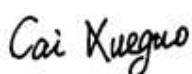
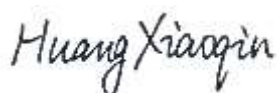


TEST REPORT

Applicant: Shanghai Xiangcheng Communication Technology Co., Ltd.
Address: 5F-6F, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai City, China
Equipment Type: Intelligent Mobile Data Capture Terminal
Model Name: Ranger 2(N)
Brand Name: N/A
FCC ID: 2A2UU-MF-T2351
Test Standard: FCC 47 CFR Part 2.1093 (refer section 3.1)
Maximum SAR: Head (1 g@0mm): 0.96W/kg
Body-worn (1 g@10mm): 1.06 W/kg
Hotspot (1 g@10mm): 1.10 W/kg
Specific (10 g@0mm): 0.13 W/kg
Sample Arrival Date: Aug. 11, 2025
Test Date: Aug. 13, 2025 - Aug. 24, 2025
Date of Issue: Sep. 19, 2025

ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center

Prepared by: Huang Xiaoqin**Reviewed by:** Cai Xueguo**Approved by:** Zhang Yanqing
(Laboratory Manager)

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 19, 2025</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China

1.2 Test Location

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1352. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 29671.

1.3 Test Environment Condition

Ambient Temperature	18°C to 25°C
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Shanghai Xiangcheng Communication Technology Co., Ltd.
Address	5F-6F, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai City, China

2.2 Manufacturer Information

Manufacturer	Shanghai Xiangcheng Communication Technology Co., Ltd.
Address	5F-6F, Building 10, No.3000 Longdong Avenue, Pudong New District, Shanghai City, China

2.3 Factory Information

Manufacturer	Sichuan Xiangcheng Intelligent Technology Co.,Ltd.
Address	Factory No.2 and 7, Zone A, Intelligent terminal Demonstration Park, West Section of Gangyuan Road, Lingang Economic Development Zone, Yibin City, Sichuan Province, China

2.4 General Description for Equipment under Test (EUT)

EUT Name	Intelligent Mobile Data Capture Terminal
Model Name Under Test	Ranger 2(N)
Series Model Name	Ranger 2/N, Ranger2(N), Ranger2/N, RANGER 2(N), RANGER 2/N, Ranger2 Nova, Ranger2 Ultra, M5 Pro, EM5 Pro, M5 PRO, MF50C, MF50N, MF50P, MF50 Pro, MF50 Nova, T23, T2351,T23X
Description of Model name differentiation	All the same except for the model name (The information provided by applicant).
Hardware Version	V1.0
Software Version	1.0.0
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	F50163MA
	Serial No.	N/A
	Capacity	4900mAh
	Rated Voltage	3.85V

	Limit Charge Voltage	4.4V
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2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE850/1900MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12/13/17/25/26/66/71 TDD LTE Band 38/41 Bluetooth, 2.4G WIFI, 5G WIFI GPS, GLONASS, BDS, Galileo, NFC
-----------------------------------	---

The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	GSM, WCDMA, LTE, 2.4G WLAN, 5G WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 13	TX: 777 ~ 787 MHz	RX: 746 ~ 756 MHz
	LTE Band 17	TX: 704 ~ 716 MHz	RX: 734 ~ 746 MHz
	LTE Band 25	TX: 1850 ~ 1915 MHz	RX: 1930 ~ 1995 MHz
	LTE Band 26	TX: 814 ~ 849 MHz	RX: 859 ~ 894 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	LTE Band 71	TX: 663 ~ 698 MHz	RX: 617 ~ 652 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2535 ~ 2655 MHz	RX: 2535 ~ 2655 MHz
	802.11b/g /n(HT20/HT40)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40/ VHT80)	5150 ~ 5250 MHz	5250 ~ 5350 MHz
		5470 ~ 5725 MHz	5725 ~ 5850 MHz
	Bluetooth	2402 ~ 2480 MHz	
Antenna Type	WWAN	PIFA Antenna	
	WIFI	PIFA Antenna	
	Bluetooth	PIFA Antenna	
	NFC	Loop Antenna	

Hotspot Function	Support	
Exposure Category	General Population/Uncontrolled exposure	
Product Type	Portable Device	
EUT Type	☒ Production unit	☐ Identical prototype

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI 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	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
5	KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	KDB 941225 D05A v01r02	REL. 10 LTE SAR TEST GUIDANCE AND KDB INQUIRIES
7	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
8	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	KDB 865664 D02 v01r02	RF Exposure Reporting
10	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
11	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user.

Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Table of Exposure Limits:

Body Position	SAR Value (W/Kg)	
	General Population/ Uncontrolled Exposure	Occupational/ Controlled Exposure
Whole-Body SAR (averaged over the entire body)	0.08	0.4
Partial-Body SAR (averaged over any 1 gram of tissue)	1.60	8.0
SAR for hands, wrists, feet and ankles (averaged over any 10 grams of tissue)	4.0	20.0

NOTE:

General Population/Uncontrolled Exposure: Locations where there is the exposure of individuals who have no knowledge or control of their exposure. General population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Occupational/Controlled Exposure: Locations where there is exposure that may be incurred by persons who are aware of the potential for exposure. In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

3.3 Test Result Summary

3.3.1 Highest SAR Values

Equipment Class	Band	Maximum Scaled SAR (W/kg)				Maximum Report SAR (W/kg)			
		Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Specific (0mm)	Head (0mm)	Body-worn (10mm)	Hotspot (10mm)	Specific (0mm)
		1g SAR			10g SAR	1g SAR			10g SAR
PCE	GSM 850	0.11	0.13	0.13	/	0.96	1.06	1.10	0.13
	GSM 1900	0.22	0.57	0.57	/				
	WCDMA Band 2	0.26	0.70	0.70	/				
	WCDMA Band 4	0.20	0.78	0.78	/				
	WCDMA Band 5	0.12	0.14	0.14	/				
	LTE Band 2	0.33	0.84	1.00	/				
	LTE Band 4	0.27	1.06	1.06	/				
	LTE Band 5	0.18	0.18	0.18	/				
	LTE Band 7	0.51	0.83	1.01	/				
	LTE Band 12	0.21	0.28	0.28	/				
	LTE Band 13	0.08	0.12	0.12	/				
	LTE Band 17	0.20	0.27	0.27	/				
	LTE Band 25	0.31	0.81	1.01	/				
	LTE Band 26	0.20	0.25	0.25	/				
	LTE Band 66	0.22	0.96	1.10	/				
	LTE Band 71	0.03	0.06	0.06	/				
	LTE Band 38	0.32	0.48	0.58	/				
	LTE Band 41	0.21	0.37	0.46	/				
DTS	2.4G WLAN	0.96	0.21	0.21	/	0.96	1.06	1.10	0.13
NII	5G WLAN	0.30	0.21	0.18	0.13				
DSS	Bluetooth	0.06	0.01	0.01	/				
Limit (W/kg)		1.6			4.0	1.6			4.0
Verdict		PASS							

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)		
	Head 1g (0mm)	Body-worn 1g (10mm)	Hotspot 1g (10mm)
PCE	1.52	1.32	1.32
DTS	1.28	1.32	1.32
NII	1.52	1.21	1.21
DSS	1.52	1.32	1.32
Limit (W/kg)	1.60	1.60	1.60
Verdict	Pass		
Note: The highest simultaneous SAR please refer section 12.2			

3.4 Test Uncertainty

3.4.1 Measurement uncertainty evaluation for SAR test

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEC/IEEE 62209-1528. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

1) System Measurement Uncertainty (Frequency range from 300 MHz to 3 GHz)

DASY5 Uncertainty Budget (Frequency band: 300 MHz - 3 GHz range)								
Symbol	Error Description	Uncert. value	Prob Dist.	Div	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	$\pm 12.0\%$	N	2	1	1	$\pm 6.0\%$	$\pm 6.0\%$
CF _{drift}	Probe Calibration Drift	$\pm 1.0\%$	N	1	1	1	$\pm 1.0\%$	$\pm 1.0\%$
LIN	Probe Linearity	$\pm 4.7\%$	R	$\sqrt{3}$	1	1	$\pm 2.7\%$	$\pm 2.7\%$
BBS	Broadband Signal	$\pm 3.0\%$	N	2	1	1	$\pm 1.5\%$	$\pm 1.5\%$
ISO	Probe Isotropy	$\pm 7.6\%$	R	$\sqrt{3}$	1	1	$\pm 4.4\%$	$\pm 4.4\%$
DAE	Data Acquisition	$\pm 0.3\%$	N	1	1	1	$\pm 0.3\%$	$\pm 0.3\%$
AMB	RF Ambient	$\pm 1.8\%$	N	1	1	1	$\pm 1.8\%$	$\pm 1.8\%$
Δ_{sys}	Probe Positioning	$\pm 0.2\%$	N	1	0.1 4	0.14	$\pm 0\%$	$\pm 0\%$
DAT	Data Processing	$\pm 1.2\%$	N	1	1	1	$\pm 1.2\%$	$\pm 1.2\%$
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.) ^{DAK}	$\pm 2.5\%$	N	1	0.7 8	0.71	$\pm 2.0\%$	$\pm 1.8\%$
LIQ(T_{σ})	Conductivity (temp.) ^{BB}	$\pm 3.3\%$	R	$\sqrt{3}$	0.7 8	0.71	$\pm 1.5\%$	$\pm 1.4\%$
EPS	Phantom Permittivity	$\pm 14.0\%$	R	$\sqrt{3}$	0	0	$\pm 0\%$	$\pm 0\%$
DAS	Distance DUT - TSL	$\pm 2.1\%$	N	1	2	2	$\pm 4.2\%$	$\pm 4.2\%$
H	Device Holder	$\pm 3.8\%$	N	1	1	1	$\pm 3.8\%$	$\pm 3.8\%$
MOD	DUT Modulation ^m	$\pm 2.4\%$	R	$\sqrt{3}$	1	1	$\pm 1.4\%$	$\pm 1.4\%$
TAS	Time-average SAR	$\pm 2.6\%$	R	$\sqrt{3}$	1	1	$\pm 1.5\%$	$\pm 1.5\%$
RF _{drift}	DUT drift	$\pm 5.0\%$	R	$\sqrt{3}$	1	1	$\pm 2.9\%$	$\pm 2.9\%$
Correction to the SAR results								
C(ϵ , σ)	Deviation to Target	$\pm 1.9\%$	N	1	1	0.84	$\pm 1.9\%$	$\pm 1.6\%$
C(R)	SAR scaling ^p	$\pm 0\%$	R	$\sqrt{3}$	1	1	$\pm 0\%$	$\pm 0\%$
u(Δ SAR)	Combined Uncertainty	/	/	/	/	/	$\pm 11.2\%$	$\pm 11.0\%$

U	Expanded Uncertainty	/	/	/	/	/	±22.3%	±22.2%
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2) System Measurement Uncertainty (Frequency range from 3 GHz to 6 GHz)

DASY5 Uncertainty Budget								
(Frequency band: 3 GHz - 6 GHz range)								
Symbol	Error Description	Uncert. value	Prob Dist.	Div	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	±14.0%	N	2	1	1	±7.0%	±7.0%
CF _{drift}	Probe Calibration Drift	±1.0%	N	1	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±3.0%	N	2	1	1	±1.5%	±1.5%
ISO	Probe Isotropy	±7.6%	R	√3	1	1	±4.4%	±4.4%
DAE	Data Acquisition	±0.3%	N	1	1	1	±0.3%	±0.3%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ _{sys}	Probe Positioning	±0.2%	N	1	0.3 3	0.33	±0.1%	±0.1%
DAT	Data Processing	±2.3%	N	1	1	1	±2.3%	±2.3%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.) ^{DAK}	±2.5%	N	1	0.7 8	0.71	±2.0%	±1.8%
LIQ(T _σ)	Conductivity (temp.) ^{BB}	±3.4%	R	√3	0.7 8	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	√3	0.2 5	0.25	±2.0%	±2.0%
DAS	Distance DUT - TSL	±2.1%	N	1	2	2	±4.2%	±4.2%
H	Device Holder	±3.8%	N	1	1	1	±3.8%	±3.8%
MOD	DUT Modulation ^m	±2.4%	R	√3	1	1	±1.4%	±1.4%
TAS	Time-average SAR	±2.6%	R	√3	1	1	±1.5%	±1.5%
RF _{drift}	DUT drift	±5.0%	R	√3	1	1	±2.9%	±2.9%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
C(R)	SAR scaling ^p	±0%	R	√3	1	1	±0%	±0%
u(ΔSAR)	Combined Uncertainty	/	/	/	/	/	±12.1%	±12.0%
U	Expanded Uncertainty	/	/	/	/	/	±24.2%	±24.0%

3.4.2 Measurement uncertainty evaluation for system check

This measurement uncertainty budget is suggested by IEC/IEEE 62209-1528. The breakdown of the individual uncertainties is as follows:

DASY5 Uncertainty Budget (Frequency band: 300 MHz - 6 GHz range)								
Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(c _i) 1g	(c _i) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	±14.0%	N	2	1	1	±7.0%	±7.0%
CF _{drift}	Probe Calibration Drift	±1.0%	N	1	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±0.0%	N	2	1	1	±0.0%	±0.0%
ISO	Probe Isotropy	±7.6%	R	√3	1	1	±4.4%	±4.4%
DAE	Data Acquisition	±0.3%	N	1	1	1	±0.3%	±0.3%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ _{sys}	Probe Positioning	±0.2%	N	1	0.33	0.33	±0%	±0%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.) ^{DAK}	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
LIQ(T _σ)	Conductivity (temp.) ^{BB}	±3.4%	R	√3	0.78	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	√3	0.25	0.25	±2.0%	±2.0%
DAS	Distance DUT - TSL	±1.0%	N	1	2	2	±2.0%	±2.0%
VAL	Validation antenna	±0.0%	R	√3	1	1	±0.0%	±0.0%
P _{in}	Accepted power	±1.2%	N	1	1	1	±1.2%	±1.2%
RF _{drift}	DUT drift	±5.0%	R	√3	1	1	±2.9%	±2.9%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
u(ΔSAR)	Combined Uncertainty						±10.4%	±10.3%
U	Expanded Uncertainty						±20.7%	±20.5%

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

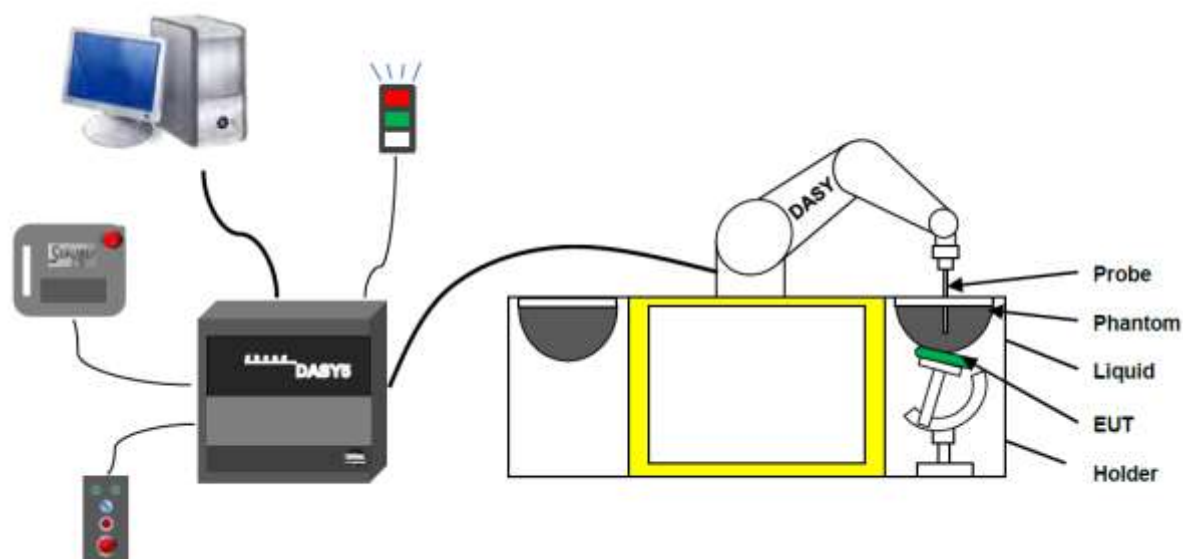
$$SAR = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram

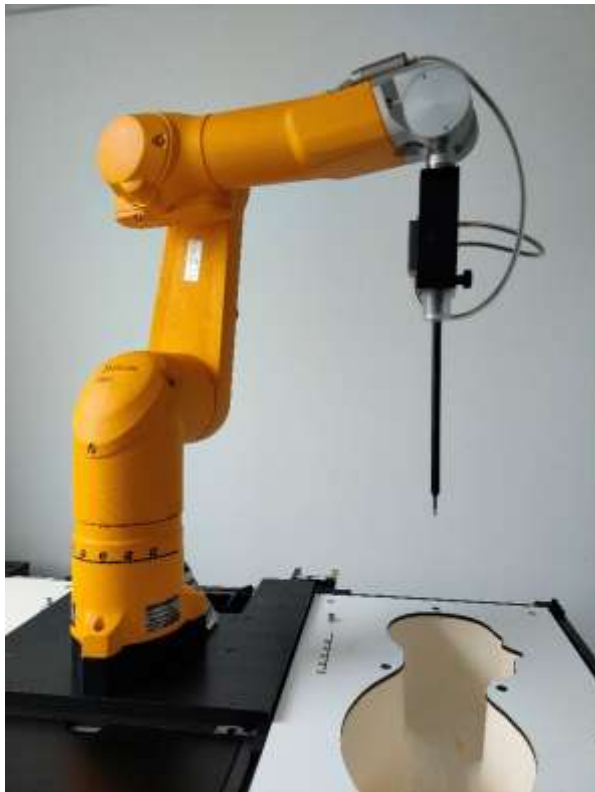


The DASY5 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
6. The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASY5 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

4.2.2 Robot

The Dasy SAR system uses the high precision robots. Symmetrical design with triangular core Built-in optical fiber for surface detection system For the 6-axis controller system, Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents). The robot series have many features that are important for our application:



- High precision
(repeatability ± 0.02 mm)
- High reliability
(industrial design)
- Low maintenance costs
(virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements
(brush less synchron motors; no stepper motors)
- Low ELF interference
(motor control _elds shielded via the closed metallic construction shields)

4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4 with following specifications is used.

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycoether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	4 MHz to 10 GHz; Linearity: ± 0.2 dB
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)



E-Field Probe Calibration Process

Probe calibration is realized, in compliance with IEC/IEEE 62209-1528 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the IEC/IEEE 62209-1528 annexe technique using reference guide at the five frequencies.

4.2.4 Data Acquisition Electronics

The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.



- Input Impedance: 200M Ω m
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB

4.2.5 Phantoms

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.



- Left head
- Right head
- Flat phantom

Photo of Phantom SN1473



Serial Number	Material	Length	Height
SN 1473 SAM1	Vinylester, glass fiber reinforced	1000	500

4.2.6 Device Holder

The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA's only. If necessary an additional support of polystyrene material is used. Larger DUT's (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.



The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1° .

4.2.7 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.

Head Liquid Depth



Body Liquid Depth



The following table gives the recipes for tissue simulating liquid.

TSL	Manufacturer / Model	Freq Range (MHz)	Main Ingredients
Head WideBand	SPEAG HBBL600-10000V6	600-10000	Ethanediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4-diol, Alkoxylated alcohol

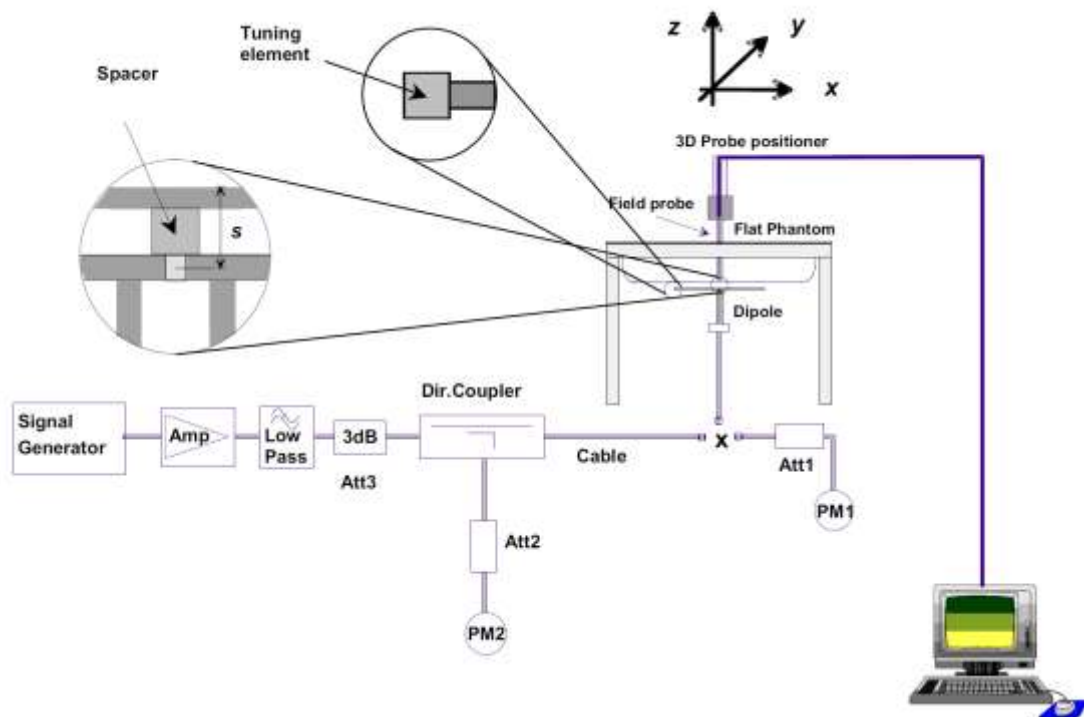
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

5.2 System Check Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



6 TEST POSITION CONFIGURATIONS

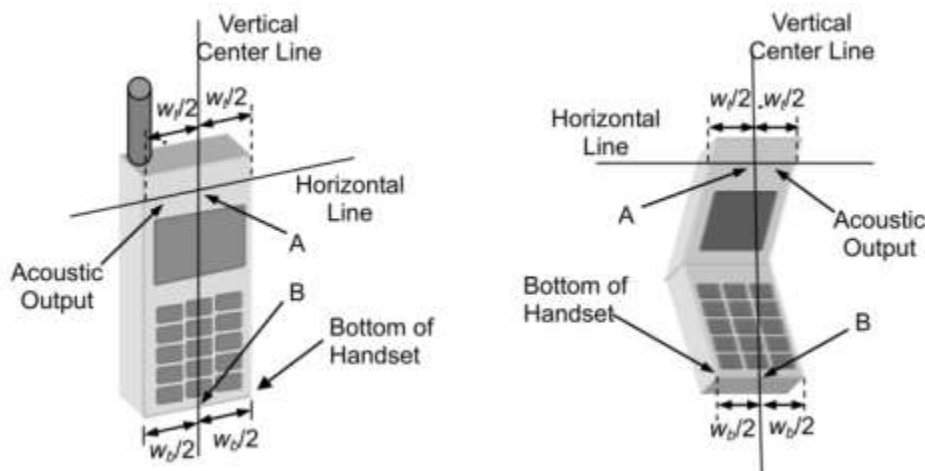
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

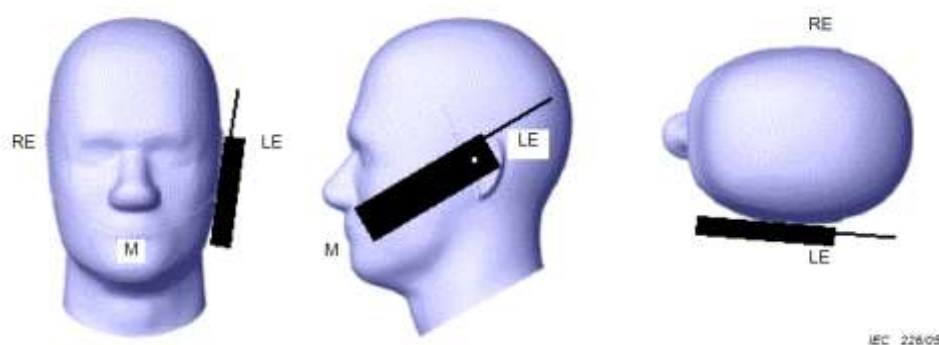
6.1.1 Two Imaginary Lines on the Handset

- The vertical center line 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 bottom of the handset.
- 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.
- 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 center line is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



6.1.2 Cheek Position

- (a) 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 three 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.
- (b) 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 the 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.



6.1.3 Tilted Position

- (a) To position the device in the “cheek” position described above.
- (b) While maintaining the device 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 contact with the ear is lost.

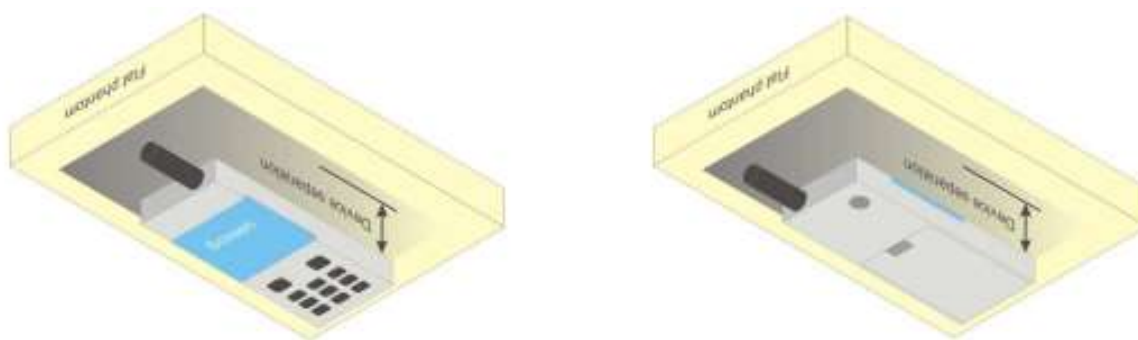


6.2 Body-worn Position Conditions

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 447498 are used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode. When the reported SAR for a body-worn accessory.

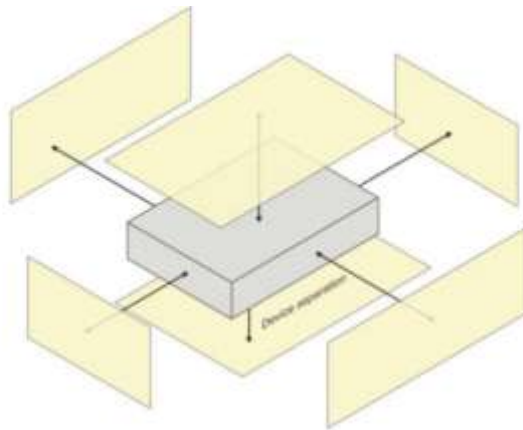
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. All body-worn accessories containing metallic components are tested in conjunction with the host device.

Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice only operations in its normal and expected use conditions, testing of data mode for body-worn compliance is not required. A conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by users of consumer handsets is used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer, according to the requirements of Supplement C 01-01. Devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, will be tested using a conservative minimum test separation distance ≤ 5 mm to support compliance.



6.3 Hotspot Mode Exposure Position Conditions

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing functions, the relevant hand and body exposure conditions 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 surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm x 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation 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).



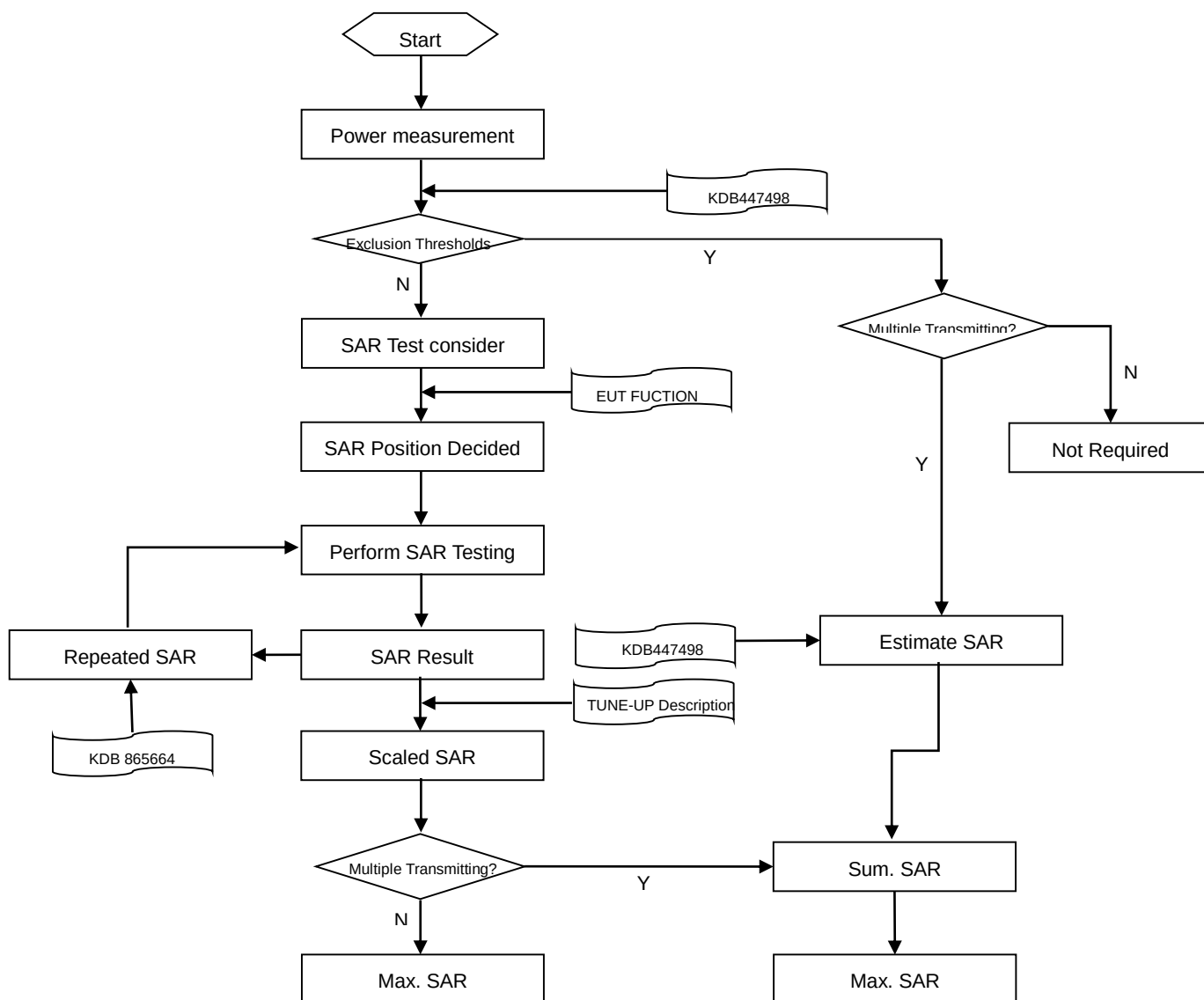
6.4 Product Specific 10g Exposure Consideration

According with FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance;

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1 g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

			≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm	½·δ·ln(2)±0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30°±1°	20°±1°
Maximum area scan spatial resolution: Δx Area , Δy Area			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3–4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom			≤ 2 GHz: ≤ 8 mm 2 –3 GHz: ≤ 5 mm*	3–4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: Δz Zoom (n)		≤ 5 mm	3–4 GHz: ≤ 4 mm
				4–5 GHz: ≤ 3 mm
				5–6 GHz: ≤ 2 mm
	graded grid	Δz Zoom (1): between 1st two points closest to phantom surface	≤ 4 mm	3–4 GHz: ≤ 3 mm
				4–5 GHz: ≤ 2.5 mm
		Δz Zoom (n>1): between subsequent points	≤ 1.5·Δz Zoom (n-1)	
Minimum zoom scan volume	x, y, z		≥30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm

Note:

1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

7.3 Measurement Procedure

The following steps are used for each test position

- a. 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
- b. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- c. 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.
- d. 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.

7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 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.

8 CONDUCTED RF OUPUT POWER

8.1 GSM

Please refer the document "BL-SH2580895-AP.pdf".

8.2 WCDMA

Please refer the document "BL-SH2580895--AP.pdf".

8.3 LTE

Please refer the document "BL-SH2580895--AP.pdf".

8.4 WIFI

8.4.1 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4G	802.11b	1	2412	18.20	18.50	Yes
		6	2437	18.25	18.50	Yes
		11	2462	18.23	18.50	Yes
	802.11g	1	2412	16.00	17.00	No
		6	2437	16.22	17.00	No
		11	2462	16.18	17.00	No
	802.11n(HT20)	1	2412	16.05	17.00	No
		6	2437	16.16	17.00	No
		11	2462	15.97	17.00	No
	802.11n(HT40)	3	2422	15.48	16.50	No
		6	2437	15.28	16.50	No
		9	2452	15.40	16.50	No

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, OFDM SAR test is not required.

Adjusted SAR = $0.955 * (50.11\text{mW}/70.79\text{mW}) = 0.676\text{W/Kg}$, so 2.4G OFDM SAR test is not required.

8.4.2 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	14.18	15.00	No
		44	5220	14.08	15.00	No
		48	5240	14.12	15.00	No
	802.11n(HT20)	36	5180	14.16	15.00	No
		44	5220	14.24	15.00	No
		48	5240	14.21	15.00	No
	802.11n(HT40)	38	5190	14.21	15.00	No
		46	5230	14.15	15.00	No
	802.11ac(VHT20)	36	5180	14.27	15.50	No
		44	5220	14.40	15.50	No
		48	5240	14.28	15.50	No
	802.11ac(VHT40)	38	5190	14.34	15.50	Yes
		46	5230	14.33	15.50	Yes
	802.11ac(VHT80)	42	5210	14.23	15.00	No
5.3 (5.25~5.35)	802.11a	52	5260	14.06	15.00	No
		60	5300	14.16	15.00	No
		64	5320	14.00	15.00	No
	802.11n(HT20)	52	5260	14.07	15.00	No
		60	5300	13.99	15.00	No
		64	5320	14.05	15.00	No
	802.11n(HT40)	54	5270	14.15	15.00	No
		62	5310	14.10	15.00	No
	802.11ac(VHT20)	52	5260	14.23	15.00	No
		60	5300	14.24	15.00	No
		64	5320	14.19	15.00	No
	802.11ac(VHT40)	54	5270	14.00	15.00	No
		62	5310	14.00	15.00	No
	802.11ac(VHT80)	58	5290	14.53	15.50	Yes
5.6 (5.47~5.725)	802.11a	100	5500	14.14	15.00	No
		116	5580	14.27	15.50	No
		140	5700	14.21	15.00	No
	802.11n(HT20)	100	5500	14.07	15.00	No
		116	5580	14.17	15.00	No
		140	5700	13.91	15.00	No
	802.11n(HT40)	102	5510	13.87	15.00	Yes

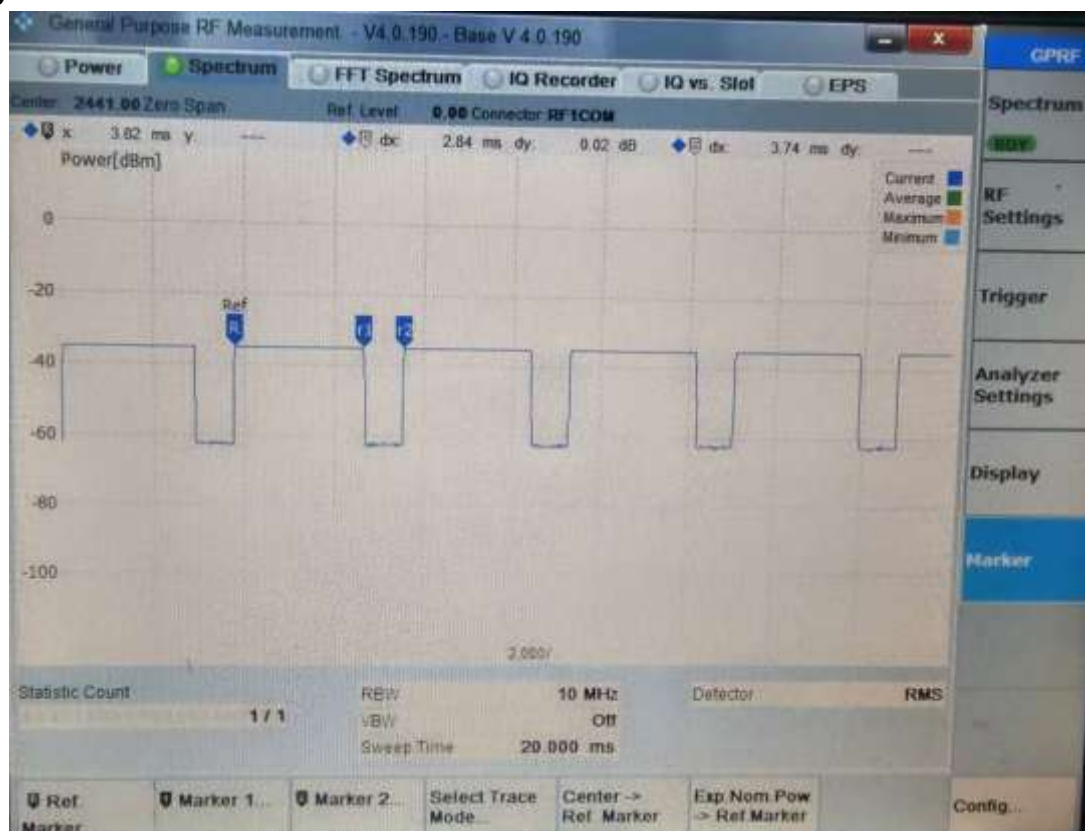
		118	5590	14.29	15.50	Yes
		134	5670	14.07	15.00	Yes
	802.11ac(VHT20)	100	5500	14.26	15.50	No
		116	5580	14.21	15.00	No
		140	5700	14.19	15.00	No
	802.11ac(VHT40)	102	5510	14.08	15.00	No
		118	5590	14.18	15.00	No
		134	5670	13.98	15.00	No
	802.11ac(VHT80)	106	5530	14.04	15.00	No
		122	5690	14.00	15.00	No
5.8 (5.725~5.850)	802.11a	149	5745	14.07	15.00	No
		157	5785	13.92	15.00	No
		165	5825	14.05	15.00	No
	802.11n(HT20)	149	5745	13.83	15.00	No
		157	5785	13.90	15.00	No
		165	5825	13.86	15.00	No
	802.11n(HT40)	151	5755	14.00	15.00	Yes
		159	5795	14.03	15.00	Yes
	802.11ac(VHT20)	149	5745	14.03	15.00	No
		157	5785	14.07	15.00	No
		165	5825	14.22	15.00	No
	802.11ac(VHT40)	151	5755	13.84	15.00	No
		159	5795	13.84	15.00	No
	802.11ac(VHT80)	155	5775	13.64	14.50	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.						

8.5 Bluetooth

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
EIRP (dBm)	5.65	5.70	5.29	4.70	4.82	4.59
Tune-Up Limit (dBm)	6.50	7.00	6.50	5.50	6.00	5.50
SAR Test Require	YES	YES	YES	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
EIRP (dBm)	4.74	4.86	5.04	/	/	/
Tune-Up Limit (dBm)	5.50	6.00	6.00	/		
SAR Test Require	NO	NO	NO	NO	NO	NO
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
EIRP (dBm)	-1.42	-1.30	-1.63	-1.33	-1.31	-1.62
Tune-Up Limit (dBm)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
SAR Test Require	NO	NO	NO	NO	NO	NO

Note: The Bluetooth duty cycle is 75.94% as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

Duty Cycle:



9 TEST EXCLUSION CONSIDERATION

9.1 SAR Test Exclusion Consideration Table

According with FCC KDB 447498 D04, Appendix B, The SAR-based exemption formula applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW), this Device SAR test configurations consider as following :

For antenna location and support bands please refer the document “BL-SH2580895-AI EUT internal photo.pdf”.

Antenna	Support Bands
Main	GSM 850/1900 WCDMA Band 2/4/5 LTE Band 2/4/5/7/12/13/17/25/26/66/71/38/41
WLAN/BT	2.4G/5G WLAN Bluetooth

Antenna	Front Side(mm)	Back Side(mm)	Left Edge(mm)	Right Edge(mm)	Top Edge(mm)	Bottom Edge(mm)
Main	<25	<25	<25	<25	<25	<25
WLAN	<25	<25	>25	<25	<25	>25
BT	<25	<25	<25	<25	<25	<25

Note: 1. Per KDB 941225 DO6, When the overall length and width of a device is > 9 cm *5 cm, a test separation distance of 10 mm is required for hotspot mode SAR measurements and hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.

10 TEST RESULT

10.1 GSM 850

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head											
GPRS (2slots)	Left Cheek	0	190	836.6	0.05	0.088	32.16	33.00	1.213	0.107	1
	Left Tilt	0	190	836.6	0.02	0.064	32.16	33.00	1.213	0.078	
	Right Cheek	0	190	836.6	-0.08	0.069	32.16	33.00	1.213	0.084	
	Right Tilt	0	190	836.6	-0.12	0.031	32.16	33.00	1.213	0.038	
Body-worn& Hotspot											
GPRS (2slots)	Front side	10	190	836.6	0.01	0.111	32.16	33.00	1.213	0.135	2
	Back side	10	190	836.6	-0.08	0.081	32.16	33.00	1.213	0.098	
	Left side	10	190	836.6	-0.06	0.046	32.16	33.00	1.213	0.056	
	Right side	10	190	836.6	-0.18	0.065	32.16	33.00	1.213	0.079	
	Top side	10	190	836.6	0.17	0.032	32.16	33.00	1.213	0.039	
	Bottom side	10	190	836.6	0.10	0.060	32.16	33.00	1.213	0.073	
Note: Refer to ANNEX C for the detailed test data for each test configuration.											

10.2 GSM 1900

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head											
GPRS (3slots)	Left Cheek	0	661	1880	0.15	0.189	27.30	28.00	1.175	0.222	3
	Left Tilt	0	661	1880	-0.17	0.072	27.30	28.00	1.175	0.085	
	Right Cheek	0	661	1880	-0.10	0.079	27.30	28.00	1.175	0.093	
	Right Tilt	0	661	1880	0.07	0.031	27.30	28.00	1.175	0.036	
Body-worn& Hotspot											
GPRS (3slots)	Front side	10	661	1880	-0.06	0.483	27.30	28.00	1.175	0.567	4
	Back side	10	661	1880	0.13	0.216	27.30	28.00	1.175	0.254	
	Left side	10	661	1880	-0.15	0.132	27.30	28.00	1.175	0.155	
	Right side	10	661	1880	-0.12	0.119	27.30	28.00	1.175	0.140	
	Top side	10	661	1880	-0.06	0.040	27.30	28.00	1.175	0.047	
	Bottom side	10	661	1880	0.07	0.367	27.30	28.00	1.175	0.431	
Note: Refer to ANNEX C for the detailed test data for each test configuration.											

10.3WCDMA Band 2

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head											
RMC	Left Cheek	0	9400	1880	-0.05	0.210	23.10	24.00	1.230	0.258	5
	Left Tilt	0	9400	1880	0.12	0.064	23.10	24.00	1.230	0.079	
	Right Cheek	0	9400	1880	0.07	0.091	23.10	24.00	1.230	0.112	
	Right Tilt	0	9400	1880	-0.05	0.042	23.10	24.00	1.230	0.052	
Body-worn& Hotspot											
RMC	Front side	10	9400	1880	-0.09	0.566	23.10	24.00	1.230	0.696	6
	Back side	10	9400	1880	0.15	0.263	23.10	24.00	1.230	0.324	
	Left side	10	9400	1880	0.11	0.158	23.10	24.00	1.230	0.194	
	Right side	10	9400	1880	-0.13	0.124	23.10	24.00	1.230	0.153	
	Top side	10	9400	1880	-0.04	0.041	23.10	24.00	1.230	0.050	
	Bottom side	10	9400	1880	0.03	0.469	23.10	24.00	1.230	0.577	
Note: Refer to ANNEX C for the detailed test data for each test configuration.											

10.4WCDMA Band 4

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head											
RMC	Left Cheek	0	1412	1732.4	-0.07	0.160	23.12	24.00	1.225	0.196	7
	Left Tilt	0	1412	1732.4	0.15	0.075	23.12	24.00	1.225	0.092	
	Right Cheek	0	1412	1732.4	-0.16	0.120	23.12	24.00	1.225	0.147	
	Right Tilt	0	1412	1732.4	0.06	0.060	23.12	24.00	1.225	0.073	
Body-worn& Hotspot											
RMC	Front side	10	1412	1732.4	0.19	0.637	23.12	24.00	1.225	0.780	8
	Back side	10	1412	1732.4	0.18	0.368	23.12	24.00	1.225	0.451	
	Left side	10	1412	1732.4	0.06	0.137	23.12	24.00	1.225	0.168	
	Right side	10	1412	1732.4	-0.07	0.070	23.12	24.00	1.225	0.086	
	Top side	10	1412	1732.4	0.14	0.030	23.12	24.00	1.225	0.037	
	Bottom side	10	1412	1732.4	0.07	0.465	23.12	24.00	1.225	0.569	
Note: Refer to ANNEX C for the detailed test data for each test configuration.											

10.5WCDMA Band 5

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head											
RMC	Left Cheek	0	4182	836.4	-0.01	0.080	22.14	23.00	1.219	0.098	
	Left Tilt	0	4182	836.4	0.13	0.050	22.14	23.00	1.219	0.061	
	Right Cheek	0	4182	836.4	-0.15	0.101	22.14	23.00	1.219	0.123	9
	Right Tilt	0	4182	836.4	0.15	0.056	22.14	23.00	1.219	0.068	
Body-worn& Hotspot											
RMC	Front side	10	4182	836.4	-0.05	0.115	22.14	23.00	1.219	0.140	10
	Back side	10	4182	836.4	0.03	0.087	22.14	23.00	1.219	0.106	
	Left side	10	4182	836.4	-0.16	0.056	22.14	23.00	1.219	0.068	
	Right side	10	4182	836.4	0.05	0.069	22.14	23.00	1.219	0.084	
	Top side	10	4182	836.4	0.04	0.025	22.14	23.00	1.219	0.030	
	Bottom side	10	4182	836.4	-0.15	0.067	22.14	23.00	1.219	0.082	
Note: Refer to ANNEX C for the detailed test data for each test configuration.											

10.6LTE Band 2 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	18900	1880	1	0	-0.03	0.263	24.01	25.00	1.256	0.330	11
	Left tilt	0	18900	1880	1	0	0.16	0.116	24.01	25.00	1.256	0.146	
	Right cheek	0	18900	1880	1	0	-0.19	0.146	24.01	25.00	1.256	0.183	
	Right tilt	0	18900	1880	1	0	0.14	0.049	24.01	25.00	1.256	0.062	
QPSK	Left cheek	0	18900	1880	50	0	-0.14	0.210	22.82	23.50	1.169	0.246	
	Left tilt	0	18900	1880	50	0	-0.06	0.097	22.82	23.50	1.169	0.113	
	Right cheek	0	18900	1880	50	0	0.18	0.123	22.82	23.50	1.169	0.144	
	Right tilt	0	18900	1880	50	0	-0.07	0.040	22.82	23.50	1.169	0.047	
Body-worn& Hotspot													
QPSK	Front side	10	18900	1880	1	0	0.12	0.672	24.01	25.00	1.256	0.844	
	Back side	10	18900	1880	1	0	0.03	0.319	24.01	25.00	1.256	0.401	
	Left side	10	18900	1880	1	0	0.13	0.180	24.01	25.00	1.256	0.226	
	Right side	10	18900	1880	1	0	-0.18	0.132	24.01	25.00	1.256	0.166	
	Top side	10	18900	1880	1	0	0.09	0.045	24.01	25.00	1.256	0.057	
	Bottom side	10	18900	1880	1	0	-0.16	0.570	24.01	25.00	1.256	0.716	
	Front side	10	18700	1860	1	0	0.05	0.787	23.98	25.00	1.265	0.995	12
	Front side	10	19100	1900	1	0	0.10	0.660	23.93	25.00	1.279	0.844	
QPSK	Front side	10	18900	1880	50	0	-0.11	0.615	22.82	23.50	1.169	0.719	
	Back side	10	18900	1880	50	0	0.06	0.263	22.82	23.50	1.169	0.308	
	Left side	10	18900	1880	50	0	0.05	0.144	22.82	23.50	1.169	0.168	
	Right side	10	18900	1880	50	0	-0.10	0.112	22.82	23.50	1.169	0.131	
	Top side	10	18900	1880	50	0	-0.16	0.035	22.82	23.50	1.169	0.041	
	Bottom side	10	18900	1880	50	0	-0.18	0.489	22.82	23.50	1.169	0.572	
	Front side	10	18700	1860	100	0	-0.03	0.565	22.92	23.50	1.143	0.646	

10.7LTE Band 4 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	20175	1732.5	1	0	-0.10	0.213	23.54	24.50	1.247	0.266	13
	Left tilt	0	20175	1732.5	1	0	-0.09	0.068	23.54	24.50	1.247	0.085	
	Right cheek	0	20175	1732.5	1	0	0.07	0.101	23.54	24.50	1.247	0.126	
	Right tilt	0	20175	1732.5	1	0	-0.17	0.054	23.54	24.50	1.247	0.067	
QPSK	Left cheek	0	20175	1732.5	50	0	-0.19	0.139	22.74	23.50	1.191	0.166	
	Left tilt	0	20175	1732.5	50	0	0.11	0.059	22.74	23.50	1.191	0.070	
	Right cheek	0	20175	1732.5	50	0	-0.02	0.079	22.74	23.50	1.191	0.094	
	Right tilt	0	20175	1732.5	50	0	0.03	0.046	22.74	23.50	1.191	0.055	
Body-worn& Hotspot													
QPSK	Front side	10	20175	1732.5	1	0	0.14	0.860	23.54	24.50	1.247	1.073	14
	Front side	10	20175	1732.5	1	0	0.01	0.847	23.54	24.50	1.247	1.057	Repeat
	Back side	10	20175	1732.5	1	0	-0.18	0.387	23.54	24.50	1.247	0.483	
	Left side	10	20175	1732.5	1	0	0.08	0.157	23.54	24.50	1.247	0.196	
	Right side	10	20175	1732.5	1	0	-0.11	0.090	23.54	24.50	1.247	0.112	
	Top side	10	20175	1732.5	1	0	0.19	0.033	23.54	24.50	1.247	0.041	
	Bottom side	10	20175	1732.5	1	0	-0.19	0.521	23.54	24.50	1.247	0.650	
	Front side	10	20050	1720	1	0	0.13	0.759	23.52	24.50	1.253	0.951	
	Front side	10	20300	1745	1	0	-0.18	0.708	23.50	24.50	1.259	0.891	
QPSK	Front side	10	20175	1732.5	50	0	0.16	0.660	22.74	23.50	1.191	0.786	
	Back side	10	20175	1732.5	50	0	0.02	0.313	22.74	23.50	1.191	0.373	
	Left side	10	20175	1732.5	50	0	-0.06	0.128	22.74	23.50	1.191	0.152	
	Right side	10	20175	1732.5	50	0	0.11	0.073	22.74	23.50	1.191	0.087	
	Top side	10	20175	1732.5	50	0	0.03	0.019	22.74	23.50	1.191	0.023	
	Bottom side	10	20175	1732.5	50	0	-0.04	0.418	22.74	23.50	1.191	0.498	
	Front side	10	20175	1732.5	100	0	0.14	0.598	22.72	23.50	1.197	0.716	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.8LTE Band 5 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	20525	836.5	1	0	0.14	0.150	22.77	23.50	1.183	0.177	15
	Left tilt	0	20525	836.5	1	0	0.11	0.098	22.77	23.50	1.183	0.116	
	Right cheek	0	20525	836.5	1	0	0.17	0.116	22.77	23.50	1.183	0.137	
	Right tilt	0	20525	836.5	1	0	0.02	0.063	22.77	23.50	1.183	0.075	
QPSK	Left cheek	0	20525	836.5	25	0	0.13	0.108	21.84	22.50	1.164	0.126	
	Left tilt	0	20525	836.5	25	0	-0.09	0.077	21.84	22.50	1.164	0.090	
	Right cheek	0	20525	836.5	25	0	0.07	0.084	21.84	22.50	1.164	0.098	
	Right tilt	0	20525	836.5	25	0	0.12	0.050	21.84	22.50	1.164	0.058	
Body-worn& Hotspot													
QPSK	Front side	10	20525	836.5	1	0	-0.06	0.152	22.77	23.50	1.183	0.180	16
	Back side	10	20525	836.5	1	0	-0.10	0.108	22.77	23.50	1.183	0.128	
	Left side	10	20525	836.5	1	0	-0.02	0.080	22.77	23.50	1.183	0.095	
	Right side	10	20525	836.5	1	0	0.09	0.093	22.77	23.50	1.183	0.110	
	Top side	10	20525	836.5	1	0	-0.02	0.032	22.77	23.50	1.183	0.038	
	Bottom side	10	20525	836.5	1	0	-0.07	0.083	22.77	23.50	1.183	0.098	
QPSK	Front side	10	20525	836.5	25	0	-0.14	0.124	21.84	22.50	1.164	0.144	
	Back side	10	20525	836.5	25	0	-0.13	0.086	21.84	22.50	1.164	0.100	
	Left side	10	20525	836.5	25	0	-0.17	0.060	21.84	22.50	1.164	0.070	
	Right side	10	20525	836.5	25	0	-0.01	0.071	21.84	22.50	1.164	0.083	
	Top side	10	20525	836.5	25	0	-0.11	0.025	21.84	22.50	1.164	0.029	
	Bottom side	10	20525	836.5	25	0	0.03	0.065	21.84	22.50	1.164	0.076	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.9LTE Band 7 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	21100	2535	1	0	0.06	0.406	23.54	24.50	1.247	0.506	17
	Left tilt	0	21100	2535	1	0	-0.17	0.126	23.54	24.50	1.247	0.157	
	Right cheek	0	21100	2535	1	0	0.01	0.138	23.54	24.50	1.247	0.172	
	Right tilt	0	21100	2535	1	0	-0.16	0.073	23.54	24.50	1.247	0.091	
QPSK	Left cheek	0	21100	2535	50	0	0.04	0.405	22.85	23.50	1.161	0.470	
	Left tilt	0	21100	2535	50	0	-0.03	0.108	22.85	23.50	1.161	0.125	
	Right cheek	0	21100	2535	50	0	0.12	0.119	22.85	23.50	1.161	0.138	
	Right tilt	0	21100	2535	50	0	0.01	0.062	22.85	23.50	1.161	0.072	
Body-worn& Hotspot													
QPSK	Front side	10	21100	2535	1	0	0.18	0.669	23.54	24.50	1.247	0.834	
	Back side	10	21100	2535	1	0	0.17	0.123	23.54	24.50	1.247	0.153	
	Left side	10	21100	2535	1	0	-0.18	0.155	23.54	24.50	1.247	0.193	
	Right side	10	21100	2535	1	0	0.13	0.045	23.54	24.50	1.247	0.056	
	Top side	10	21100	2535	1	0	0.04	0.037	23.54	24.50	1.247	0.046	
	Bottom side	10	21100	2535	1	0	0.03	0.806	23.54	24.50	1.247	1.005	18
	Bottom side	10	21100	2535	1	0	-0.09	0.801	23.54	24.50	1.247	0.999	Repeat
	Bottom side	10	20850	2510	1	0	-0.11	0.770	23.51	24.50	1.256	0.967	
	Bottom side	10	21350	2560	1	0	-0.18	0.780	23.52	24.50	1.253	0.977	
QPSK	Front side	10	21100	2535	50	0	-0.14	0.535	22.85	23.50	1.161	0.621	
	Back side	10	21100	2535	50	0	0.04	0.132	22.85	23.50	1.161	0.153	
	Left side	10	21100	2535	50	0	-0.13	0.147	22.85	23.50	1.161	0.171	
	Right side	10	21100	2535	50	0	0.11	0.041	22.85	23.50	1.161	0.048	
	Top side	10	21100	2535	50	0	-0.09	0.031	22.85	23.50	1.161	0.036	
	Bottom side	10	21100	2535	50	0	-0.17	0.714	22.85	23.50	1.161	0.829	
	Bottom side	10	20850	2510	50	0	0.09	0.684	22.86	23.50	1.159	0.793	
	Bottom side	10	21350	2560	50	0	0.05	0.739	22.93	23.50	1.140	0.843	
	Bottom side	10	21100	2535	100	0	0.07	0.774	22.89	23.50	1.151	0.891	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.10 LTE Band 12 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	23095	707.5	1	0	-0.14	0.167	23.03	24.00	1.250	0.209	19
	Left tilt	0	23095	707.5	1	0	-0.16	0.085	23.03	24.00	1.250	0.106	
	Right cheek	0	23095	707.5	1	0	-0.03	0.118	23.03	24.00	1.250	0.148	
	Right tilt	0	23095	707.5	1	0	-0.15	0.091	23.03	24.00	1.250	0.114	
QPSK	Left cheek	0	23095	707.5	25	0	-0.15	0.108	22.11	23.00	1.227	0.133	
	Left tilt	0	23095	707.5	25	0	-0.17	0.067	22.11	23.00	1.227	0.082	
	Right cheek	0	23095	707.5	25	0	-0.14	0.091	22.11	23.00	1.227	0.112	
	Right tilt	0	23095	707.5	25	0	-0.15	0.052	22.11	23.00	1.227	0.064	
Body-worn& Hotspot													
QPSK	Front side	10	23095	707.5	1	0	0.16	0.222	23.03	24.00	1.250	0.278	20
	Back side	10	23095	707.5	1	0	0.13	0.203	23.03	24.00	1.250	0.254	
	Left side	10	23095	707.5	1	0	-0.15	0.210	23.03	24.00	1.250	0.263	
	Right side	10	23095	707.5	1	0	0.07	0.189	23.03	24.00	1.250	0.236	
	Top side	10	23095	707.5	1	0	-0.08	0.037	23.03	24.00	1.250	0.046	
	Bottom side	10	23095	707.5	1	0	-0.06	0.067	23.03	24.00	1.250	0.084	
QPSK	Front side	10	23095	707.5	25	0	-0.13	0.195	22.11	23.00	1.227	0.239	
	Back side	10	23095	707.5	25	0	-0.14	0.157	22.11	23.00	1.227	0.193	
	Left side	10	23095	707.5	25	0	-0.08	0.194	22.11	23.00	1.227	0.238	
	Right side	10	23095	707.5	25	0	0.09	0.135	22.11	23.00	1.227	0.166	
	Top side	10	23095	707.5	25	0	-0.04	0.025	22.11	23.00	1.227	0.031	
	Bottom side	10	23095	707.5	25	0	-0.16	0.056	22.11	23.00	1.227	0.069	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.11 LTE Band 13 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	23230	782	1	0	0.15	0.069	22.79	23.50	1.178	0.081	21
	Left tilt	0	23230	782	1	0	-0.18	0.030	22.79	23.50	1.178	0.035	
	Right cheek	0	23230	782	1	0	0.12	0.048	22.79	23.50	1.178	0.057	
	Right tilt	0	23230	782	1	0	0.16	0.030	22.79	23.50	1.178	0.035	
QPSK	Left cheek	0	23230	782	25	0	-0.13	0.047	21.71	22.50	1.199	0.056	
	Left tilt	0	23230	782	25	0	0.09	0.028	21.71	22.50	1.199	0.034	
	Right cheek	0	23230	782	25	0	-0.10	0.036	21.71	22.50	1.199	0.043	
	Right tilt	0	23230	782	25	0	-0.07	0.022	21.71	22.50	1.199	0.026	
Body-worn& Hotspot													
QPSK	Front side	10	23230	782	1	0	0.12	0.106	22.79	23.50	1.178	0.125	22
	Back side	10	23230	782	1	0	0.08	0.067	22.79	23.50	1.178	0.079	
	Left side	10	23230	782	1	0	0.07	0.050	22.79	23.50	1.178	0.059	
	Right side	10	23230	782	1	0	-0.13	0.062	22.79	23.50	1.178	0.073	
	Top side	10	23230	782	1	0	-0.11	0.020	22.79	23.50	1.178	0.024	
	Bottom side	10	23230	782	1	0	0.19	0.023	22.79	23.50	1.178	0.027	
QPSK	Front side	10	23230	782	25	0	-0.09	0.072	21.71	22.50	1.199	0.086	
	Back side	10	23230	782	25	0	-0.15	0.048	21.71	22.50	1.199	0.058	
	Left side	10	23230	782	25	0	-0.16	0.036	21.71	22.50	1.199	0.043	
	Right side	10	23230	782	25	0	-0.15	0.045	21.71	22.50	1.199	0.054	
	Top side	10	23230	782	25	0	-0.16	0.027	21.71	22.50	1.199	0.032	
	Bottom side	10	23230	782	25	0	0.18	0.030	21.71	22.50	1.199	0.036	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.12 LTE Band 17 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	23790	710	1	0	0.06	0.167	23.11	24.00	1.227	0.205	23
	Left tilt	0	23790	710	1	0	-0.03	0.076	23.11	24.00	1.227	0.093	
	Right cheek	0	23790	710	1	0	-0.07	0.118	23.11	24.00	1.227	0.145	
	Right tilt	0	23790	710	1	0	0.08	0.070	23.11	24.00	1.227	0.086	
QPSK	Left cheek	0	23790	710	25	0	0.14	0.126	22.12	23.00	1.225	0.154	
	Left tilt	0	23790	710	25	0	-0.08	0.066	22.12	23.00	1.225	0.081	
	Right cheek	0	23790	710	25	0	-0.15	0.097	22.12	23.00	1.225	0.119	
	Right tilt	0	23790	710	25	0	-0.10	0.058	22.12	23.00	1.225	0.071	
Body-worn& Hotspot													
QPSK	Front side	10	23790	710	1	0	-0.06	0.216	23.11	24.00	1.227	0.265	24
	Back side	10	23790	710	1	0	0.03	0.201	23.11	24.00	1.227	0.247	
	Left side	10	23790	710	1	0	0.02	0.211	23.11	24.00	1.227	0.259	
	Right side	10	23790	710	1	0	0.08	0.188	23.11	24.00	1.227	0.231	
	Top side	10	23790	710	1	0	0.12	0.035	23.11	24.00	1.227	0.043	
	Bottom side	10	23790	710	1	0	-0.10	0.067	23.11	24.00	1.227	0.082	
QPSK	Front side	10	23790	710	25	0	0.14	0.196	22.12	23.00	1.225	0.240	
	Back side	10	23790	710	25	0	-0.17	0.159	22.12	23.00	1.225	0.195	
	Left side	10	23790	710	25	0	0.14	0.186	22.12	23.00	1.225	0.228	
	Right side	10	23790	710	25	0	-0.05	0.149	22.12	23.00	1.225	0.182	
	Top side	10	23790	710	25	0	0.12	0.032	22.12	23.00	1.225	0.039	
	Bottom side	10	23790	710	25	0	-0.12	0.054	22.12	23.00	1.225	0.066	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.13 LTE Band 25 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	26365	1882.5	1	0	0.16	0.248	23.55	24.50	1.245	0.309	25
	Left tilt	0	26365	1882.5	1	0	-0.05	0.119	23.55	24.50	1.245	0.148	
	Right cheek	0	26365	1882.5	1	0	0.01	0.109	23.55	24.50	1.245	0.136	
	Right tilt	0	26365	1882.5	1	0	-0.16	0.057	23.55	24.50	1.245	0.071	
QPSK	Left cheek	0	26365	1882.5	50	0	0.09	0.192	22.74	23.50	1.191	0.229	
	Left tilt	0	26365	1882.5	50	0	0.03	0.097	22.74	23.50	1.191	0.116	
	Right cheek	0	26365	1882.5	50	0	-0.04	0.090	22.74	23.50	1.191	0.107	
	Right tilt	0	26365	1882.5	50	0	-0.14	0.046	22.74	23.50	1.191	0.055	
Body-worn& Hotspot													
QPSK	Front side	10	26365	1882.5	1	0	-0.08	0.647	23.55	24.50	1.245	0.805	
	Back side	10	26365	1882.5	1	0	0.03	0.309	23.55	24.50	1.245	0.385	
	Left side	10	26365	1882.5	1	0	-0.02	0.162	23.55	24.50	1.245	0.202	
	Right side	10	26365	1882.5	1	0	-0.01	0.142	23.55	24.50	1.245	0.177	
	Top side	10	26365	1882.5	1	0	0.11	0.043	23.55	24.50	1.245	0.054	
	Bottom side	10	26365	1882.5	1	0	0.17	0.565	23.55	24.50	1.245	0.703	
	Front side	10	26140	1860	1	0	-0.16	0.803	23.51	24.50	1.256	1.009	26
	Front side	10	26140	1860	1	0	-0.12	0.790	23.51	24.50	1.256	0.992	Repeat
	Front side	10	26590	1905	1	0	0.13	0.618	23.41	24.50	1.285	0.794	
QPSK	Front side	10	26365	1882.5	50	0	-0.09	0.598	22.74	23.50	1.191	0.712	
	Back side	10	26365	1882.5	50	0	-0.06	0.256	22.74	23.50	1.191	0.305	
	Left side	10	26365	1882.5	50	0	-0.12	0.137	22.74	23.50	1.191	0.163	
	Right side	10	26365	1882.5	50	0	0.19	0.119	22.74	23.50	1.191	0.142	
	Top side	10	26365	1882.5	50	0	0.14	0.021	22.74	23.50	1.191	0.025	
	Bottom side	10	26365	1882.5	50	0	0.06	0.480	22.74	23.50	1.191	0.572	
	Front side	10	26140	1860	100	0	-0.12	0.571	22.89	23.50	1.151	0.657	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.14 LTE Band 26 (15MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	26865	831.5	1	0	-0.11	0.170	22.84	23.50	1.164	0.198	27
	Left tilt	0	26865	831.5	1	0	-0.17	0.107	22.84	23.50	1.164	0.125	
	Right cheek	0	26865	831.5	1	0	-0.04	0.120	22.84	23.50	1.164	0.140	
	Right tilt	0	26865	831.5	1	0	-0.10	0.079	22.84	23.50	1.164	0.092	
QPSK	Left cheek	0	26865	831.5	36	0	-0.04	0.115	21.94	22.50	1.138	0.131	
	Left tilt	0	26865	831.5	36	0	0.17	0.076	21.94	22.50	1.138	0.086	
	Right cheek	0	26865	831.5	36	0	0.04	0.097	21.94	22.50	1.138	0.110	
	Right tilt	0	26865	831.5	36	0	0.03	0.058	21.94	22.50	1.138	0.066	
Body-worn& Hotspot													
QPSK	Front side	10	26865	831.5	1	0	0.07	0.212	22.84	23.50	1.164	0.247	28
	Back side	10	26865	831.5	1	0	0.05	0.128	22.84	23.50	1.164	0.149	
	Left side	10	26865	831.5	1	0	-0.19	0.092	22.84	23.50	1.164	0.107	
	Right side	10	26865	831.5	1	0	-0.04	0.106	22.84	23.50	1.164	0.123	
	Top side	10	26865	831.5	1	0	-0.09	0.038	22.84	23.50	1.164	0.044	
	Bottom side	10	26865	831.5	1	0	0.17	0.095	22.84	23.50	1.164	0.111	
QPSK	Front side	10	26865	831.5	36	0	-0.17	0.135	21.94	22.50	1.138	0.154	
	Back side	10	26865	831.5	36	0	-0.15	0.094	21.94	22.50	1.138	0.107	
	Left side	10	26865	831.5	36	0	-0.12	0.069	21.94	22.50	1.138	0.078	
	Right side	10	26865	831.5	36	0	-0.03	0.079	21.94	22.50	1.138	0.090	
	Top side	10	26865	831.5	36	0	-0.16	0.023	21.94	22.50	1.138	0.026	
	Bottom side	10	26865	831.5	36	0	-0.01	0.068	21.94	22.50	1.138	0.077	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.15 LTE Band 66 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	132322	1745	1	0	-0.09	0.175	23.58	24.50	1.236	0.216	29
	Left tilt	0	132322	1745	1	0	-0.16	0.077	23.58	24.50	1.236	0.095	
	Right cheek	0	132322	1745	1	0	0.13	0.099	23.58	24.50	1.236	0.122	
	Right tilt	0	132322	1745	1	0	-0.19	0.052	23.58	24.50	1.236	0.064	
QPSK	Left cheek	0	132322	1745	50	0	0.11	0.122	22.85	23.50	1.161	0.142	
	Left tilt	0	132322	1745	50	0	-0.16	0.067	22.85	23.50	1.161	0.078	
	Right cheek	0	132322	1745	50	0	0.01	0.079	22.85	23.50	1.161	0.092	
	Right tilt	0	132322	1745	50	0	-0.03	0.044	22.85	23.50	1.161	0.051	
Body-worn& Hotspot													
QPSK	Front side	10	132322	1745	1	0	-0.19	0.776	23.58	24.50	1.236	0.959	
	Back side	10	132322	1745	1	0	-0.04	0.349	23.58	24.50	1.236	0.431	
	Left side	10	132322	1745	1	0	-0.07	0.161	23.58	24.50	1.236	0.199	
	Right side	10	132322	1745	1	0	-0.19	0.064	23.58	24.50	1.236	0.079	
	Top side	10	132322	1745	1	0	0.06	0.038	23.58	24.50	1.236	0.047	
	Bottom side	10	132322	1745	1	0	-0.10	0.563	23.58	24.50	1.236	0.696	
	Front side	10	132072	1720	1	0	0.08	0.889	23.56	24.50	1.242	1.104	30
	Front side	10	132072	1720	1	0	0.02	0.867	23.56	24.50	1.242	1.077	Repeat
	Front side	10	132572	1770	1	0	0.12	0.699	23.51	24.50	1.256	0.878	
QPSK	Front side	10	132322	1745	50	0	0.19	0.643	22.85	23.50	1.161	0.747	
	Back side	10	132322	1745	50	0	-0.01	0.271	22.85	23.50	1.161	0.315	
	Left side	10	132322	1745	50	0	0.14	0.126	22.85	23.50	1.161	0.146	
	Right side	10	132322	1745	50	0	-0.11	0.054	22.85	23.50	1.161	0.063	
	Top side	10	132322	1745	50	0	-0.17	0.033	22.85	23.50	1.161	0.038	
	Bottom side	10	132322	1745	50	0	0.07	0.455	22.85	23.50	1.161	0.528	
	Front side	10	132072	1720	100	0	0.08	0.627	22.63	23.50	1.222	0.766	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.16 LTE Band 71 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	133322	683	1	0	0.09	0.015	23.40	24.00	1.148	0.017	
	Left tilt	0	133322	683	1	0	0.02	0.010	23.40	24.00	1.148	0.011	
	Right cheek	0	133322	683	1	0	-0.04	0.028	23.40	24.00	1.148	0.032	31
	Right tilt	0	133322	683	1	0	0.15	0.012	23.40	24.00	1.148	0.014	
QPSK	Left cheek	0	133322	683	50	0	0.15	0.012	22.50	23.00	1.122	0.013	
	Left tilt	0	133322	683	50	0	0.15	0.009	22.50	23.00	1.122	0.010	
	Right cheek	0	133322	683	50	0	-0.16	0.018	22.50	23.00	1.122	0.020	
	Right tilt	0	133322	683	50	0	-0.17	0.010	22.50	23.00	1.122	0.011	
Body-worn& Hotspot													
QPSK	Front side	10	133322	683	1	0	0.10	0.052	23.40	24.00	1.148	0.060	32
	Back side	10	133322	683	1	0	0.14	0.047	23.40	24.00	1.148	0.054	
	Left side	10	133322	683	1	0	0.03	0.050	23.40	24.00	1.148	0.057	
	Right side	10	133322	683	1	0	0.15	0.020	23.40	24.00	1.148	0.023	
	Top side	10	133322	683	1	0	0.08	0.020	23.40	24.00	1.148	0.023	
	Bottom side	10	133322	683	1	0	-0.07	0.018	23.40	24.00	1.148	0.021	
QPSK	Front side	10	133322	683	50	0	0.14	0.040	22.50	23.00	1.122	0.045	
	Back side	10	133322	683	50	0	-0.17	0.035	22.50	23.00	1.122	0.039	
	Left side	10	133322	683	50	0	-0.16	0.030	22.50	23.00	1.122	0.034	
	Right side	10	133322	683	50	0	0.15	0.023	22.50	23.00	1.122	0.026	
	Top side	10	133322	683	50	0	-0.15	0.021	22.50	23.00	1.122	0.024	
	Bottom side	10	133322	683	50	0	0.12	0.019	22.50	23.00	1.122	0.021	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.17 LTE Band 38 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	38000	2595	1	0	0.06	0.274	23.85	24.50	1.161	0.318	33
	Left tilt	0	38000	2595	1	0	-0.16	0.069	23.85	24.50	1.161	0.080	
	Right cheek	0	38000	2595	1	0	0.15	0.111	23.85	24.50	1.161	0.129	
	Right tilt	0	38000	2595	1	0	-0.08	0.054	23.85	24.50	1.161	0.063	
QPSK	Left cheek	0	38000	2595	50	0	-0.04	0.180	23.06	24.00	1.242	0.223	
	Left tilt	0	38000	2595	50	0	-0.07	0.072	23.06	24.00	1.242	0.089	
	Right cheek	0	38000	2595	50	0	0.08	0.108	23.06	24.00	1.242	0.134	
	Right tilt	0	38000	2595	50	0	-0.12	0.051	23.06	24.00	1.242	0.063	
Body-worn& Hotspot													
QPSK	Front side	10	38000	2595	1	0	0.06	0.417	23.85	24.50	1.161	0.484	
	Back side	10	38000	2595	1	0	0.02	0.178	23.85	24.50	1.161	0.207	
	Left side	10	38000	2595	1	0	0.01	0.236	23.85	24.50	1.161	0.274	
	Right side	10	38000	2595	1	0	-0.08	0.020	23.85	24.50	1.161	0.023	
	Top side	10	38000	2595	1	0	-0.03	0.038	23.85	24.50	1.161	0.044	
	Bottom side	10	38000	2595	1	0	0.13	0.501	23.85	24.50	1.161	0.582	34
QPSK	Front side	10	38000	2595	50	0	-0.04	0.323	23.06	24.00	1.242	0.401	
	Back side	10	38000	2595	50	0	-0.16	0.151	23.06	24.00	1.242	0.187	
	Left side	10	38000	2595	50	0	-0.02	0.203	23.06	24.00	1.242	0.252	
	Right side	10	38000	2595	50	0	-0.08	0.023	23.06	24.00	1.242	0.029	
	Top side	10	38000	2595	50	0	-0.10	0.025	23.06	24.00	1.242	0.031	
	Bottom side	10	38000	2595	50	0	0.04	0.389	23.06	24.00	1.242	0.483	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.18 LTE Band 41 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/k g)	Meas. Power (dBm)	Max. tune-up power(dB m)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
QPSK	Left cheek	0	40640	2595	1	0	0.15	0.181	24.86	25.50	1.159	0.210	35
	Left tilt	0	40640	2595	1	0	0.17	0.051	24.86	25.50	1.159	0.059	
	Right cheek	0	40640	2595	1	0	0.18	0.071	24.86	25.50	1.159	0.082	
	Right tilt	0	40640	2595	1	0	-0.12	0.032	24.86	25.50	1.159	0.037	
QPSK	Left cheek	0	40640	2595	50	0	-0.02	0.154	24.01	24.50	1.119	0.172	
	Left tilt	0	40640	2595	50	0	0.12	0.041	24.01	24.50	1.119	0.046	
	Right cheek	0	40640	2595	50	0	-0.07	0.065	24.01	24.50	1.119	0.073	
	Right tilt	0	40640	2595	50	0	-0.14	0.030	24.01	24.50	1.119	0.034	
Body-worn& Hotspot													
QPSK	Front side	10	40640	2595	1	0	-0.16	0.316	24.86	25.50	1.159	0.366	
	Back side	10	40640	2595	1	0	0.12	0.146	24.86	25.50	1.159	0.169	
	Left side	10	40640	2595	1	0	-0.18	0.183	24.86	25.50	1.159	0.212	
	Right side	10	40640	2595	1	0	0.07	0.043	24.86	25.50	1.159	0.050	
	Top side	10	40640	2595	1	0	-0.18	0.037	24.86	25.50	1.159	0.043	
	Bottom side	10	40640	2595	1	0	-0.11	0.397	24.86	25.50	1.159	0.460	36
QPSK	Front side	10	40640	2595	50	0	-0.19	0.358	24.01	24.50	1.119	0.401	
	Back side	10	40640	2595	50	0	-0.08	0.161	24.01	24.50	1.119	0.180	
	Left side	10	40640	2595	50	0	-0.05	0.196	24.01	24.50	1.119	0.219	
	Right side	10	40640	2595	50	0	-0.02	0.042	24.01	24.50	1.119	0.047	
	Top side	10	40640	2595	50	0	0.02	0.020	24.01	24.50	1.119	0.022	
	Bottom side	10	40640	2595	50	0	0.09	0.351	24.01	24.50	1.119	0.393	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.19 Bluetooth

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle(%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
BR/EDR 1Mbps	Left Cheek	0	39	2441	-0.14	0.031	5.70	7.00	1.349	76.00	1.316	0.055	37
	Left Tilt	0	39	2441	-0.04	0.020	5.70	7.00	1.349	76.00	1.316	0.035	
	Right Cheek	0	39	2441	0.02	0.026	5.70	7.00	1.349	76.00	1.316	0.046	
	Right Tilt	0	39	2441	0.12	0.016	5.70	7.00	1.349	76.00	1.316	0.028	
Body-worn& Hotspot													
BR/EDR 1Mbps	Front side	10	39	2441	-0.12	0.006	5.70	7.00	1.349	76.00	1.316	0.011	38
	Back side	10	39	2441	0.10	0.004	5.70	7.00	1.349	76.00	1.316	0.007	
	Left side	10	39	2441	-0.03	0.003	5.70	7.00	1.349	76.00	1.316	0.005	
	Right side	10	39	2441	-0.05	0.005	5.70	7.00	1.349	76.00	1.316	0.009	
	Top side	10	39	2441	-0.19	0.003	5.70	7.00	1.349	76.00	1.316	0.005	
	Bottom side	10	39	2441	-0.09	0.002	5.70	7.00	1.349	76.00	1.316	0.004	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.20 WIFI 2.4GHz

Position	Dist. (mm)	Test Mode	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
Head													
Left cheek	0	802.1 1b	6	2437	0.15	0.865	18.25	18.50	1.059	99.00	1.010	0.926	
Left tilt	0		6	2437	0.10	0.655	18.25	18.50	1.059	99.00	1.010	0.701	
Right cheek	0		6	2437	0.17	0.725	18.25	18.50	1.059	99.00	1.010	0.776	
Right tilt	0		6	2437	-0.13	0.432	18.25	18.50	1.059	99.00	1.010	0.462	
Left cheek	0		1	2412	-0.04	0.882	18.20	18.50	1.072	99.00	1.010	0.955	39
Left cheek	0		1	2412	0.04	0.871	18.20	18.50	1.072	99.00	1.010	0.943	Repeat
Left cheek	0		11	2462	0.06	0.870	18.23	18.50	1.064	99.00	1.010	0.935	
Body-worn& Hotspot													
Front side	10	802.1 1b	6	2437	-0.18	0.196	18.25	18.50	1.059	99.00	1.010	0.210	40
Back side	10		6	2437	-0.13	0.117	18.25	18.50	1.059	99.00	1.010	0.125	
Left side	10		6	2437	0.05	0.045	18.25	18.50	1.059	99.00	1.010	0.048	
Right side	10		6	2437	0.05	0.143	18.25	18.50	1.059	99.00	1.010	0.153	
Top side	10		6	2437	0.05	0.138	18.25	18.50	1.059	99.00	1.010	0.148	
Bottom side	10		6	2437	0.04	0.021	18.25	18.50	1.059	99.00	1.010	0.022	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.21 WIFI 5GHz

Fre. Band	Position	Dist. (mm)	Test Mode	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- up power(dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
5.3G	Left Cheek	0	802.11 ac80	58	5290	0.08	0.074	14.53	15.50	1.250	84.00	1.190	0.110	41
	Left Tilt	0		58	5290	0.03	0.056	14.53	15.50	1.250	84.00	1.190	0.083	
	Right Cheek	0		58	5290	-0.05	0.058	14.53	15.50	1.250	84.00	1.190	0.086	
	Right Tilt	0		58	5290	0.17	0.054	14.53	15.50	1.250	84.00	1.190	0.080	
5.6G	Left Cheek	0	802.11 n40	118	5590	0.05	0.120	14.29	15.50	1.321	92.00	1.087	0.172	
	Left Tilt	0		118	5590	-0.18	0.172	14.29	15.50	1.321	92.00	1.087	0.247	42
	Right Cheek	0		118	5590	0.16	0.092	14.29	15.50	1.321	92.00	1.087	0.132	
	Right Tilt	0		118	5590	-0.04	0.110	14.29	15.50	1.321	92.00	1.087	0.158	
5.8G	Left Cheek	0	802.11 n40	151	5755	-0.07	0.220	14.00	15.00	1.259	92.00	1.087	0.301	43
	Left Tilt	0		151	5755	0.14	0.179	14.00	15.00	1.259	92.00	1.087	0.245	
	Right Cheek	0		151	5755	0.14	0.120	14.00	15.00	1.259	92.00	1.087	0.164	
	Right Tilt	0		151	5755	0.12	0.102	14.00	15.00	1.259	92.00	1.087	0.140	
Body														
5.3G	Left Cheek	10	802.11 ac80	58	5290	-0.02	0.007	14.53	15.50	1.250	84.00	1.190	0.010	44
	Left Tilt	10		58	5290	-0.14	0.005	14.53	15.50	1.250	84.00	1.190	0.007	
5.6G	Left Cheek	10	802.11 n40	118	5590	-0.02	0.068	14.29	15.50	1.321	92.00	1.087	0.098	
	Left Tilt	10		118	5590	0.02	0.110	14.29	15.50	1.321	92.00	1.087	0.158	45
5.8G	Left Cheek	10	802.11 n40	151	5755	0.19	0.067	14.00	15.00	1.259	92.00	1.087	0.092	
	Left Tilt	10		151	5755	0.08	0.152	14.00	15.00	1.259	92.00	1.087	0.208	46
Hotspot														
5.2G	Front Side	10	802.11 ac40	38	5190	-0.13	0.007	14.34	15.50	1.306	93.00	1.075	0.010	
	Back Side	10		38	5190	-0.03	0.005	14.34	15.50	1.306	93.00	1.075	0.007	
	Left side	10		38	5190	0.12	0.005	14.34	15.50	1.306	93.00	1.075	0.007	
	Right side	10		38	5190	0.04	0.006	14.34	15.50	1.306	93.00	1.075	0.008	
	Top side	10		38	5190	0.18	0.009	14.34	15.50	1.306	93.00	1.075	0.013	47
	Bottom side	10		38	5190	-0.13	0.003	14.34	15.50	1.306	93.00	1.075	0.004	
5.8G	Front Side	10	802.11 n40	151	5755	0.10	0.067	14.00	15.00	1.259	92.00	1.087	0.092	
	Back Side	10		151	5755	-0.10	0.117	14.00	15.00	1.259	92.00	1.087	0.160	
	Left side	10		151	5755	0.13	0.125	14.00	15.00	1.259	92.00	1.087	0.171	
	Right side	10		151	5755	-0.17	0.109	14.00	15.00	1.259	92.00	1.087	0.149	
	Top side	10		151	5755	0.09	0.132	14.00	15.00	1.259	92.00	1.087	0.181	48
	Bottom side	10		151	5755	-0.11	0.066	14.00	15.00	1.259	92.00	1.087	0.090	
Fre. Band	Position	Dist. (mm)	Test Mode	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- up power(dBm)	Scaling Factor	Duty cycle (%)	Duty Factor	10g Scaled SAR (W/kg)	Meas. No.
Extremity														

5.3G	Front Side	0	802.11 ac80	58	5290	0.02	0.040	14.53	15.50	1.250	84.00	1.190	0.060	
	Back Side	0		58	5290	0.13	0.027	14.53	15.50	1.250	84.00	1.190	0.040	
	Left Edge	0		58	5290	-0.15	0.056	14.53	15.50	1.250	84.00	1.190	0.083	49
	Top Edge	0		58	5290	-0.02	0.050	14.53	15.50	1.250	84.00	1.190	0.074	
5.6G	Front Side	0	802.11 n40	118	5590	-0.07	0.078	14.29	15.50	1.321	92.00	1.087	0.112	
	Back Side	0		118	5590	0.14	0.065	14.29	15.50	1.321	92.00	1.087	0.093	
	Left Edge	0		118	5590	0.16	0.091	14.29	15.50	1.321	92.00	1.087	0.131	50
	Top Edge	0		118	5590	0.08	0.070	14.29	15.50	1.321	92.00	1.087	0.101	

Note: Refer to ANNEX C for the detailed test data for each test configuration.

10.22 NFC SAR

1. According to the 2022.04 TCBC Workshop meeting, the power threshold is $\leq 100\text{MHz}$, refer to P6s.

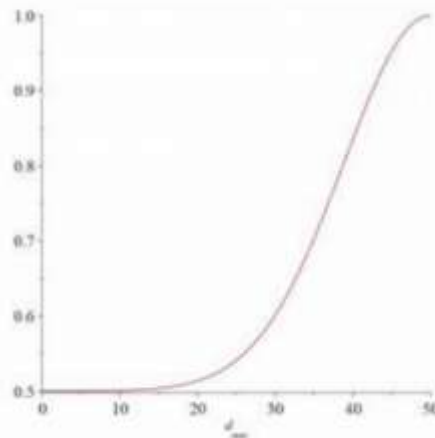
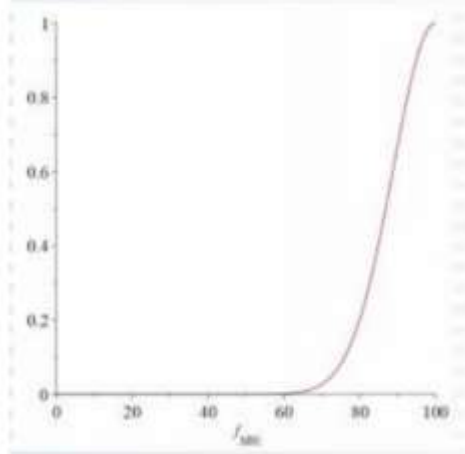
$$P_{7X}(d_{mm}, f_{MHz}) := \begin{cases} P_{6S}(d_{mm}, f_{MHz}) & f_{MHz} \leq 100 \\ P_{6to7}(d_{mm}, f_{MHz}) & 100 < f_{MHz} \leq 300 \\ P_7(d_{mm}, f_{MHz}) & 300 < f_{MHz} \end{cases}$$

2. For portable products, when using a distance of $\leq 50\text{mm}$, such as mobile phone NFC, P6s is calculated with the following formula calculate.

$$S_f(f_{MHz}) \cdot P_{431a}(d_{mm}, f_{MHz}) + (1 - S_f(f_{MHz})) \cdot S_d(d_{mm}) \cdot P_{431b1}(50., 100.) \cdot \left(1 + \log_{10}\left(\frac{100.}{f_{MHz}}\right)\right) \quad d_{mm} \leq 50 \text{ and } f_{MHz} \leq 100$$

3. The smoothing functions S_f and S_d in P6s calculate the limits based on KDB 447498 V06 and are calculated as follows.

$$S_f(f_{MHz}) := \exp\left(-10 \frac{(f_{MHz} - f_{max})^2}{\Delta f^2}\right) \quad S_d(d_{mm}) := 0.5 + 0.5 \cdot \exp\left(-10 \frac{(d_{mm} - d_{max})^2}{\Delta d^2}\right)$$



d≤50mm				
f Max(MHz)	100		d Max(mm)	50
f MHz	13.56		d(mm)	5
△f(MHz)	100		△d	50
S _F (f _{MHz})	0.000568861		S _d (dmm)	0.50015177
P6s(mW)	443.1257378			
Note: SAR testing is required when the distance is 5mm and the power is greater than 443.13mW.				

4. According to the ANSI C63.10 clause 11.12.2.2:

The value of maximum peak output power is according to the method described in ANSI C63.10 clause 11.12.2.2 General procedure for conducted measurements in restricted bands:

- a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see guidance on determining the applicable antenna gain)
- c) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies $\leq$ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies $>$ 1000 MHz).
- d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
- e) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship: $E = \text{EIRP} - 20\log D + 104.8$

where:

E = electric field strength in dB μ V/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

Mode	f (MHz)	Max. E-Field strength (dB μ V/m)	D (m)	Ground reflection factor (dB)	ERP (dBm)
NFC (13.56MHz)	13.56	57.10	3	6	-21.70

Note:

1. Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies $\leq$ 30 MHz).

2. ERP = $57.10 + 20 \cdot \log(3) - 104.8 + 6 = -21.70$ (dBm)

According to the FCC KDB 447498 D04

Estimated SAR: SAR test = $1.6 \cdot P_{\text{ant}} / P_{\text{th}}$ [W/kg]

Estimated SAR	$1.6 \cdot P_{\text{ant}} / P_{\text{th}}$ [W/kg]		
Pmeas.(dBm)	-21.70	Pmeas.(mW)	0.007
Pth.(mW)	443.13		
NFC Estimated 1g SAR [W/kg]	0.001		

11 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are ≤ 1.45 W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is ≤ 1.10 , the highest SAR configuration for either head or body tissue-equivalent medium may be used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is < 0.80 W/kg, repeated measurement is not required.
2. When the highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3. If the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 , or when the original or repeated measurement is ≥ 1.45 W/kg, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 , and the original, first or second repeated measurement is ≥ 1.5 W/kg, perform a third repeated measurement.

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Repeated ^{1st} Measured SAR (W/kg)	Largest to Smallest SAR Radio
1750	LTE B4	Body-worn&Hotspot	Front Side	1.073	Yes	1.057	1.02
2600	LTE B7	Body-worn&Hotspot	Bottom Side	1.005	Yes	0.999	1.01
1900	LTE B25	Body-worn&Hotspot	Front Side	1.009	Yes	0.992	1.02
1750	LTE B66	Body-worn&Hotspot	Front Side	1.104	Yes	1.077	1.03
2450	WIFI 2.4G	Head	Left Cheek	1.122	Yes	1.108	1.01

Note: The ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20 , the second repeated measurement. is not required.

12 SIMULTANEOUS TRANSMISSION

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR 1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR 1g 1.6 W/kg), SAR test exclusion is determined by the SAR to Peak Location Ratio (SPLSR).

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot
1	WWAN+WIFI2.4G+BT	Yes	Yes	Yes
2	WWAN+WIFI5G+BT	Yes	Yes	Yes
Note: 1. 2G&3G&4G share the same antenna and can't transmit simultaneously. 2. 2.4G WLAN can transmit simultaneously with Bluetooth or 5G WLAN. 3. The maximum SAR summation is calculated based on the same configuration and test position. 4. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications. 5. This device 2.4GHz WLAN/5G WLAN support hotspot operation.				

12.2 Sum SAR of Simultaneous Transmission

12.2.1 Sum Head SAR of Simultaneous Transmission

Band	Position	Stand alone SAR				SUM SAR	
		1	2	3	4		
		WWAN	2.4GWIFI	5G WIFI	Bluetooth	1+2+4	1+3+4
GSM 850	Left Cheek	0.107	0.955	0.301	0.055	1.116	0.463
	Left Tilt	0.078	0.701	0.247	0.036	0.814	0.360
	Right Cheek	0.084	0.776	0.164	0.046	0.906	0.294
	Right Tilt	0.038	0.462	0.158	0.028	0.528	0.224
GSM 1900	Left Cheek	0.222	0.955	0.301	0.055	1.232	0.578
	Left Tilt	0.085	0.701	0.247	0.036	0.821	0.367
	Right Cheek	0.093	0.776	0.164	0.046	0.915	0.303
	Right Tilt	0.036	0.462	0.158	0.028	0.527	0.223
WCDMA B2	Left Cheek	0.258	0.955	0.301	0.055	1.268	0.614
	Left Tilt	0.079	0.701	0.247	0.036	0.815	0.361
	Right Cheek	0.112	0.776	0.164	0.046	0.934	0.322
	Right Tilt	0.052	0.462	0.158	0.028	0.542	0.238
WCDMA B4	Left Cheek	0.196	0.955	0.301	0.055	1.206	0.552
	Left Tilt	0.092	0.701	0.247	0.036	0.828	0.374
	Right Cheek	0.147	0.776	0.164	0.046	0.969	0.357
	Right Tilt	0.073	0.462	0.158	0.028	0.564	0.260
WCDMA B5	Left Cheek	0.098	0.955	0.301	0.055	1.107	0.454
	Left Tilt	0.061	0.701	0.247	0.036	0.797	0.344
	Right Cheek	0.123	0.776	0.164	0.046	0.945	0.334
	Right Tilt	0.068	0.462	0.158	0.028	0.559	0.255
LTE B2	Left Cheek	0.330	0.955	0.301	0.055	1.340	0.686
	Left Tilt	0.146	0.701	0.247	0.036	0.882	0.428
	Right Cheek	0.183	0.776	0.164	0.046	1.005	0.394
	Right Tilt	0.062	0.462	0.158	0.028	0.552	0.248
LTE B4	Left Cheek	0.266	0.955	0.301	0.055	1.275	0.622
	Left Tilt	0.085	0.701	0.247	0.036	0.821	0.367
	Right Cheek	0.126	0.776	0.164	0.046	0.948	0.336
	Right Tilt	0.067	0.462	0.158	0.028	0.558	0.254
LTE B5	Left Cheek	0.177	0.955	0.301	0.055	1.187	0.534
	Left Tilt	0.116	0.701	0.247	0.036	0.852	0.398
	Right Cheek	0.137	0.776	0.164	0.046	0.959	0.348
	Right Tilt	0.075	0.462	0.158	0.028	0.565	0.261
LTE B7	Left Cheek	0.506	0.955	0.301	0.055	1.516	0.863
	Left Tilt	0.157	0.701	0.247	0.036	0.894	0.440
	Right Cheek	0.172	0.776	0.164	0.046	0.994	0.383
	Right Tilt	0.091	0.462	0.158	0.028	0.582	0.277
LTE B12	Left Cheek	0.209	0.955	0.301	0.055	1.218	0.565

	Left Tilt	0.106	0.701	0.247	0.036	0.843	0.389
	Right Cheek	0.148	0.776	0.164	0.046	0.969	0.358
	Right Tilt	0.114	0.462	0.158	0.028	0.604	0.300
LTE B13	Left Cheek	0.081	0.955	0.301	0.055	1.091	0.437
	Left Tilt	0.035	0.701	0.247	0.036	0.772	0.318
	Right Cheek	0.057	0.776	0.164	0.046	0.878	0.267
	Right Tilt	0.035	0.462	0.158	0.028	0.526	0.222
LTE B17	Left Cheek	0.205	0.955	0.301	0.055	1.215	0.561
	Left Tilt	0.093	0.701	0.247	0.036	0.830	0.376
	Right Cheek	0.145	0.776	0.164	0.046	0.967	0.355
	Right Tilt	0.086	0.462	0.158	0.028	0.577	0.272
LTE B25	Left Cheek	0.309	0.955	0.301	0.055	1.318	0.665
	Left Tilt	0.148	0.701	0.247	0.036	0.884	0.431
	Right Cheek	0.136	0.776	0.164	0.046	0.958	0.346
	Right Tilt	0.071	0.462	0.158	0.028	0.562	0.257
LTE B26	Left Cheek	0.198	0.955	0.301	0.055	1.208	0.554
	Left Tilt	0.125	0.701	0.247	0.036	0.861	0.407
	Right Cheek	0.140	0.776	0.164	0.046	0.962	0.350
	Right Tilt	0.092	0.462	0.158	0.028	0.583	0.278
LTE B66	Left Cheek	0.216	0.955	0.301	0.055	1.226	0.572
	Left Tilt	0.095	0.701	0.247	0.036	0.832	0.378
	Right Cheek	0.122	0.776	0.164	0.046	0.944	0.333
	Right Tilt	0.064	0.462	0.158	0.028	0.555	0.251
LTE B71	Left Cheek	0.017	0.955	0.301	0.055	1.027	0.373
	Left Tilt	0.011	0.701	0.247	0.036	0.748	0.294
	Right Cheek	0.032	0.776	0.164	0.046	0.854	0.243
	Right Tilt	0.014	0.462	0.158	0.028	0.504	0.200
LTE B38	Left Cheek	0.318	0.955	0.301	0.055	1.328	0.674
	Left Tilt	0.089	0.701	0.247	0.036	0.826	0.372
	Right Cheek	0.134	0.776	0.164	0.046	0.956	0.344
	Right Tilt	0.063	0.462	0.158	0.028	0.554	0.250
LTE B41	Left Cheek	0.210	0.955	0.301	0.055	1.219	0.566
	Left Tilt	0.059	0.701	0.247	0.036	0.795	0.342
	Right Cheek	0.082	0.776	0.164	0.046	0.904	0.293
	Right Tilt	0.037	0.462	0.158	0.028	0.528	0.223

Note:

- 1: The simultaneous transmission combinations of the antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.
- 2: The highest Summed 10g SAR is 1.516W/Kg < 1.6W/kg, so Simultaneous Transmission SAR test is not required.

12.2.2 Sum Body-worn SAR of Simultaneous Transmission

Band	Position	Stand alone SAR				SUM SAR	
		1	2	3	4		
		WWAN	2.4GWIFI	5G WIFI	Bluetooth	1+2+4	1+3+4
GSM 850	Front Side	0.135	0.210	0.098	0.011	0.355	0.243
	Back Side	0.098	0.125	0.208	0.007	0.231	0.313
GSM 1900	Front Side	0.567	0.210	0.098	0.011	0.788	0.676
	Back Side	0.254	0.125	0.208	0.007	0.386	0.469
WCDMA B2	Front Side	0.696	0.210	0.098	0.011	0.917	0.805
	Back Side	0.324	0.125	0.208	0.007	0.456	0.539
WCDMA B4	Front Side	0.780	0.210	0.098	0.011	1.000	0.888
	Back Side	0.451	0.125	0.208	0.007	0.583	0.666
WCDMA B5	Front Side	0.140	0.210	0.098	0.011	0.361	0.249
	Back Side	0.106	0.125	0.208	0.007	0.238	0.321
LTE B2	Front Side	0.995	0.210	0.098	0.011	1.216	1.104
	Back Side	0.401	0.125	0.208	0.007	0.533	0.616
LTE B4	Front Side	1.057	0.210	0.098	0.011	1.277	1.165
	Back Side	0.483	0.125	0.208	0.007	0.615	0.698
LTE B5	Front Side	0.180	0.210	0.098	0.011	0.400	0.288
	Back Side	0.128	0.125	0.208	0.007	0.260	0.343
LTE B7	Front Side	0.834	0.210	0.098	0.011	1.055	0.943
	Back Side	0.153	0.125	0.208	0.007	0.286	0.369
LTE B12	Front Side	0.278	0.210	0.098	0.011	0.498	0.386
	Back Side	0.254	0.125	0.208	0.007	0.386	0.469
LTE B13	Front Side	0.125	0.210	0.098	0.011	0.345	0.233
	Back Side	0.079	0.125	0.208	0.007	0.211	0.294
LTE B17	Front Side	0.265	0.210	0.098	0.011	0.485	0.373
	Back Side	0.247	0.125	0.208	0.007	0.379	0.462
LTE B25	Front Side	1.009	0.210	0.098	0.011	1.229	1.117
	Back Side	0.385	0.125	0.208	0.007	0.517	0.600
LTE B26	Front Side	0.247	0.210	0.098	0.011	0.467	0.355
	Back Side	0.149	0.125	0.208	0.007	0.281	0.364
LTE B66	Front Side	1.104	0.210	0.098	0.011	1.324	1.212
	Back Side	0.431	0.125	0.208	0.007	0.564	0.646
LTE B71	Front Side	0.060	0.210	0.098	0.011	0.280	0.168
	Back Side	0.054	0.125	0.208	0.007	0.186	0.269
LTE B38	Front Side	0.484	0.210	0.098	0.011	0.705	0.593
	Back Side	0.207	0.125	0.208	0.007	0.339	0.422
LTE B41	Front Side	0.401	0.210	0.098	0.011	0.621	0.509
	Back Side	0.180	0.125	0.208	0.007	0.313	0.395

Note:

1: The simultaneous transmission combinations of the antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Combined 10g SAR is 1.324 W/Kg < 1.6 W/Kg, so Simultaneous Transmission SAR test is not required.

12.2.3 Sum Hotspot SAR of Simultaneous Transmission

Band	Position	Stand alone SAR				SUM SAR	
		1	2	3	4		
		WWAN	2.4GWIFI	5G WIFI	Bluetooth	1+2+4	1+3+4
GSM 850	Front Side	0.135	0.210	0.098	0.011	0.355	0.243
	Back Side	0.098	0.125	0.208	0.007	0.231	0.313
	Left Side	0.056	0.048	0.171	0.005	0.109	0.232
	Right Side	0.079	0.153	0.149	0.009	0.241	0.237
	Top Side	0.039	0.148	0.181	0.005	0.192	0.225
	Bottom Side	0.073	0.022	0.090	0.004	0.099	0.167
GSM 1900	Front Side	0.567	0.210	0.098	0.011	0.788	0.676
	Back Side	0.254	0.125	0.208	0.007	0.386	0.469
	Left Side	0.155	0.048	0.171	0.005	0.209	0.331
	Right Side	0.140	0.153	0.149	0.009	0.302	0.298
	Top Side	0.047	0.148	0.181	0.005	0.200	0.233
	Bottom Side	0.431	0.022	0.090	0.004	0.457	0.525
WCDMA B2	Front Side	0.696	0.210	0.098	0.011	0.917	0.805
	Back Side	0.324	0.125	0.208	0.007	0.456	0.539
	Left Side	0.194	0.048	0.171	0.005	0.248	0.371
	Right Side	0.153	0.153	0.149	0.009	0.314	0.311
	Top Side	0.050	0.148	0.181	0.005	0.203	0.236
	Bottom Side	0.577	0.022	0.090	0.004	0.603	0.671
WCDMA B4	Front Side	0.780	0.210	0.098	0.011	1.000	0.888
	Back Side	0.451	0.125	0.208	0.007	0.583	0.666
	Left Side	0.168	0.048	0.171	0.005	0.221	0.344
	Right Side	0.086	0.153	0.149	0.009	0.248	0.244
	Top Side	0.037	0.148	0.181	0.005	0.190	0.223
	Bottom Side	0.569	0.022	0.090	0.004	0.595	0.663
WCDMA B5	Front Side	0.140	0.210	0.098	0.011	0.361	0.249
	Back Side	0.106	0.125	0.208	0.007	0.238	0.321
	Left Side	0.068	0.048	0.171	0.005	0.122	0.245
	Right Side	0.084	0.153	0.149	0.009	0.246	0.242
	Top Side	0.030	0.148	0.181	0.005	0.183	0.216
	Bottom Side	0.082	0.022	0.090	0.004	0.108	0.176
LTE B2	Front Side	0.995	0.210	0.098	0.011	1.216	1.104
	Back Side	0.401	0.125	0.208	0.007	0.533	0.616

	Left Side	0.226	0.048	0.171	0.005	0.280	0.402
	Right Side	0.166	0.153	0.149	0.009	0.328	0.324
	Top Side	0.057	0.148	0.181	0.005	0.210	0.242
	Bottom Side	0.716	0.022	0.090	0.004	0.742	0.810
LTE B4	Front Side	1.057	0.210	0.098	0.011	1.277	1.165
	Back Side	0.483	0.125	0.208	0.007	0.615	0.698
	Left Side	0.196	0.048	0.171	0.005	0.249	0.372
	Right Side	0.112	0.153	0.149	0.009	0.274	0.270
	Top Side	0.041	0.148	0.181	0.005	0.194	0.227
	Bottom Side	0.650	0.022	0.090	0.004	0.676	0.744
LTE B5	Front Side	0.180	0.210	0.098	0.011	0.400	0.288
	Back Side	0.128	0.125	0.208	0.007	0.260	0.343
	Left Side	0.095	0.048	0.171	0.005	0.148	0.271
	Right Side	0.110	0.153	0.149	0.009	0.272	0.268
	Top Side	0.038	0.148	0.181	0.005	0.191	0.224
	Bottom Side	0.098	0.022	0.090	0.004	0.124	0.192
LTE B7	Front Side	0.834	0.210	0.098	0.011	1.055	0.943
	Back Side	0.153	0.125	0.208	0.007	0.286	0.369
	Left Side	0.193	0.048	0.171	0.005	0.247	0.370
	Right Side	0.056	0.153	0.149	0.009	0.218	0.214
	Top Side	0.046	0.148	0.181	0.005	0.199	0.232
	Bottom Side	1.005	0.022	0.090	0.004	1.031	1.099
LTE B12	Front Side	0.278	0.210	0.098	0.011	0.498	0.386
	Back Side	0.254	0.125	0.208	0.007	0.386	0.469
	Left Side	0.263	0.048	0.171	0.005	0.316	0.439
	Right Side	0.236	0.153	0.149	0.009	0.398	0.394
	Top Side	0.046	0.148	0.181	0.005	0.199	0.232
	Bottom Side	0.084	0.022	0.090	0.004	0.110	0.178
LTE B13	Front Side	0.125	0.210	0.098	0.011	0.345	0.233
	Back Side	0.079	0.125	0.208	0.007	0.211	0.294
	Left Side	0.059	0.048	0.171	0.005	0.112	0.235
	Right Side	0.073	0.153	0.149	0.009	0.235	0.231
	Top Side	0.032	0.148	0.181	0.005	0.185	0.218
	Bottom Side	0.036	0.022	0.090	0.004	0.062	0.130
LTE B17	Front Side	0.265	0.210	0.098	0.011	0.485	0.373
	Back Side	0.247	0.125	0.208	0.007	0.379	0.462
	Left Side	0.259	0.048	0.171	0.005	0.312	0.435
	Right Side	0.231	0.153	0.149	0.009	0.393	0.389
	Top Side	0.043	0.148	0.181	0.005	0.196	0.229
	Bottom Side	0.082	0.022	0.090	0.004	0.108	0.176
LTE B25	Front Side	1.009	0.210	0.098	0.011	1.229	1.117
	Back Side	0.385	0.125	0.208	0.007	0.517	0.600
	Left Side	0.202	0.048	0.171	0.005	0.255	0.378

	Right Side	0.177	0.153	0.149	0.009	0.339	0.335
	Top Side	0.054	0.148	0.181	0.005	0.206	0.239
	Bottom Side	0.703	0.022	0.090	0.004	0.729	0.797
LTE B26	Front Side	0.247	0.210	0.098	0.011	0.467	0.355
	Back Side	0.149	0.125	0.208	0.007	0.281	0.364
	Left Side	0.107	0.048	0.171	0.005	0.161	0.283
	Right Side	0.123	0.153	0.149	0.009	0.285	0.281
	Top Side	0.044	0.148	0.181	0.005	0.197	0.230
	Bottom Side	0.111	0.022	0.090	0.004	0.137	0.204
LTE B66	Front Side	1.104	0.210	0.098	0.011	1.324	1.212
	Back Side	0.431	0.125	0.208	0.007	0.564	0.646
	Left Side	0.199	0.048	0.171	0.005	0.252	0.375
	Right Side	0.079	0.153	0.149	0.009	0.241	0.237
	Top Side	0.047	0.148	0.181	0.005	0.200	0.233
	Bottom Side	0.696	0.022	0.090	0.004	0.722	0.790
LTE B71	Front Side	0.060	0.210	0.098	0.011	0.280	0.168
	Back Side	0.054	0.125	0.208	0.007	0.186	0.269
	Left Side	0.057	0.048	0.171	0.005	0.111	0.234
	Right Side	0.026	0.153	0.149	0.009	0.188	0.184
	Top Side	0.024	0.148	0.181	0.005	0.177	0.210
	Bottom Side	0.021	0.022	0.090	0.004	0.047	0.115
LTE B38	Front Side	0.484	0.210	0.098	0.011	0.705	0.593
	Back Side	0.207	0.125	0.208	0.007	0.339	0.422
	Left Side	0.274	0.048	0.171	0.005	0.328	0.450
	Right Side	0.029	0.153	0.149	0.009	0.190	0.187
	Top Side	0.044	0.148	0.181	0.005	0.197	0.230
	Bottom Side	0.582	0.022	0.090	0.004	0.608	0.676
LTE B41	Front Side	0.401	0.210	0.098	0.011	0.621	0.509
	Back Side	0.180	0.125	0.208	0.007	0.313	0.395
	Left Side	0.219	0.048	0.171	0.005	0.273	0.396
	Right Side	0.050	0.153	0.149	0.009	0.212	0.208
	Top Side	0.043	0.148	0.181	0.005	0.196	0.229
	Bottom Side	0.460	0.022	0.090	0.004	0.486	0.554

Note:

1: The simultaneous transmission combinations of the antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Combined 10g SAR is 1.324 W/Kg <1.6W/kg, so Simultaneous Transmission SAR test is not required.

12.2.4 Highest Total Exposure Ratio of Simultaneous Transmission

NFC multi-transmit requires the use of the TER formula:

$$TER = \sum_{k=1}^{N_s} \left(\frac{SAR_k}{SAR_{lim}} \right) + \sum_{k=1}^{N_f} \left(\frac{MPE_{field, k}}{MPE_{field, lim}} \right)^2 + \sum_{k=1}^{N_{PD}} \left(\frac{MPE_{PD, k}}{MPE_{PD, lim}} \right)$$

The maximum SAR value for Simultaneous Transmission is 1.52 [W/kg]. Therefore, the worst TER = (1.52+0.001)/1.6 = 0.95 < 1, the NFC SAR transmit simultaneously Pass.

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.10.4.1535	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1201	2024/09/03	2027/09/02
835MHz Validation Dipole	Speag	D835V2	SN: 4d277	2024/08/30	2027/08/29
1750MHz Validation Dipole	Speag	D1750V2	SN: 1183	2024/09/03	2027/09/02
1900MHz Validation Dipole	Speag	D1900V2	SN: 5d155	2024/09/02	2027/09/01
2450MHz Validation Dipole	Speag	D2450V2	SN: 1065	2024/09/05	2027/09/04
2600MHz Validation Dipole	Speag	D2600V2	SN: 1184	2024/08/30	2027/08/29
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1333	2024/09/05	2027/09/04
Data Acquisition Electronicsr	Speag	DAE4	SN: 1423	2025/06/05	2026/06/04
E-Field Probe	Speag	EX3DV4	SN: 3974	2025/06/05	2026/06/04
Signal Generator	R&S	SMB100A	182635	2025/02/12	2026/02/12
Power Meter	R&S	E4419B	MY45104512	2025/02/11	2026/02/11
Power Sensor	Agilent	E9304A	MY41499059	2025/02/11	2026/02/11
Power Sensor	Agilent	E9304A	MY41499060	2025/02/11	2026/02/11
Wireless Communication Test Set	R&S	CMW500	168792	2025/02/11	2026/02/11
Wireless Communication Test Set	Anritsu	MT8820C	6201061029	2025/02/12	2026/02/12
Network Analyzer	Agilent	E5071C	MY56301409	2025/02/12	2026/02/12
Thermometer	CEM	DT-322	210402350	2025/01/22	2026/01/22
Thermometer	Elitech	RC-4HC	EF7247001275	2025/01/22	2026/01/22
Power Amplifier	COM-MW	PAO.4	201704001	N/A	N/A
Dielectric Probe Kit	Keysight	85070E	MY44300524	N/A	N/A
Phantom	Speag	SAM	1857	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

Note: For dipole antennas, Tejet has adopted 3 years as calibration intervals, and on annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss in within 20% of calibrated measurement.
4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an 85070E Dielectric Probe Kit.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2025.8.13	Head	750	21.3	0.91	42.50	0.89	41.94	2.25	1.34
2025.8.14	Head	750	21.4	0.92	42.37	0.89	41.94	3.37	1.03
2025.8.15	Head	835	21.2	0.93	42.22	0.90	41.50	3.33	1.73
2025.8.16	Head	1750	20.9	1.37	40.35	1.37	40.08	0.00	0.67
2025.8.17	Head	1750	21.4	1.35	40.37	1.37	40.08	-1.46	0.72
2025.8.18	Head	1900	21.0	1.42	40.17	1.40	40.00	1.43	0.43
2025.8.14	Head	1900	21.4	1.42	40.14	1.40	40.00	1.43	0.35
2025.8.19	Head	2450	21.2	1.81	39.33	1.80	39.20	0.56	0.33
2025.8.20	Head	2600	21.1	1.96	39.12	1.96	39.01	0.00	0.28
2025.8.21	Head	2600	21.0	1.94	39.22	1.96	39.01	-1.02	0.54
2025.8.22	Head	5300	21.3	4.72	34.89	4.76	35.87	-0.84	-2.73
2025.8.23	Head	5600	21.2	5.03	34.30	5.07	35.53	-0.79	-3.46
2025.8.24	Head	5800	21.0	5.23	33.90	5.27	35.30	-0.76	-3.97
Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$.									

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by Keysight, the validation data should be within its specification of 10 %(for 1 g).

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2025.8.13	Head	750	100	0.890	8.90	8.46	5.20
2025.8.14	Head	750	100	0.898	8.98	8.46	6.15
2025.8.15	Head	835	100	0.982	9.82	9.59	2.40
2025.8.16	Head	1750	100	3.580	35.80	36.50	-1.92
2025.8.17	Head	1750	100	3.750	37.50	36.50	2.74
2025.8.18	Head	1900	100	3.920	39.20	39.90	-1.75
2025.8.14	Head	1900	100	3.880	38.80	39.90	-2.76
2025.8.19	Head	2450	100	5.500	55.00	52.60	4.56
2025.8.20	Head	2600	100	5.730	57.30	55.30	3.62
2025.8.21	Head	2600	100	5.790	57.90	55.30	4.70
2025.8.22	Head	5300	100	7.270	72.70	79.00	-7.97
2025.8.23	Head	5600	100	8.990	89.90	82.80	8.57
2025.8.24	Head	5800	100	7.820	78.20	78.50	-0.38
Note: The tolerance limit of System validation $\pm 10\%$.							

System Performance Check Data (750MHz)

Date: 2025/8/13

Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.908 \text{ S/m}$; $\epsilon_r = 42.499$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21.3°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(10.7, 10.7, 10.7); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW750/Area Scan (71x131x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.18 W/kg

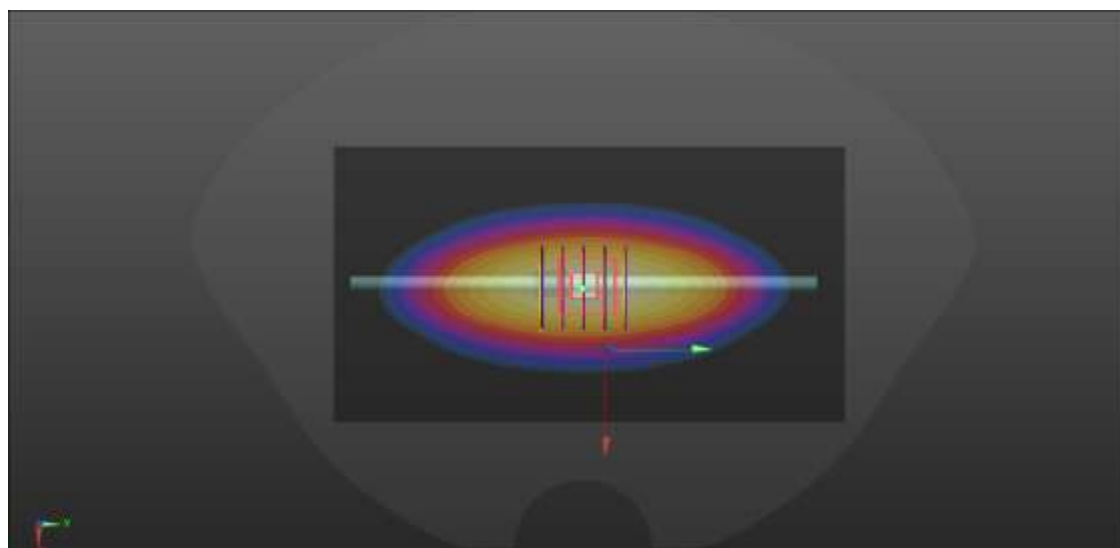
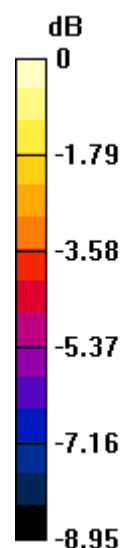
CW750/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 38.01 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.890 W/kg; SAR(10 g) = 0.611 W/kg

Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg

System Performance Check Data (750MHz)

Date: 2025/8/14

Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.916 \text{ S/m}$; $\epsilon_r = 42.368$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(10.7, 10.7, 10.7); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW750/Area Scan (71x131x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.25 W/kg

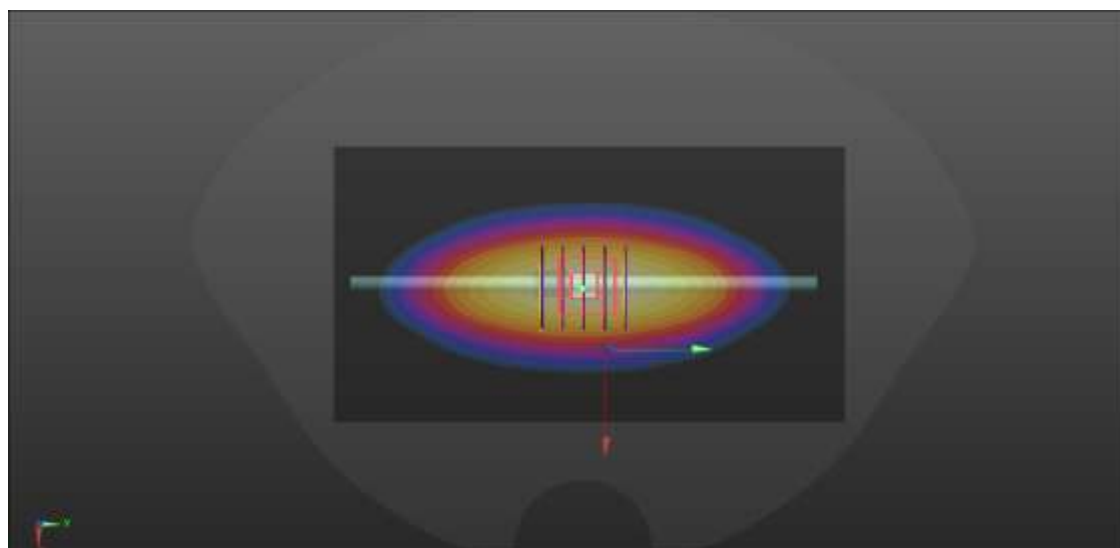
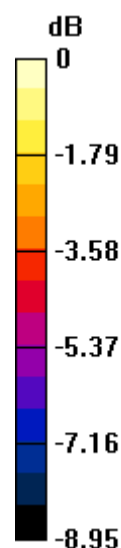
CW750/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 39.01 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.898 W/kg; SAR(10 g) = 0.616 W/kg

Maximum value of SAR (measured) = 1.23 W/kg



0 dB = 1.23 W/kg

System Performance Check Data (835MHz)

Date: 2025/8/15

Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.932 \text{ S/m}$; $\epsilon_r = 42.218$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.2°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(10.7, 10.7, 10.7); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW835/Area Scan (71x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.29 W/kg

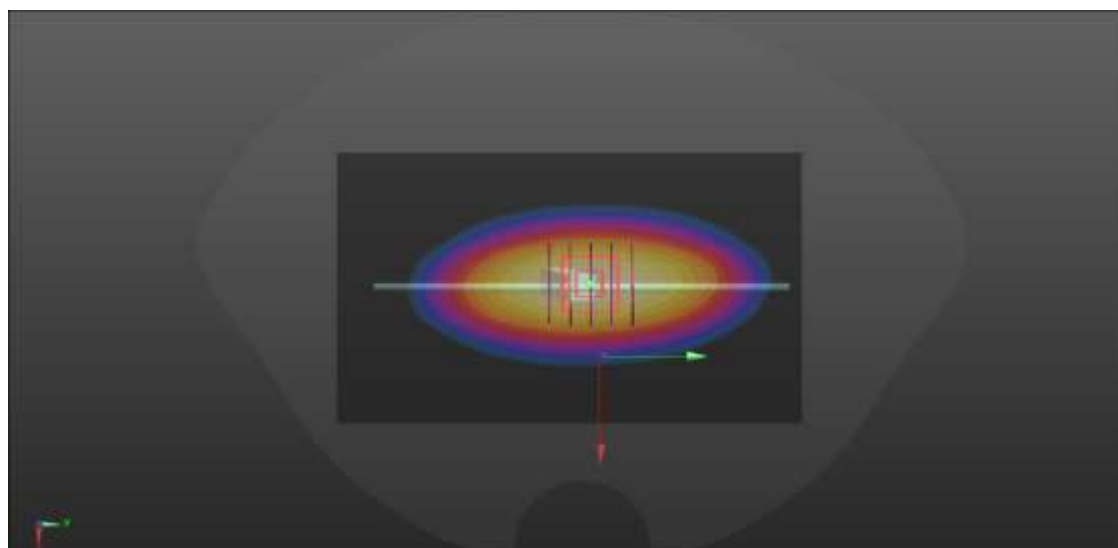
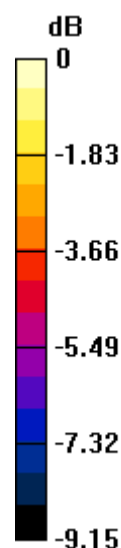
CW835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.10 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 0.982 W/kg; SAR(10 g) = 0.673 W/kg

Maximum value of SAR (measured) = 1.30 W/kg



0 dB = 1.30 W/kg

System Performance Check Data (1750MHz)

Date: 2025/8/16

Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.352$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.1°C Liquid Temperature: 20.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(8.87, 8.87, 8.87); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW1750/Area Scan (51x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 5.79 W/kg

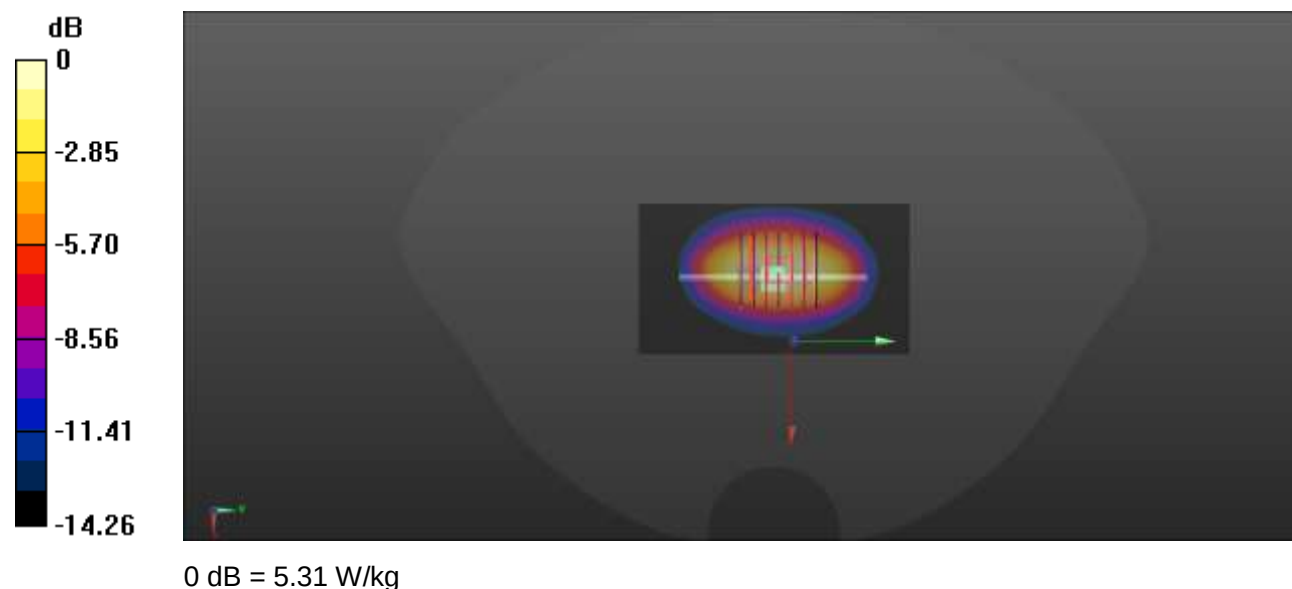
CW1750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 66.00 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 6.24 W/kg

SAR(1 g) = 3.58 W/kg; SAR(10 g) = 2.02 W/kg

Maximum value of SAR (measured) = 5.31 W/kg



System Performance Check Data (1750MHz)

Date: 2025/8/17

Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.351$ S/m; $\epsilon_r = 40.368$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(8.87, 8.87, 8.87); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW1750/Area Scan (51x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 5.89 W/kg

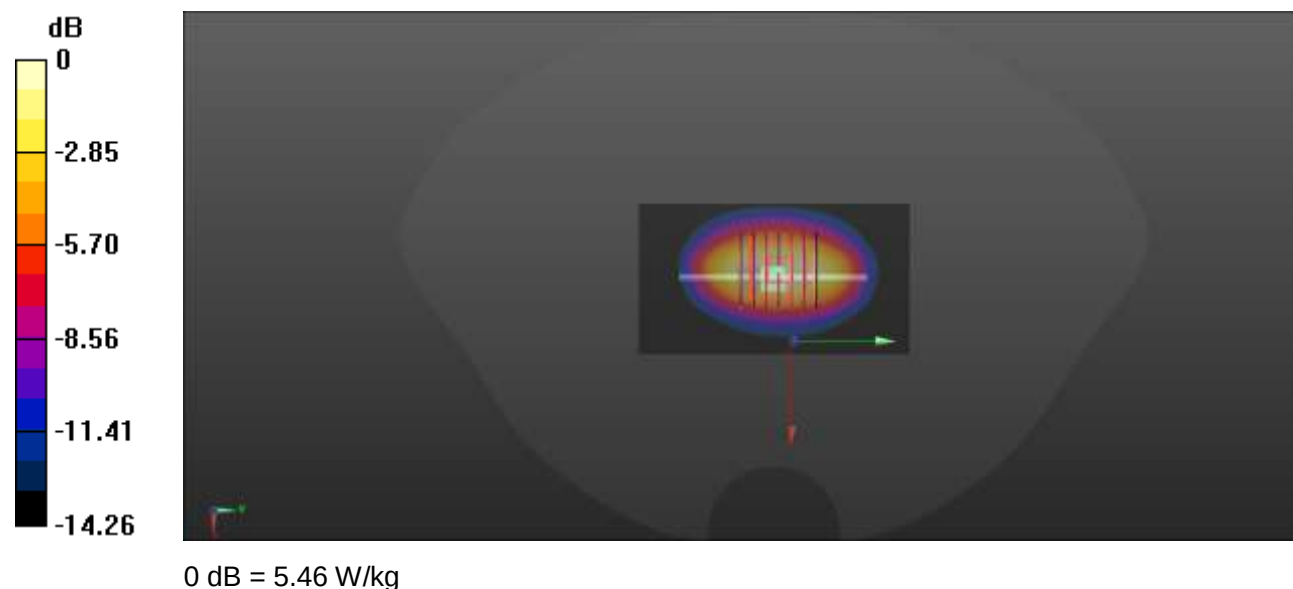
CW1750/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 66.00 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 6.80 W/kg

SAR(1 g) = 3.75 W/kg; SAR(10 g) = 2.09 W/kg

Maximum value of SAR (measured) = 5.46 W/kg



System Performance Check Data (1900MHz)

Date: 2025/8/18

Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.415$ S/m; $\epsilon_r = 40.166$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 21.8°C Liquid Temperature: 21°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(8.53, 8.53, 8.53); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW1900/Area Scan (61x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 6.23 W/kg

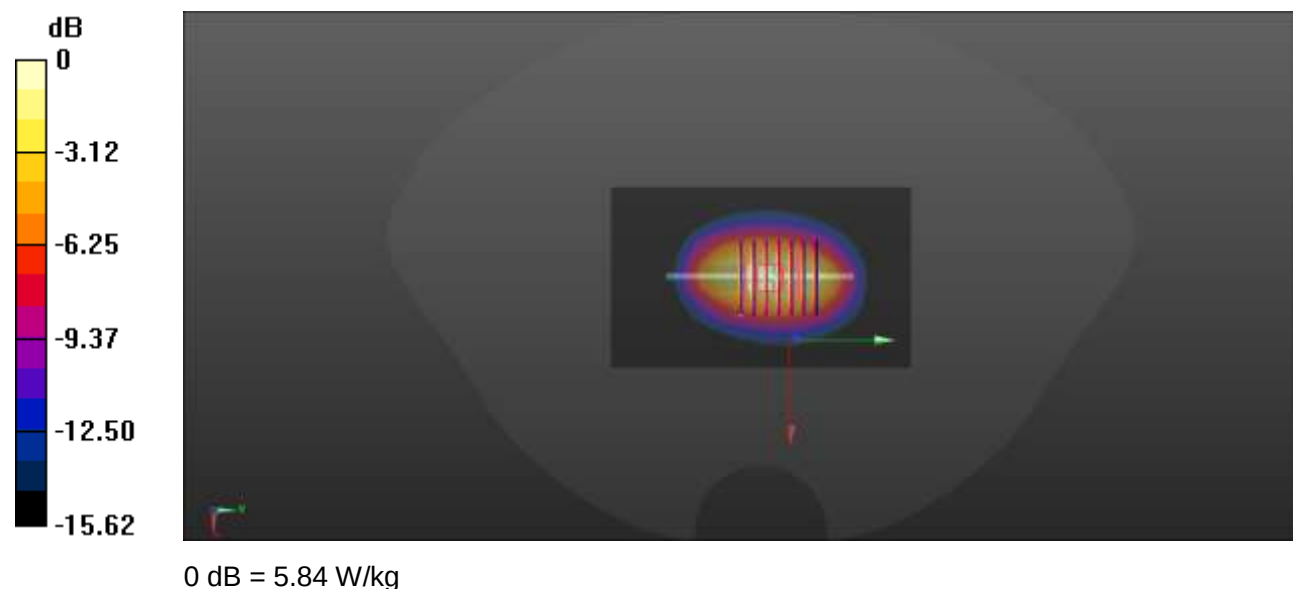
CW1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 69.61 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 6.94 W/kg

SAR(1 g) = 3.92 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 5.84 W/kg



System Performance Check Data (1900MHz)

Date: 2025/8/14

Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.420$ S/m; $\epsilon_r = 40.138$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(8.53, 8.53, 8.53); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW1900/Area Scan (61x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 6.83 W/kg

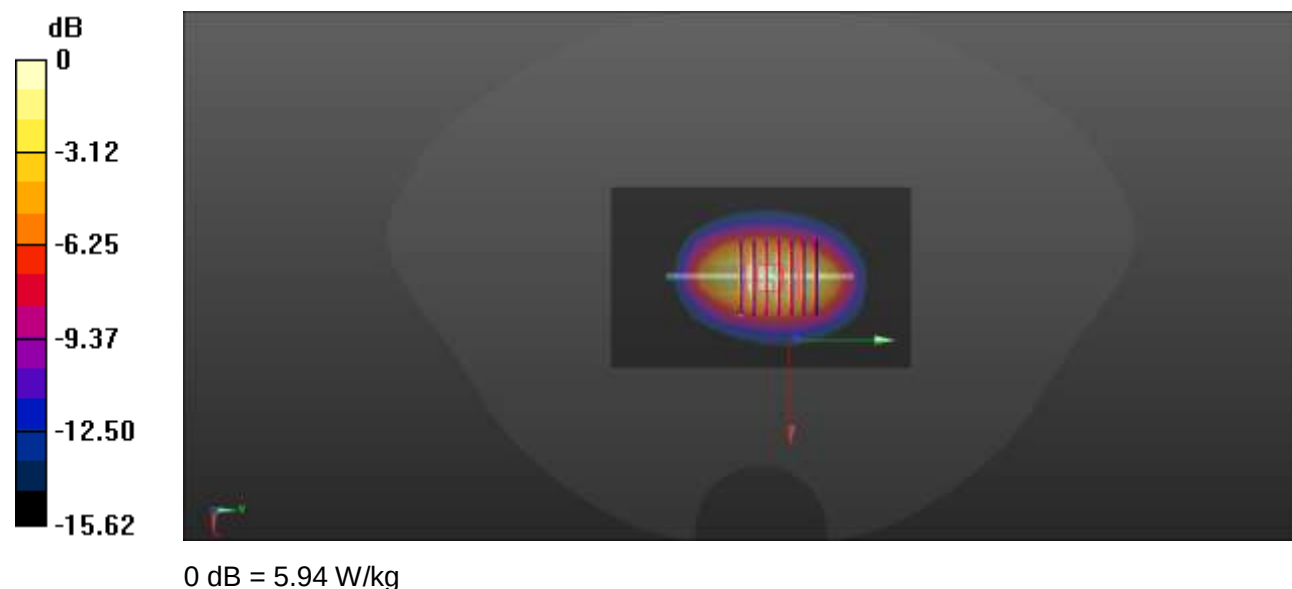
CW1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 70.61 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 7.00 W/kg

SAR(1 g) = 3.88 W/kg; SAR(10 g) = 2.13 W/kg

Maximum value of SAR (measured) = 5.94 W/kg



0 dB = 5.94 W/kg

System Performance Check Data (2450MHz)

Date: 2025/8/19

Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.807$ S/m; $\epsilon_r = 39.325$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(8, 8, 8); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW2450/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 9.15 W/kg

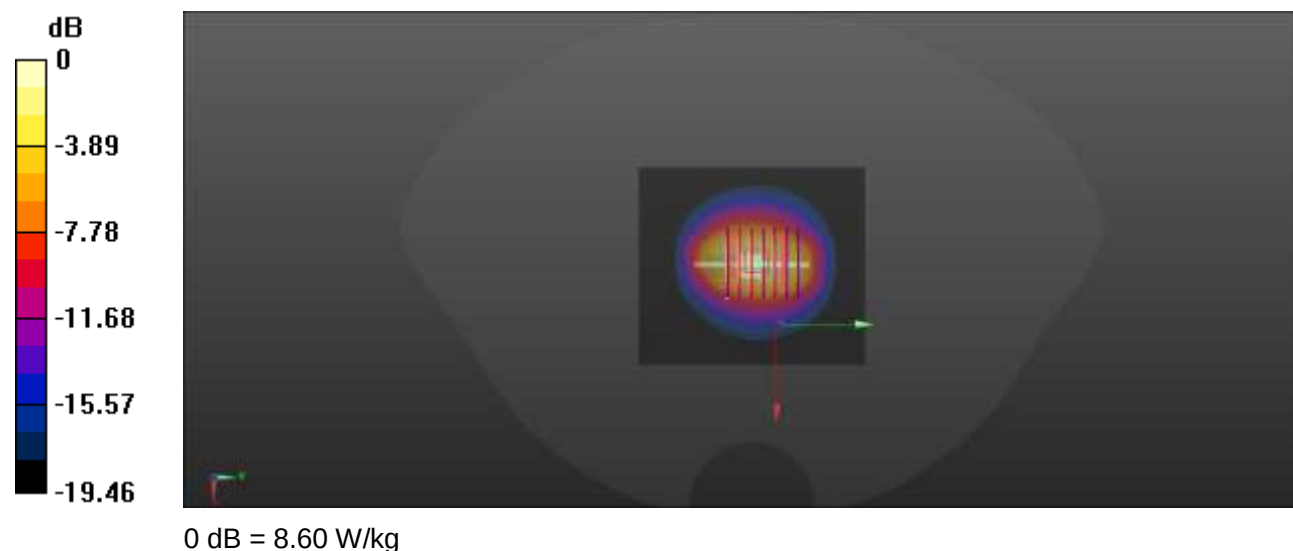
CW2450/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 74.30 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 10.5 W/kg

SAR(1 g) = 5.5 W/kg; SAR(10 g) = 2.70 W/kg

Maximum value of SAR (measured) = 8.60 W/kg



System Performance Check Data (2600MHz)

Date: 2025/8/20

Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.957$ S/m; $\epsilon_r = 39.118$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(7.83, 7.83, 7.83); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW2600/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 9.76 W/kg

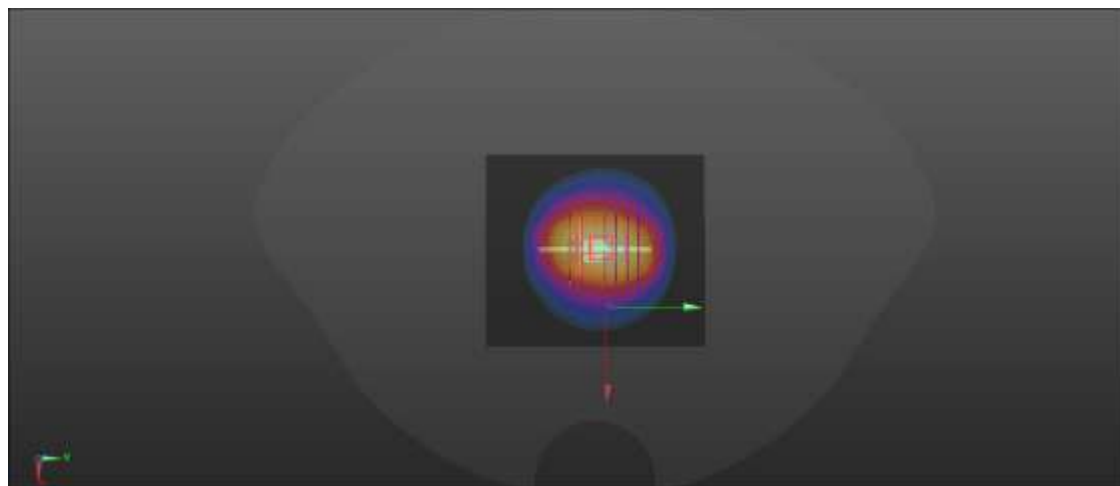
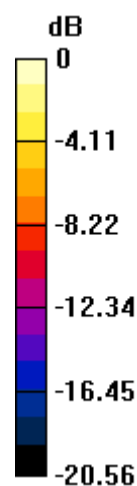
CW2600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 73.55 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 11.4 W/kg

SAR(1 g) = 5.73 W/kg; SAR(10 g) = 2.72 W/kg

Maximum value of SAR (measured) = 9.35 W/kg



0 dB = 9.35 W/kg

System Performance Check Data (2600MHz)

Date: 2025/8/21

Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.942$ S/m; $\epsilon_r = 39.223$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.1°C Liquid Temperature: 21°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(7.83, 7.83, 7.83); Calibrated: 2025/6/5
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW2600/Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 9.87 W/kg

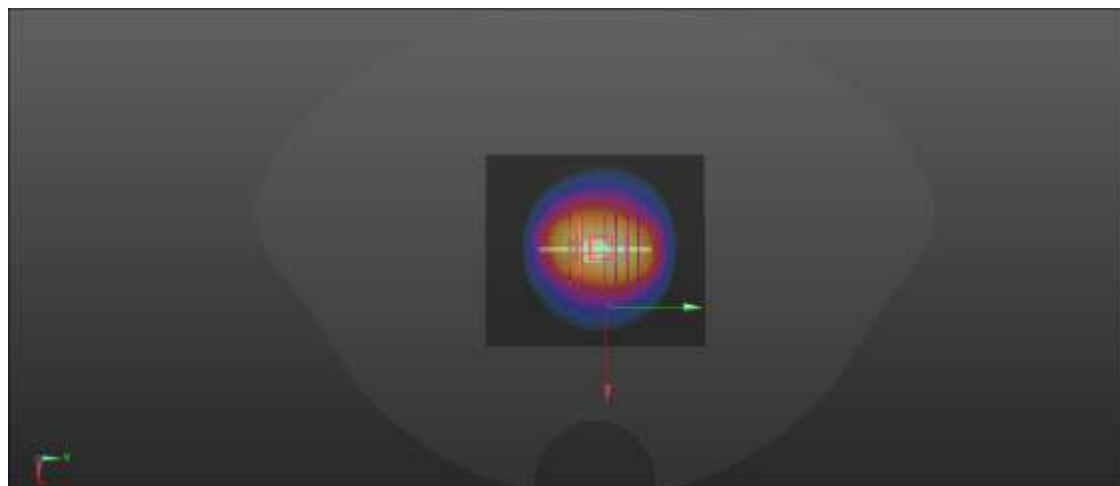
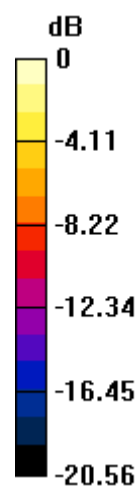
CW2600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 72.55 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 12 W/kg

SAR(1 g) = 5.79 W/kg; SAR(10 g) = 2.75 W/kg

Maximum value of SAR (measured) = 9.48 W/kg



0 dB = 9.48 W/kg

System Performance Check Data (5300MHz)

Date: 2025/8/22

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 4.722$ S/m; $\epsilon_r = 34.892$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(5.56, 5.56, 5.56); Calibrated: 2025/6/5
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW5300/Area Scan (61x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.3 W/kg

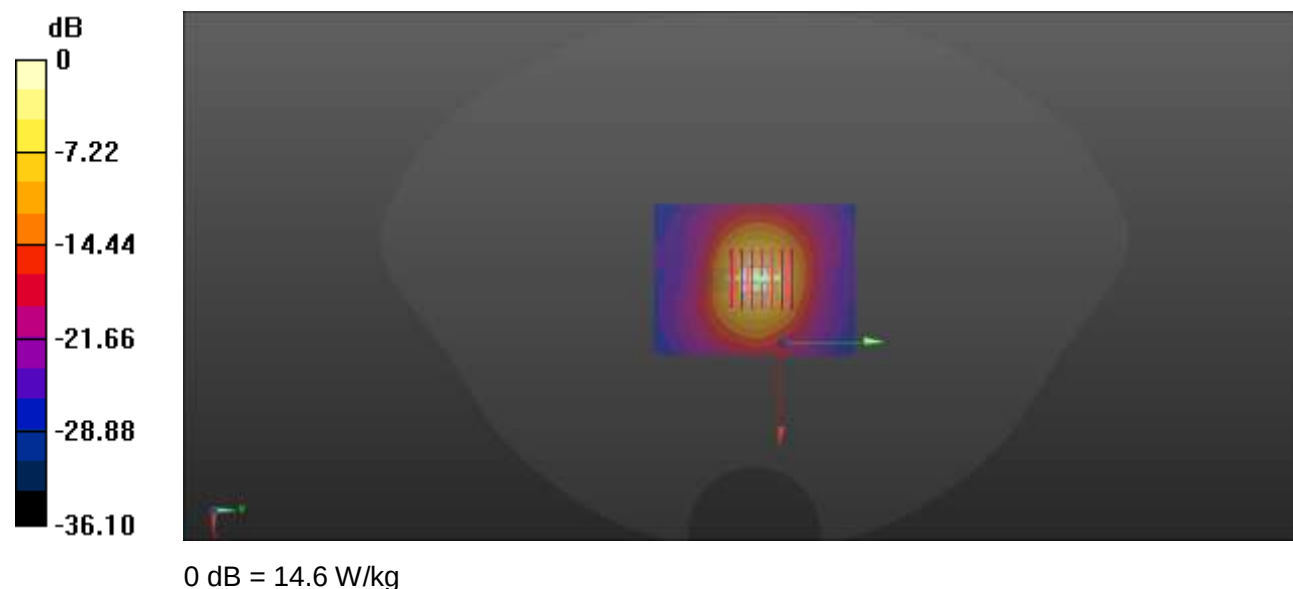
CW5300/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 70.69 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 29.8 W/kg

SAR(1 g) = 7.27 W/kg; SAR(10 g) = 2.08 W/kg

Maximum value of SAR (measured) = 14.6 W/kg



System Performance Check Data (5600MHz)

Date: 2025/8/23

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.034$ S/m; $\epsilon_r = 34.299$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(5.05, 5.05, 5.05); Calibrated: 2025/6/5
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW5600/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 18.7 W/kg

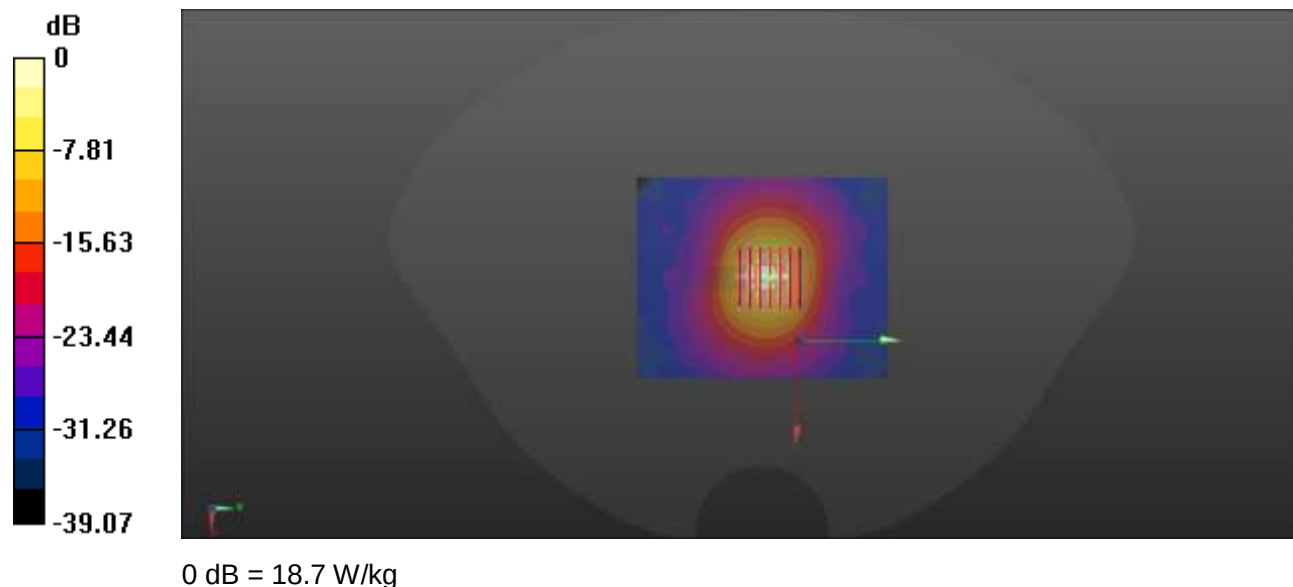
CW5600/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 71.65 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 34.6 W/kg

SAR(1 g) = 8.99 W/kg; SAR(10 g) = 2.57 W/kg

Maximum value of SAR (measured) = 18.7 W/kg



System Performance Check Data (5800MHz)

Date: 2025/8/24

Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.226$ S/m; $\epsilon_r = 33.903$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.4°C Liquid Temperature: 21°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3974; ConvF(5.14, 5.14, 5.14); Calibrated: 2025/6/5
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1423; Calibrated: 2025/6/5
- Phantom: SAM2; Type: QD 000 P40 CC; Serial: 1473
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW 5800/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.5 W/kg

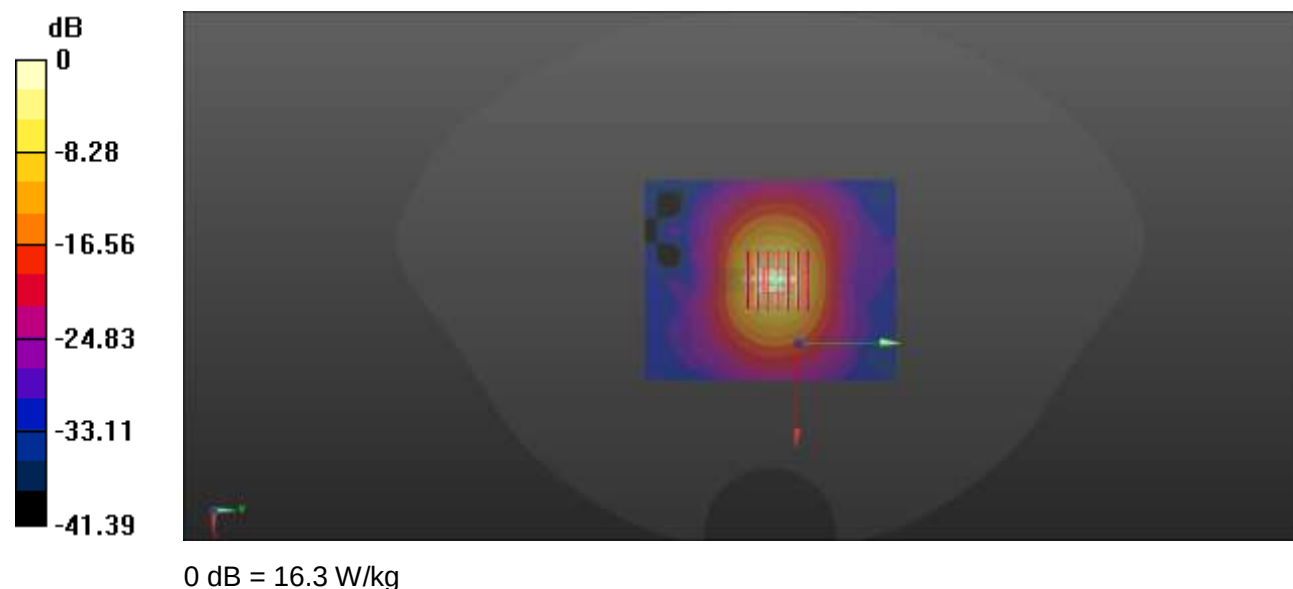
CW 5800/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 68.49 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 30.9 W/kg

SAR(1 g) = 7.82 W/kg; SAR(10 g) = 2.24 W/kg

Maximum value of SAR (measured) = 16.3 W/kg



ANNEX C TEST DATA

Please refer the document “BL-SH2580895-ATD.pdf”.

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SH2580895-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SH2580895-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SH2580895-AC.pdf”.

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--END OF REPORT--