

TEST REPORT

Applicant: ITTEL MOBILE LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL
CENTRE 19-25 SHAN MEI STREET FOTAN NT
HONGKONG
Equipment Type: Tablet
Model Name: P08003L
Brand Name: itel
FCC ID: 2AJMN-P08003L
Test Standard: FCC 47 CFR Part 2.1093
(refer section 3.1)
Maximum SAR: Body (1 g@0mm): 0.87 W/kg
Sample Arrival Date: Nov. 17, 2025
Test Date: Nov. 25, 2025 - Dec. 27, 2025
Date of Issue: Jan. 13, 2026

ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center



Prepared by: Cai Xueguo

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

Cai Xueguo

Huang Xiaoqin

Zhang Yanqing

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Jan. 06, 2026</u>	<u>Initial Issue</u>
<u>Rev. 01</u>	<u>Jan. 13, 2026</u>	<u>Added the SAR evaluation instructions in Section 3.3.1. the original report is invalid.</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	ITEL MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.2 Manufacturer Information

Manufacturer	ITEL MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.3 General Description for Equipment under Test (EUT)

EUT Name	Tablet
Model Name Under Test	P08003L
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12/17/26/66 TDD LTE Band 38/41 Bluetooth; 2.4G WIFI; 5G WIFI GPS, GLONASS, BDS, Galileo, SBAS, FM
Note: The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, and both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

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 17	TX: 704 ~ 716 MHz	RX: 734 ~ 746 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 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	2.4G WLAN	2412 ~ 2462 MHz	
	5G WLAN	5725 ~ 5850 MHz	
	Bluetooth	2402 ~ 2480 MHz	
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	N/A		
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
8	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	KDB 865664 D02 v01r02	RF Exposure Reporting
10	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS
11	KDB 616217 D04v01r02	SAR for laptop and tablets

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	Frequency Band	Maximum Scaled SAR	Maximum Report SAR (W/kg)
		1 g(W/kg)	1 g(W/kg)
		Body	Body
		(Separation 0 mm)	(Separation 0 mm)
PCE	GSM 850	0.68	0.87
	GSM 1900	0.55	
	WCDMA Band 2	0.67	
	WCDMA Band 4	0.49	
	WCDMA Band 5	0.38	
	LTE Band 2	0.87	
	LTE Band 7	0.47	
	LTE Band 12	0.79	
	LTE Band 26	0.78	
	LTE Band 66	0.58	
	LTE Band 41	0.67	
DTS	2.4G WIFI	0.28	0.66
NII	5G WIFI	0.66	
DSS	Bluetooth	0.17	
Limits (W/kg)		1.6	1.6
Test Verdict		Pass	

Note: This device supports LTE B4/5/17/38 and LTE B12/26/41/66.

Since the supported frequency span for LTE B4/5/17/38 falls completely within the supports frequency span for LTE B12/26/41/66, these LTE bands share the same transmission path, and LTE B4/5/17/38 have lower or the same target power as LTE B12/26/41/66; Therefore, SAR was only assessed for LTE B12/26/41/66.

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)
	Body 1g (0mm)
PCE	1.59
DTS	1.31
NII	1.59
DSS	1.59
Limit (W/Kg)	1.60
Verdict	
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	(c_i) 1g	(c_i) 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(ΔSAR)	Combined Uncertainty						$\pm 11.2\%$	$\pm 11.0\%$
U	Expanded Uncertainty						$\pm 22.3\%$	$\pm 22.2\%$

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	(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	±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:

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

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

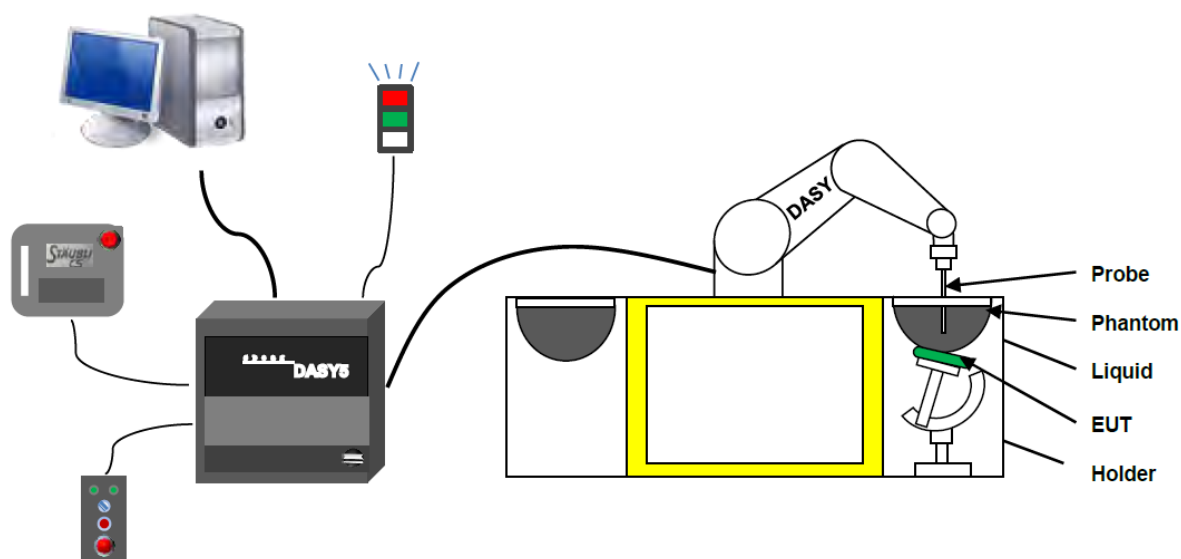
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

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

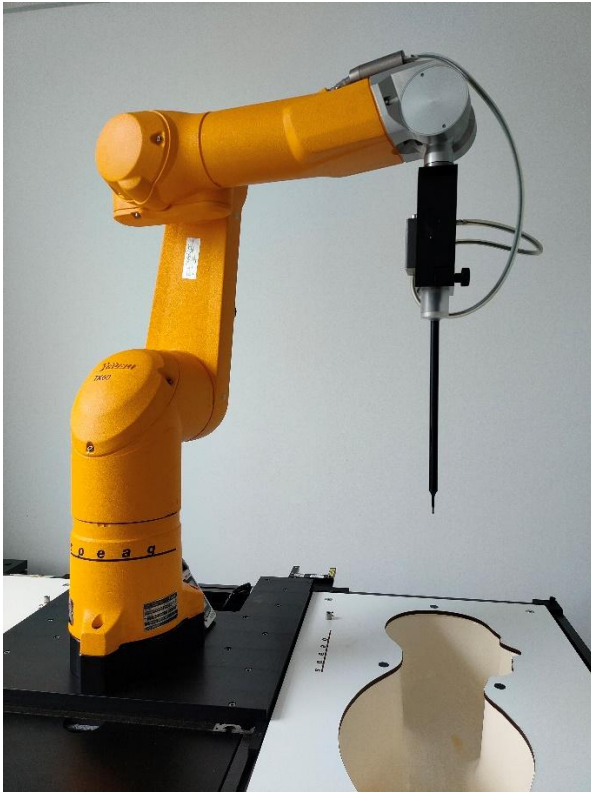


The DASY5 system for performing compliance tests consists of the following items:

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., glycolether)
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

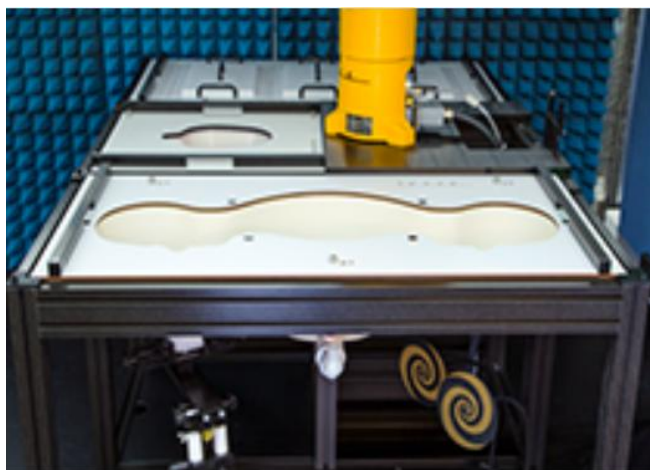
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through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



- Input Impedance: 200M Ω
- The Inputs: Symmetrical and Floating
- Common 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 SN1857



Serial Number	Material	Length	Height
SN 1857 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.

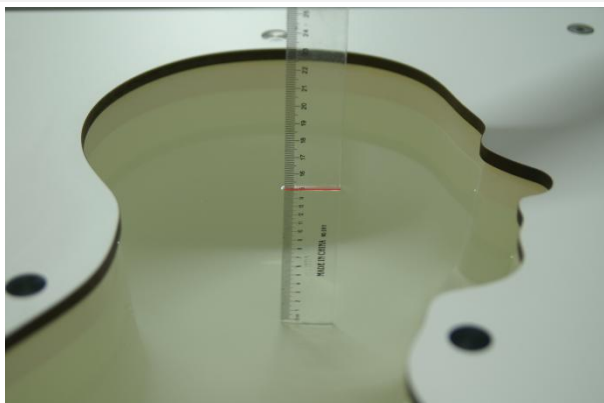


The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1° .

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

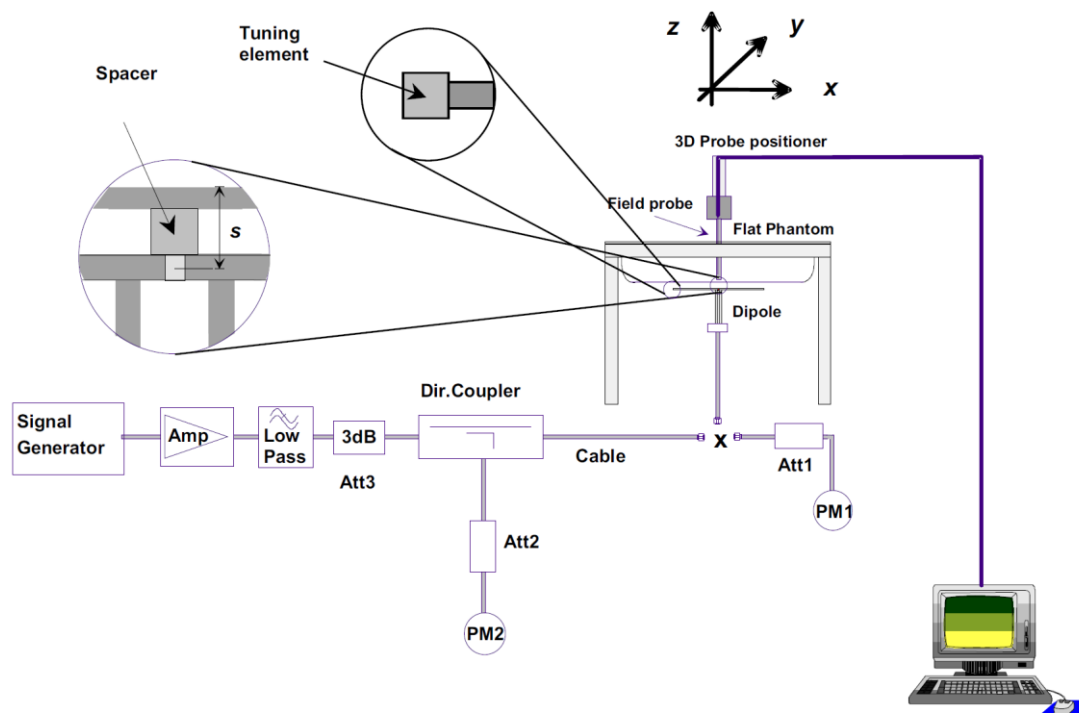
5 SYSTEM VERIFICATION

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

6.1 Tablet Exposure Condition

This DUT was tested in four different positions. They are back side, left edge, right edge, top edge and Bottom edge in these positions, the surface of DUT is touching with phantom 0mm.

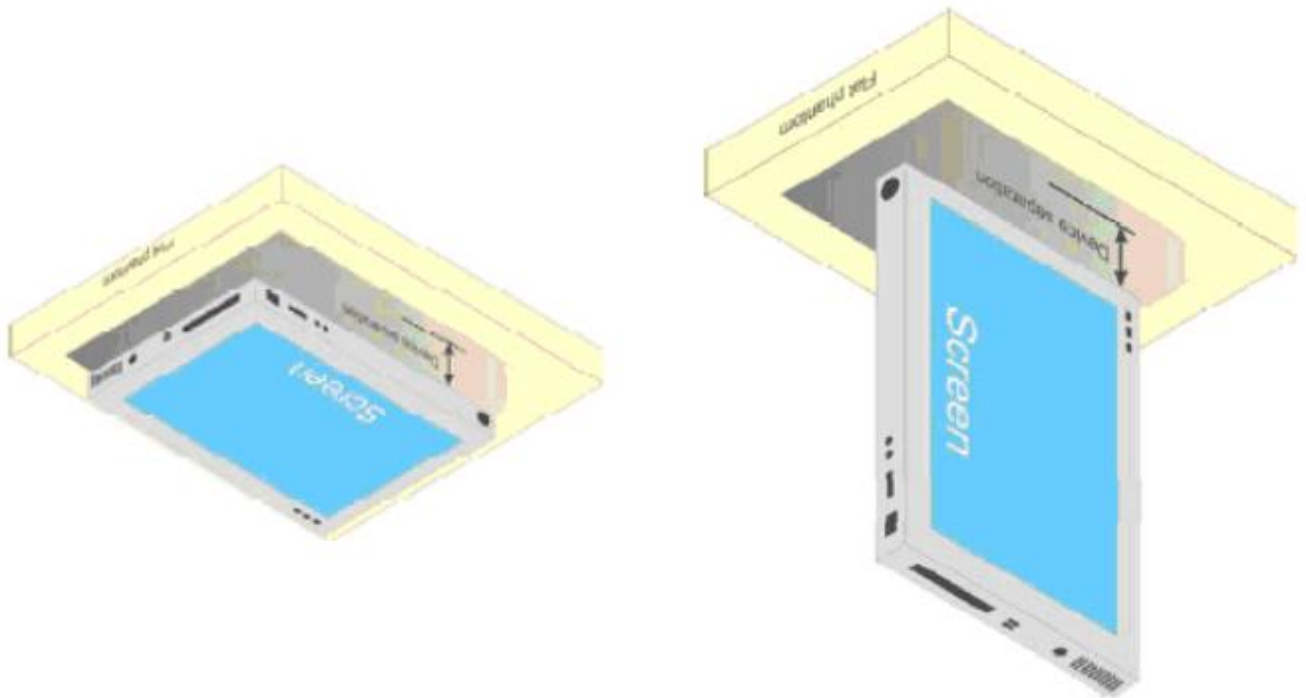
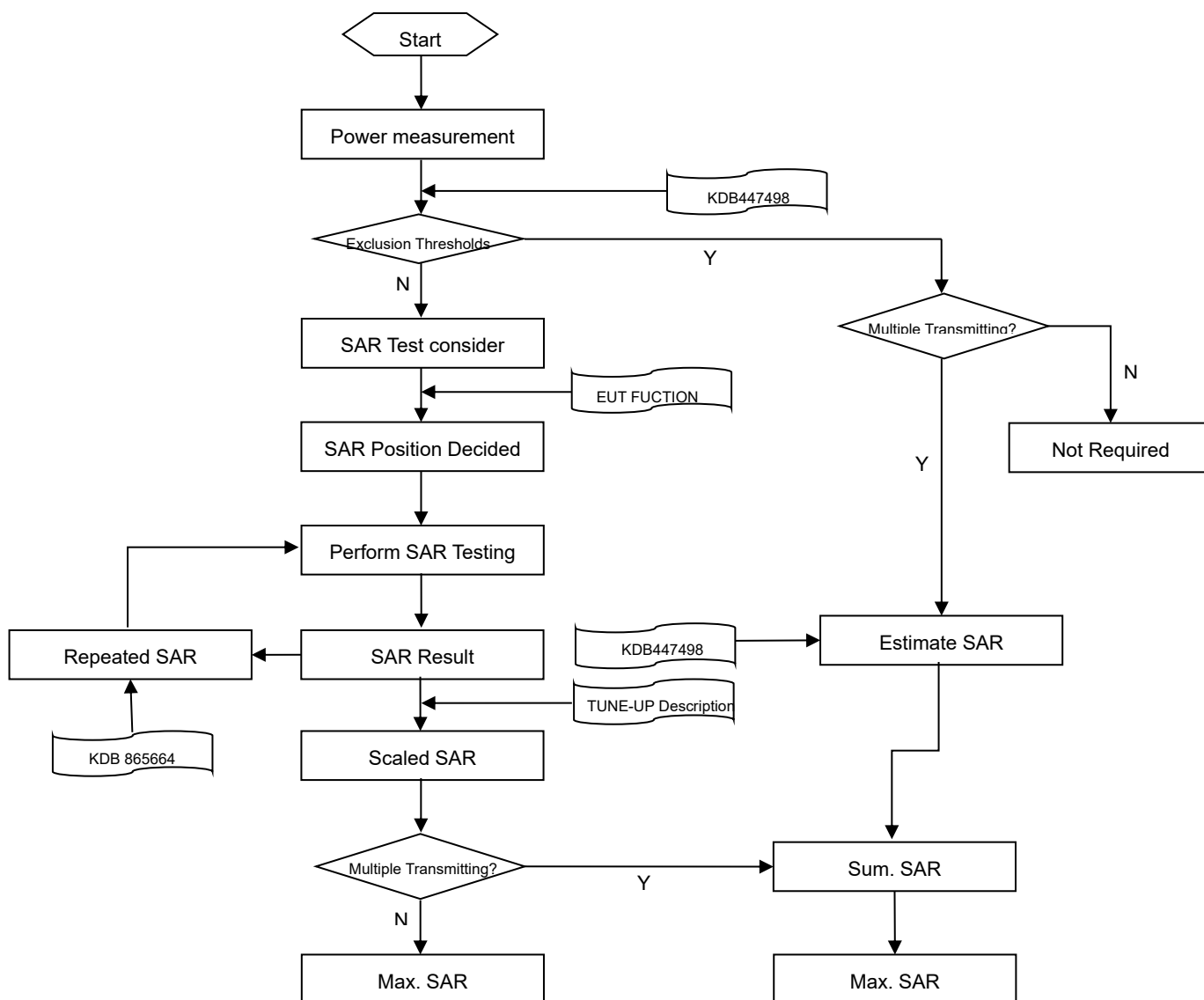


Fig Illustration for Lap-touching Position

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	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ 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-SH25B1270-AP.pdf”.

8.2 WCDMA

Please refer the document “BL-SH25B1270-AP.pdf”.

8.3 LTE

Please refer the document “BL-SH25B1270-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.
2.4 (2.4~2.4835)	802.11b	1	2412	3.32	4.50	No
		6	2437	3.56	4.50	Yes
		11	2462	1.12	2.00	No
	802.11g	1	2412	4.57	5.50	No
		6	2437	4.90	6.00	Yes
		11	2462	2.57	3.50	No
	802.11n(HT20)	1	2412	4.54	5.50	No
		6	2437	4.78	6.00	No
		11	2462	2.43	3.50	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.

8.4.2 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.8 (5.725~5.850)	802.11a	149	5745	2.96	3.00	No
		157	5785	3.36	4.50	Yes
		165	5825	3.15	4.00	No
	802.11n(HT20)	149	5745	2.89	4.00	No
		157	5785	3.14	4.00	No
		165	5825	3.08	4.00	No
	802.11n(HT40)	151	5755	3.21	4.00	No
		159	5795	3.09	4.00	No
	802.11ac(VHT20)	149	5745	2.94	4.00	No
		157	5785	3.28	4.00	No
		165	5825	3.08	4.00	No
	802.11ac(VHT40)	151	5755	3.21	4.00	No
		159	5795	3.08	4.00	No
	802.11ac(VHT80)	155	5775	2.28	3.00	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.

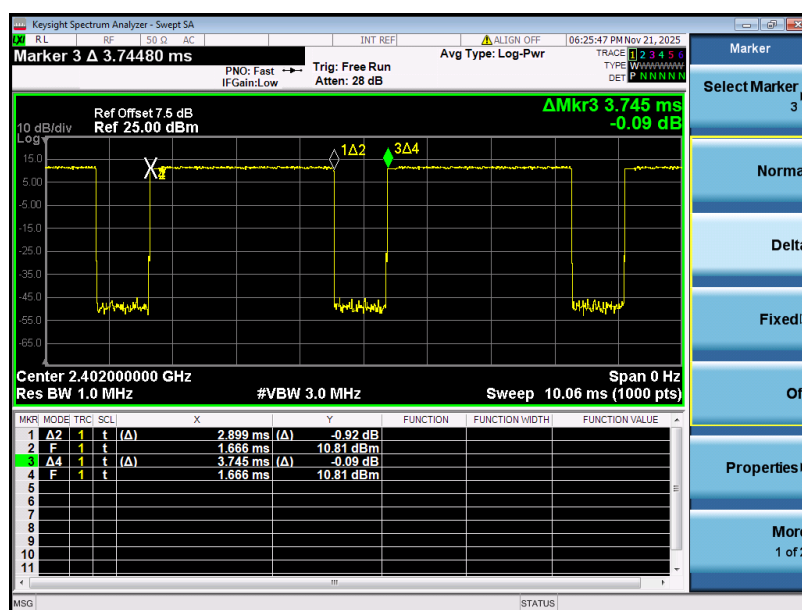
8.5 Bluetooth

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
PK Power (dBm)	7.56	7.76	-1.24	7.3	7.98	0.71
Tune-Up Limit (dBm)	8.50	8.50	0.00	8.50	8.50	2.00
SAR Test Require	NO	NO	NO	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
PK Power (dBm)	7.55	8.28	1.00	/	/	/
Tune-Up Limit (dBm)	8.50	9.00	2.00	/		
SAR Test Require	NO	YES	NO	NO	NO	NO
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
PK Power (dBm)	-0.49	0.55	-0.56	-0.22	0.61	-0.16
Tune-Up Limit (dBm)	1.50	1.50	1.50	1.50	1.50	1.50
SAR Test Require	NO	NO	NO	NO	NO	NO

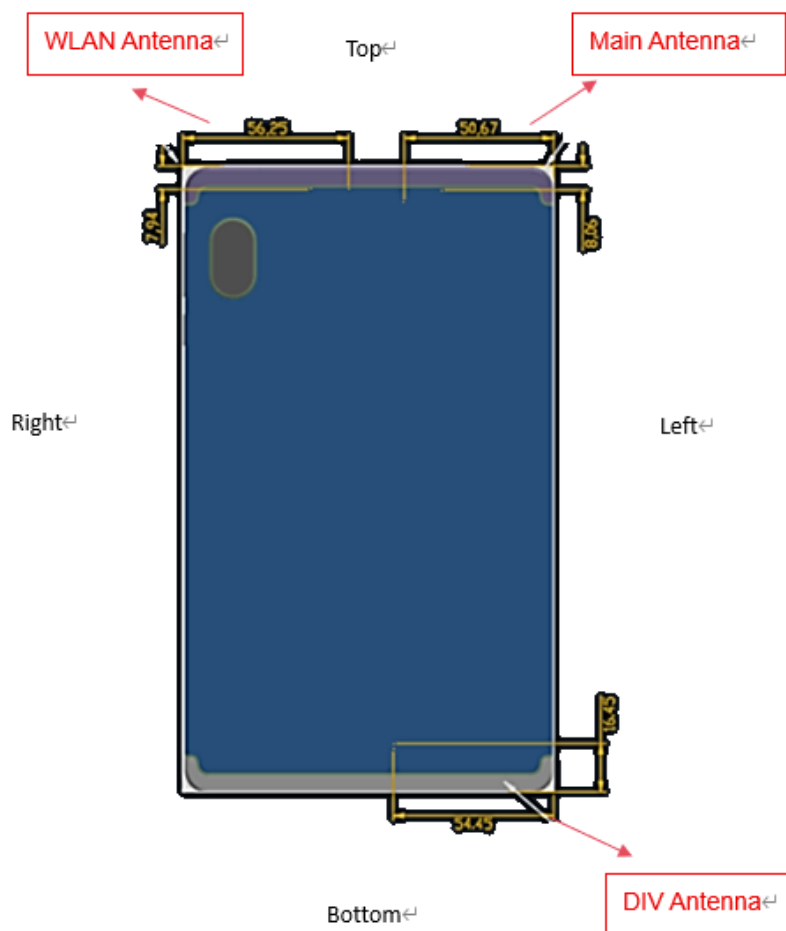
Note 1: Since bluetooth BR mode is the maximum output power mode, SAR measurements were performed with test software using DH5 modulation, and SAR measurement is not required for the EDR and LE. When the secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode.

The Bluetooth duty cycle is 77.41% 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



<EUT Back View>

Antenna	Support Bands
Main	GSM850/1900 WCDMA B2/B4/B5 LTE B2/B4/B5/B7/B12/B17/B26/B66/B38/B40/B41
DIV	Only RX
WLAN	WIFI 2.4G/5G; BT

9.1 SAR Test Exclusion Consideration Table

SAR Test Required						
Antenna	Front Side	Back Side	Left Edge	Right Edge	Top Edge	Bottom Edge
Main	/	Yes	Yes	Yes	Yes	Yes
WLAN	/	Yes	Yes	Yes	Yes	Yes

10 TEST RESULT

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

10.1 GSM 850

Antenna	Test Position	Dist.	Test Mode	Channel	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.
Body												
Main	Back side	0mm	GPRS 2TX	190	836.6	0.04	0.555	30.59	31.50	1.233	0.684	1
	Left side			190	836.6	0.06	0.229	30.59	31.50	1.233	0.282	/
	Right side			190	836.6	-0.11	0.025	30.59	31.50	1.233	0.031	/
	Top side			190	836.6	0.13	0.329	30.59	31.50	1.233	0.406	/
	Bottom side			190	836.6	0.03	0.035	30.59	31.50	1.233	0.043	/

10.2 GSM 1900

Antenna	Test Position	Dist.	Test Mode	Channel	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.
Body												
Main	Back side	0mm	GPRS 3TX	512	1850.2	0.07	0.486	25.99	26.50	1.125	0.547	2
	Left side			512	1850.2	-0.09	0.216	25.99	26.50	1.125	0.243	/
	Right side			512	1850.2	-0.06	0.022	25.99	26.50	1.125	0.025	/
	Top side			512	1850.2	0.02	0.428	25.99	26.50	1.125	0.481	/
	Bottom side			512	1850.2	0.16	0.029	25.99	26.50	1.125	0.033	/

10.3WCDMA Band 2

Antenna	Test Position	Dist.	Test Mode	Channel	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.
Body												
Main	Back side	0mm	RMC	9400	1880	0.18	0.531	23.20	24.00	1.202	0.638	/
	Left side			9400	1880	0.10	0.185	23.20	24.00	1.202	0.222	/
	Right side			9400	1880	-0.05	0.021	23.20	24.00	1.202	0.025	/
	Top side			9400	1880	0.09	0.561	23.20	24.00	1.202	0.674	3
	Bottom side			9400	1880	-0.04	0.032	23.20	24.00	1.202	0.038	/

10.4WCDMA Band 4

Antenna	Test Position	Dist.	Test Mode	Channel	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.
Body												
Main	Back side	0mm	RMC	1412	1732.4	0.14	0.391	23.01	24.00	1.256	0.491	/
	Left side			1412	1732.4	0.13	0.227	23.01	24.00	1.256	0.285	/
	Right side			1412	1732.4	-0.06	0.020	23.01	24.00	1.256	0.025	/
	Top side			1412	1732.4	0.03	0.393	23.01	24.00	1.256	0.494	4
	Bottom side			1412	1732.4	-0.05	0.024	23.01	24.00	1.256	0.030	/

10.5WCDMA Band 5

Antenna	Test Position	Dist.	Test Mode	Channel	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.
Body												
Main	Back side	0mm	RMC	4183	836.6	0.02	0.222	23.11	24.00	1.227	0.272	/
	Left side			4183	836.6	-0.04	0.067	23.11	24.00	1.227	0.082	/
	Right side			4183	836.6	0.11	0.033	23.11	24.00	1.227	0.041	/
	Top side			4183	836.6	-0.11	0.311	23.11	24.00	1.227	0.382	5
	Bottom side			4183	836.6	0.14	0.022	23.11	24.00	1.227	0.027	/

10.6LTE Band 2 (20MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	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.
Body														
Main	Back side	0mm	QPSK	18900	1880	1	0	0.10	0.753	23.87	24.50	1.156	0.871	6
	Left side			18900	1880	1	0	-0.09	0.444	23.87	24.50	1.156	0.513	/
	Right side			18900	1880	1	0	-0.08	0.065	23.87	24.50	1.156	0.075	/
	Top side			18900	1880	1	0	-0.02	0.690	23.87	24.50	1.156	0.798	/
	Bottom side			18900	1880	1	0	-0.10	0.024	23.87	24.50	1.156	0.028	/
	Back side			18700	1860	1	0	-0.04	0.610	23.83	24.50	1.167	0.712	/
	Back side			19100	1900	1	0	0.02	0.738	23.79	24.50	1.178	0.869	/
	Back side	0mm	QPSK	18900	1880	50	0	0.18	0.647	22.79	23.50	1.178	0.762	/
	Left side			18900	1880	50	0	-0.03	0.241	22.79	23.50	1.178	0.284	/
	Right side			18900	1880	50	0	-0.13	0.042	22.79	23.50	1.178	0.049	/
	Top side			18900	1880	50	0	-0.13	0.601	22.79	23.50	1.178	0.708	/
	Bottom side			18900	1880	50	0	0.01	0.022	22.79	23.50	1.178	0.026	/
	Back side			19100	1900	100	0	0.04	0.627	22.77	23.50	1.183	0.742	/

10.7LTE Band 7 (20MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	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.
Body														
Main	Back side	0mm	QPSK	21100	2535	1	0	0.14	0.421	24.05	24.50	1.109	0.467	7
	Left side			21100	2535	1	0	-0.10	0.395	24.05	24.50	1.109	0.438	/
	Right side			21100	2535	1	0	0.07	0.045	24.05	24.50	1.109	0.050	/
	Top side			21100	2535	1	0	0.17	0.149	24.05	24.50	1.109	0.165	/
	Bottom side			21100	2535	1	0	0.13	0.026	24.05	24.50	1.109	0.029	/
	Back side	0mm	QPSK	21100	2535	50	0	0.19	0.348	23.12	23.50	1.091	0.380	/
	Left side			21100	2535	50	0	0.13	0.344	23.12	23.50	1.091	0.375	/
	Right side			21100	2535	50	0	0.12	0.028	23.12	23.50	1.091	0.031	/
	Top side			21100	2535	50	0	-0.07	0.117	23.12	23.50	1.091	0.128	/
	Bottom side			21100	2535	50	0	0.05	0.021	23.12	23.50	1.091	0.023	/

10.8LTE Band 12 (00MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	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.
Body														
Main	Back side	0mm	QPSK	23095	707.5	1	0	0.16	0.357	23.46	24.50	1.271	0.454	/
	Left side			23095	707.5	1	0	-0.06	0.099	23.46	24.50	1.271	0.126	/
	Right side			23095	707.5	1	0	-0.13	0.033	23.46	24.50	1.271	0.042	/
	Top side			23095	707.5	1	0	0.06	0.624	23.46	24.50	1.271	0.793	8
	Bottom side			23095	707.5	1	0	0.15	0.022	23.46	24.50	1.271	0.028	/
	Back side	0mm	QPSK	23095	707.5	25	0	-0.08	0.217	22.39	23.50	1.291	0.280	/
	Left side			23095	707.5	25	0	0.13	0.064	22.39	23.50	1.291	0.083	/
	Right side			23095	707.5	25	0	0.15	0.030	22.39	23.50	1.291	0.039	/
	Top side			23095	707.5	25	0	-0.17	0.432	22.39	23.50	1.291	0.558	/
	Bottom side			23095	707.5	25	0	0.04	0.020	22.39	23.50	1.291	0.026	/

10.9LTE Band 26 (15MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	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.
Body														
Main	Back side	0mm	QPSK	26865	831.5	1	0	0.18	0.631	23.60	24.50	1.230	0.776	9
	Left side			26865	831.5	1	0	-0.15	0.215	23.60	24.50	1.230	0.265	/
	Right side			26865	831.5	1	0	0.13	0.029	23.60	24.50	1.230	0.036	/
	Top side			26865	831.5	1	0	-0.15	0.459	23.60	24.50	1.230	0.565	/
	Bottom side			26865	831.5	1	0	-0.15	0.024	23.60	24.50	1.230	0.030	/
	Back side	0mm	QPSK	26865	831.5	36	0	-0.10	0.470	22.54	23.50	1.247	0.586	/
	Left side			26865	831.5	36	0	-0.18	0.210	22.54	23.50	1.247	0.262	/
	Right side			26865	831.5	36	0	0.15	0.027	22.54	23.50	1.247	0.034	/
	Top side			26865	831.5	36	0	0.05	0.412	22.54	23.50	1.247	0.514	/
	Bottom side			26865	831.5	36	0	-0.13	0.022	22.54	23.50	1.247	0.027	/

10.10 LTE Band 66 (20MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	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.
Body														
Main	Back side	0mm	QPSK	132322	1745	1	0	0.05	0.495	23.80	24.50	1.175	0.582	10
	Left side			132322	1745	1	0	-0.15	0.312	23.80	24.50	1.175	0.367	/
	Right side			132322	1745	1	0	0.03	0.025	23.80	24.50	1.175	0.029	/
	Top side			132322	1745	1	0	-0.13	0.432	23.80	24.50	1.175	0.507	/
	Bottom side			132322	1745	1	0	0.02	0.033	23.80	24.50	1.175	0.039	/
	Back side	0mm	QPSK	132322	1745	50	0	-0.18	0.448	22.73	23.50	1.194	0.535	/
	Left side			132322	1745	50	0	0.11	0.234	22.73	23.50	1.194	0.279	/
	Right side			132322	1745	50	0	-0.10	0.021	22.73	23.50	1.194	0.025	/
	Top side			132322	1745	50	0	-0.13	0.442	22.73	23.50	1.194	0.528	/
	Bottom side			132322	1745	50	0	0.17	0.030	22.73	23.50	1.194	0.036	/

10.11 LTE Band 41 (20MHz Bandwidth)

Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	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.
Body														
Main	Back side	0mm	QPSK	40620	2593	1	0	0.07	0.523	24.14	25.00	1.219	0.638	/
	Left side			40620	2593	1	0	0.17	0.549	24.14	25.00	1.219	0.669	11
	Right side			40620	2593	1	0	-0.13	0.033	24.14	25.00	1.219	0.040	/
	Top side			40620	2593	1	0	-0.10	0.298	24.14	25.00	1.219	0.363	/
	Bottom side			40620	2593	1	0	0.16	0.026	24.14	25.00	1.219	0.032	/
	Back side	0mm	QPSK	40620	2593	50	0	0.13	0.401	22.92	24.00	1.282	0.514	/
	Left side			40620	2593	50	0	0.10	0.497	22.92	24.00	1.282	0.637	/
	Right side			40620	2593	50	0	-0.12	0.030	22.92	24.00	1.282	0.038	/
	Top side			40620	2593	50	0	0.03	0.293	22.92	24.00	1.282	0.376	/
	Bottom side			40620	2593	50	0	0.11	0.022	22.92	24.00	1.282	0.028	/

10.12 Bluetooth

Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	1g Scaled SAR (W/kg)	Meas. No.
Body													
Back side	0mm	3DH5	39	2441	0.12	0.109	8.28	9.00	1.180	77.41	1.292	0.166	12
Left side			39	2441	-0.09	0.031	8.28	9.00	1.180	77.41	1.292	0.047	/
Right side			39	2441	-0.18	0.040	8.28	9.00	1.180	77.41	1.292	0.061	/
Top side			39	2441	0.10	0.089	8.28	9.00	1.180	77.41	1.292	0.136	/
Bottom side			39	2441	0.04	0.031	8.28	9.00	1.180	77.41	1.292	0.047	/

10.13 WIFI 2.4GHz

Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	1g Scaled SAR (W/kg)	Meas. No.
Body													
Back side	0mm	802.11b	6	2437	0.17	0.151	3.56	4.50	1.242	97.88	1.022	0.192	/
Left side			6	2437	-0.14	0.015	3.56	4.50	1.242	97.88	1.022	0.019	/
Right side			6	2437	0.05	0.023	3.56	4.50	1.242	97.88	1.022	0.029	/
Top side			6	2437	0.04	0.053	3.56	4.50	1.242	97.88	1.022	0.067	/
Bottom side			6	2437	0.19	0.010	3.56	4.50	1.242	97.88	1.022	0.013	/
Back side	0mm	802.11g	6	2437	0.08	0.190	4.90	6.00	1.288	88.80	1.126	0.276	13
Left side			6	2437	-0.03	0.012	4.90	6.00	1.288	88.80	1.126	0.017	/
Right side			6	2437	0.06	0.030	4.90	6.00	1.288	88.80	1.126	0.044	/
Top side			6	2437	0.03	0.067	4.90	6.00	1.288	88.80	1.126	0.097	/
Bottom side			6	2437	-0.08	0.011	4.90	6.00	1.288	88.80	1.126	0.016	/

10.14 WIFI 5.8GHz

Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	1g Scaled SAR (W/kg)	Meas. No.
Body													
Back side	0mm	802.11a	157	5785	-0.03	0.116	3.36	4.50	1.300	88.80	1.126	0.170	/
Left side			157	5785	-0.10	0.013	3.36	4.50	1.300	88.80	1.126	0.019	/
Right side			157	5785	-0.04	0.085	3.36	4.50	1.300	88.80	1.126	0.124	/
Top side			157	5785	0.07	0.448	3.36	4.50	1.300	88.80	1.126	0.656	14
Bottom side			157	5785	-0.07	0.012	3.36	4.50	1.300	88.80	1.126	0.018	/

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.

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	Body
1	WWAN+WIFI 2.4G+BT	Yes
2	WWAN+WIFI 5G+BT	Yes

Note:

1. When stand-alone SAR is not required for a side of antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
2. The maximum SAR summation is calculated based on the same configuration and test position.
3. The simultaneous transmission combinations of the more antennas contain combinations of less antennas, so only the worst simultaneous transmission combinations is shown in this report.

12.2 Sum SAR of Simultaneous Transmission

12.2.1 Body Simultaneous Transmission SAR Evaluation for WWAN Antenna with WIFI and Bluetooth

Band	Position	Stand alone SAR				SUM SAR	
		1	2	3	4		
		WWAN	2.4GWIFI	5G WIFI	Bluetooth	1+2+4	1+3+4
GSM850	Back Side	0.684	0.276	0.170	0.166	1.126	1.020
GSM850	Left Side	0.282	0.017	0.019	0.047	0.346	0.348
GSM850	Right Side	0.031	0.044	0.124	0.061	0.136	0.216
GSM850	Top Side	0.406	0.097	0.656	0.136	0.639	1.198
GSM850	Bottom Side	0.043	0.016	0.018	0.047	0.106	0.108
GSM1900	Back Side	0.547	0.276	0.170	0.166	0.989	0.883
GSM1900	Left Side	0.243	0.017	0.019	0.047	0.307	0.309
GSM1900	Right Side	0.025	0.044	0.124	0.061	0.130	0.210
GSM1900	Top Side	0.481	0.097	0.656	0.136	0.714	1.273
GSM1900	Bottom Side	0.033	0.016	0.018	0.047	0.096	0.098
WCDMAB2	Back Side	0.638	0.276	0.170	0.166	1.080	0.974
WCDMAB2	Left Side	0.222	0.017	0.019	0.047	0.286	0.288
WCDMAB2	Right Side	0.025	0.044	0.124	0.061	0.130	0.210
WCDMAB2	Top Side	0.674	0.097	0.656	0.136	0.907	1.466
WCDMAB2	Bottom Side	0.038	0.016	0.018	0.047	0.101	0.103
WCDMAB4	Back Side	0.491	0.276	0.170	0.166	0.933	0.827
WCDMAB4	Left Side	0.285	0.017	0.019	0.047	0.349	0.351
WCDMAB4	Right Side	0.025	0.044	0.124	0.061	0.130	0.210
WCDMAB4	Top Side	0.494	0.097	0.656	0.136	0.727	1.286
WCDMAB4	Bottom Side	0.030	0.016	0.018	0.047	0.093	0.095
WCDMAB5	Back Side	0.272	0.276	0.170	0.166	0.714	0.608
WCDMAB5	Left Side	0.082	0.017	0.019	0.047	0.146	0.148
WCDMAB5	Right Side	0.041	0.044	0.124	0.061	0.146	0.226
WCDMAB5	Top Side	0.382	0.097	0.656	0.136	0.615	1.174
WCDMAB5	Bottom Side	0.027	0.016	0.018	0.047	0.090	0.092
LTEB2	Back Side	0.871	0.276	0.170	0.166	1.313	1.207
LTEB2	Left Side	0.513	0.017	0.019	0.047	0.577	0.579
LTEB2	Right Side	0.075	0.044	0.124	0.061	0.180	0.260
LTEB2	Top Side	0.798	0.097	0.656	0.136	1.031	1.590
LTEB2	Bottom Side	0.028	0.016	0.018	0.047	0.091	0.093
LTEB7	Back Side	0.467	0.276	0.170	0.166	0.909	0.803
LTEB7	Left Side	0.438	0.017	0.019	0.047	0.502	0.504
LTEB7	Right Side	0.050	0.044	0.124	0.061	0.155	0.235
LTEB7	Top Side	0.165	0.097	0.656	0.136	0.398	0.957
LTEB7	Bottom Side	0.029	0.016	0.018	0.047	0.092	0.094

LTEB12	Back Side	0.454	0.276	0.170	0.166	0.896	0.790
LTEB12	Left Side	0.126	0.017	0.019	0.047	0.190	0.192
LTEB12	Right Side	0.042	0.044	0.124	0.061	0.147	0.227
LTEB12	Top Side	0.793	0.097	0.656	0.136	1.026	1.585
LTEB12	Bottom Side	0.028	0.016	0.018	0.047	0.091	0.093
LTEB26	Back Side	0.776	0.276	0.170	0.166	1.218	1.112
LTEB26	Left Side	0.265	0.017	0.019	0.047	0.329	0.331
LTEB26	Right Side	0.036	0.044	0.124	0.061	0.141	0.221
LTEB26	Top Side	0.565	0.097	0.656	0.136	0.798	1.357
LTEB26	Bottom Side	0.030	0.016	0.018	0.047	0.093	0.095
LTEB66	Back Side	0.582	0.276	0.170	0.166	1.024	0.918
LTEB66	Left Side	0.367	0.017	0.019	0.047	0.431	0.433
LTEB66	Right Side	0.029	0.044	0.124	0.061	0.134	0.214
LTEB66	Top Side	0.528	0.097	0.656	0.136	0.761	1.320
LTEB66	Bottom Side	0.039	0.016	0.018	0.047	0.102	0.104
LTEB41	Back Side	0.638	0.276	0.170	0.166	1.080	0.974
LTEB41	Left Side	0.669	0.017	0.019	0.047	0.733	0.735
LTEB41	Right Side	0.040	0.044	0.124	0.061	0.145	0.225
LTEB41	Top Side	0.376	0.097	0.656	0.136	0.609	1.168
LTEB41	Bottom Side	0.032	0.016	0.018	0.047	0.095	0.097

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 1g SAR is 1.59 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

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	1201	2024/09/03	2027/09/03
835MHz Validation Dipole	Speag	D835V2	4d277	2024/08/30	2027/08/30
1750MHz Validation Dipole	Speag	D1750V2	1183	2024/09/03	2027/09/03
1900MHz Validation Dipole	Speag	D1900V2	5d155	2024/09/02	2027/09/02
2450MHz Validation Dipole	Speag	D2450V2	1065	2024/09/05	2027/09/05
2600MHz Validation Dipole	Speag	D2600V2	1184	2024/08/30	2027/08/30
5GHz Validation Dipole	Speag	D5GHzV2	1333	2024/09/04	2027/09/04
Data Acquisition Electronicsr	Speag	DAE4	540	2025/04/21	2026/04/21
E-Field Probe	Speag	EX3DV4	3748	2025/04/24	2026/04/24
Signal Generator	R&S	SMB100A	182635	2025/02/12	2026/02/12
Power Meter	Agilent	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
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, BALUN 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 (%)
2025.11.25	Head	750	21.5	0.88	41.41	0.89	41.94	-1.12	-1.26
2025.11.25	Head	835	21.5	0.91	40.96	0.90	41.50	1.11	-1.30
2025.11.26	Head	1750	21.1	1.40	39.32	1.37	40.08	2.19	-1.90
2025.11.26	Head	1900	21.1	1.44	39.17	1.40	40.00	2.86	-2.08
2025.11.27	Head	2450	21.2	1.85	39.35	1.80	39.20	2.78	0.38
2025.12.27	Head	2600	20.8	2.01	38.00	1.96	39.01	2.55	-2.59
2025.11.27	Head	5800	21.2	5.36	34.18	5.27	35.30	1.71	-3.17
Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$.									

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by Speag, 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 (%)
2025.11.25	Head	750	100	0.816	8.16	8.46	-3.55
2025.11.25	Head	835	100	0.991	9.91	9.59	3.34
2025.11.26	Head	1750	100	3.510	35.10	36.50	-3.84
2025.11.26	Head	1900	100	3.820	38.20	39.90	-4.26
2025.11.27	Head	2450	100	5.490	54.90	52.60	4.37
2025.12.27	Head	2600	100	5.800	58.00	55.30	4.88
2025.11.27	Head	5800	100	7.470	74.70	78.50	-4.84

Note: The tolerance limit of System validation $\pm 10\%$.

System Performance Check Data (750MHz)

Date: 2025/11/25

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

Medium parameters used: $f = 750$ MHz; $\sigma = 0.882$ S/m; $\epsilon_r = 41.409$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(9.14, 9.14, 9.14); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

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

Maximum value of SAR (interpolated) = 1.07 W/kg

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

Reference Value = 36.57 V/m; Power Drift = -0.07 dB

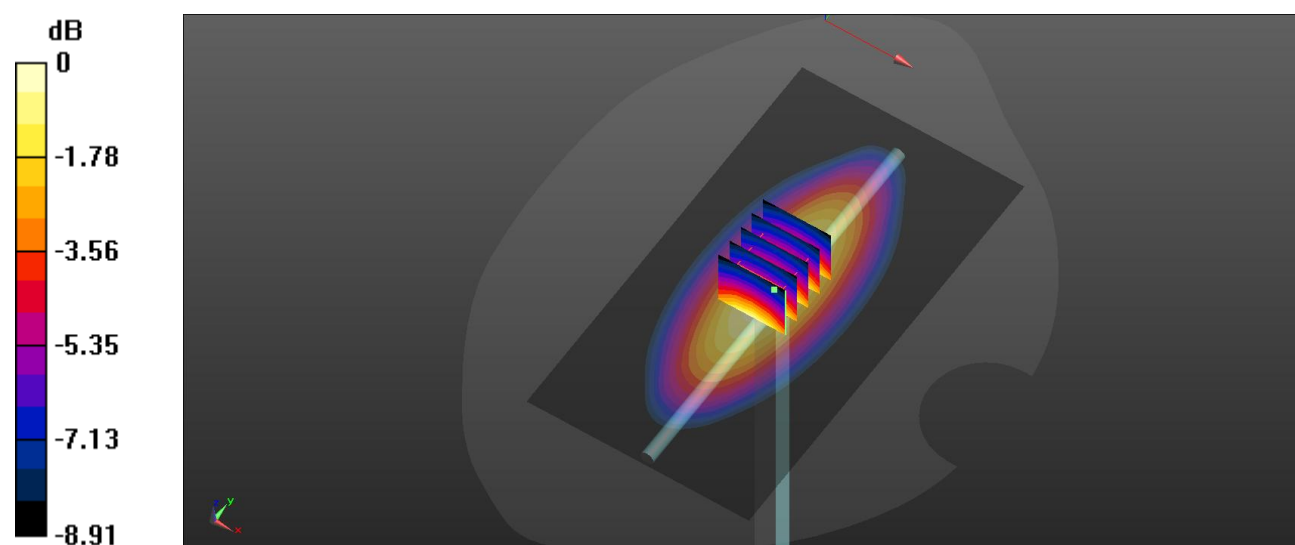
Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.816 W/kg; SAR(10 g) = 0.563 W/kg

Smallest distance from peaks to all points 3 dB below = 23.8 mm

Ratio of SAR at M2 to SAR at M1 = 65.8%

Maximum value of SAR (measured) = 1.09 W/kg



0 dB = 1.09 W/kg

System Performance Check Data (835MHz)

Date: 2025/11/25

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

Medium parameters used: $f = 835$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 40.96$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.8°C Liquid Temperature: 21.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.74, 8.74, 8.74); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW835/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.28 W/kg

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

Reference Value = 34.22 V/m; Power Drift = -0.10 dB

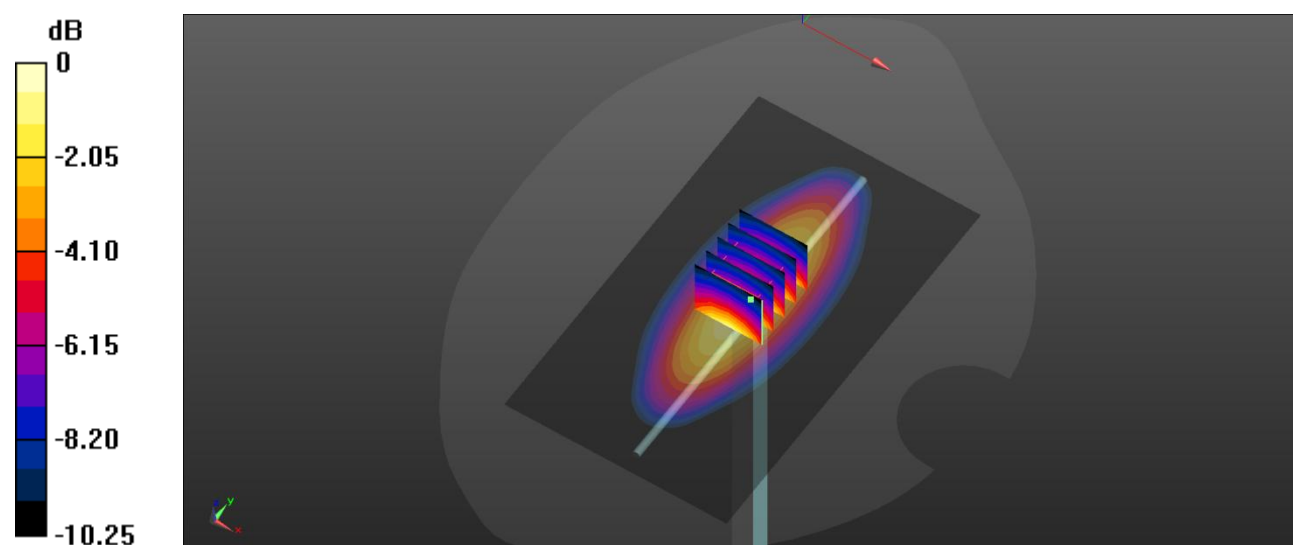
Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.991 W/kg; SAR(10 g) = 0.639 W/kg

Smallest distance from peaks to all points 3 dB below = 13.7 mm

Ratio of SAR at M2 to SAR at M1 = 60.8%

Maximum value of SAR (measured) = 1.41 W/kg



0 dB = 1.41 W/kg

System Performance Check Data (1750MHz)

Date: 2025/11/26

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.404$ S/m; $\epsilon_r = 39.316$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.63, 7.63, 7.63); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- 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) = 5.68 W/kg

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

Reference Value = 62.43 V/m; Power Drift = 0.03 dB

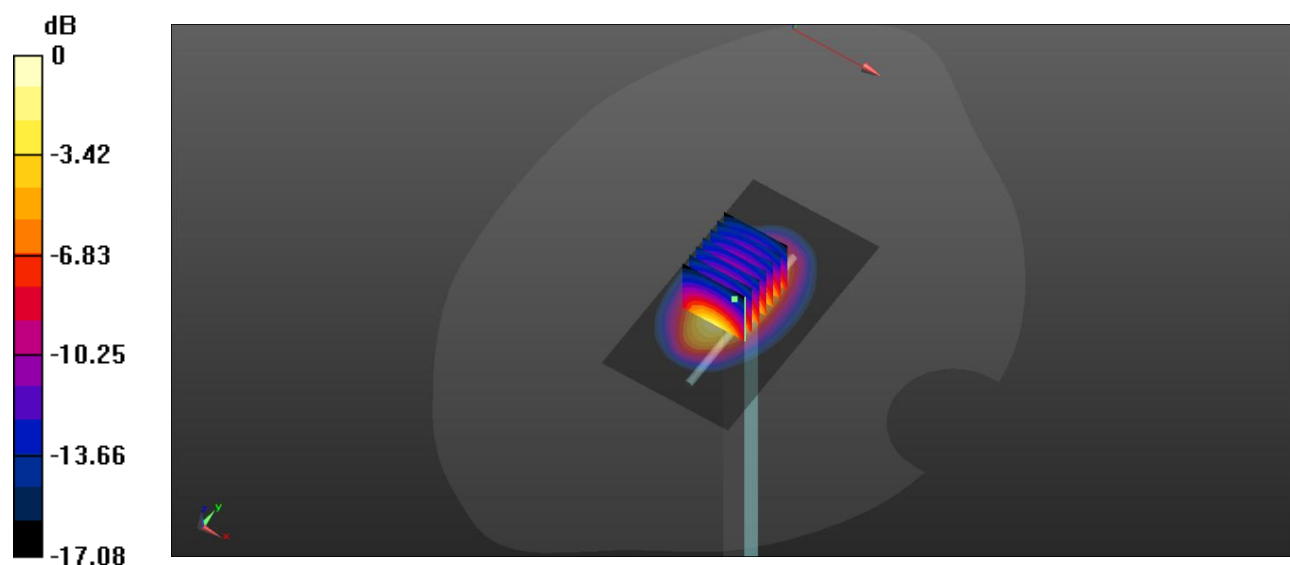
Peak SAR (extrapolated) = 6.12 W/kg

SAR(1 g) = 3.51 W/kg; SAR(10 g) = 1.98 W/kg

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 58.8%

Maximum value of SAR (measured) = 5.21 W/kg



0 dB = 5.21 W/kg

System Performance Check Data (1900MHz)

Date: 2025/11/26

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.435$ S/m; $\epsilon_r = 39.174$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C Liquid Temperature: 21.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.3, 7.3, 7.3); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- 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) = 6.16 W/kg

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

Reference Value = 67.58 V/m; Power Drift = -0.05 dB

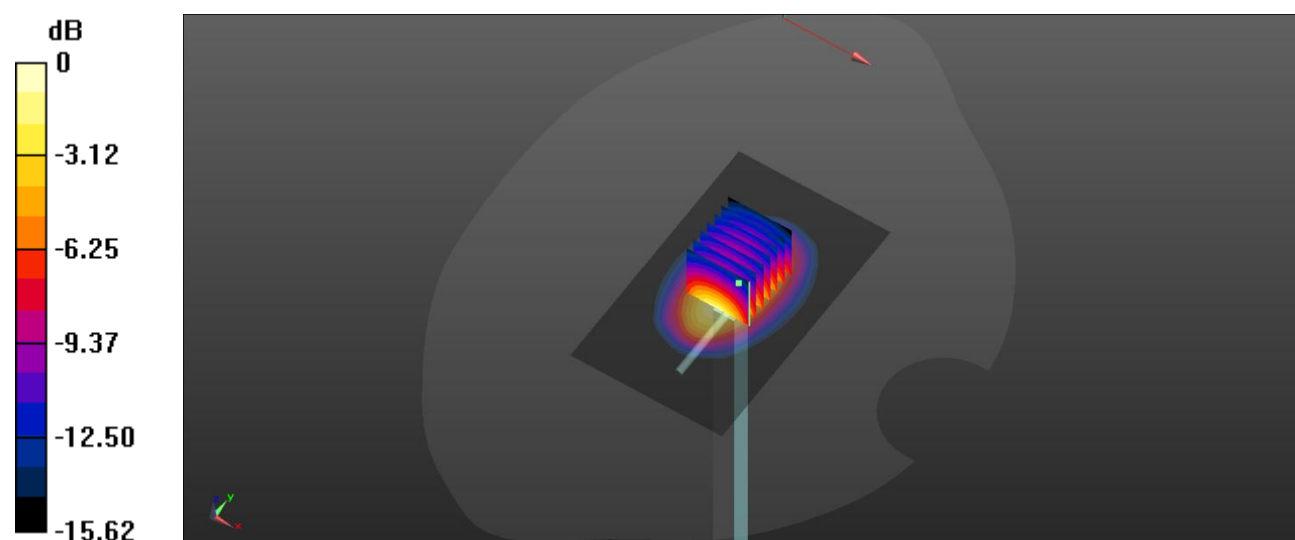
Peak SAR (extrapolated) = 6.78 W/kg

SAR(1 g) = 3.82 W/kg; SAR(10 g) = 2.1 W/kg

Smallest distance from peaks to all points 3 dB below = 9.5 mm

Ratio of SAR at M2 to SAR at M1 = 57.8%

Maximum value of SAR (measured) = 5.87 W/kg



0 dB = 5.87 W/kg

System Performance Check Data (2450MHz)

Date: 2025/11/27

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.847$ S/m; $\epsilon_r = 39.354$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.9, 6.9, 6.9); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- 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) = 9.58 W/kg

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

Reference Value = 58.18 V/m; Power Drift = -0.04 dB

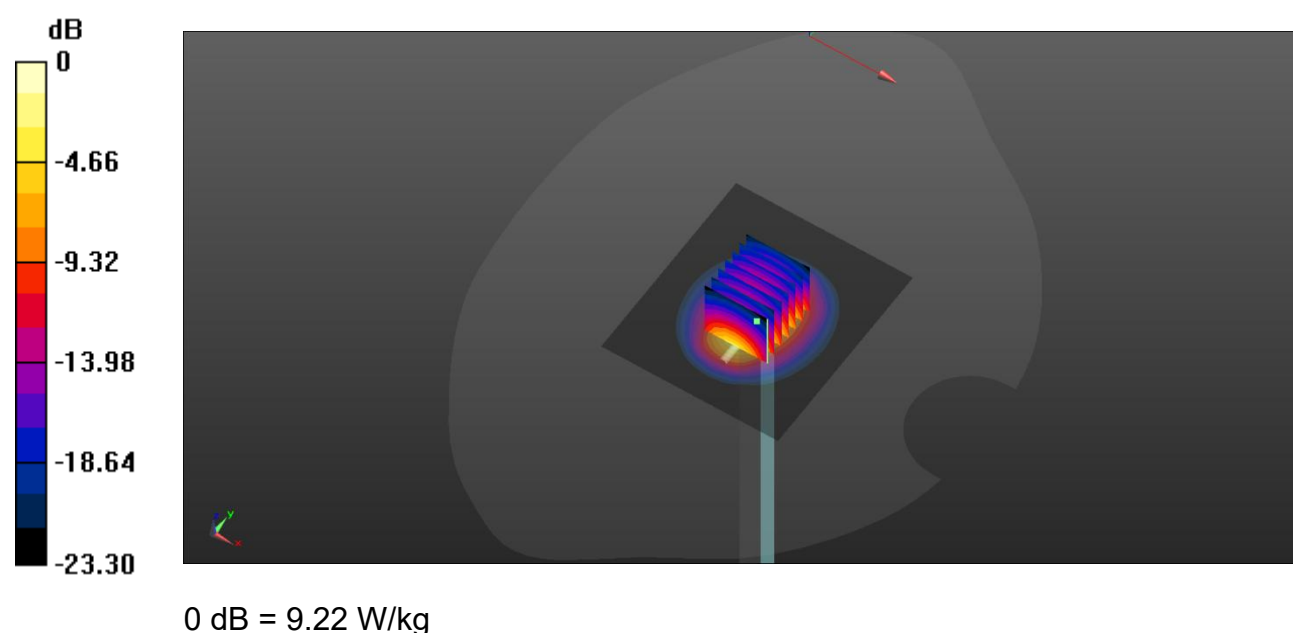
Peak SAR (extrapolated) = 11.6 W/kg

SAR(1 g) = 5.49 W/kg; SAR(10 g) = 2.52 W/kg

Smallest distance from peaks to all points 3 dB below = 8.5 mm

Ratio of SAR at M2 to SAR at M1 = 47.9%

Maximum value of SAR (measured) = 9.22 W/kg



System Performance Check Data (2600MHz)

Date: 2025/12/27

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

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.011$ S/m; $\epsilon_r = 38.004$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 21.9°C Liquid Temperature: 20.8°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.72, 6.72, 6.72); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- 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) = 10.2 W/kg

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

Reference Value = 57.47 V/m; Power Drift = -0.05 dB

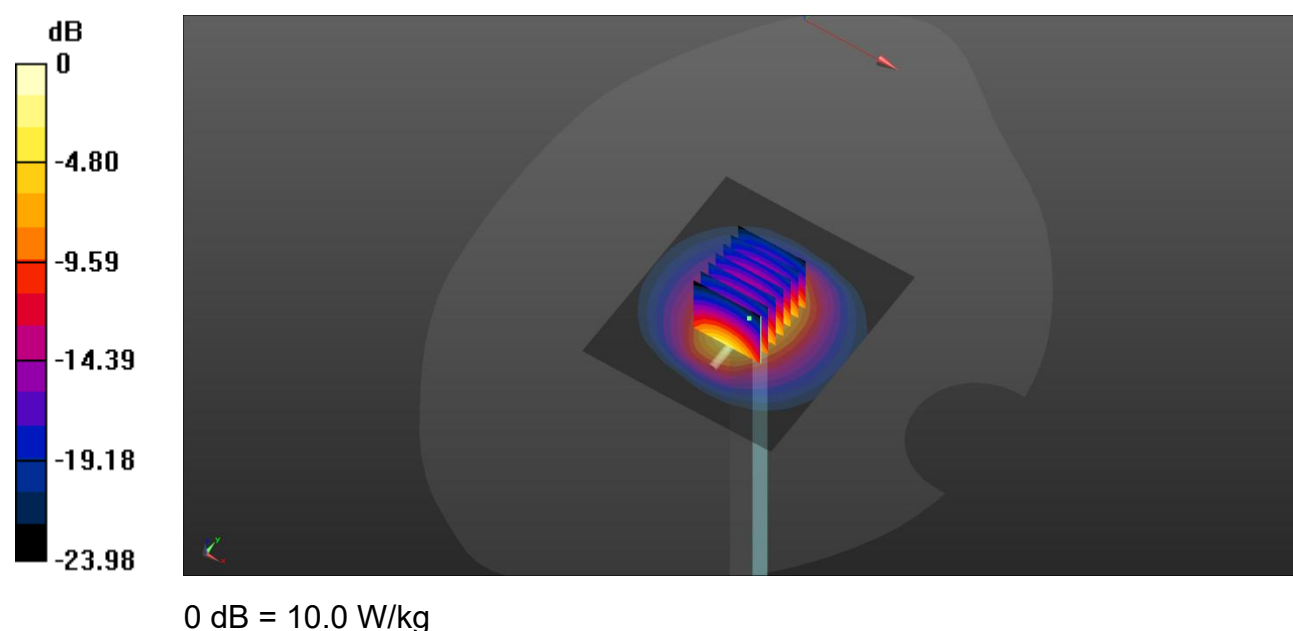
Peak SAR (extrapolated) = 12.6 W/kg

SAR(1 g) = 5.8 W/kg; SAR(10 g) = 2.58 W/kg

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 47.2%

Maximum value of SAR (measured) = 10.0 W/kg



System Performance Check Data (5800MHz)

Date: 2025/11/27

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

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.356$ S/m; $\epsilon_r = 34.181$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.5°C Liquid Temperature: 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(4.41, 4.41, 4.41); Calibrated: 2025/4/24
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2025/4/21
- Phantom: Twin-SAM Right V5.0 (20deg probe tilt); Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

CW5800/Area Scan (81x101x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm
Maximum value of SAR (interpolated) = 15.9 W/kg

CW5800/Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 15.38 V/m; Power Drift = -0.10 dB

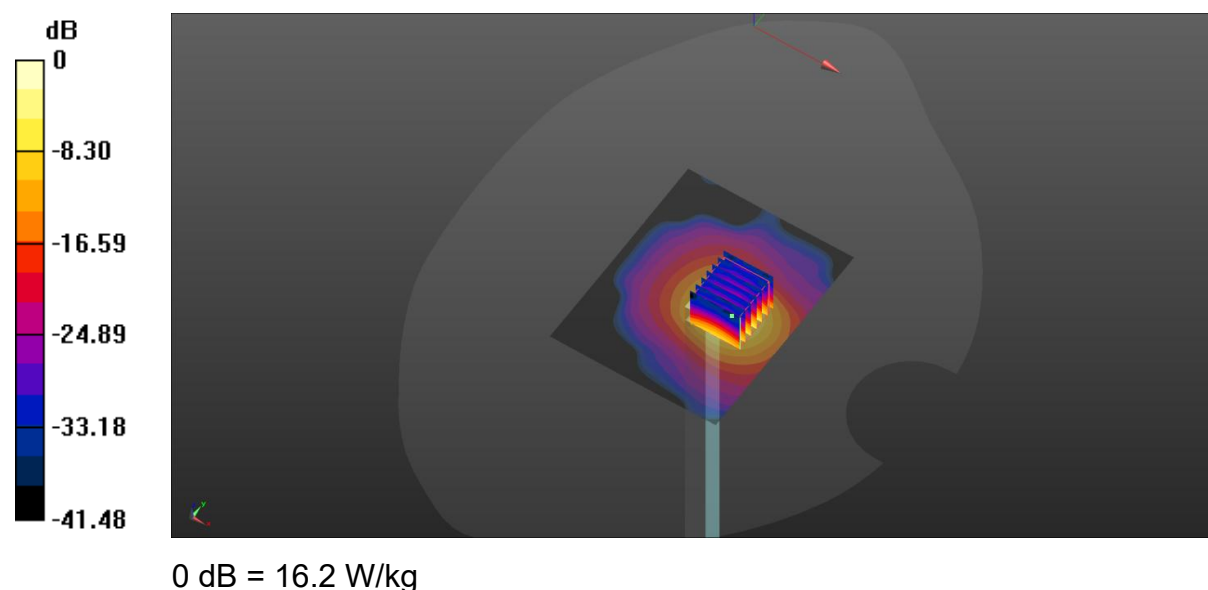
Peak SAR (extrapolated) = 36.3 W/kg

SAR(1 g) = 7.47 W/kg; SAR(10 g) = 2.09 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 49%

Maximum value of SAR (measured) = 16.2 W/kg



ANNEX C TEST DATA

Please refer the document “BL-SH25B1270-ATD.pdf”.

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SH25B1270-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SH25B1270-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SH25B1270-AC.pdf”.

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--END OF REPORT--