

No.: GJWSZ2024-0098-SAR1

TEST REPORT

FCC ID : EW780-1957-01E
NAME OF SAMPLE : Video Baby Monitor
CLIENT : VTech Telecommunications Ltd.
CLASSIFICATION OF TEST : N/A
Max. Body SAR (1 g): : **0.83** W/kg

CVC Testing Technology (Shenzhen) Co., Ltd.



Applicant		Name: VTech Telecommunications Ltd.	
		Address: 23/F, Tai Ping Industrial Centre, Block 1,57 Ting Kok Road, Tai Po, Hong Kong.	
Manufacturer		Name: VTech (Dongguan) Telecommunications Limited.	
		Address: VTech Science Park, Xia Ling Bei Management Zone,Liaobu, Dongguan, Guangdong, China.	
Equipment Under Test		Name: Video Baby Monitor	
		Model/Type: VM901HD PU & VM901-2HD PU	
		Trade mark: VTech	
		Serial NO.: 4020345001001	
		Sampe NO.: 2-1	
Date of Receipt.	2024.04.09	Date of Testing	2024.04.12
Test Specification		Test Result	
ANSI/IEEE Std. C95.1 FCC 47 CFR Part 2 (2.1093) IEEE 1528: 2013 IEC/IEEE 62209-1528: 2020		Pass	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied.		
	Seal of CVC		
	Date of issue:2024-04-15,Correction 1: 2024-11-08		
Tested by: Liang Jiatong Name Signature	Reviewed by: Mo Xianbiao Name Signature	Approved by: Dong Sanbi Name Signature	
Other Aspects: NONE.			
Abbreviations: Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
GJWSZ2024-0098-SAR1	Original release	2024.04.15
GJWSZ2024-0098-SAR1	1. SAR test results changed from Extremity SAR (10 g) to Body SAR (1 g). 2. Update lab address	2024.10.23



1 GENERAL INFORMATION

1.1 GENERAL PRODUCT INFORMATION

PRODUCT	Video Baby Monitor
BRAND	VTech
MODEL	VM901HD PU & VM901-2HD PU
Max. Tune-up power	16.5dBm
HW Version	35-400508PUA
POWER SUPPLY	Rechargeable Li-ion Polymer Battery
MODULATION MODE	GFSK only
OPERATING FREQUENCY	FHSS: 2406 MHz to 2475 MHz
ANTENNA TYPE	External antenna
Operating Mode	Maximum continuous output
Remark: <ol style="list-style-type: none">For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power.This is provided by the manufacturer. The laboratory is not responsible for technical data provided by the customer.	



1.2 DESCRIPTION OF ACCESSORIES

AC Adapter	
BRAND	VTPL
Model No.:	VT07EUS05200
Input:	100-240 V~50/60 Hz 0.5A
Output:	DC: 5V 2A
AC Cable:	N/A
DC Cable:	Unshielded

1.3 TEST Environment

Ambient conditions in the SAR laboratory:

Items	Required
Temperature (°C)	21.5
Humidity (%RH)	55-60

1.4 TEST Location

The tests and measurements refer to this report were performed by CVC Testing Technology (Shenzhen) Co., Ltd.

Lab Address:No. 1301-14&16, Guanguang Road, Xinlan Community, Guanlan Subdistrict, Longhua District, Shenzhen, Guangdong, China

Post Code: 518110 Tel: 0755-23763060-8805

Fax: 0755-23763060 E-mail: sz-kf@cvc.org.cn

FCC(Test firm designation number: CN1363)

IC(Test firm CAB identifier number: CN0137)

CNAS(Test firm designation number: L16091)



1.5 TEST Standards and Limits

No.	Identity	Document Title
1	FCC 47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	ANSI/IEEE Std. C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	IEC/IEEE 62209-1528:2020	Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)
5	FCC KDB 447498 D01 v06	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
6	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
7	FCC KDB 865664 D02 v01r02	RF Exposure Reporting

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

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

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

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

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

Population/Uncontrolled Environments:

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

Occupational/Controlled Environments:

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

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



1.6 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for the EUT are as follows:

Mode	Highest Reported Body SAR _{1g} (W/kg) (0 cm Gap)
2.4G FHSS	0.83

Note:

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6W/kg as averaged over any 1 gram of tissue; 10-gram SAR for Product Specific 10g SAR, limit: 4.0W/kg) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

2 SAR Measurement System

2.1 Definition of Specific Absorption Rate (SAR)

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

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

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

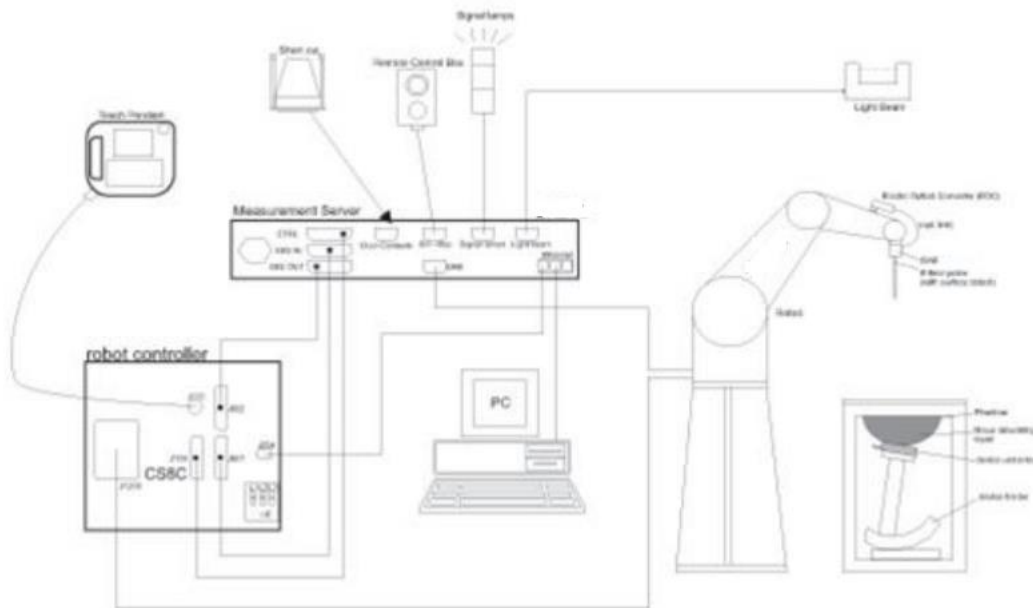
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

Where: σ is the conductivity of the tissue;
 ρ is the mass density of the tissue and E is the RMS electrical field strength.

2.2 SAR System

DASY System Diagram:





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

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

The following figure shows the system.



The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The Open SAR software computes the results to give a SAR value in a 1g or 10g mass.



2.3 Probe

EX3DV4 – Smallest isotropic dosimetric probe for high precision SAR measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 10 GHz with a precision of better than 30%

- Frequency range: 4 MHz – 10 GHz
- Dynamic range: 0.01 W/kg – >100 W/kg
- Tip diameter: 2.5 mm
- Scanning distance: ≥ 1.4 mm



Figure 1-Speag COMOSAR Dosimetric E field Dipole



2.4 Date Acquisition Electronics 4 (DAE4)

High precision 3-channel differential voltmeter for use with SPEAG's field, SAR, and temperature probes. Serial optical link for communication with the DASY8 measurement server. Two-step probe touch detector for mechanical surface detection and emergency robot stop.

- Measurement range: -100 – +300 mV (16-bit resolution and two range settings: 4 mV, 400 mV)
- Input offset voltage: <math><5 \mu\text{V}</math> (with auto zero)
- Input resistance: 200 MOhm
- Input bias current: <math><50 \text{ fA}</math>
- Battery power: >10 hours of operation (with two 9.6 V NiMH batteries)
- Dimensions (L x W x H): 60 x 60 x 68 mm
- Calibration: ISO/IEC 17025 calibration service available.





2.4.1 SAM-Twin Phantom

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEC/IEEE 62209-1528. It enables the dosimetric evaluation of left and right hand phone usage as well as body-mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot. SAM-Twin V5.0 and higher has the same shell geometry and is manufactured from the same material as SAM-Twin V4.0 but with reinforced top structure.

- Material: Vinyl ester, fiberglass reinforced (VE-GF)
- Shell Thickness: 2 ± 0.2 mm (6 ± 0.2 mm at ear point)
- Dimensions: Length: 1000 mm
Width: 500 mm
Height: adjustable feet

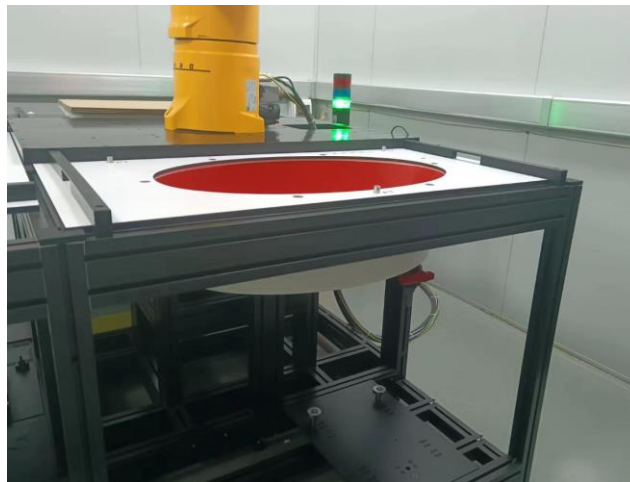




2.4.2 ELI Phantom

The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices in the frequency range of 4 MHz to 10 GHz. ELI is fully compatible with the IEC/IEEE 62209-1528 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all of SPEAG's dosimetric probes and dipoles. The latest ELI V8.0 phantom shell has optimized pretension in the bottom surface during production, such that the phantom is more robust and with reduced sagging.

- Material: Vinyl ester, fiberglass reinforced (VE-GF)
- Shell Thickness: 2.0 ± 0.2 mm (bottom plate)
- Dimensions: Major axis: 600 mm,
Minor axis: 400 mm
- Filling Volume: approx. 30 liters.

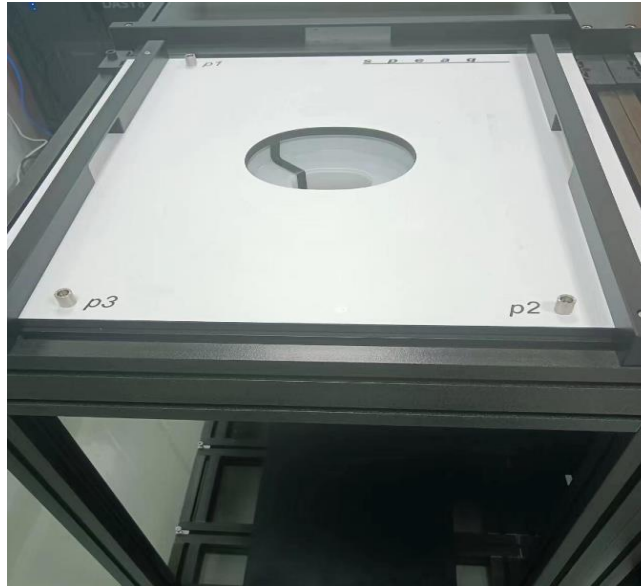




2.5 Wrist Phantom

The Wrist Phantom V10 is shape-compatible with the CTIA approved OTA GFPC-V1 and optimized for specific absorption rate evaluation of watches and other wireless hand accessories.

- Material: Photosensitive epoxy acrylates
- Shell Thickness: 2 ± 0.2 mm
- Wrist Shape: Design compatible with CTIA forearm.



2.6 Device Holder

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





2.7 System Validation Dipoles

Symmetrical dipole with 1/4 balun. Enables measurement of feed point impedance with NWA. Matched for use near flat phantoms filled with tissue simulating solutions.

- Frequency: 300 MHz to 10 GHz
- Return loss: >20 dB
- Power capability: >40 W

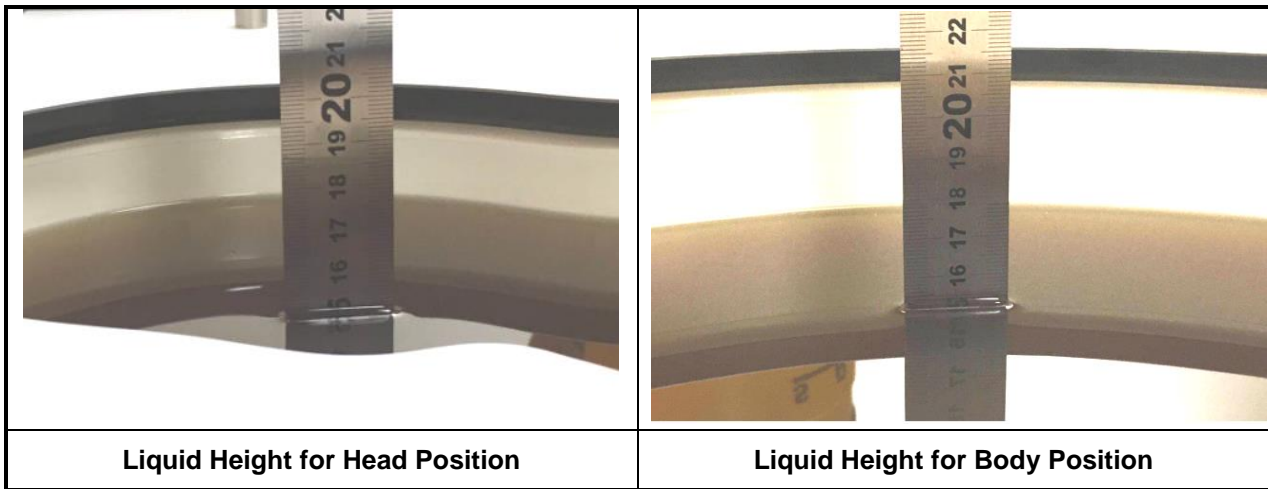




3 Tissue Simulating Liquids

3.1 Simulating Liquids Parameter Check

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% are listed.



The dielectric properties of the tissue simulating liquids are defined in IEC 62209-1528. The dielectric properties of the tissue simulating liquids were verified prior to the SAR evaluation using a dielectric assessment kit and a network analyzer.



Dielectric properties of Tissue Simulating Liquid

Frequency (MHz)	Target Permittivity	Target Conductivity
300	45.3	0.87
450	43.5	0.87
750	41.9	0.89
835	41.5	0.90
900	41.5	0.97
1450	40.5	1.20
1640	40.3	1.29
1750	40.1	1.37
1800	40.0	1.40
1900	40.0	1.40
2000	40.0	1.40
2100	39.8	1.49
2300	39.5	1.67
2450	39.2	1.80
2600	39.0	1.96
3000	38.5	2.40
3500	37.9	2.91
4000	37.4	3.43
4500	36.8	3.94
5000	36.2	4.45
5200	36.0	4.66
5300	35.9	4.76
5500	35.6	4.96
5600	35.5	5.07
5800	35.3	5.27
6000	35.1	5.48



3.2 Liquids Measurement Results

The measuring results for tissue simulating liquid are shown as below.

Tissue Type	Frequency (MHz)	Measured Conductivity (σ)	Measured Permittivity (ϵ_r)	Target Conductivity (σ)	Target Permittivity (ϵ_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
HSL600-10000MHz	2450	1.870	38.200	1.800	39.200	3.89	-2.55	Apr. 10, 2024

Note:

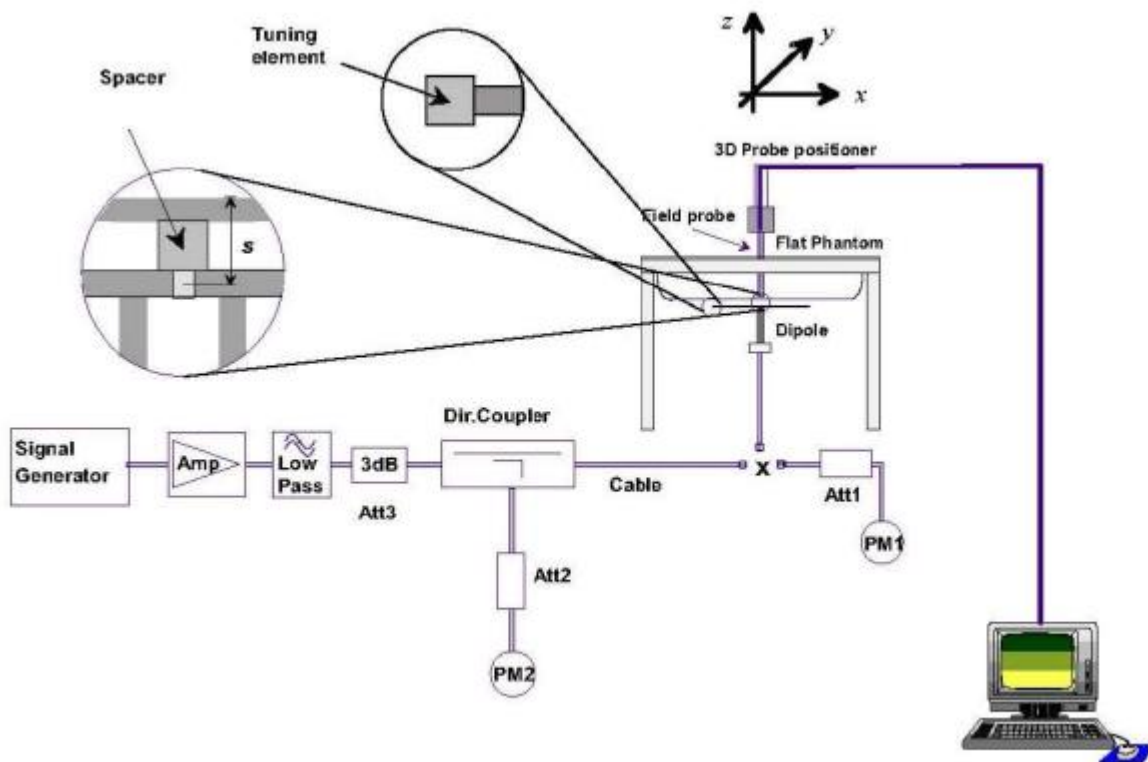
1. The dielectric properties of the tissue simulating liquid must be measured within 24 hours before the SAR testing and within $\pm 5\%$ of the target values. Liquid temperature during the SAR testing must be within ± 2 °C.
2. Since the maximum deviation of dielectric properties of the tissue simulating liquid is within 5%.

4 SAR System Validation

4.1 Validation System

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

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





4.2 System Validation Result

The measuring result for system verification is tabulated as below.

Test Date	Frequency (MHz)	1W Target SAR-1g (W/kg)	Measured SAR-1g (W/kg)	Normalized to 1W SAR-1g (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N
Apr. 10, 2024	2450	51.40	13.20	52.80	2.72	1014	7738	1725

Note:

Comparing to the reference SAR value provided by SPEAG, the validation data should be within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots can be referred to Appendix A of this report.



5 SAR Evaluation Procedures

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

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

Area Scan & Zoom Scan:

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

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



6 SAR Measurement Evaluation

6.1 EUT Configuration and Setting

<Considerations Related to 2.4G FHSS for Setup and Testing>

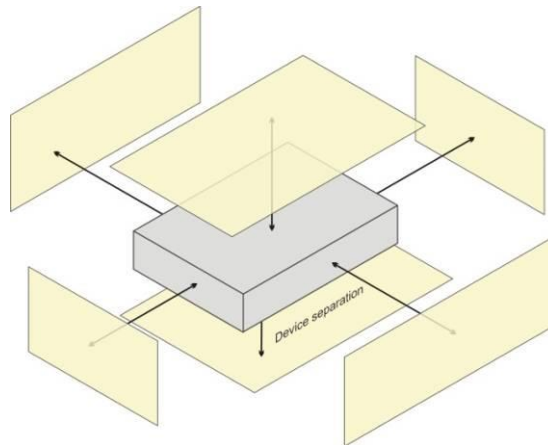
This device has installed 2.4G FHSS engineering testing software which can provide continuous transmitting RF signal. During 2.4G FHSS SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.



7 EUT Testing Position

7.1 Body Exposure Conditions

For this device, based on the antenna positions shown below, we would expect a low or no SAR value for antenna separation distances greater than 5cm from the edge. Therefore, we performed SAR tests on the Front Face, Rear Face, Right Side and Top Side positions of the antenna in this report, at 0 cm separation from a flat phantom.



The SAR testing required for body mode is listed as below.

Antenna	Ant. Degree	Front Face	Rear Face	Left Side	Right Side	Top Side	Bottom Side
2.4G FHSS Ant.	0	V	V	/	V	V	/
	90	V	V	/	V	V	/



8 Maximum Output Power

8.1 Measured Conducted Power Result

All Rate have been tested, the Worst average power (Unit: dBm) is shown as below.

<2.4G FHSS>

Mode	2.4G FHSS		
Channel / Frequency (MHz)	Low (2406)	Middle (2442)	High (2475)
Average Power	16.04	15.91	15.26
Tune-Up	16.5		



9 SAR Testing Results

9.1 SAR Test Reduction Considerations

<KDB 447498 D01, General RF Exposure Guidance>

Testing of other required channels within the operating mode of a frequency band is not required when the reported SAR for the mid-band or highest output power channel is:

- (1) ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
- (2) ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
- (3) ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz



9.2 SAR Results for Body Exposure Condition (Separation Distance is 0 cm Gap)

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	Fre.	Antenna Degree	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	D2.4G	-	Front Face	0	Low	2406	0	16.5	16.04	1.11	0.00	0.023	0.03
	D2.4G	-	Rear Face	0	Low	2406	0	16.5	16.04	1.11	-0.01	0.676	0.75
	D2.4G	-	Right Side	0	Low	2406	0	16.5	16.04	1.11	0.06	<0.01	<0.01
1	D2.4G	-	Top Side	0	Low	2406	0	16.5	16.04	1.11	0.00	0.748	0.83
	D2.4G	-	Front Face	0	Low	2406	90	16.5	16.04	1.11	0.00	0.14	0.16
	D2.4G	-	Rear Face	0	Low	2406	90	16.5	16.04	1.11	-0.03	0.232	0.26
	D2.4G	-	Right Side	0	Low	2406	90	16.5	16.04	1.11	-0.05	0.013	0.01
	D2.4G	-	Top Side	0	Low	2406	90	16.5	16.04	1.11	-0.08	0.008	0.01
	D2.4G	-	Top Side	0	Middle	2442	0	16.5	15.91	1.15	0.02	0.408	0.47
	D2.4G	-	Top Side	0	High	2475	0	16.5	15.26	1.33	-0.14	0.116	0.15



9.3 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.

Since all the measured SAR are less than 0.8 W/kg, the repeated measurement is not required.



10 Equipment List

Equipment	Manufacturer	Model	SN	Cal. Data	Cal. interval
System Validation Dipole	SPEAG	D2450V2	1081	May. 25, 2022	3 years
Dosimetric E-Field Probe	SPEAG	EX3DV4	7738	Dec. 13, 2023	1 year
Data Acquisition Electronics	SPEAG	DAE4	1725	Oct. 26, 2023	1 year
Wideband Radio Communication Tester	R&S	CMW500	168558	May. 26, 2023	1 year
Signal Analyzer	R&S	FSV	104408	May. 22, 2023	1 year
Vector Network Analyzer	R&S	ZNB 40	101544	May. 26, 2023	1 year
Dielectric assessment Kit	SPEAG	DAK-3.5	1327	Oct. 22, 2022	N/A
Signal Generator	R&S	SMB 100B	101843	Sep. 21, 2023	1 year
Power Sensor	R&S	NRP18S-10	101843	Sep. 25, 2023	1 year
Power Sensor	R&S	NRP18S-10	101845	Sep. 25, 2023	1 year
DC Power Supply	Topward	3303D	810984	Sep. 24, 2023	1 year
Cavity Coupler	/	/	LS0300103	Jan. 17, 2024	1 year
Directional Coupler	/	SHX-DC04/12-20N	2206171042	Jan. 17, 2024	1 year
Coaxial attenuator	R&S	8491A	1424.6721k02-101845-HX	Sep. 25, 2023	1 year
Coaxial attenuator	R&S	8491A	1424.6721K02-101843-aM	Sep. 25, 2023	1 year
Digital Thermometer	LKM	DTM3000	3946	Jan. 15, 2024	1 year
Power Amplifier Mini circuit	mini-circuits	ZVA-183W-S+	726202215	Jan. 10, 2024	1 year
PHANTOM	SPEAG	ELI V8.0	2171	N/A	N/A
PHANTOM	SPEAG	SAM-Twin V8.0	2097	N/A	N/A



11 Measurement Uncertainty

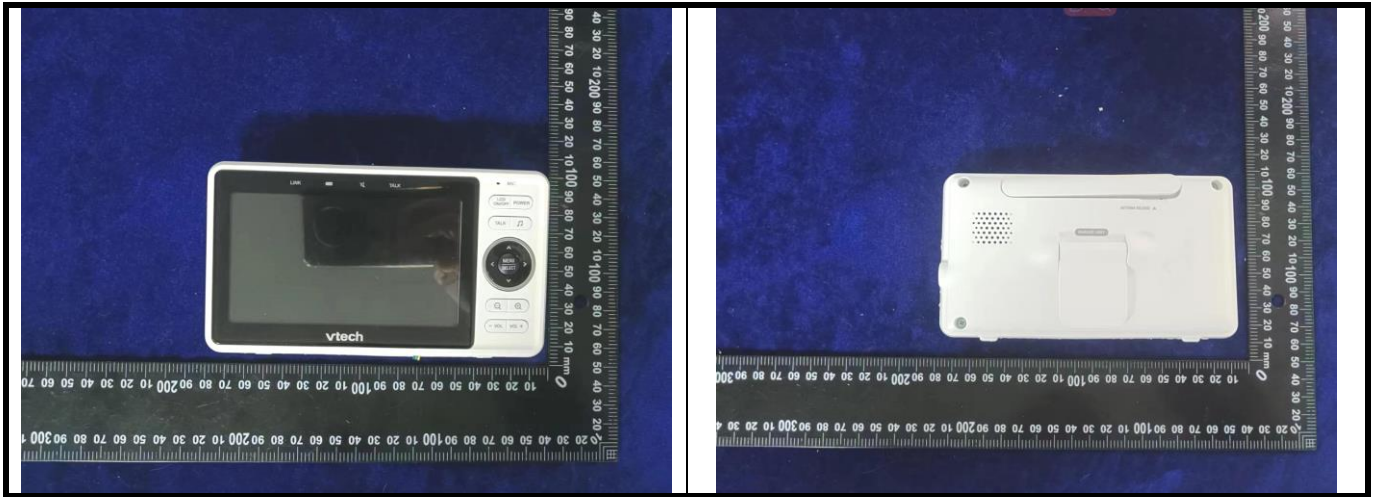
This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Symbol	Source of Uncertainty	Tolerance (\pm %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (1g)	Standard Uncertainty (10g)	Vi Veff	
Measurement System Errors										
CF	Probe Calibration	$\pm 12.7\%$	Normal (k=2)	2	1	1	$\pm 6.35\%$	$\pm 6.35\%$	∞	
CF _{drift}	Probe Calibration Drift	$\pm 1.7\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.0\%$	$\pm 1.0\%$	∞	
LIN	Probe Linearity	$\pm 4.7\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.7\%$	$\pm 2.7\%$	∞	
BBS	Broadband Signal	$\pm 0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0\%$	$\pm 0\%$	∞	
ISO	Probe Isotropy	$\pm 4.7\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.7\%$	$\pm 2.7\%$	∞	
DAE	Other Probe + Electronic	$\pm 2.4\%$	Normal	1	1	1	$\pm 2.4\%$	$\pm 2.4\%$	∞	
AMB	RF Ambient	$\pm 0.6\%$	Normal	1	1	1	$\pm 0.6\%$	$\pm 0.6\%$	∞	
Δ_{sys}	Probe Positioning	$\pm 0.5\%$	Normal	1	0.50	0.50	$\pm 0.2\%$	$\pm 0.2\%$	∞	
DAT	Data Processing	$\pm 0\%$	Normal	1	1	1	$\pm 0\%$	$\pm 0\%$	∞	
Phantom and Device Errors										
LIQ(σ)	Conductivity (meas.)DAK	$\pm 2.5\%$	Normal	1	0.78	0.71	$\pm 2.0\%$	$\pm 1.8\%$	100	
LIQ($T\sigma$)	Conductivity (temp.)BB	$\pm 3.4\%$	Rectangular	$\sqrt{3}$	0.78	0.71	$\pm 1.5\%$	$\pm 1.4\%$	∞	
EPS	Phantom Permittivity	$\pm 14.0\%$	Rectangular	$\sqrt{3}$	0.5	0.5	$\pm 4.0\%$	$\pm 4.0\%$	∞	
DIS	Distance DUT – TSL	$\pm 2.6\%$	Normal	1	2	2	$\pm 5.3\%$	$\pm 5.3\%$	∞	
MOD	DUT Modulationm	$\pm 0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0\%$	$\pm 0\%$	∞	
TAS	Time-average SAR	$\pm 0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0\%$	$\pm 0\%$	∞	
VAL	Val Antenna Unc.val	$\pm 3.2\%$	Normal	1	1	1	$\pm 3.2\%$	$\pm 3.2\%$		
Pin	Accepted power	$\pm 2.0\%$	Normal	1	1	1	$\pm 2.0\%$	$\pm 2.0\%$		
Correction to the SAR results										
C(ϵ, σ)	Deviation to Target	$\pm 1.9\%$	Normal	1	1	0.84	$\pm 1.9\%$	$\pm 1.6\%$		
u(Δ SAR)	Combined Standard Uncertainty (K = 1)							$\pm 13.3\%$	$\pm 13.2\%$	
U	Expanded Uncertainty (K = 2)							$\pm 26.6\%$	$\pm 26.4\%$	

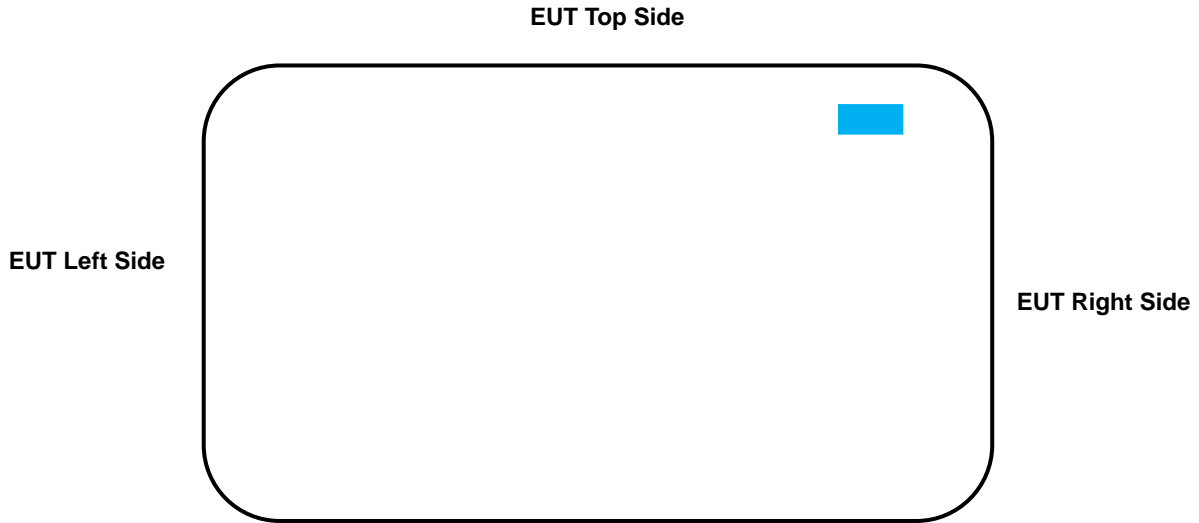


12 Test Photos and Results

12.1 EUT Photo



<EUT Antenna Location>



EUT Bottom Side

<EUT Front View>

 2.4G FHSS Antenna

The separation distance for antenna to edge:

Antenna	To Left Side (mm)	To Right Side (mm)	To Top Side (mm)	To Bottom Side (mm)	To Front Face (mm)	To Rear Face (mm)
2.4G FHSS Ant.	130	40	15	70	10	7



<Photographs of SAR Setup>



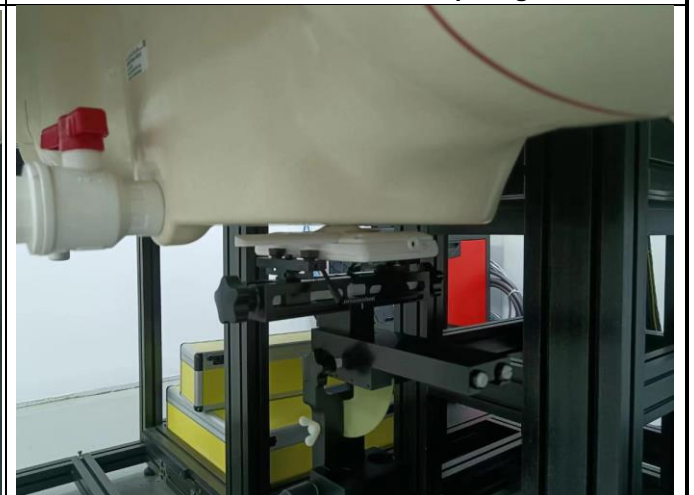
Front Face of EUT with 0 cm Gap_Degree 0



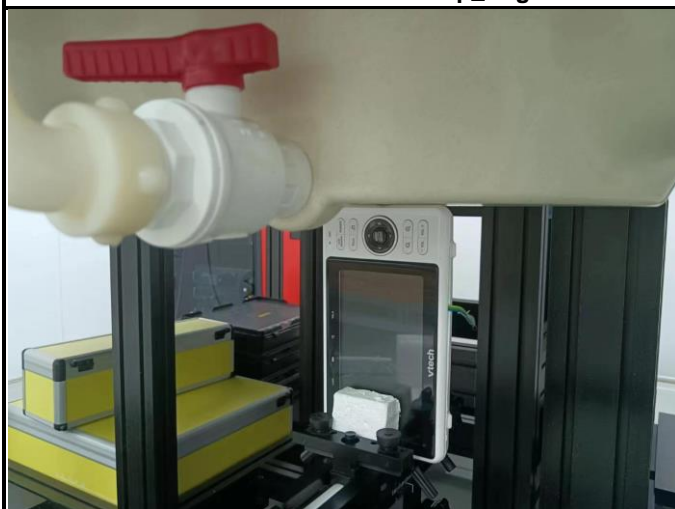
Front Face of EUT with 0 cm Gap_Degree 90



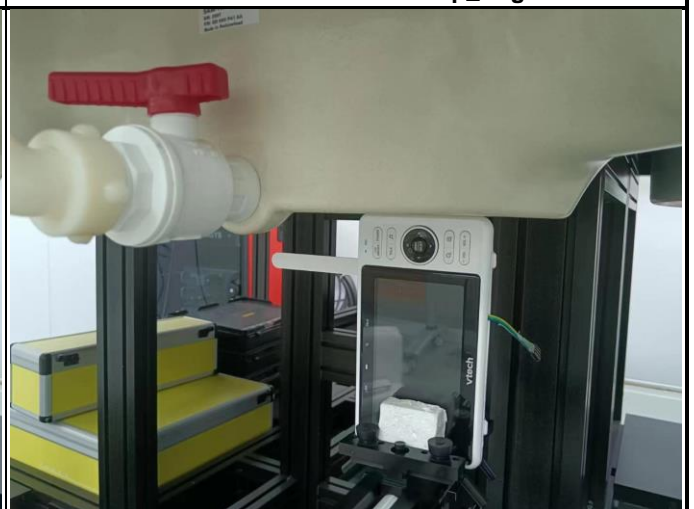
Rear Face of EUT with 0 cm Gap_Degree 0



Rear Face of EUT with 0 cm Gap_Degree 90



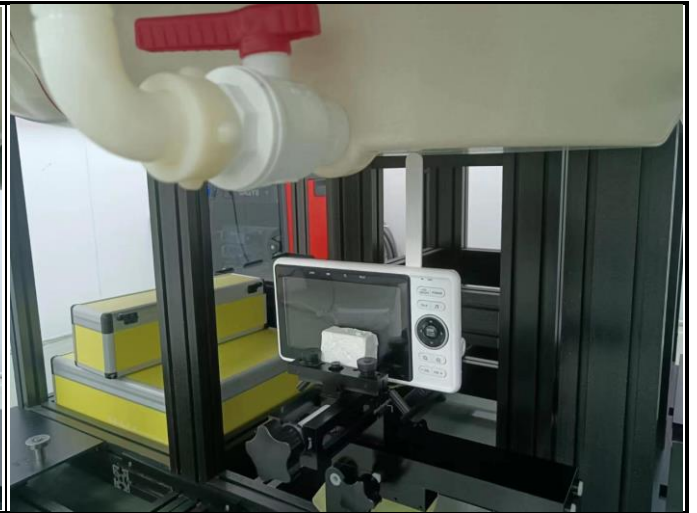
Right Side of EUT with 0 cm Gap_Degree 0



Right Side of EUT with 0 cm Gap_Degree 90



Top Side of EUT with 0 cm Gap_Degree 0



Top Side of EUT with 1.0 cm Gap_Degree 90



13 Appendixes

13.1 Appendix A. SAR Plots of System Verification

System Performance Check Report

Summary

Dipole	Frequency [MHz]	TSL	Power [dBm]	Dev. 1g [%]	Dev. 10g [%]	Dev. Peak [%]	Iso. Error [%]
D2450V2 - SN1081	2450.0	HSL600-10000MHz	24.0	2.0	1.9	n/a	-3.8

Exposure Conditions

Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL600-10000MHz	10		CW, 0--	2450.000, 0	7.6	1.87	38.2

Hardware Setup

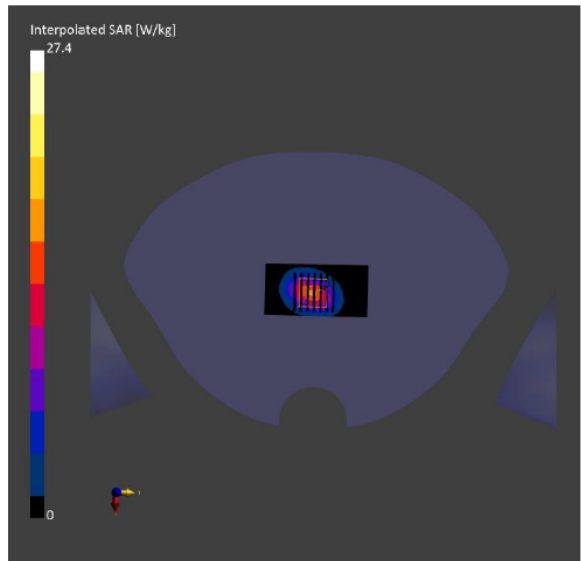
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2097	HSL600-10000MHz, 2024-Apr-10	EX3DV4 - SN7738, 2023-12-13	DAE4 Sn1725, 2023-10-26

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-04-10	2024-04-10
psSAR1g [W/Kg]	13.0	13.2
psSAR10g [W/Kg]	6.21	6.14
Power Drift [dB]	0.01	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction





13.2 Appendix B. SAR Plots of SAR Measurement

Measurement Report for Device, 2.4G FHSS_Top Side _0cm_Ch Low_Fre.2406_Antenna Degree 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	168.0 x 93.0 x 25.0		Video Baby Monitor

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL600-10000MHz	EDGE TOP, 0.00	2.4G FHSS	CW, 0--	2406.000, 6	7.6	1.84	38.2

Hardware Setup

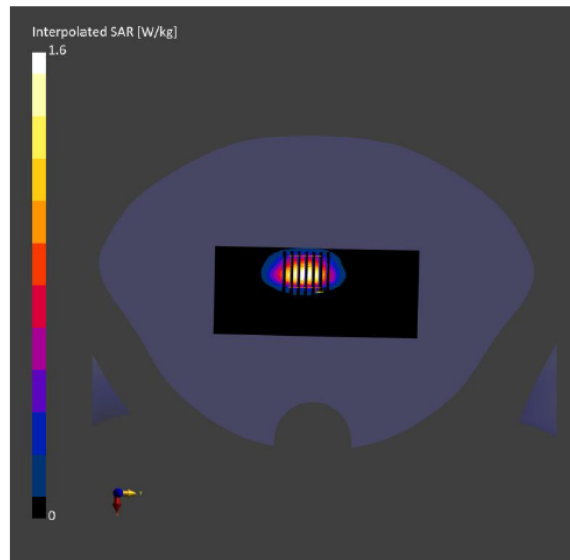
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2097	HSL600-10000MHz, 2024-Apr-10	EX3DV4 - SN7738, 2023-12-13	DAE4 Sn1725, 2023-10-26

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 140.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-04-10	2024-04-10
psSAR1g [W/kg]	0.739	0.748
psSAR10g [W/kg]	0.329	0.324
Power Drift [dB]	0.00	-0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.9
Dist 3dB Peak [mm]		8.0





13.3 Appendix C. Probe Calibration and Dipole Calibration Report

Refer the appendix Calibration Report.



Important

- (1) The test report is invalid without the official stamp of CVC;
- (2) Any part photocopies of the test report are forbidden without the written permission from CVC;
- (3) The test report is invalid without the signatures of Approval and Reviewer;
- (4) The test report is invalid if altered;
- (5) Objections to the test report must be submitted to CVC within 15 days.
- (6) Generally, commission test is responsible for the tested samples only.
- (7) As for the test result “-” or “N” means “not applicable”, “/” means “not test”, “P” means “pass” and “F” means “fail”

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