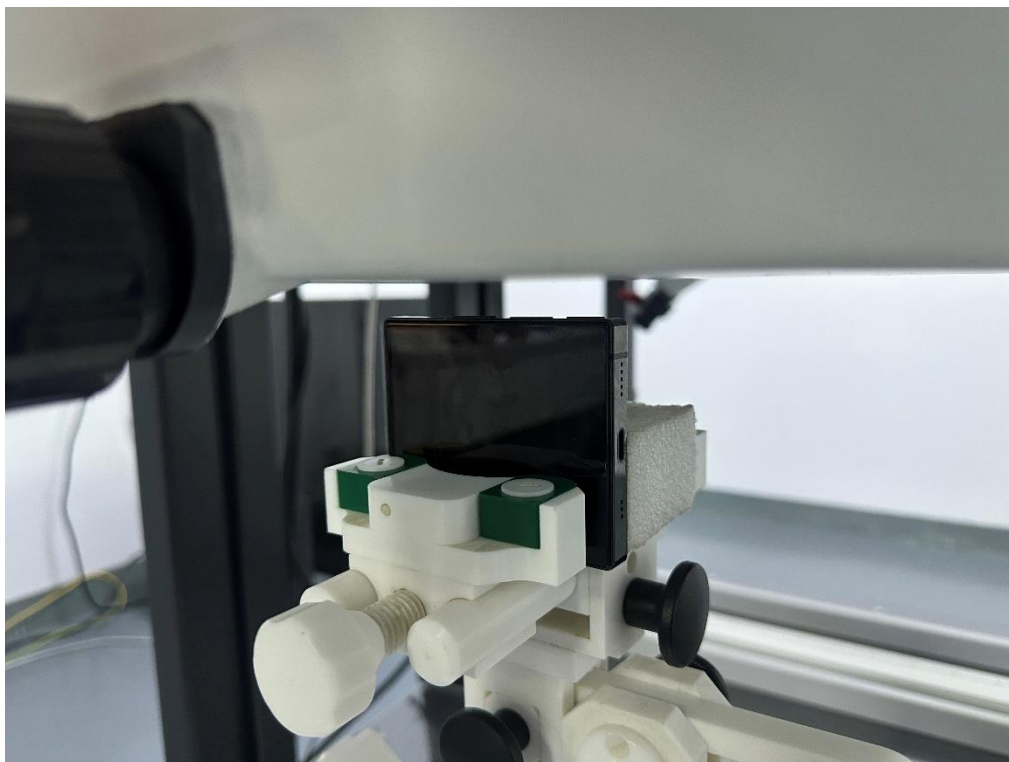




Body Left side (separation distance is 10mm)

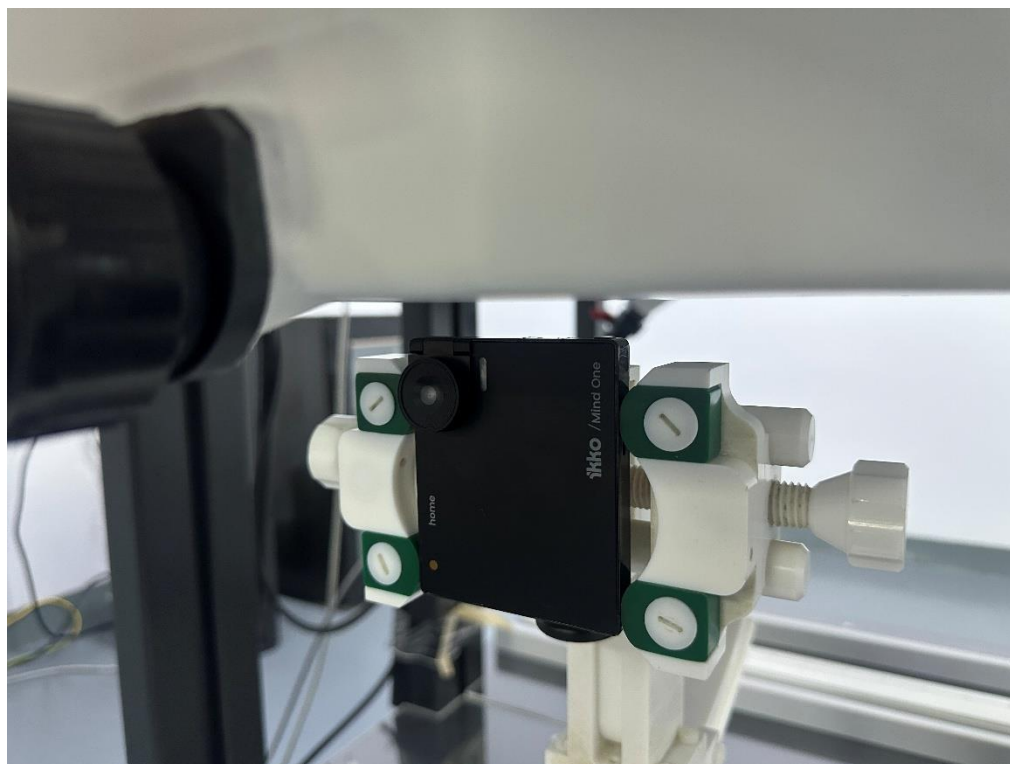


Body Right side (separation distance is 10mm)

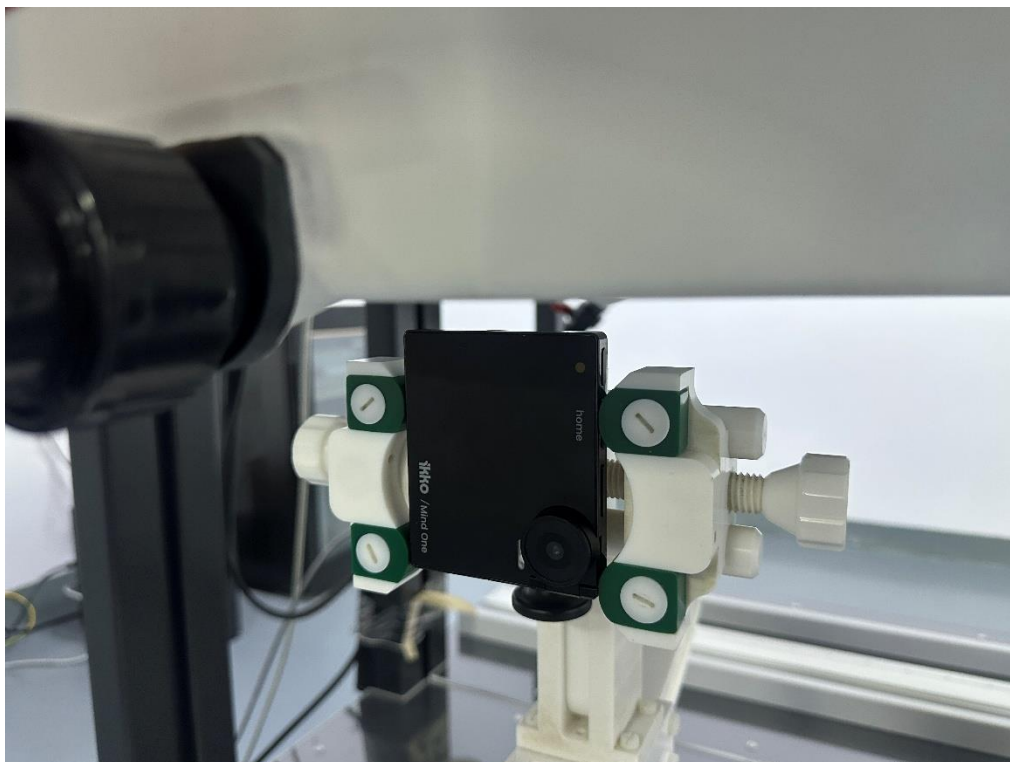




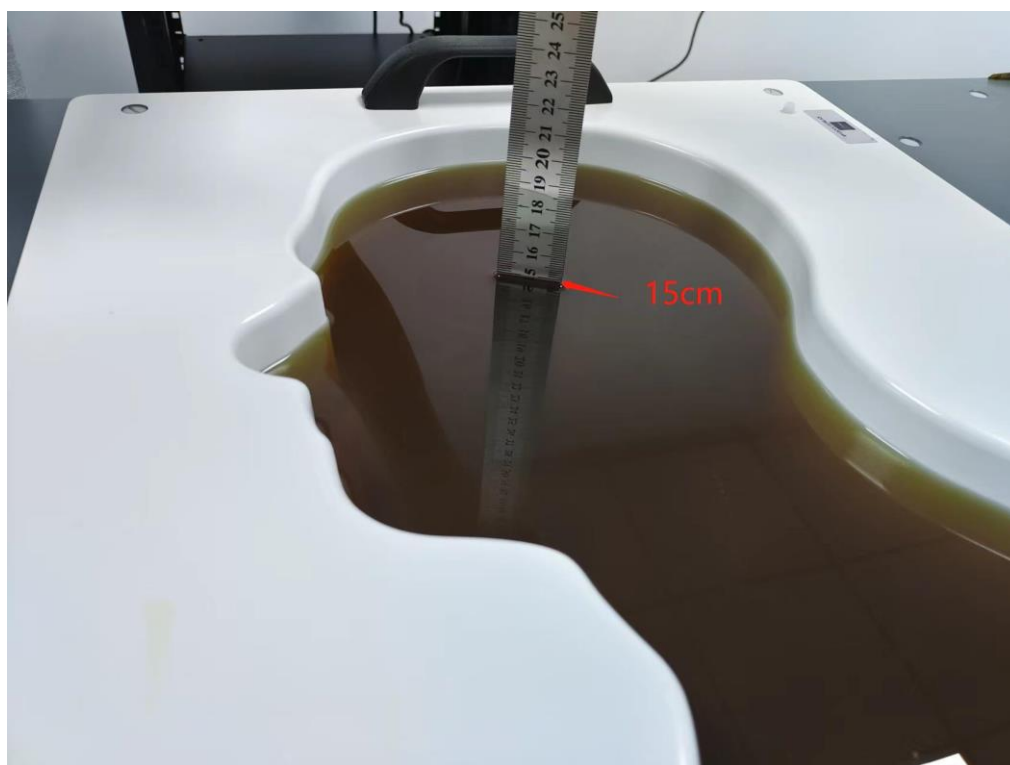
Body Top side (separation distance is 10mm)



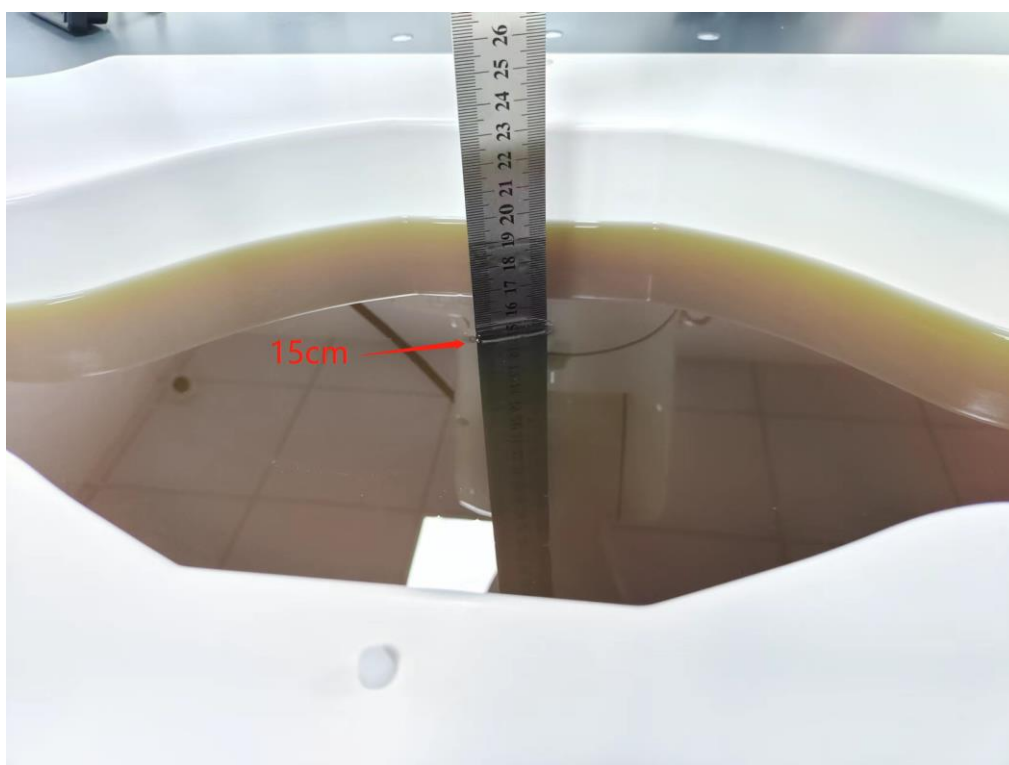
Body Bottom side (separation distance is 10mm)



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	0.115	0.67	33.50	33.33	1.040	0.120	/
		Right Tilt	848.8	0.103	1.91	33.50	33.33	1.040	0.107	/
		Left Cheek	848.8	0.148	-3.47	33.50	33.33	1.040	0.154	1
		Left Tilt	848.8	0.128	-0.35	33.50	33.33	1.040	0.133	/
PCS 1900	GSM	Right Cheek	1850.2	0.139	2.71	30.30	30.02	1.067	0.148	/
		Right Tilt	1850.2	0.123	3.43	30.30	30.02	1.067	0.131	/
		Left Cheek	1850.2	0.322	-2.14	30.30	30.02	1.067	0.343	3
		Left Tilt	1850.2	0.277	-3.00	30.30	30.02	1.067	0.295	/
WCDMA Band II	RMC	Right Cheek	1852.4	0.175	1.36	23.00	22.65	1.084	0.190	/
		Right Tilt	1852.4	0.150	-0.04	23.00	22.65	1.084	0.163	/
		Left Cheek	1852.4	0.455	3.79	23.00	22.65	1.084	0.493	5
		Left Tilt	1852.4	0.388	0.89	23.00	22.65	1.084	0.421	/
WCDMA Band V	RMC	Right Cheek	826.4	0.180	0.19	24.80	24.53	1.064	0.192	/
		Right Tilt	826.4	0.157	0.04	24.80	24.53	1.064	0.167	/
		Left Cheek	826.4	0.226	0.67	24.80	24.53	1.064	0.240	7
		Left Tilt	826.4	0.197	-1.60	24.80	24.53	1.064	0.210	/
2.4G WLAN	802.11b	Right Cheek	2437	0.096	1.65	17.30	17.13	1.040	0.100	/
		Right Tilt	2437	0.123	-0.99	17.30	17.13	1.040	0.128	/
		Left Cheek	2437	0.169	-1.67	17.30	17.13	1.040	0.176	/
		Left Tilt	2437	0.225	-1.33	17.30	17.13	1.040	0.234	9
5.2G WLAN	802.11a	Right Cheek	5180	0.175	-2.07	14.00	13.61	1.094	0.191	/
		Right Tilt	5180	0.229	-2.88	14.00	13.61	1.094	0.251	/
		Left Cheek	5180	0.329	2.42	14.00	13.61	1.094	0.360	/
		Left Tilt	5180	0.380	-0.27	14.00	13.61	1.094	0.416	11
5.3G WLAN	802.11a	Right Cheek	5260	0.070	-3.27	13.00	12.75	1.059	0.074	/
		Right Tilt	5260	0.092	3.37	13.00	12.75	1.059	0.097	/
		Left Cheek	5260	0.130	2.55	13.00	12.75	1.059	0.138	/
		Left Tilt	5260	0.151	-1.31	13.00	12.75	1.059	0.160	13
5.6G WLAN	802.11a	Right Cheek	5700	0.196	2.58	13.30	13.12	1.042	0.204	/
		Right Tilt	5700	0.261	3.89	13.30	13.12	1.042	0.272	/
		Left Cheek	5700	0.371	-2.65	13.30	13.12	1.042	0.387	/
		Left Tilt	5700	0.435	0.17	13.30	13.12	1.042	0.453	15
5.8G WLAN	802.11a	Right Cheek	5785	0.193	-3.83	13.80	13.55	1.059	0.204	/
		Right Tilt	5785	0.253	-0.95	13.80	13.55	1.059	0.268	/
		Left Cheek	5785	0.362	0.32	13.80	13.55	1.059	0.383	/
		Left Tilt	5785	0.420	1.93	13.80	13.55	1.059	0.445	17



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	49	Right Cheek	1860	0.189	-1.91	23.00	22.77	1.054	0.199	/
			50	0	Right Cheek	1860	0.181	3.03	23.00	22.75	1.059	0.192	/
			1	49	Right Tilt	1860	0.172	3.39	23.00	22.77	1.054	0.181	/
			50	0	Right Tilt	1860	0.162	1.78	23.00	22.75	1.059	0.172	/
			1	49	Left Cheek	1860	0.448	-3.84	23.00	22.77	1.054	0.472	19
			50	0	Left Cheek	1860	0.432	1.51	23.00	22.75	1.059	0.458	/
			1	49	Left Tilt	1860	0.385	-1.39	23.00	22.77	1.054	0.406	/
			50	0	Left Tilt	1860	0.370	-3.57	23.00	22.75	1.059	0.392	/
LTE Band 4	20M	QPSK	1	0	Right Cheek	1732.5	0.189	-3.21	23.00	22.84	1.038	0.196	/
			50	49	Right Cheek	1732.5	0.155	-1.60	22.00	21.59	1.099	0.170	/
			1	0	Right Tilt	1732.5	0.165	0.38	23.00	22.84	1.038	0.171	/
			50	49	Right Tilt	1732.5	0.139	0.80	22.00	21.59	1.099	0.153	/
			1	0	Left Cheek	1732.5	0.442	2.28	23.00	22.84	1.038	0.459	21
			50	49	Left Cheek	1732.5	0.360	-0.53	22.00	21.59	1.099	0.396	/
			1	0	Left Tilt	1732.5	0.384	-2.23	23.00	22.84	1.038	0.398	/
			50	49	Left Tilt	1732.5	0.318	1.82	22.00	21.59	1.099	0.349	/
LTE Band 5	10M	QPSK	1	24	Right Cheek	829	0.087	2.66	24.00	23.89	1.026	0.089	/
			25	12	Right Cheek	829	0.074	-3.90	23.00	22.80	1.047	0.077	/
			1	24	Right Tilt	829	0.077	-1.92	24.00	23.89	1.026	0.079	/
			25	12	Right Tilt	829	0.063	-3.65	23.00	22.80	1.047	0.066	/
			1	24	Left Cheek	829	0.111	-0.44	24.00	23.89	1.026	0.114	23
			25	12	Left Cheek	829	0.093	-2.09	23.00	22.80	1.047	0.097	/
			1	24	Left Tilt	829	0.096	1.52	24.00	23.89	1.026	0.098	/
			25	12	Left Tilt	829	0.080	0.96	23.00	22.80	1.047	0.084	/



LTE Band 7	20M	QPSK	1	49	Right Cheek	2560	0.443	-2.18	21.50	21.20	1.072	0.475	/
			50	49	Right Cheek	2560	0.367	3.61	20.30	20.18	1.028	0.377	/
			1	49	Right Tilt	2560	0.383	2.95	21.50	21.20	1.072	0.410	/
			50	49	Right Tilt	2560	0.318	-1.16	20.30	20.18	1.028	0.327	/
			1	49	Left Cheek	2510	0.958	3.73	21.20	20.98	1.052	1.008	/
			1	49	Left Cheek	2535	0.912	1.53	21.00	20.71	1.069	0.975	/
			1	49	Left Cheek	2560	1.045	-1.84	21.50	21.20	1.072	1.120	25
			50	49	Left Cheek	2510	0.807	0.03	20.30	20.18	1.028	0.830	/
			50	49	Left Cheek	2535	0.764	-0.91	19.80	19.57	1.054	0.806	/
			50	49	Left Cheek	2560	0.848	2.93	20.30	20.18	1.028	0.872	/
			100	49	Left Cheek	2560	0.778	-0.67	20.20	20.10	1.023	0.796	/
			1	49	Left Tilt	2510	0.817	-1.52	21.20	20.98	1.052	0.859	/
			1	49	Left Tilt	2535	0.783	2.00	21.00	20.71	1.069	0.837	/
			1	49	Left Tilt	2560	0.899	-0.05	21.50	21.20	1.072	0.963	/
			50	49	Left Tilt	2560	0.731	-2.85	20.30	20.18	1.028	0.751	/
LTE Band 12	10M	QPSK	1	24	Right Cheek	707.5	0.072	1.20	24.30	24.06	1.057	0.076	/
			25	24	Right Cheek	704	0.062	-2.66	23.30	23.03	1.064	0.066	/
			1	24	Right Tilt	707.5	0.061	-0.89	24.30	24.06	1.057	0.064	/
			25	24	Right Tilt	704	0.052	3.41	23.30	23.03	1.064	0.055	/
			1	24	Left Cheek	707.5	0.094	-3.26	24.30	24.06	1.057	0.099	27
			25	24	Left Cheek	704	0.077	0.65	23.30	23.03	1.064	0.082	/
			1	24	Left Tilt	707.5	0.084	1.92	24.30	24.06	1.057	0.089	/
			25	24	Left Tilt	704	0.069	-1.17	23.30	23.03	1.064	0.073	/
LTE Band 13	10M	QPSK	1	49	Right Cheek	782	0.088	0.96	24.80	24.53	1.064	0.094	/
			25	24	Right Cheek	782	0.073	2.67	23.70	23.47	1.054	0.077	/
			1	49	Right Tilt	782	0.076	2.18	24.80	24.53	1.064	0.081	/
			25	24	Right Tilt	782	0.063	-0.34	23.70	23.47	1.054	0.066	/
			1	49	Left Cheek	782	0.115	-0.85	24.80	24.53	1.064	0.122	29
			25	24	Left Cheek	782	0.095	3.33	23.70	23.47	1.054	0.100	/
			1	49	Left Tilt	782	0.102	0.97	24.80	24.53	1.064	0.109	/
			25	24	Left Tilt	782	0.082	-1.99	23.70	23.47	1.054	0.086	/



LTE Band 17	10M	QPSK	1	24	Right Cheek	709	0.074	1.14	24.30	24.09	1.050	0.078	/
			25	12	Right Cheek	709	0.065	-1.93	23.00	22.88	1.028	0.067	/
			1	24	Right Tilt	709	0.066	1.54	24.30	24.09	1.050	0.069	/
			25	12	Right Tilt	709	0.058	-3.11	23.00	22.88	1.028	0.060	/
			1	24	Left Cheek	709	0.094	-2.34	24.30	24.09	1.050	0.099	31
			25	12	Left Cheek	709	0.084	-0.10	23.00	22.88	1.028	0.086	/
			1	24	Left Tilt	709	0.083	1.33	24.30	24.09	1.050	0.087	/
			25	12	Left Tilt	709	0.077	3.96	23.00	22.88	1.028	0.079	/
LTE Band 38	20M	QPSK	1	49	Right Cheek	2595	0.421	-0.91	22.00	21.83	1.040	0.438	/
			50	24	Right Cheek	2595	0.374	0.38	21.00	20.74	1.062	0.397	/
			1	49	Right Tilt	2595	0.363	2.26	22.00	21.83	1.040	0.377	/
			50	24	Right Tilt	2595	0.319	-3.61	21.00	20.74	1.062	0.339	/
			1	49	Left Cheek	2580	0.853	-3.77	21.30	21.05	1.059	0.904	/
			1	49	Left Cheek	2595	0.990	3.79	22.00	21.83	1.040	1.030	33
			1	49	Left Cheek	2610	0.934	1.83	22.00	21.72	1.067	0.996	/
			50	24	Left Cheek	2580	0.762	-1.97	20.30	20.03	1.064	0.811	/
			50	24	Left Cheek	2595	0.869	0.53	21.00	20.74	1.062	0.923	/
			50	24	Left Cheek	2610	0.810	2.77	21.00	20.60	1.096	0.888	/
			100	0	Left Cheek	2595	0.753	-2.10	20.80	20.61	1.045	0.787	/
			1	49	Left Tilt	2580	0.715	-2.27	21.30	21.05	1.059	0.757	/
			1	49	Left Tilt	2595	0.844	2.25	22.00	21.83	1.040	0.878	/
			1	49	Left Tilt	2610	0.782	-0.19	22.00	21.72	1.067	0.834	/
			50	24	Left Tilt	2595	0.738	0.17	21.00	20.74	1.062	0.784	/
LTE Band 40	10M	QPSK	1	49	Right Cheek	2310	0.299	-0.64	21.00	20.82	1.042	0.312	/
			50	24	Right Cheek	2310	0.261	-2.31	20.00	19.67	1.079	0.282	/
			1	49	Right Tilt	2310	0.258	-1.84	21.00	20.82	1.042	0.269	/
			50	24	Right Tilt	2310	0.228	1.73	20.00	19.67	1.079	0.246	/
			1	49	Left Cheek	2310	0.697	-1.22	21.00	20.82	1.042	0.726	35
			50	24	Left Cheek	2310	0.611	-2.12	20.00	19.67	1.079	0.659	/
			1	49	Left Tilt	2310	0.593	3.03	21.00	20.82	1.042	0.618	/
			50	24	Left Tilt	2310	0.524	-0.19	20.00	19.67	1.079	0.565	/



LTE Band 41	20M	QPSK	1	49	Right Cheek	2680	0.352	1.65	22.10	21.90	1.047	0.369	/
			50	24	Right Cheek	2593	0.287	-0.22	20.80	20.47	1.079	0.310	/
			1	49	Right Tilt	2680	0.309	0.67	22.10	21.90	1.047	0.324	/
			50	24	Right Tilt	2593	0.251	-2.11	20.80	20.47	1.079	0.271	/
			1	49	Left Cheek	2506	0.703	3.76	20.60	20.36	1.057	0.743	/
			1	49	Left Cheek	2593	0.759	3.70	21.80	21.56	1.057	0.802	/
			1	49	Left Cheek	2680	0.835	-0.72	22.10	21.90	1.047	0.874	37
			50	24	Left Cheek	2593	0.667	-1.64	20.80	20.47	1.079	0.720	/
			1	49	Left Tilt	2680	0.715	1.55	22.10	21.90	1.047	0.749	/
			50	24	Left Tilt	2593	0.578	-0.01	20.80	20.47	1.079	0.624	/
LTE Band 66	20M	QPSK	1	0	Right Cheek	1770	0.376	2.13	22.20	21.93	1.064	0.400	/
			50	49	Right Cheek	1720	0.304	-0.39	20.70	20.55	1.035	0.315	/
			1	0	Right Tilt	1770	0.322	-2.52	22.20	21.93	1.064	0.343	/
			50	49	Right Tilt	1720	0.262	2.25	20.70	20.55	1.035	0.271	/
			1	0	Left Cheek	1720	0.810	0.67	21.70	21.36	1.081	0.876	/
			1	0	Left Cheek	1745	0.841	1.12	22.00	21.80	1.047	0.881	/
			1	0	Left Cheek	1770	0.890	-1.66	22.20	21.93	1.064	0.947	39
			50	49	Left Cheek	1720	0.719	-3.81	20.70	20.55	1.035	0.744	/
			1	0	Left Tilt	1720	0.668	1.40	21.70	21.36	1.081	0.722	/
			1	0	Left Tilt	1745	0.712	-0.47	22.00	21.80	1.047	0.746	/
			1	0	Left Tilt	1770	0.757	-2.69	22.20	21.93	1.064	0.806	/
			50	49	Left Tilt	1720	0.607	1.50	20.70	20.55	1.035	0.628	/

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	GPRS Data-4 Slot	Front Side	848.8	0.138	0.46	30.00	29.79	1.050	0.145	/
		Back Side	848.8	0.165	-1.12	30.00	29.79	1.050	0.173	/
		Left Side	848.8	0.122	0.78	30.00	29.79	1.050	0.128	/
		Right Side	848.8	0.081	0.98	30.00	29.79	1.050	0.085	/
		Top Side	848.8	0.020	0.93	30.00	29.79	1.050	0.021	/
		Bottom Side	848.8	0.225	1.85	30.00	29.79	1.050	0.236	2
PCS 1900	GPRS Data-4 Slot	Front Side	1850.2	0.246	2.97	26.50	26.43	1.016	0.250	/
		Back Side	1850.2	0.218	2.32	26.50	26.43	1.016	0.222	/
		Left Side	1850.2	0.390	3.85	26.50	26.43	1.016	0.396	/
		Right Side	1850.2	0.129	-2.98	26.50	26.43	1.016	0.131	/
		Top Side	1850.2	0.039	-1.83	26.50	26.43	1.016	0.040	/
		Bottom Side	1850.2	0.512	2.36	26.50	26.43	1.016	0.520	4
WCDMA Band II	RMC	Front Side	1852.4	0.208	3.26	23.00	22.65	1.084	0.225	/
		Back Side	1852.4	0.171	3.84	23.00	22.65	1.084	0.185	/
		Left Side	1852.4	0.319	2.58	23.00	22.65	1.084	0.346	/
		Right Side	1852.4	0.083	3.05	23.00	22.65	1.084	0.090	/
		Bottom Side	1852.4	0.433	2.64	23.00	22.65	1.084	0.469	6
WCDMA Band V	RMC	Front Side	826.4	0.174	3.89	24.80	24.53	1.064	0.185	/
		Back Side	826.4	0.209	-3.11	24.80	24.53	1.064	0.222	/
		Left Side	826.4	0.157	1.78	24.80	24.53	1.064	0.167	/
		Right Side	826.4	0.112	0.98	24.80	24.53	1.064	0.119	/
		Bottom Side	826.4	0.277	-0.64	24.80	24.53	1.064	0.295	8
2.4GHz WLAN	802.11b	Front Side	2437	0.067	-0.61	17.30	17.13	1.040	0.070	/
		Back Side	2437	0.114	3.01	17.30	17.13	1.040	0.119	/
		Left Side	2437	0.103	-1.80	17.30	17.13	1.040	0.107	/
		Top Side	2437	0.142	1.43	17.30	17.13	1.040	0.148	10
5.2GHz WLAN	802.11a	Front Side	5180	0.081	2.05	14.00	13.61	1.094	0.089	/
		Back Side	5180	0.140	-2.87	14.00	13.61	1.094	0.153	/
		Left Side	5180	0.129	-3.60	14.00	13.61	1.094	0.141	/
		Top Side	5180	0.179	-2.54	14.00	13.61	1.094	0.196	12
5.3GHz WLAN	802.11a	Front Side	5260	0.070	1.06	13.00	12.75	1.059	0.074	/
		Back Side	5260	0.121	1.01	13.00	12.75	1.059	0.128	/
		Left Side	5260	0.107	0.09	13.00	12.75	1.059	0.113	/
		Top Side	5260	0.151	-1.11	13.00	12.75	1.059	0.160	14
5.6GHz WLAN	802.11a	Front Side	5700	0.141	0.60	13.30	13.12	1.042	0.147	/
		Back Side	5700	0.242	1.31	13.30	13.12	1.042	0.252	/
		Left Side	5700	0.218	-2.77	13.30	13.12	1.042	0.227	/
		Top Side	5700	0.306	3.51	13.30	13.12	1.042	0.319	16
5.8GHz WLAN	802.11a	Front Side	5785	0.027	-3.82	13.80	13.55	1.059	0.029	/
		Back Side	5785	0.047	3.52	13.80	13.55	1.059	0.050	/
		Left Side	5785	0.044	1.27	13.80	13.55	1.059	0.047	/
		Top Side	5785	0.056	-0.21	13.80	13.55	1.059	0.059	18



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	49	Front side	1860	0.101	-2.24	23.00	22.77	1.054	0.106	/
			50	0	Front side	1860	0.098	1.42	23.00	22.75	1.059	0.104	/
			1	49	Back Side	1860	0.088	2.90	23.00	22.77	1.054	0.093	/
			50	0	Back Side	1860	0.085	2.02	23.00	22.75	1.059	0.090	/
			1	49	Left Side	1860	0.162	1.70	23.00	22.77	1.054	0.171	/
			50	0	Left Side	1860	0.157	-2.08	23.00	22.75	1.059	0.166	/
			1	49	Right Side	1860	0.052	3.56	23.00	22.77	1.054	0.055	/
			50	0	Right Side	1860	0.049	-2.86	23.00	22.75	1.059	0.052	/
			1	49	Bottom Side	1860	0.209	0.69	23.00	22.77	1.054	0.220	20
			50	0	Bottom Side	1860	0.200	-1.32	23.00	22.75	1.059	0.212	/
LTE Band 4	20M	QPSK	1	0	Front side	1732.5	0.168	-2.43	23.00	22.84	1.038	0.174	/
			50	49	Front side	1732.5	0.142	0.63	22.00	21.59	1.099	0.156	/
			1	0	Back Side	1732.5	0.147	2.46	23.00	22.84	1.038	0.153	/
			50	49	Back Side	1732.5	0.121	-1.74	22.00	21.59	1.099	0.133	/
			1	0	Left Side	1732.5	0.269	1.24	23.00	22.84	1.038	0.279	/
			50	49	Left Side	1732.5	0.229	-2.97	22.00	21.59	1.099	0.252	/
			1	0	Right Side	1732.5	0.085	2.81	23.00	22.84	1.038	0.088	/
			50	49	Right Side	1732.5	0.074	1.04	22.00	21.59	1.099	0.081	/
			1	0	Bottom Side	1732.5	0.349	3.84	23.00	22.84	1.038	0.362	22
			50	49	Bottom Side	1732.5	0.290	1.13	22.00	21.59	1.099	0.319	/
LTE Band 5	10M	QPSK	1	24	Front side	829	0.069	-3.31	24.00	23.89	1.026	0.071	/
			25	12	Front side	829	0.062	3.24	23.00	22.80	1.047	0.065	/
			1	24	Back Side	829	0.085	-3.00	24.00	23.89	1.026	0.087	/
			25	12	Back Side	829	0.074	0.51	23.00	22.80	1.047	0.077	/
			1	24	Left Side	829	0.062	2.92	24.00	23.89	1.026	0.064	/
			25	12	Left Side	829	0.052	-1.71	23.00	22.80	1.047	0.054	/
			1	24	Right Side	829	0.038	3.45	24.00	23.89	1.026	0.039	/
			25	12	Right Side	829	0.037	3.94	23.00	22.80	1.047	0.039	/
			1	24	Bottom Side	829	0.111	3.60	24.00	23.89	1.026	0.114	24
			25	12	Bottom Side	829	0.090	-1.20	23.00	22.80	1.047	0.094	/
	20M	QPSK	1	49	Front side	2560	0.187	1.63	21.50	21.20	1.072	0.200	/



LTE Band 7			50	49	Front side	2560	0.151	-2.48	20.30	20.18	1.028	0.155	/
			1	49	Back Side	2560	0.167	2.66	21.50	21.20	1.072	0.179	/
			50	49	Back Side	2560	0.135	3.78	20.30	20.18	1.028	0.139	/
			1	49	Left Side	2560	0.297	2.44	21.50	21.20	1.072	0.318	/
			50	49	Left Side	2560	0.244	1.20	20.30	20.18	1.028	0.251	/
			1	49	Right Side	2560	0.100	1.40	21.50	21.20	1.072	0.107	/
			50	49	Right Side	2560	0.089	1.07	20.30	20.18	1.028	0.091	/
			1	49	Bottom Side	2560	0.390	-1.85	21.50	21.20	1.072	0.418	26
			50	49	Bottom Side	2560	0.317	-2.74	20.30	20.18	1.028	0.326	/
LTE Band 12	10M	QPSK	1	24	Front side	707.5	0.046	2.22	24.30	24.06	1.057	0.049	/
			25	24	Front side	704	0.041	-2.72	23.30	23.03	1.064	0.044	/
			1	24	Back Side	707.5	0.053	3.26	24.30	24.06	1.057	0.056	/
			25	24	Back Side	704	0.048	-2.72	23.30	23.03	1.064	0.051	/
			1	24	Left Side	707.5	0.043	-1.75	24.30	24.06	1.057	0.045	/
			25	24	Left Side	704	0.034	0.30	23.30	23.03	1.064	0.036	/
			1	24	Right Side	707.5	0.026	3.47	24.30	24.06	1.057	0.027	/
			25	24	Right Side	704	0.023	-2.34	23.30	23.03	1.064	0.024	/
			1	24	Bottom Side	707.5	0.073	-3.48	24.30	24.06	1.057	0.077	28
			25	24	Bottom Side	704	0.063	2.56	23.30	23.03	1.064	0.067	/
LTE Band 13	10M	QPSK	1	49	Front side	782	0.070	2.58	24.80	24.53	1.064	0.074	/
			25	24	Front side	782	0.062	3.34	23.70	23.47	1.054	0.065	/
			1	49	Back Side	782	0.087	2.39	24.80	24.53	1.064	0.093	/
			25	24	Back Side	782	0.069	0.40	23.70	23.47	1.054	0.073	/
			1	49	Left Side	782	0.064	0.56	24.80	24.53	1.064	0.068	/
			25	24	Left Side	782	0.058	3.47	23.70	23.47	1.054	0.061	/
			1	49	Right Side	782	0.041	0.81	24.80	24.53	1.064	0.044	/
			25	24	Right Side	782	0.036	1.88	23.70	23.47	1.054	0.038	/
			1	49	Bottom Side	782	0.115	-0.06	24.80	24.53	1.064	0.122	30
			25	24	Bottom Side	782	0.099	-1.72	23.70	23.47	1.054	0.104	/
LTE Band 17	10M	QPSK	1	24	Front side	709	0.054	-1.63	24.30	24.09	1.050	0.057	/
			25	12	Front side	709	0.051	2.33	23.00	22.88	1.028	0.052	/
			1	24	Back Side	709	0.066	-3.92	24.30	24.09	1.050	0.069	/
			25	12	Back Side	709	0.057	0.53	23.00	22.88	1.028	0.059	/



			1	24	Left Side	709	0.051	0.73	24.30	24.09	1.050	0.054	/
			25	12	Left Side	709	0.045	-1.80	23.00	22.88	1.028	0.046	/
			1	24	Right Side	709	0.032	0.26	24.30	24.09	1.050	0.034	/
			25	12	Right Side	709	0.029	-2.93	23.00	22.88	1.028	0.030	/
			1	24	Bottom Side	709	0.091	3.86	24.30	24.09	1.050	0.096	32
			25	12	Bottom Side	709	0.077	-0.26	23.00	22.88	1.028	0.079	/
LTE Band 38	20M	QPSK	1	49	Front side	2595	0.142	0.89	22.00	21.83	1.040	0.148	/
			50	24	Front side	2595	0.129	2.31	21.00	20.74	1.062	0.137	/
			1	49	Back Side	2595	0.125	0.85	22.00	21.83	1.040	0.130	/
			50	24	Back Side	2595	0.111	2.88	21.00	20.74	1.062	0.118	/
			1	49	Left Side	2595	0.220	0.13	22.00	21.83	1.040	0.229	/
			50	24	Left Side	2595	0.199	1.39	21.00	20.74	1.062	0.211	/
			1	49	Right Side	2595	0.075	0.57	22.00	21.83	1.040	0.078	/
			50	24	Right Side	2595	0.066	2.50	21.00	20.74	1.062	0.070	/
			1	49	Bottom Side	2595	0.288	1.51	22.00	21.83	1.040	0.299	34
			50	24	Bottom Side	2595	0.250	-1.18	21.00	20.74	1.062	0.265	/
LTE Band 40	10M	QPSK	1	49	Front side	2310	0.258	0.27	21.00	20.82	1.042	0.269	/
			50	24	Front side	2310	0.232	3.68	20.00	19.67	1.079	0.250	/
			1	49	Back Side	2310	0.222	0.89	21.00	20.82	1.042	0.231	/
			50	24	Back Side	2310	0.196	0.50	20.00	19.67	1.079	0.211	/
			1	49	Left Side	2310	0.403	-3.09	21.00	20.82	1.042	0.420	/
			50	24	Left Side	2310	0.359	1.05	20.00	19.67	1.079	0.387	/
			1	49	Right Side	2310	0.133	1.77	21.00	20.82	1.042	0.139	/
			50	24	Right Side	2310	0.119	0.73	20.00	19.67	1.079	0.128	/
			1	49	Bottom Side	2310	0.530	0.31	21.00	20.82	1.042	0.552	36
			50	24	Bottom Side	2310	0.469	-3.38	20.00	19.67	1.079	0.506	/
LTE Band 41	20M	QPSK	1	49	Front side	2680	0.143	-1.28	22.10	21.90	1.047	0.150	/
			50	24	Front side	2593	0.117	0.90	20.80	20.47	1.079	0.126	/
			1	49	Back Side	2680	0.129	-0.76	22.10	21.90	1.047	0.135	/
			50	24	Back Side	2593	0.111	-0.11	20.80	20.47	1.079	0.120	/
			1	49	Left Side	2680	0.228	-0.99	22.10	21.90	1.047	0.239	/
			50	24	Left Side	2593	0.185	0.70	20.80	20.47	1.079	0.200	/
			1	49	Right Side	2680	0.078	-0.28	22.10	21.90	1.047	0.082	/



LTE Band 66	20M	QPSK	50	24	Right Side	2593	0.061	-2.22	20.80	20.47	1.079	0.066	/
			1	49	Bottom Side	2680	0.299	0.21	22.10	21.90	1.047	0.313	38
			50	24	Bottom Side	2593	0.243	3.16	20.80	20.47	1.079	0.262	/
			1	0	Front side	1770	0.465	-2.53	22.20	21.93	1.064	0.495	/
			50	49	Front side	1720	0.372	3.08	20.70	20.55	1.035	0.385	/
			1	0	Back Side	1770	0.408	-1.09	22.20	21.93	1.064	0.434	/
			50	49	Back Side	1720	0.329	1.86	20.70	20.55	1.035	0.341	/
			1	0	Left Side	1770	0.733	-0.48	22.20	21.93	1.064	0.780	/
			50	49	Left Side	1720	0.594	-0.69	20.70	20.55	1.035	0.615	/
			1	0	Right Side	1770	0.242	0.69	22.20	21.93	1.064	0.258	/
			50	49	Right Side	1720	0.195	1.60	20.70	20.55	1.035	0.202	/
			1	0	Bottom Side	1720	0.867	2.75	21.70	21.36	1.081	0.938	/
			1	0	Bottom Side	1745	0.914	-2.68	22.00	21.80	1.047	0.957	/
			1	0	Bottom Side	1770	0.962	-0.73	22.20	21.93	1.064	1.024	40
			50	49	Bottom Side	1720	0.774	-2.46	20.70	20.55	1.035	0.801	/
			50	49	Bottom Side	1745	0.735	1.58	20.70	20.51	1.045	0.768	/
			50	49	Bottom Side	1770	0.698	1.29	20.60	20.26	1.081	0.755	/
			100	0	Bottom Side	1745	0.743	-2.34	20.50	20.40	1.023	0.760	/

Note:

1. The test separation of all above table is 10mm.
2. 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
3. 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	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 7	20M	QPSK	1	49	Left Cheek	2510	0.948	3.84	21.20	20.98	1.052	0.997
			1	49	Left Cheek	2535	0.883	0.23	21.00	20.71	1.069	0.944
			1	49	Left Cheek	2560	1.013	-0.42	21.50	21.20	1.072	1.085
			50	49	Left Cheek	2510	0.772	-2.82	20.30	20.18	1.028	0.794
			50	49	Left Cheek	2535	0.759	-1.96	19.80	19.57	1.054	0.800
			50	49	Left Cheek	2560	0.841	2.48	20.30	20.18	1.028	0.865
			1	49	Left Tilt	2510	0.777	0.21	21.20	20.98	1.052	0.817
			1	49	Left Tilt	2535	0.756	-3.22	21.00	20.71	1.069	0.808
			1	49	Left Tilt	2560	0.884	-3.41	21.50	21.20	1.072	0.947
LTE Band 38	20M	QPSK	1	49	Left Cheek	2580	0.835	0.31	21.30	21.05	1.059	0.884
			1	49	Left Cheek	2595	0.961	-2.44	22.00	21.83	1.040	0.999
			1	49	Left Cheek	2610	0.911	1.96	22.00	21.72	1.067	0.972
			50	24	Left Cheek	2580	0.740	0.08	20.30	20.03	1.064	0.787
			50	24	Left Cheek	2595	0.845	3.50	21.00	20.74	1.062	0.897
			50	24	Left Cheek	2610	0.793	-0.51	21.00	20.60	1.096	0.870
			1	49	Left Tilt	2595	0.809	-2.56	22.00	21.83	1.040	0.841
			1	49	Left Tilt	2610	0.769	-0.82	22.00	21.72	1.067	0.820
LTE Band 41	20M	QPSK	1	49	Left Cheek	2593	0.739	-0.34	21.80	21.56	1.057	0.781
			1	49	Left Cheek	2680	0.810	-1.89	22.10	21.90	1.047	0.848
LTE Band 66	20M	QPSK	1	0	Left Cheek	1720	0.806	0.88	21.70	21.36	1.081	0.872
			1	0	Left Cheek	1745	0.830	-2.76	22.00	21.80	1.047	0.869
			1	0	Left Cheek	1770	0.884	2.51	22.20	21.93	1.064	0.941
			1	0	Left Tilt	1770	0.751	-1.69	22.20	21.93	1.064	0.799
			1	0	Bottom Side	1720	0.831	1.68	21.70	21.36	1.081	0.899
			1	0	Bottom Side	1745	0.886	0.73	22.00	21.80	1.047	0.928
			1	0	Bottom Side	1770	0.945	-1.73	22.20	21.93	1.064	1.006
			50	49	Bottom Side	1720	0.772	-3.33	20.70	20.55	1.035	0.799



12.4 Repeated SAR measurement

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Freq.	Original Measured SAR 1g(W/kg) 1g (W/Kg)	1 st Repeated SAR 1g	Ratio
LTE Band 7	20M	QPSK	1	49	Left Cheek	2510	0.958	0.948	1.011
			1	49	Left Cheek	2535	0.912	0.883	1.033
			1	49	Left Cheek	2560	1.045	1.013	1.032
			50	49	Left Cheek	2510	0.807	0.772	1.045
			50	49	Left Cheek	2535	0.764	0.759	1.006
			50	49	Left Cheek	2560	0.848	0.841	1.008
			1	49	Left Tilt	2510	0.817	0.777	1.052
			1	49	Left Tilt	2535	0.783	0.756	1.036
			1	49	Left Tilt	2560	0.899	0.884	1.018
LTE Band 38	20M	QPSK	1	49	Left Cheek	2580	0.853	0.835	1.022
			1	49	Left Cheek	2595	0.990	0.961	1.030
			1	49	Left Cheek	2610	0.934	0.911	1.025
			50	24	Left Cheek	2580	0.762	0.740	1.029
			50	24	Left Cheek	2595	0.869	0.845	1.028
			50	24	Left Cheek	2610	0.810	0.793	1.021
			1	49	Left Tilt	2595	0.844	0.809	1.043
			1	49	Left Tilt	2610	0.782	0.769	1.016
LTE Band 41	20M	QPSK	1	49	Left Cheek	2593	0.759	0.739	1.027
			1	49	Left Cheek	2680	0.835	0.810	1.031
LTE Band 66	20M	QPSK	1	0	Left Cheek	1720	0.810	0.806	1.005
			1	0	Left Cheek	1745	0.841	0.830	1.013
			1	0	Left Cheek	1770	0.890	0.884	1.007
			1	0	Left Tilt	1770	0.757	0.751	1.008
			1	0	Bottom Side	1720	0.867	0.831	1.044
			1	0	Bottom Side	1745	0.914	0.886	1.032
			1	0	Bottom Side	1770	0.962	0.945	1.018
			50	49	Bottom Side	1720	0.774	0.772	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.