

Report No.: STS2507001H02

Issued for

Launch Tech Co., Ltd.

No.4012, Launch Industrial Park, North Wuhe Rd, Bantian Street, Longgang District, Shenzhen, China

> Professional Diagnostic Tool **Product Name:**

**Brand Name:** LAUNCH

Model Name: Creader Professional 123 V3

Creader Professional 123 V3 PLUS, Series Model(s):

Creader VII+ V3

FCC ID: XUJCRP123V3ARM

ANSI/IEEE Std. C95.1

Test Standard: FCC 47 CFR Part 2 (2.1093)

IEEE Std. 1528-2013

Max. Report

Body: 0.202 W/kg(1g)

**SAR** (1g)

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



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#### **TEST REPORT CERTIFICATION**

Applicant's name ...... Launch Tech Co., Ltd.

Longgang District, Shenzhen, China

Manufacturer's Name .....: Launch Tech Co., Ltd.

Longgang District, Shenzhen, China

**Product description** 

Product name .....: Professional Diagnostic Tool

Brand name .....: LAUNCH

Model name .....: Creader Professional 123 V3

Series Model(s): ...... Creader Professional 123 V3 PLUS, Creader VII+ V3

ANSI/IEEE Std. C95.1

**Standards**.....: FCC 47 CFR Part 2 (2.1093)

IEEE Std. 1528-2013

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

Date of Test .....:

Test Result.....: Pass

Testing Engineer : Xin Lit

(Xin.Liu

Technical Manager:

(Shifan. Long)

Authorized Signatory:

(Bovey Yang)



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# **Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	06 Aug. 2025 STS2507001H02		ALL	Initial Issue
	7		7/	



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#### 1. General Information

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

1.1 EUT Description

Product Name	Professiona	al Diagnostic Tool				
Brand Name	LAUNCH	LAUNCH				
Model Name	Creader Pr	ofessional 123 V3				
Series Model	Creader Pr	ofessional 123 V3 PLU	S, Creader VII+ V3			
Model Difference	Creader Pro	Only different in the color of the rubber sleeve. Creader Professional 123 V3: Black shell; Creader VII+ V3: Red shell; Creader Professional 123 V3 PLUS: Black shell.				
Sample number	250626011	-3	77	77		
Battery	N/A					
Device Category	Portable					
Product stage	Production	unit				
RF Exposure Environment	General Po	General Population / Uncontrolled				
Hardware Version	V1.00.00	V1.00.00				
Software Version	N/A	N/A				
Frequency Range	WLAN 802 WLAN 802	WLAN 802.11b/g/n20: 2412 MHz ~ 2462 MHz WLAN 802.11n40: 2422 MHz ~ 2452 MHz WLAN 802.11a/n20/n40/ac20/ac40: 5150 ~ 5250 MHz WLAN 802.11a/n20/n40/ac20/ac40: 5725 ~ 5850 MHz				
Max. Reported	Band	Mode	Body Worn and hotspot(V	V/kg)		
SAR(1g):	DTS	2.4G WLAN	0.202			
(Limit:1.6W/kg) Test distance:	NII	5.2G WLAN	0.105			
Body:0mm	NII	5.8G WLAN	0.122			
	Limit		1.6W/kg			
FCC Equipment Class	Unlicensed	smission System (DTS National Information In	frastructure TX(NII)	6×		
Operating Mode:	802.11g(OI 802.11n(OI 5G WLAN: 802.11n(OI	FDM):BPSK,QPSK,16-0	QAM,64-QAM QAM,64-QAM ,QPSK,16-QAM,64-QAM			
Antenna Specification:	WLAN: FPO	WLAN: FPC Antenna				
Hotspot Mode	Not Suppor	Not Support				
DTM Mode	Not Suppor	t	1/25	65		
Note: 1. The EUT battery i	must be fully (	charged and checked p	eriodically during the test to ascertain	uniform power		

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#### **1.2 Test Environment**

Ambient conditions in the SAR laboratory:

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

## 1.3 Test Factory

ShenZhen STS Test Services Co.,Ltd.

101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration No.: 625569

IC Registration No.: 12108A A2LA Certificate No.: 4338.01



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#### 2. Test Standards and Limits

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	IEEE Std C95.1, 2019	IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz. It specifies the maximum exposure limit of 1.6 W/kg as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial- Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D04 v01	RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices
5	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
10	FCC KDB 248227 D01 Wi-Fi SAR v02r02	SAR Considerations for 802.11 Devices

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

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

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

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

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

#### **Population/Uncontrolled Environments:**

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

#### **Occupational/Controlled Environments:**

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

# NOTE GENERAL POPULATION/UNCONTROLLED EXPOSURE PARTIAL BODY LIMIT 1.6 W/kg

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## 3. SAR Measurement System

#### 3.1 Definition of Specific Absorption Rate (SAR)

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

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

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

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

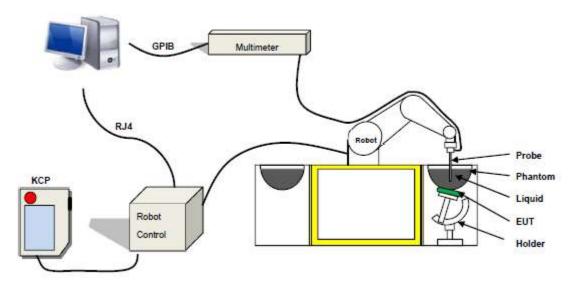
$$SAR = \frac{\sigma E^2}{\rho}$$

Where:  $\boldsymbol{\sigma}$  is the conductivity of the tissue,

 $\rho$  is the mass density of the tissue and E is the RMS electrical field strength.

#### 3.2 SAR System

MVG SAR System Diagram:



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

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



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The following figure shows the system.



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

#### 3.2.1 Probe

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

- Probe Length: 330 mm
- Length of Individual Dipoles: 2 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter: 2.5 mm
- Distance between dipole/probe extremity: 1 mm
- Dynamic range: 0.01-100 W/kg
- Probe linearity: 3%
- Axial Isotropy: < 0.10 dB
- Spherical Isotropy: < 0.10 dB
- Calibration range: 150 MHz to 6 GHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°



Figure 1-MVG COMOSAR Dosimetric E field Dipole

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#### 3.2.2 Phantom

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.





3.2.3 Device Holder



The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5 mm distance, a positioning uncertainty of  $\pm$  0.5 mm would produce a SAR uncertainty of  $\pm$  20 %. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.4. Tissue Simulating Liquids



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## 4. Tissue Simulating Liquids

#### 4.1 Simulating Liquids Parameter Check

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine of the dielectric parameters are within the tolerances of the specified target values

The uncertainty due to the liquid conductivity and permittivity arises from two different sources. The first source of error is the deviation of the liquid conductivity from its target value (max \_ 5 %) and the second source of error arises from the measurement procedures used to assess conductivity. The uncertainty shall be assessed using a rectangular probability For 1 g averaging, the maximum weighting coefficient for SAR is 0,5.

#### IEEE SCC-34/SC-2 RECOMMENDED TISSUE DIELECTRIC PARAMETERS

The head and body tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 have been incorporated in the following table.

Frequency	εr	σ 10g S/m		
300	45.3	0.87		
450	43.5	0.87		
750	41.9	0.89		
835	41.5	0.90		
900	41.5	0.97		
1450	40.5	1.20		
1800 to 2000	40.0	1.40		
2100	39.8	1.49		
2450	39.2	1.80		
2600	39.0	1.96		
3000	38.5	2.40		
3500	37.9	2.91		
4000	37.4	3.43		
4500	36.8	3.94		
5000	36.2	4.45		
5200	36.0	4.66		
5400	35.8	4.86		
5600	35.5	5.07		
5800	35.3	5.27		



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The following table gives the recipes for tissue simulating liquid and the theoretical Conductivity/Permittivity.

		He	ead (Referer	ice IEEE15	28)			
Frequency	Water	Sugar	Cellulose	Salt	Preventol	DGBE	Conductivity	Permittivity
(MHz)	(%)	(%)	(%)	(%)	(%)	(%)	σ (S/m)	ε
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.4	40.0
2450	55.0	0	0	0.1	0	44.9	1.80	39.2
2600	54.9	0	0	0.1	0	45.0	1.96	39.0
Frequency	Water	-	Hexyl Carbito	ol	Triton	X-100	Conductivity	Permittivity
(MHz)	(%)		(%)		(%	6)	σ (S/m)	ε
5200	62.52		17.24		17.24		4.66	36.0
5800	62.52		17.24		17.	24	5.27	35.3
		Body (F	rom instrun	nent manu	facturer)			
Frequency	Water	Sugar	Cellulose	Salt	Preventol	DGBE	Conductivity	Permittivity
(MHz)	(%)	(%)	(%)	(%)	(%)	(%)	σ (S/m)	ε
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0.1	0	31.3	1.95	52.7
2600	68.2	0	0	0.1	0	31.7	2.16	52.5
			DGBE		Salt		Conductivity	Permittivity
Frequency(MHz)	Water	(%)			(%)		σ (S/m)	ε
5200	78.60	21.40			/		5.30	49.00
5800	78.50	21.40			0.1		6.00	48.20



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## **LIQUID MEASUREMENT RESULTS**

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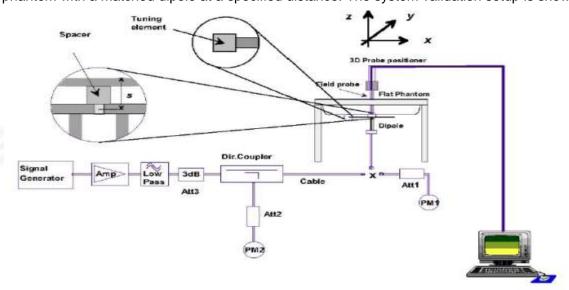
Doto	Amb	pient	Simulating Liquid		Developed	Toward		Deviation	Limited
Date	Temp. [°C]	Humidity %	Frequenc y(MHz)	Temp. [°C]	Parameters	Target	Measured	%	%
2025-07-22	22.1	57	2412	21.8	Permittivity	39.27	39.54	0.69	±5
2023-07-22	22.1	57	2412	21.0	Conductivity	1.77	1.76	-0.35	±5
2025-07-22	22.1	57	2437	21.8	Permittivity	39.22	40.26	2.64	±5
2025-01-22	22.1	37	2437	21.0	Conductivity	1.79	1.82	1.76	±5
2025-07-22	22.2	FO	2450	24.0	Permittivity	39.20	39.16	-0.10	±5
2025-07-22	22.2	58	2450	21.8	Conductivity	1.80	1.77	-1.67	±5
2025-07-22	22.3	58	2462	21.9	Permittivity	39.18	39.87	1.76	±5
2025-01-22	22.3	30	2402	21.9	Conductivity	1.81	1.82	0.52	±5
2025-07-25	23.4	50	5190	23.1	Permittivity	36.01	37.17	3.22	±5
2023-07-23	23.4	30	3190	23.1	Conductivity	4.65	4.64	-0.20	±5
2025-07-25	23.5	50	5200	23.2	Permittivity	36.00	36.69	1.92	±5
2023-07-23	23.3	30	3200	23.2	Conductivity	4.66	4.62	-0.86	±5
2025-07-25	23.4	50	E900	22.1	Permittivity	35.30	35.47	0.48	±5
2023-07-25	23.4	50	3000	5800 23.1	Conductivity	5.27	5.30	0.57	±5
2025 07 25	22.4	F0	EODE	22.2	Permittivity	35.28	36.08	2.28	±5
2025-07-25	23.4	50	5825	23.2	Conductivity	5.30	5.32	0.45	±5

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# 5. SAR System Validation

#### 5.1 Validation System

Each MVG system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the MVG software, enable the user to conduct the system performance check and system validation. System kit includes a dipole, and dipole device holder. The system check verifies that the system operates within its specifications. It's performed daily or before every SAR measurement. The system check uses normal SAR measurement in the flat section of the phantom with a matched dipole at a specified distance. The system validation setup is shown as below.





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#### 5.2 Validation Result

#### **Justification for Extended SAR Dipole Calibrations**

Comparing to the original SAR value provided by MVG, the validation data should be within its specification of 10 %.

0 0 0 0	J J J	,								
	_		0.4.5	0.4.0	0.4.5		arget	Difference		
Date	Frequency (MHz)	Power	SAR <sub>1g</sub> (W/Kg)	SAR <sub>10g</sub> (W/Kg)	Drift (%)	SAR <sub>1g</sub> (W/Kg)	SAR <sub>10g</sub> (W/Kg)	1g	10g	Limited %
2025-07-22	2450	100 mW	5.445	2.349	3.51	54.70	24.11	-0.46%	-2.55%	10
2025-07-22	2025-07-22 2450	Normalize to 1 Watt	54.448	23.495	3.31	54.70	24.11	-0.40 /6	-2.55/6	10
2025-07-25	5200	10 mW	1.531	0.563	-1.44	163.88	57.29	-6.55%	-1.73%	10
2025-07-25	5200	Normalize to 1 Watt	153.150	56.297	-1.44	103.00	57.29	-0.55%	-1.73%	10
2025-07-25	5800	10 mW	1.813	0.624	0.75	188.95	63.45	-4.06%	-1.62%	10
2020-07-20 0	3600	Normalize to 1 Watt	181.283	62.423	0.75	0.75	0.90 03.40	-4.06%	-1.02%	10

#### Note:

(1) We use a CW signal of 20dBm(2450MHz) and 10dBm(5000-6000MHz) for system check, and then all SAR values are normalized to 1W forward power. The result must be within ±10% of target value.



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#### 6. SAR Evaluation Procedures

The procedure for assessing the average SAR value consists of the following steps: The following steps are used for each test position

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

#### Area Scan& Zoom Scan

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

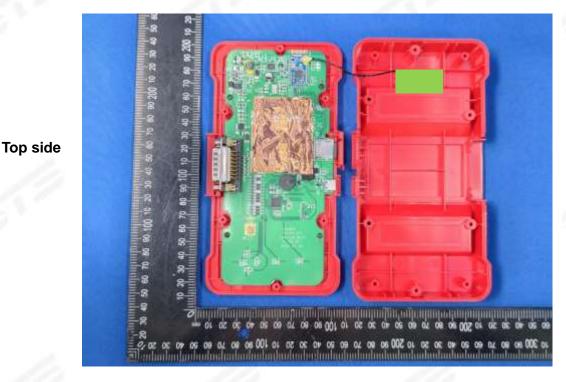


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#### 7. EUT Antenna Location Sketch

It is a Professional Diagnostic Tool, support WLAN mode.

#### Left side



**Bottom side** 

Right Side (Back view)



WLAN Antenna

Antenna Separation Distance(cm)						
ANT	Back Side	Front Side	Left Side	Right Side	Top Side	Bottom Side
WLAN	≤0.5	1	2	16.8	4	3.5

Note 1: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.



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#### 7.1 SAR test exclusion consider table

The WLAN SAR evaluation of Maximum power (dBm) summing tolerance.

	•	•		
Exposure	Wireless Interface	2.4G WLAN	5.2G WLAN	5.8G WLAN
Position	Calculated Frequency(GHz)	2.412	5.19	5.825
	Maximum Turn-up power (dBm)	14	11	11
	Maximum rated power(mW)	25.12	12.59	12.59
	Separation distance (cm)	0.5	0.5	0.5
Back Side	exclusion threshold(mW)	2.78	1.50	1.37
	Testing required?	YES	YES	YES
	Separation distance (cm)	1	1	1
Front Side	exclusion threshold(mW)	10.36	6.29	5.84
	Testing required?	YES	YES	YES
	Separation distance (cm)	2	2	2
Left Side	exclusion threshold(mW)	38.63	26.34	24.86
	Testing required?	NO	NO	NO
	Separation distance (cm)	16.8	16.8	16.8
Right Side	exclusion threshold(mW)	2197.59	2134.75	2125.44
	Testing required?	NO	NO	NO
	Separation distance (cm)	4	4	4
Top Side	exclusion threshold(mW)	144.06	110.22	105.86
	Testing required?	NO	NO	NO
	Separation distance (cm)	3.5	3.5	3.5
Bottom Side	exclusion threshold(mW)	111.80	83.65	80.08
	Testing required?	NO	NO	NO

#### Note:

- 1. maximum power is the source-based time-average power and represents the maximum RF output power among production units.
- 2. Per KDB 447498 D04, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
- 3. Per KDB 447498 D04, if the maximum time-averaged power available does not exceed 1 mW. This stand-alone SAR exemption test.



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4. Per KDB 447498 D04, the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by:

$$P_{th} \ (\text{mW}) = \begin{cases} ERP_{20\ cm} (d/20\ \text{cm})^x & d \leq 20\ \text{cm} \\ ERP_{20\ cm} & 20\ \text{cm} < d \leq 40\ \text{cm} \end{cases}$$
 Where 
$$x = -\log_{10} \left( \frac{60}{ERP_{20\ cm} \sqrt{f}} \right) \ \text{and} \ f \ \text{is in GHz};$$
 and 
$$ERP_{20\ cm} \ (\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \leq f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \leq f \leq 6\ \text{GHz} \end{cases}$$

5. Per KDB 447498 D04, An alternative to the SAR-based exemption is using below table and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in below table to apply, R must be at least  $\lambda/2\pi$ , where  $\lambda$  is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of  $\lambda/4$  or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

d = the separation distance (cm);

RF Source frequency (MHz)	Threshold ERP(watts)
0.3-1.34	1,920 R <sup>2</sup> .
1.34-30	3,450 R <sup>2</sup> /f <sup>2</sup> .
30-300	3.83 R <sup>2</sup> .
300-1,500	0.0128 R <sup>2</sup> f.
1,500-100,000	19.2R <sup>2</sup> .



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- 6. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion 8.for each frequency band ,testing at higher data rates and higher order modulations is not required when the maximum average output power for each of each of these configurations is less than 1/4db higher than those measured at the lower data rate than 11b mode ,thus the SAR can be excluded.
- 7. Per KDB 616217 D04, SAR evaluation for the front surface of tablet display screens are generally not necessary.
- 8. Per KDB 248227, as maximum rated power for U-NII-1>U-NII-2A, U-NII-1 was chosen for SAR evaluation. Based on the measurements obtained, SAR measurements on U-NII-2A are not required as highest reported SAR from U-NII-1 band is≤1.2W/Kg.

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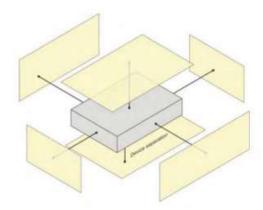
#### 8. EUT Test Position

This EUT was tested in Back Side, Front Side

#### 8.1 Body-worn Position Conditions

**Body-worn Position Conditions:** 

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB Publication 447498 D04 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. When the same wireless transmission configuration is used for testing body-worn accessory and hotspot mode SAR, respectively, in voice and data mode, SAR results for the most conservative *test separation distance* configuration may be used to support both SAR conditions. When the *reported* SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest *reported* SAR configuration for that wireless mode and frequency band should be repeated for the body-worn accessory with a headset attached to the handset.





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# 9. Uncertainty

#### 9.1 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEEE 1528: 2013. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

approximately the 95% confidence level using a coverage factor of k=2.									
	SATIMO Uncertainty- SN 08/21 EPGO352  Measurement uncertainty for DUT averaged over 1 gram / 10 gram.								
	Measure		ainty for DU	IT averaged	over 1 gram	ı / 10 gram.			ı
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+- %)	10g Ui (+- %)	vi
			Measurer	nent Systen	1				
Probe calibration	E.2.1	5.72	N	1.00	1.00	1.00	5.72	5.72	00
Axial Isotropy	E.2.2	0.18	R	1.73	0.71	0.71	0.07	0.07	00
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.71	0.71	0.42	0.42	00
Boundary effect	E.2.3	0.80	R	1.73	1.00	1.00	0.46	0.46	00
Linearity	E.2.4	1.25	R	1.73	1.00	1.00	0.72	0.72	00
System detection limits	E.2.4	1.20	R	1.73	1.00	1.00	0.69	0.69	00
Modulation response	E2.5	3.42	R	1.73	1.00	1.00	1.97	1.97	8
Readout Electronics	E.2.6	0.26	N	1.00	1.00	1.00	0.26	0.26	8
Response Time	E.2.7	0.17	R	1.73	1.00	1.00	0.10	0.10	8
Integration Time	E.2.8	1.43	R	1.73	1.00	1.00	0.83	0.83	8
RF ambient conditions-Noise	E.6.1	3.51	R	1.73	1.00	1.00	2.03	2.03	00
RF ambient conditions- reflections	E.6.1	3.15	R	1.73	1.00	1.00	1.82	1.82	00
Probe positioner mechanical tolerance	E.6.2	1.20	R	1.73	1.00	1.00	0.69	0.69	00
Probe positioning with respect to phantom shell	E.6.3	1.40	R	1.73	1.00	1.00	0.81	0.81	8
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.10	R	1.73	1.00	1.00	1.21	1.21	00
TOT THOSE OF THE OFFICE AND THE			Test sam	ple Related				I	I
Test sample positioning	E.4.2	3.10	N	1.00	1.00	1.00	3.10	3.10	00
Device holder uncertainty	E.4.1	3.80	N	1.00	1.00	1.00	3.80	3.80	8
Output power variation— SAR drift measurement	E.2.9	4.50	R	1.73	1.00	1.00	2.60	2.60	00
SAR scaling	E.6.5	1.80	R	1.73	1.00	1.00	1.04	1.04	8
		Pha	ntom and t	issue paran	neters				
Phantom shell uncertainty— shape, thickness, and permittivity	E.3.1	3.70	R	1.73	1.00	1.00	2.14	2.14	8
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.90	N	1.00	1.00	0.84	1.90	1.60	8
Liquid conductivity measurement	E.3.3	2.40	R	1.73	0.78	0.71	1.08	0.98	М
Liquid permittivity measurement	E.3.3	4.10	N	1.00	0.78	0.71	3.20	2.91	М
Liquid conductivity— temperature uncertainty	E.3.4	2.70	R	1.73	0.23	0.26	0.36	0.41	8
Liquid permittivity— temperature uncertainty	E.3.4	4.80	N	1.00	0.23	0.26	1.10	1.25	8
Combined Standard Uncertainty			RSS				10.08	9.59	
Expanded Uncertainty (95% Confidence interval)			K=2				19.58	19.18	



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		SATIMO	Uncertain	ty- SN 08/21	EPGO352				
	System Val	idation unce	ertainty for	DUT averag	ed over 1 gra	am / 10 gram	).		
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+- %)	10g Ui (+-%)	vi
Measurement System	1.0				JE 3				
Probe calibration	E.2.1	5.72	N	1.00	1.00	1.00	5.72	5.72	8
Axial Isotropy	E.2.2	0.18	R	1.73	1.00	1.00	0.10	0.10	00
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.00	0.00	0.00	0.00	00
Boundary effect	E.2.3	0.80	R	1.73	1.00	1.00	0.46	0.46	00
Linearity	E.2.4	1.25	R	1.73	1.00	1.00	0.72	0.72	00
System detection limits	E.2.4	1.20	R	1.73	1.00	1.00	0.69	0.69	00
Modulation response	E2.5	3.42	R	1.73	0.00	0.00	0.00	0.00	00
Readout Electronics	E.2.6	0.26	N	1.00	1.00	1.00	0.26	0.26	00
Response Time	E.2.7	0.17	R	1.73	0.00	0.00	0.00	0.00	00
Integration Time	E.2.8	1.43	R	1.73	0.00	0.00	0.00	0.00	00
RF ambient conditions- Noise	E.6.1	3.51	R	1.73	1.00	1.00	2.03	2.03	00
RF ambient conditions- reflections	E.6.1	3.15	R	1.73	1.00	1.00	1.82	1.82	00
Probe positioner mechanical tolerance	E.6.2	1.20	R	1.73	1.00	1.00	0.69	0.69	00
Probe positioning with respect to phantom shell	E.6.3	1.40	R	1.73	1.00	1.00	0.81	0.81	8
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.10	R	1.73	1.00	1.00	1.21	1.21	00
System validation source		1			- I	- I	1		
Deviation of experimental dipole from numerical dipole	E.6.4	4.80	N	1.00	1.00	1.00	4.80	4.80	00
Input power and SAR drift measurement	8,6.6.4	5.10	R	1.73	1.00	1.00	2.94	2.94	00
Dipole axis to liquid distance	8,E.6.6	2.40	R	1.73	1.00	1.00	1.39	1.39	8
Phantom and set-up									
Phantom shell uncertainty— shape, thickness, and permittivity	E.3.1	3.70	R	1.73	1.00	1.00	2.14	2.14	8
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.90	N	1.00	1.00	0.84	1.90	1.60	8
Liquid conductivity ( temperature uncertainty )	E.3.3	2.40	R	1.73	0.78	0.71	1.08	0.98	00
Liquid conductivity ( measured )	E.3.3	4.10	N	1.00	0.78	0.71	3.20	2.91	М
Liquid permittivity ( temperature uncertainty )	E.3.4	2.70	R	1.73	0.23	0.26	0.36	0.41	00
Liquid permittivity ( measured )	E.3.4	4.80	N	1.00	0.23	0.26	1.10	1.25	М
Combined Standard Uncertainty			RSS				9.72	9.52	
Expanded Uncertainty (95% Confidence interval)			K=2				19.44	19.03	



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		SATIMO	Uncertain	ty- SN 08/21	EPGO352				
	。Svstem	Check unce		•		am / 10 gram	).		
Uncertainty Component	Sec.	Tol	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+- %)	10g Ui (+-%)	vi
200		(+- %)					ĺ		
Measurement System	100	5 70			0.0				
Probe calibration drift	E.2.1.3	5.72	N	1.00	1.00	1.00	5.72	5.72	00
Axial Isotropy	E.2.2	0.18	R	1.73	0.00	0.00	0.00	0.00	00
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.00	0.00	0.00	0.00	00
					-				
Boundary effect	E.2.3	0.8	R	1.73	0.00	0.00	0.00	0.00	00
Linearity	E.2.4	1.25	R	1.73	0.00	0.00	0.00	0.00	00
System detection limits	E.2.4	1.20	R	1.73	0.00	0.00	0.00	0.00	80
Modulation response	E2.5	3.42	R	1.73	0.00	0.00	0.00	0.00	8
Readout Electronics	E.2.6	0.26	N	1.00	0.00	0.00	0.00	0.00	00
Response Time	E.2.7	0.17	R	1.73	0.00	0.00	0.00	0.00	8
Integration Time	E.2.8	1.43	R	1.73	0.00	0.00	0.00	0.00	00
RF ambient conditions- Noise	E.6.1	3.51	R	1.73	0.00	0.00	0.00	0.00	00
RF ambient conditions- reflections	E.6.1	3.15	R	1.73	0.00	0.00	0.00	0.00	00
Probe positioner mechanical tolerance	E.6.2	1.2	R	1.73	1.00	1.00	0.69	0.69	00
Probe positioning with respect to phantom shell	E.6.3	1.4	R	1.73	1.00	1.00	0.81	0.81	00
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	3.9	R	1.73	0.00	0.00	0.00	0.00	8
System check source (dipole)					10			117	
Deviation of experimental dipoles	E.6.4	4.8	N	1.00	1.00	1.00	4.80	4.80	00
Input power and SAR drift measurement	8,6.6.4	5.1	R	1.73	1.00	1.00	2.94	2.94	00
Dipole axis to liquid distance	8,E.6.6	2.4	R	1.73	1.00	1.00	1.39	1.39	00
Phantom and tissue parameters									
Phantom shell uncertainty— shape, thickness, and permittivity	E.3.1	3.7	R	1.73	1.00	1.00	2.14	2.14	8
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1.00	1.00	0.84	1.90	1.60	00
Liquid conductivity measurement	E.3.3	2.4	R	1.73	0.78	0.71	1.08	0.98	00
Liquid permittivity measurement	E.3.3	4.1	N	1.00	0.78	0.71	3.20	2.91	М
Liquid conductivity— temperature uncertainty	E.3.4	2.7	R	1.73	0.23	0.26	0.36	0.41	8
Liquid permittivity— temperature uncertainty	E.3.4	4.8	N	1.00	0.23	0.26	1.10	1.25	М
Combined Standard Uncertainty			RSS				5.56	5.20	
Expanded Uncertainty (95% Confidence interval)			K=2			100	11.12	10.41	



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# **10. Conducted Power Measurement**

## 10.1 Test Result

#### **2.4G WLAN**

		2.4GWIFI		
Mode	Channel Number	Frequency (MHz)	Peak Power (dBm)	Output Power (mW)
	1	2412	13.59	22.86
802.11b	7	2437	12.79	19.01
	11	2462	12.10	16.22
	1	2412	13.96	24.89
802.11g	7	2437	14.65	29.17
	11	2462	13.99	25.06
	1	2412	13.99	25.06
802.11 n-HT20	7	2437	14.55	28.51
	11	2462	13.91	24.60
	3	2422	13.50	22.39
802.11 n-HT40	6	2437	13.14	20.61
	9	2452	12.43	17.50

#### **5.2G WLAN**

	5.2G WLAN							
Mode	Channel Number	Frequency (MHz)	Conducted Power (dBm)	Output Power (mW)				
	36	5180	10.68	11.69				
802.11a	40	5200	10.08	10.19				
	48	5240	8.99	7.93				
	36	5180	10.03	10.07				
802.11 n-HT20	40	5200	8.96	7.87				
	48	5240	8.55	7.16				
802.11 n-HT40	38	5190	10.96	12.47				
002.1111-1140	46	5230	9.18	8.28				
	36	5180	10.71	11.78				
802.11ac-VHT20	40	5200	10.26	10.62				
	48	5240	9.19	8.30				
000 44ee \// IT40	38	5190	10.16	10.38				
802.11ac-VHT40	46	5230	9.94	9.86				

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#### **5.8G WLAN**

		5.8G WLAN		
Mode	Channel Number	Frequency (MHz)	Conducted Power (dBm)	Output Power (mW)
	149	5745	9.99	9.98
802.11a	157	5785	9.08	8.09
	165	5825	9.42	8.75
	149	5745	9.91	9.79
802.11 n-HT20	157	5785	8.53	7.13
	165	5825	10.51	11.25
802.11 n-HT40	151	5755	9.37	8.65
002.1111-11140	159	5795	10.41	10.99
	149	5745	9.36	8.63
802.11ac-VHT20	157	5785	9.85	9.66
	165	5825	8.96	7.87
802.11ac-VHT40	151	5755	10.30	10.72
002.11ac-v1140	159	5795	9.34	8.59



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## 11. EUT and Test Setup Photo

#### 11.1 EUT Photo





Back side





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Top side



#### Bottom side





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Left side



Right side



11.2 Setup Photo

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## Front side(separation distance is 0mm)



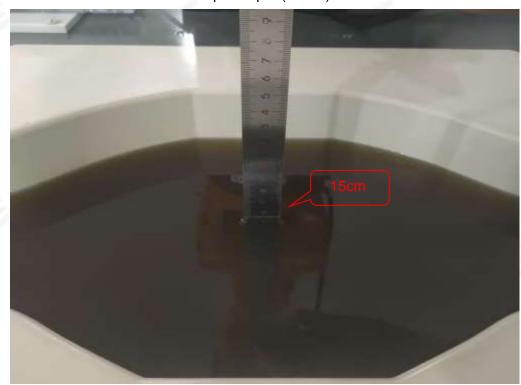
Back Side (separation distance is 0mm)





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Liquid depth (15 cm)





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# 12. SAR Result Summary

#### 12.1 Body SAR

Band	Model	Test Position	Freq.	SAR (1g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaling Factor	Scaled SAR (W/Kg)	Meas. No.
		Front Side	2412	0.105	1.52	14.00	13.59	1.099	0.115	/
2.4GHz	802.11b	Back Side	2412	0.184	2.02	14.00	13.59	1.099	0.202	1
WLAN	802.110	Back Side	2437	0.182	-2.75	13.00	12.79	1.050	0.191	/
		Back Side	2462	0.175	-1.83	12.50	12.10	1.096	0.192	/
5.2GHz	802.11	Front Side	5190	0.051	3.13	11.00	10.96	1.009	0.051	/
WLAN	n-HT40	Back Side	5190	0.104	-1.34	11.00	10.96	1.009	0.105	2
5.8GHz	802.11	Front Side	5825	0.039	1.31	11.00	10.51	1.119	0.044	/
WLAN	n-HT20	Back Side	5825	0.109	-2.19	11.00	10.51	1.119	0.122	3

#### Note:

- 1. The test separation of all above table is 0mm.
- 2. Per KDB 447498 D04, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
  - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
  - b. Scaled SAR(W/kg)= Measured SAR(W/kg)\*Tune-up Scaling Factor
- 3. Per KDB 248227- When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg. (The highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power was **0.248** W/Kg for Body)
- 4. Per KDB 865664 D01, Repeated measurement is not required when the original highest measured SAR is <0.80 W/kg

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# 13. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
2450MHzDipole	MVG	SID2450	SN 30/14 DIP2G450-335	2023.07.04	2026.07.03
Waveguide	MVG	SWG5500	SN 13/14 WGA32	2023.07.04	2026.07.03
E-Field Probe	MVG	SSE2	SN 08/21 EPGO352	2024.09.18	2025.09.17
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2024.09.18	2025.09.17
Antenna	MVG	ANTA3	SN 07/13 ZNTA52	N/A	N/A
Phantom1	MVG	SAM	SN 32/14 SAM115	N/A	N/A
Phantom3	MVG	SAM	SN 21/21 ELLI48	N/A	N/A
Phone holder	MVG	N/A	SN 32/14 MSH97	N/A	N/A
Laptop holder	MVG	N/A	SN 32/14 LSH29	N/A	N/A
Attenuator	Agilent	HXT-10-8-SMA	240327017	2025-02-22	2026-02-21
Directional coupler	Xi'an Xingbo	XBOH-OA08- 20dB	211123-4-3	2025-02-22	2026-02-21
Network Analyzer	Agilent	E5071C	MY46520378	2024-09-25	2025-09-26
Multi Meter	Keithley	Multi Meter 2000	4050073	2024-09-25	2025-09-26
Signal Generator	Agilent	N5182A	MY50140530	2024-09-25	2025-09-26
Wireless Communication Test Set	Agilent	8960-E5515C	MY48360751	2025-02-22	2026-02-21
Wireless Communication Test Set	R&S	CMW500	156324	2024-09-25	2025-09-26
Power Amplifier	DESAY	ZHL-42W	9638	2024-09-25	2025-09-26
Power Meter	R&S	NRP	100510	2024-09-25	2025-09-26
Power Sensor	R&S	NRP-Z11	101919	2024-09-25	2025-09-26
Power Sensor	Keysight	U2021XA	MY56280002	2024-09-25	2025-09-26
Temperature hygrometer	SuWei	SW-108	N/A	2024.10.15	2025.10.14
Thermograph	Elitech	RC-4	S/N EF7176501537	2024.10.15	2025.10.14

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# **Appendix A. System Validation Plots**

#### System Performance Check Data (2450MHz)

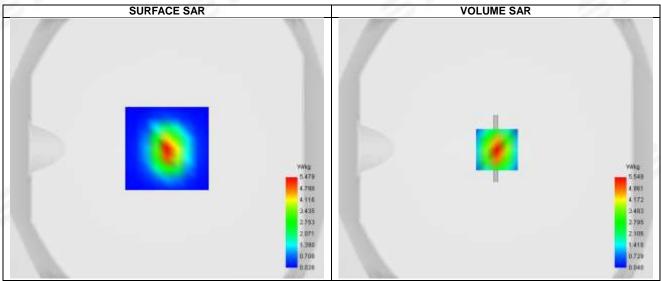
Type: Phone measurement (Complete)
Area scan resolution: dx=8mm, dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2025-07-22

#### **Experimental conditions.**

Device Position	Validation plane
Band	2450 MHz
Channels	
Signal	CW
Frequency (MHz)	2450
Relative permittivity	39.16
Conductivity (S/m)	1.77
Probe	SN 08/21 EPGO352
ConvF	1.80
Crest factor:	1:1



Maximum location: X=1.00, Y=-1.00; SAR Peak: 9.07 W/kg

## D. SAR 1q & 10q

SAR 10g (W/Kg)	2.349
SAR 1g (W/Kg)	5.445
Horizontal validation criteria: minimum distance (mm)	16.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	51.273156

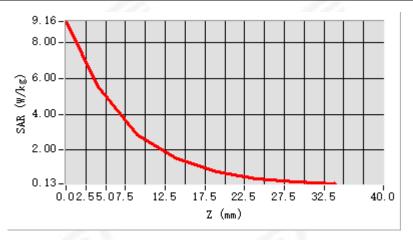


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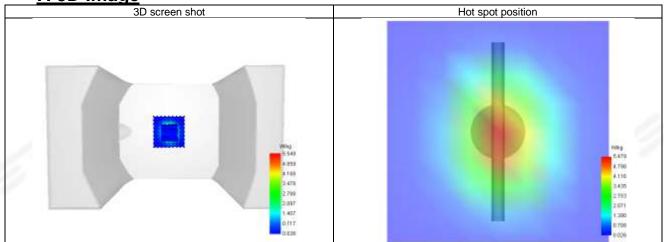
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# E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	9.159	5.549	2.845	1.534	0.810	0.428	0.226



# F. 3D Image





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#### System Performance Check Data (5200MHz)

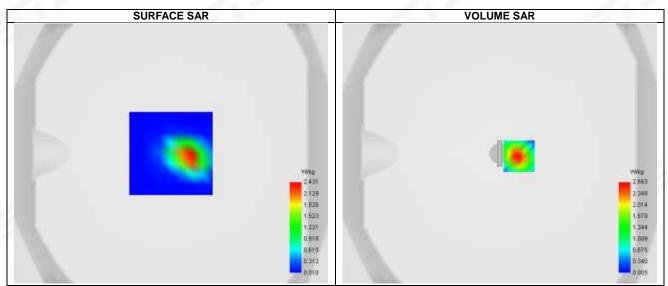
Type: Dipole measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2025-07-25

#### Experimental conditions.

Phantom	Validation plane
Device Position	Dipole
Band	5200MHz
Channels	Middle
Signal	CW
Frequency (MHz)	5200
Relative permittivity	36.69
Conductivity (S/m)	4.62
Probe	SN 08/21 EPGO352
ConvF	1.33
Crest factor:	1:1



Maximum location: X=15.00, Y=-2.00; SAR Peak: 4.56 W/kg

# D. SAR 1g & 10g

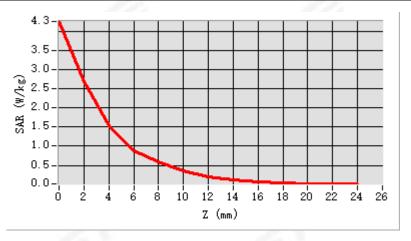
SAR 10g (W/Kg)	0.563
SAR 1g (W/Kg)	1.531
Horizontal validation criteria: minimum distance (mm)	8.944272
Vertical validation criteria: SAR ratio M2/M1 (%)	56.995278



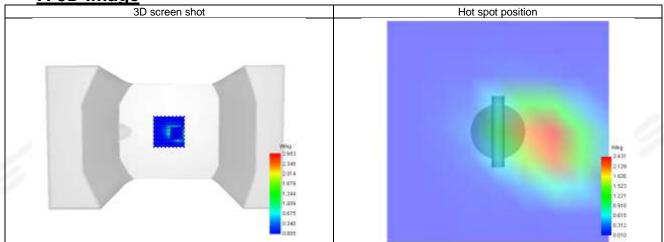
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# E. Z Axis Scan

	Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
S	SAR (W/Kg)	4.254	2.683	1.529	0.892	0.580	0.352	0.214	0.130	0.079	0.048	0.029	0.018



F. 3D Image



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#### System Performance Check Data (5800MHz)

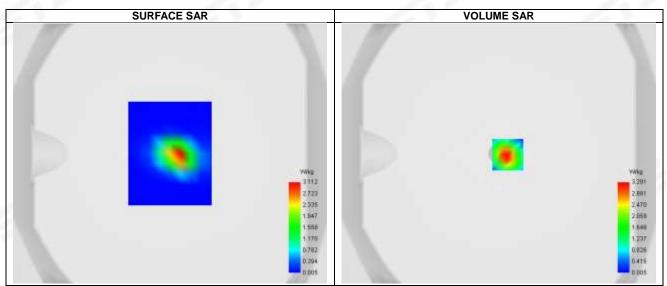
Type: Dipole measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2025-07-25

#### Experimental conditions.

Phantom	Validation plane				
Device Position	Dipole				
Band	5800MHz				
Channels	Middle				
Signal	CW				
Frequency (MHz)	5800				
Relative permittivity	35.47				
Conductivity (S/m)	5.30				
Probe	SN 08/21 EPGO352				
ConvF	1.35				
Crest factor:	1:1				



Maximum location: X=7.00, Y=-1.00; SAR Peak: 5.91 W/kg

# D. SAR 1g & 10g

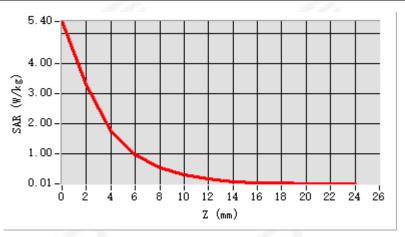
SAR 10g (W/Kg)	0.624
SAR 1g (W/Kg)	1.813
Horizontal validation criteria: minimum distance (mm)	8.944272
Vertical validation criteria: SAR ratio M2/M1 (%)	52.702682



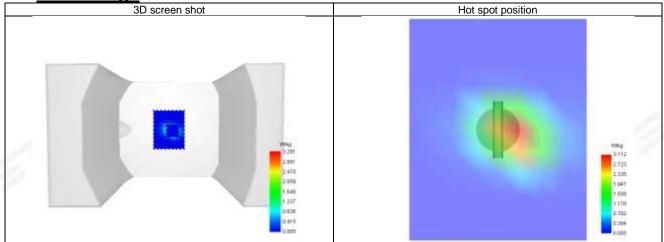
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# E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	5.396	3.291	1.735	0.979	0.537	0.295	0.162	0.089	0.049	0.027	0.015	0.008



F. 3D Image

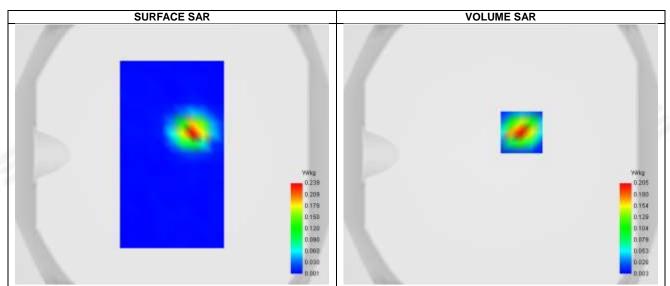


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# **Appendix B. SAR Test Plots**

Plot 1: DUT: Professional Diagnostic Tool; EUT Model: Creader Professional 123 V3

Test Date	2025-07-22					
ConvF	1.80					
Probe	SN 08/21 EPGO352					
Area Scan	dx=8mm dy=8mm, Complete					
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5.0mm, Complete					
Phantom	Validation plane					
Device Position	Back					
Band	2.4GHz WLAN					
Signal	802.11b (Crest factor: 1.0)					
Frequency (MHz)	2412					
Relative permittivity (real part)	39.54					
Conductivity (S/m)	1.76					



Maximum location: X=16.00, Y=17.00 ; SAR Peak: 0.31 W/kg

# D. SAR 1g & 10g

SAR 10g (W/Kg)	0.084
SAR 1g (W/Kg)	0.184
Horizontal validation criteria: minimum distance (mm)	11.313708
Vertical validation criteria: SAR ratio M2/M1 (%)	60.858135

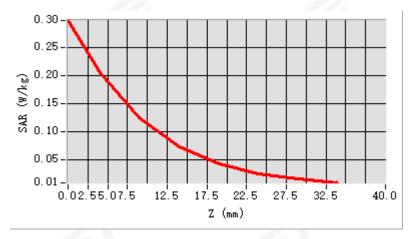


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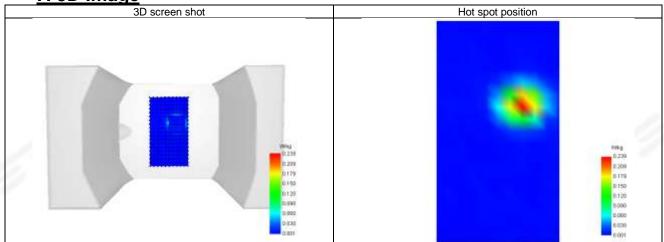
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# E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.298	0.205	0.125	0.072	0.043	0.025	0.015



# F. 3D Image

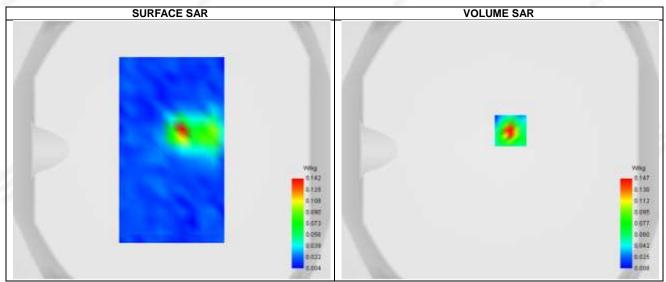




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Plot 2: DUT: Professional Diagnostic Tool; EUT Model: Creader Professional 123 V3

Test Date	2025-07-25
ConvF	1.33
Probe	SN 08/21 EPGO352
Area Scan	dx=8mm dy=8mm, Complete
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm, Complete
Phantom	Validation plane
Device Position	Back
Band	5.2GHz WLAN
Signal	802.11 n-HT40 (Crest factor: 1.0)
Frequency (MHz)	5190
Relative permittivity (real part)	37.17
Conductivity (S/m)	4.64



Maximum location: X=8.00, Y=15.00; SAR Peak: 0.33 W/kg

# D. SAR 1g & 10g

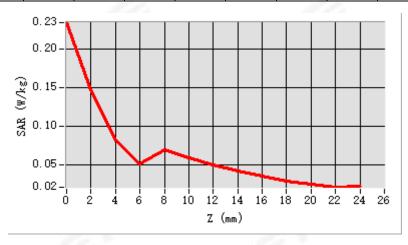
<u> </u>	
SAR 10g (W/Kg)	0.044
SAR 1g (W/Kg)	0.104
Horizontal validation criteria: minimum distance (mm)	8.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	59.319241



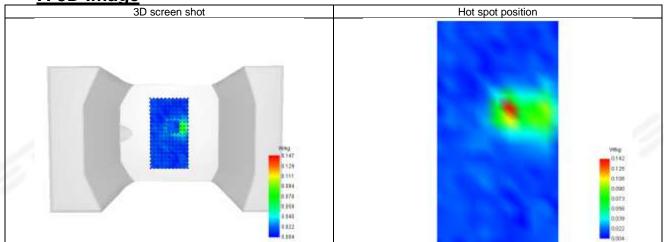
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## E. Z Axis Scan

_													
Г	Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
Г	SAR (W/Kg)	0.235	0.147	0.082	0.051	0.069	0.058	0.049	0.041	0.035	0.029	0.025	0.021



F. 3D Image

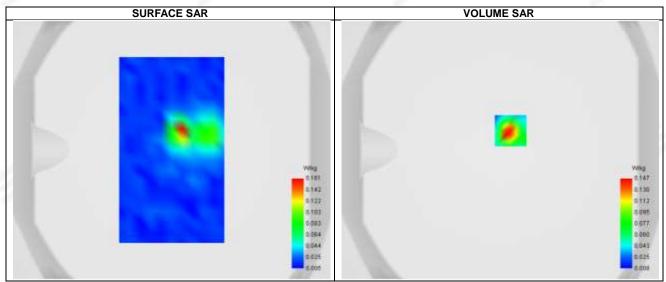




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Plot 3: DUT: Professional Diagnostic Tool; EUT Model: Creader Professional 123 V3

Test Date	2025-07-25					
ConvF	1.35					
Probe	SN 08/21 EPGO352					
Area Scan	dx=8mm dy=8mm, Complete					
Zoom Scan	7x7x12,dx=4mm dy=4mm dz=2.0mm, Complete					
Phantom	Validation plane					
Device Position	Back					
Band	5.8GHz WLAN					
Signal	802.11 n-HT40 (Crest factor: 1.0)					
Frequency (MHz)	5825					
Relative permittivity (real part)	36.08					
Conductivity (S/m)	5.32					



Maximum location: X=8.00, Y=15.00; SAR Peak: 0.31 W/kg

# D. SAR 1g & 10g

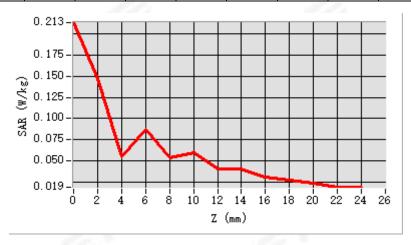
<u> </u>	
SAR 10g (W/Kg)	0.045
SAR 1g (W/Kg)	0.109
Horizontal validation criteria: minimum distance (mm)	8.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	65.543642



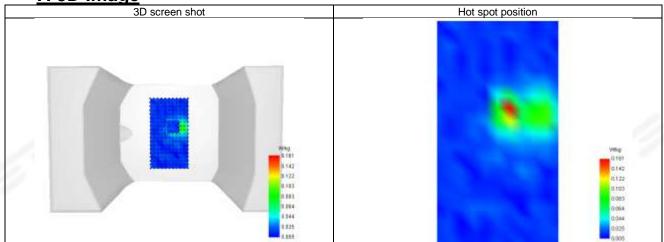
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# E. Z Axis Scan

Z (mm)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	0.213	0.147	0.055	0.087	0.054	0.059	0.041	0.040	0.031	0.028	0.023	0.019



F. 3D Image





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# Appendix C. Probe Calibration and Dipole Calibration Report

Refer the appendix Calibration Report.

\*\*\*\*\*END OF THE REPORT\*\*\*