



SAR Test Report

Report No.:STS2501044H02

Issued for

Shenzhen DOOGEE Hengtong Technology CO.,LTD

B, 2/F, Building A4, Silicon Valley Power Digital Industrial
Park, No. 22, Longhua New District, Shenzhen, China

Product Name: Smart Phone

Brand Name: DOOGEE

Model Name: Fire 6 Max

Series Model(s): S200 Max, Fire 6 Ultra, Fire 6 Turbo, Fire
7 Max, Fire7, Fire 7 Power, Fire 7 Pro,
Fire 7 Power Pro

FCC ID: 2AX4YFIRE6MAX

Test Standard: ANSI/IEEE Std. C95.1
FCC 47 CFR Part 2 (2.1093)
IEEE Std. 1528-2013

Max. Report Head: 0.484 W/kg
SAR (1g) Body: 1.358 W/kg

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

**TEST REPORT CERTIFICATION**

Applicant's name : Shenzhen DOOGEE Hengtong Technology CO.,LTD
Address : B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park,
No. 22, Longhua New District, Shenzhen, China
Manufacturer's Name : Shenzhen DOOGEE Hengtong Technology CO.,LTD
Address : B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park,
No. 22, Longhua New District, Shenzhen, China

Product description

Product name : Smart Phone
Brand name : DOOGEE
Model name : Fire 6 Max
Series Model..... : S200 Max, Fire 6 Ultra, Fire 6 Turbo, Fire 7 Max, Fire7, Fire 7
Power, Fire 7 Pro, Fire 7 Power Pro
ANSI/IEEE Std. C95.1
Standards..... : FCC 47 CFR Part 2 (2.1093)
IEEE Std. 1528-2013

The device was tested by Shenzhen STS Test Services Co., Ltd. in accordance with the measurement methods and procedures specified in KDB 865664 The test results in this report apply only to the tested sample of the stated device/equipment. Other similar device/equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Date of Test..... :

Date (s) of performance of tests..... : 20 Jan 2025 ~ 10 Feb 2025

Date of Issue..... : 19 Feb 2025

Test Result..... : **Pass**

Testing Engineer :

Xin Liu

(Xin.Liu)

Technical Manager :

Shi fan-long

(Shifan. Long)

Authorized Signatory :

Bovey Yang

(Bovey Yang)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	19 Feb 2025	STS2501044H02	ALL	Initial Issue



1. General Information

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

1.1 EUT Description

Product Name	Smart Phone
Brand Name	DOOGEE
Model Name	Fire 6 Max
Series Model	S200 Max, Fire 6 Ultra, Fire 6 Turbo, Fire 7 Max, Fire7, Fire 7 Power, Fire 7 Pro, Fire 7 Power Pro
Model Difference	There is no difference except the name of the model
Battery	Rated Voltage: 3.87V Charge Limit Voltage:4.45V Capacity: 18000mAh
Device Category	Portable
Product stage	Production unit
RF Exposure Environment	General Population / Uncontrolled
Hardware Version	M162-MUB-V2
Software Version	DOOGEE-Fire_6_Max-EEA-Android14.0-20241202_20241202-1134
Frequency Range	GSM850: 824.20MHz-848.80MHz PCS1900: 1850.20MHz-1909.80MHz WCDMA Band V: 826.40MHz -846.60MHz WCDMA Band II: 1852.40MHz -1907.60MHz WCDMA Band IV:1712.4MHz -1752.6MHz LTE Band 2: 1850 ~ 1910 MHz LTE Band 4: 1710 ~ 1755 MHz LTE Band 5: 824 ~ 849 MHz LTE Band 7: 2500 ~2570 MHz LTE Band 19: 830 ~845MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2535MHz ~ 2655MHz LTE Band 66: 1710 MHz ~ 1780 MHz WLAN802.11b/g/n20: 2412 MHz ~ 2462 MHz WLAN 802.11n40: 2422 MHz ~ 2452 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5180 ~ 5240 MHz WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5745 ~ 5825 MHz Bluetooth: 2402 MHz to 2480 MHz NFC: 13.56MHz



Max. Reported SAR(1g): (Limit:1.6W/kg) Test distance: Head:0mm Body:10mm	Band	Mode	Head (W/kg)	Body Worn and Hotspot (W/kg)
	PCE	GSM 850	0.177	0.298
	PCE	GSM 1900	0.071	0.213
	PCE	WCDMA Band II	0.187	0.571
	PCE	WCDMA Band V	0.279	0.310
	PCE	WCDMA Band IV	0.220	0.670
	PCE	LTE Band 2	0.289	0.539
	PCE	LTE Band 4	0.229	0.297
	PCE	LTE Band 5	0.307	0.284
	PCE	LTE Band 7	0.233	1.358
	PCE	LTE Band 19	0.249	0.221
	PCE	LTE Band 25	0.270	0.488
	PCE	LTE Band 26	0.224	0.230
	PCE	LTE Band 38	0.176	0.682
	PCE	LTE Band 41	0.151	0.341
	PCE	LTE Band 66	0.242	0.278
	DSS	BT	0.137	0.114
	NII	5.2G WLAN	0.484	0.131
NII	5.8G WLAN	0.256	0.130	
1-g Sum SAR			0.791	1.488
FCC Equipment Class	Licensed Portable Transmitter Held to Ear (PCE) Part 15 Spread Spectrum Transmitter (DSS) Unlicensed National Information Infrastructure TX(NII)			
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 NFC:ASK			
Antenna Specification:	GSM/WCDMA/LTE: PIFA Antenna Bluetooth: PIFA Antenna WLAN: PIFA Antenna NFC: Coil Antenna			
SIM Card	Support dual-SIM, dual standby, the multiple SIM card with two lines cannot transmitting at the same time			
Hotspot Mode	Support			
DTM Mode	Not Support			
Note: 1. The dual SIM card mobile has 2 SIM slots and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (Single active) 2. After pre-scan two SIM cards power, we found test result of the SIM1 was the worse, so we chose SIM1 card to perform all tests. 3. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power				



1.2 Test Environment

Ambient conditions in the SAR laboratory:

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

1.3 Test Factory

Shenzhen STS Test Services Co.,Ltd.

A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration No.: 625569

IC Registration No.: 12108A

A2LA Certificate No.: 4338.01



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. C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz 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 D04 v01	RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices
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

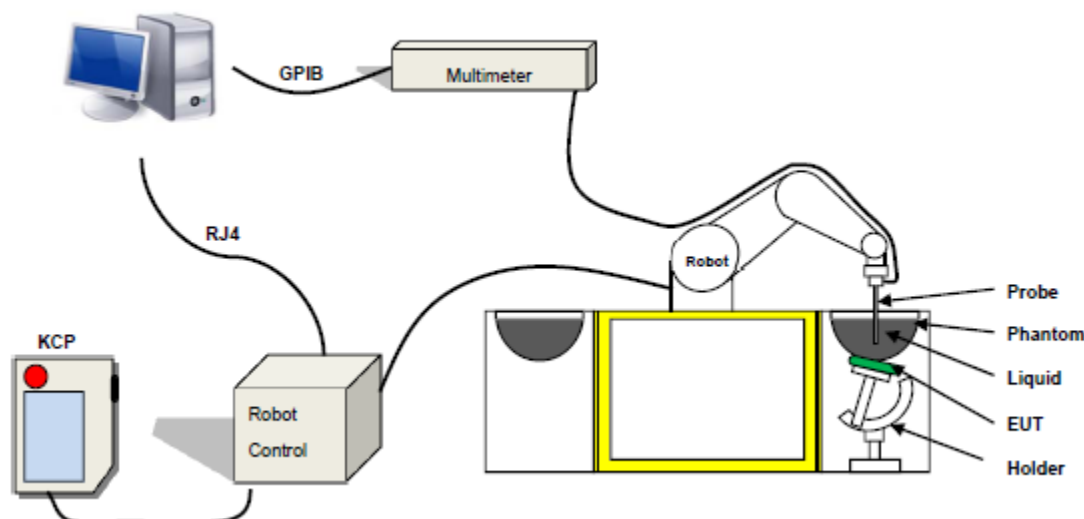
$$SAR = \frac{\sigma E^2}{\rho}$$

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 Open SAR software computes the results to give a SAR value in a 1g or 10g mass.

3.2.1 Probe

For the measurements the Specific Dosimetric E-Field Probe SN 08/21 EPGO352 with following specifications is used

- Probe Length: 330 mm
- Length of Individual Dipoles: 2 mm
- 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: 150 MHz to 6 GHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°



Figure 1-MVG COMOSAR Dosimetric E field Dipole

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.

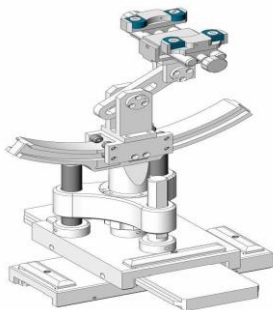
SN 32/14 SAM115



Figure-SN 21/21 ELLI48



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 head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

Head Tissue

Frequency (MHz)	cellulose %	DGBE %	HEC %	NaCl %	Preventol %	Sugar %	X100 %	Water %	Conductivity σ	Permittivity ϵ_r
750	0.2	/	/	1.4	0.2	57.0	/	41.1	0.89	41.9
835	0.2	/	/	1.4	0.2	57.9	/	40.3	0.90	41.5
900	0.2	/	/	1.4	0.2	57.9	/	40.3	0.97	41.5
1800	/	44.5	/	0.3	/	/	30.45	55.2	1.4	40.0
1900	/	44.5	/	0.3	/	/	30.45	55.2	1.4	40.0
2000	/	44.5	/	0.3	/	/	/	55.2	1.4	40.0
2450	/	44.9	/	0.1	/	/	/	55.0	1.80	39.2
2600	/	45.0	/	0.1	/	/	/	54.9	1.96	39.0

Body Tissue

Frequency (MHz)	cellulose %	DGBE %	HEC %	NaCl %	Preventol %	Sugar %	X100 %	Water %	Conductivity σ	Permittivity ϵ_r
750	0.2	/	/	0.9	0.1	47.2	/	51.7	0.96	55.5
835	0.2	/	/	0.9	0.1	48.2	/	50.8	0.97	55.2
900	0.2	/	/	0.9	0.1	48.2	/	50.8	1.05	55.0
1800	/	29.4	/	0.4	/	/	30.45	70.2	1.52	53.3
1900	/	29.4	/	0.4	/	/	30.45	70.2	1.52	53.3
2000	/	29.4	/	0.4	/	/	/	70.2	1.52	53.3
2450	/	31.3	/	0.1	/	/	/	68.6	1.95	52.7
2600	/	31.7	/	0.1	/	/	/	68.2	2.16	52.3

Tissue dielectric parameters for head and body phantoms				
Frequency	ϵ_r		σ S/m	
	Head	Body	Head	Body
300	45.3	58.2	0.87	0.92
450	43.5	56.7	0.87	0.94
900	41.5	55.0	0.97	1.05
1450	40.5	54.0	1.20	1.30
1800	40.0	53.3	1.40	1.52
2450	39.2	52.7	1.80	1.95
3000	38.5	52.0	2.40	2.73
5800	35.3	48.2	5.27	6.00

**LIQUID MEASUREMENT RESULTS**

Date	Ambient		Simulating Liquid		Parameters	Target	Measured	Deviation %	Limited %
	Temp. [°C]	Humidity %	Frequency (MHz)	Temp. [°C]					
2025-01-20	23.8	41	821.5	23.3	Permittivity	41.56	41.70	0.33	±5
					Conductivity	0.90	0.89	-0.94	±5
2025-01-20	23.8	41	822.5	23.4	Permittivity	41.56	41.73	0.41	±5
					Conductivity	0.90	0.90	0.16	±5
2025-01-20	23.8	42	824.5	23.4	Permittivity	41.55	40.68	-2.09	±5
					Conductivity	0.90	0.91	1.25	±5
2025-01-20	23.8	42	829	23.5	Permittivity	41.53	41.15	-0.91	±5
					Conductivity	0.90	0.87	-3.26	±5
2025-01-20	23.8	43	835	23.5	Permittivity	41.50	41.47	-0.07	±5
					Conductivity	0.90	0.89	-1.11	±5
2025-01-20	23.8	43	836.5	23.6	Permittivity	41.49	41.97	1.15	±5
					Conductivity	0.90	0.87	-3.35	±5
2025-01-20	23.8	43	836.6	23.7	Permittivity	41.49	41.20	-0.70	±5
					Conductivity	0.90	0.88	-2.24	±5
2025-01-20	23.8	43	841.5	23.8	Permittivity	41.47	41.53	0.15	±5
					Conductivity	0.90	0.86	-4.53	±5
2025-01-20	23.8	43	844	23.9	Permittivity	41.46	41.83	0.90	±5
					Conductivity	0.90	0.89	-1.23	±5
2025-01-22	21.7	51	1720	21.3	Permittivity	40.11	40.71	1.49	±5
					Conductivity	1.35	1.37	1.16	±5
2025-01-22	21.7	51	1732.5	21.4	Permittivity	40.10	41.29	2.98	±5
					Conductivity	1.36	1.31	-3.78	±5
2025-01-22	21.7	52	1740	21.4	Permittivity	40.09	40.56	1.18	±5
					Conductivity	1.37	1.40	2.51	±5
2025-01-22	21.7	52	1777.5	21.4	Permittivity	40.03	40.73	1.74	±5
					Conductivity	1.39	1.42	2.37	±5
2025-01-22	21.7	52	1800	21.5	Permittivity	40.00	40.67	1.68	±5
					Conductivity	1.40	1.42	1.43	±5
2025-01-23	21.3	60	1850.2	20.9	Permittivity	40.00	41.26	3.15	±5
					Conductivity	1.40	1.44	2.86	±5
2025-01-23	21.3	60	1860	21.0	Permittivity	40.00	40.82	2.05	±5
					Conductivity	1.40	1.38	-1.43	±5
2025-01-23	21.3	60	1880	21.1	Permittivity	40.00	40.26	0.65	±5
					Conductivity	1.40	1.39	-0.71	±5



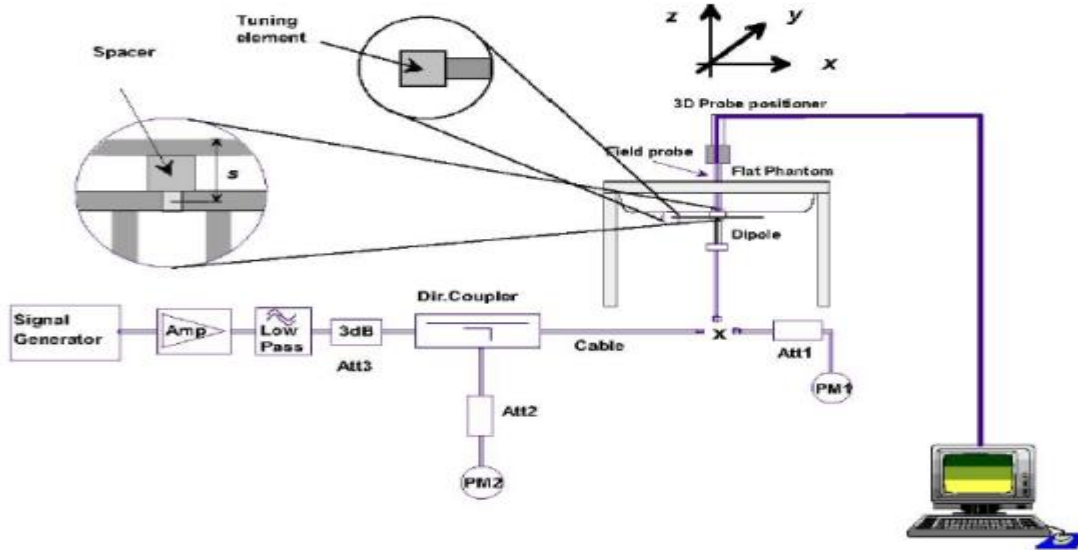
2025-01-23	21.3	61	1900	21.2	Permittivity	40.00	40.96	2.40	±5
					Conductivity	1.40	1.42	1.43	±5
2025-01-24	23.2	60	2450	21.9	Permittivity	39.20	40.02	2.09	±5
					Conductivity	1.80	1.77	-1.67	±5
2025-01-24	23.2	60	2480	22.0	Permittivity	39.15	40.06	2.33	±5
					Conductivity	1.83	1.84	0.73	±5
2025-01-24	23.2	56	2506	22.8	Permittivity	39.13	39.54	1.06	±5
					Conductivity	1.86	1.91	2.70	±5
2025-01-24	23.2	56	2510	23.0	Permittivity	39.12	39.36	0.61	±5
					Conductivity	1.86	1.88	0.86	±5
2025-01-24	23.2	57	2535	23.0	Permittivity	39.09	40.10	2.59	±5
					Conductivity	1.89	1.85	-2.15	±5
2025-01-24	23.2	57	2560	23.1	Permittivity	39.05	39.58	1.35	±5
					Conductivity	1.92	1.89	-1.43	±5
2025-01-24	23.2	57	2580	23.0	Permittivity	39.03	40.38	3.47	±5
					Conductivity	1.94	1.89	-2.51	±5
2025-01-24	23.2	58	2600	23.1	Permittivity	39.00	39.97	2.49	±5
					Conductivity	1.96	1.94	-1.02	±5
2025-01-24	23.2	58	2610	23.0	Permittivity	38.99	39.69	1.80	±5
					Conductivity	1.97	1.98	0.47	±5
2025-02-10	21.8	40	5200	21.6	Permittivity	36.00	36.32	0.89	±5
					Conductivity	4.66	4.61	-1.07	±5
2025-02-10	21.8	40	5240	21.5	Permittivity	35.96	37.00	2.89	±5
					Conductivity	4.70	4.64	-1.32	±5
2025-02-10	21.8	58	5785	20.4	Permittivity	35.32	35.34	0.07	±5
					Conductivity	5.25	5.22	-0.65	±5
2025-02-10	21.8	58	5800	20.6	Permittivity	35.30	36.07	2.18	±5
					Conductivity	5.27	5.35	1.52	±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 10 %.

Date	Freq.	Power	Tested Value	Normalized SAR	Target SAR	Tolerance	Limit
	(MHz)	(mW)	(W/Kg)	(W/kg)	1g(W/kg)	(%)	(%)
2025-01-20	835	100	0.948	9.48	9.63	-1.56	10
2025-01-22	1800	100	3.850	38.50	38.40	0.26	10
2025-01-23	1900	100	4.052	40.52	39.84	1.71	10
2025-01-24	2450	100	5.291	52.91	54.70	-3.27	10
2025-01-24	2600	100	5.711	57.11	56.19	1.64	10
2025-02-10	5200	100	16.474	164.74	163.88	0.52	10
2025-02-10	5800	100	18.721	187.21	188.95	-0.92	10

Note:

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



6. SAR Evaluation Procedures

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

The following steps are used for each test position

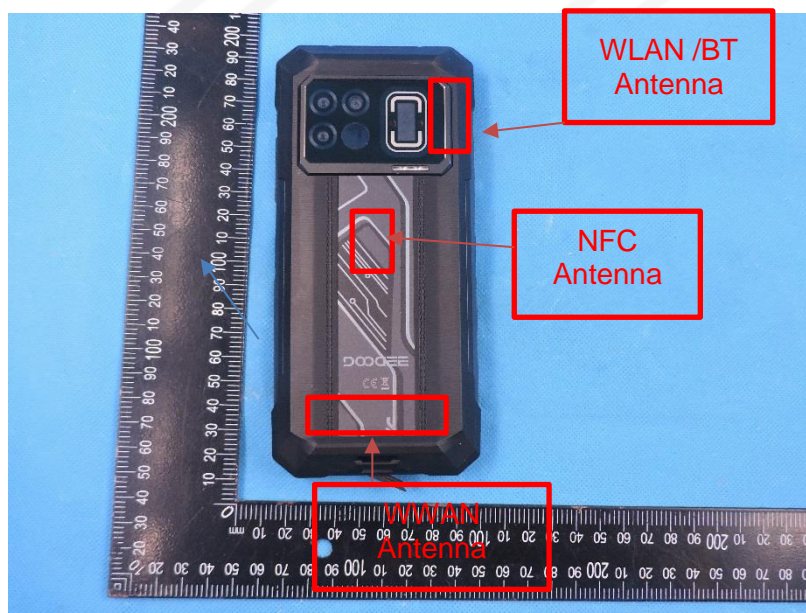
- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible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

➤ Area Scan& Zoom Scan

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01 quoted below. When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7. EUT Antenna Location Sketch

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



Antenna Separation Distance(cm)

ANT	Back Side	Front Side	Left Side	Right Side	Top Side	Bottom Side
WLAN/BT	1	1	1	7	1.5	16
WWAN	1	1	1.5	1	15.5	1.5
NFC	1	1	3	2.5	6.5	8.5

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	WCDMA IV
	Calculated Frequency(GHz)	0.8242	1.8502	1.88	0.8366	1.74
	Maximum Turn-up power (dBm)	30	28	23	23	23
	Maximum rated power(mW)	1000.00	630.96	199.53	199.53	199.53
Back Side	Separation distance (cm)	1	1	1	1	1
	exclusion threshold(mW)	24.95	12.31	12.18	24.60	12.81
	Testing required?	YES	YES	YES	YES	YES
Front Side	Separation distance (cm)	1	1	1	1	1
	exclusion threshold(mW)	24.95	12.31	12.18	24.60	12.81
	Testing required?	YES	YES	YES	YES	YES
Left Side	Separation distance (cm)	1.5	1.5	1.5	1.5	1.5
	exclusion threshold(mW)	44.11	25.97	25.74	43.66	26.88
	Testing required?	YES	YES	YES	YES	YES
Right Side	Separation distance (cm)	1	1	1	1	1
	exclusion threshold(mW)	24.95	12.31	12.18	24.60	12.81
	Testing required?	YES	YES	YES	YES	YES
Top Side	Separation distance (cm)	15.5	15.5	15.5	15.5	15.5
	exclusion threshold(mW)	1175.10	1913.84	1912.15	1189.82	1920.36
	Testing required?	NO	NO	NO	NO	NO
Bottom Side	Separation distance (cm)	1.5	1.5	1.5	1.5	1.5
	exclusion threshold(mW)	44.11	25.97	25.74	43.66	26.88
	Testing required?	YES	YES	YES	YES	YES



	Wireless Interface	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 19	LTE Band 25
Exposure Position	Calculated Frequency(GHz)	1.88	1.72	0.8365	2.535	0.8375	1.86
	Maximum Turn-up power (dBm)	23.5	24	25.5	24	24.5	24
	Maximum rated power(mW)	223.87	251.19	354.81	251.19	281.84	251.19
Back Side	Separation distance (cm)	1	1	1	1	1	1
	exclusion threshold(mW)	12.18	12.91	24.60	10.03	24.57	12.27
	Testing required?	YES	YES	YES	YES	YES	YES
Front Side	Separation distance (cm)	1	1	1	1	1	1
	exclusion threshold(mW)	12.18	12.91	24.60	10.03	24.57	12.27
	Testing required?	YES	YES	YES	YES	YES	YES
Left Side	Separation distance (cm)	1.5	1.5	1.5	1.5	1.5	1.5
	exclusion threshold(mW)	25.74	27.06	43.66	21.76	43.63	25.90
	Testing required?	YES	YES	YES	YES	YES	YES
Right Side	Separation distance (cm)	1	1	1	1	1	1
	exclusion threshold(mW)	12.18	12.91	24.60	10.03	24.57	12.27
	Testing required?	YES	YES	YES	YES	YES	YES
Top Side	Separation distance (cm)	15.5	15.5	15.5	15.5	15.5	15.5
	exclusion threshold(mW)	1912.15	1921.59	1189.70	1880.77	1190.89	1913.28
	Testing required?	NO	NO	NO	NO	NO	NO
Bottom Side	Separation distance (cm)	1.5	1.5	1.5	1.5	1.5	1.5
	exclusion threshold(mW)	25.74	27.06	43.66	21.76	43.63	25.90
	Testing required?	YES	YES	YES	YES	YES	YES



Exposure Position	Wireless Interface	LTE Band 26	LTE Band 38	LTE Band 40	LTE Band 66	BT	2.4G WLAN
	Calculated Frequency(GHz)	0.8315	2.58	2.31	1.745	2.48	2.437
	Maximum Turn-up power (dBm)	24	24.5	24	24.5	12	8
	Maximum rated power(mW)	251.19	281.84	251.19	281.84	15.85	6.31
Back Side	Separation distance (cm)	1	1	1	1	1	1
	exclusion threshold(mW)	24.74	9.92	10.66	12.79	10.17	10.29
	Testing required?	YES	YES	YES	YES	YES	NO
Front Side	Separation distance (cm)	1	1	1	1	1	1
	exclusion threshold(mW)	24.74	9.92	10.66	12.79	10.17	10.29
	Testing required?	YES	YES	YES	YES	YES	NO
Left Edge	Separation distance (cm)	1.5	1.5	1.5	1.5	1	1
	exclusion threshold(mW)	43.84	21.54	22.92	26.84	10.17	10.29
	Testing required?	YES	YES	YES	YES	YES	NO
Right Edge	Separation distance (cm)	1	1	1	1	7	7
	exclusion threshold(mW)	24.74	59.06	10.66	12.79	414.25	415.91
	Testing required?	YES	YES	YES	YES	NO	NO
Top Edge	Separation distance (cm)	15.5	15.5	15.5	15.5	1.5	1.5
	exclusion threshold(mW)	5201.69	1878.94	1890.47	1920.05	22.03	22.24
	Testing required?	NO	NO	NO	NO	NO	NO
Bottom Edge	Separation distance (cm)	1.5	1.5	1.5	1.5	16	16
	exclusion threshold(mW)	43.84	21.54	22.92	26.84	2000.45	2002.15
	Testing required?	YES	YES	YES	YES	NO	NO