

SAR Test Report

Report No.: AGC00408240808FH01

FCC ID	:	2A3DR-AGMPADT2
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	Smart PAD Tablet
BRAND NAME	:	AGM
MODEL NAME	:	AGM_PAD_T2
APPLICANT	:	AGM MOBILE LIMITED
DATE OF ISSUE	:	Oct. 17, 2024
STANDARD(S)	:	IEEE Std. 1528:2013 FCC 47 CFR Part 2§2.1093 IEEE Std C95.1 ™-2005
REPORT VERSION	:	V1.0
<u>Attestation of</u>	<u>:</u> G	lobar Compliance (Shenzhen) Co., Ltd.





Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Oct. 17, 2024	Valid	Initial Release



Test Report				
Applicant Name	AGM MOBILE LIMITED			
Applicant Address	FLAT/RM 2253 22/F HOI TAI FACTORY ESTATE TSING YEUNG CIRCUIT TUEN MUN NT HONG KONG,CHINA			
Manufacturer Name	GUANGDONG AIJIEMO ELECTRONIC INDUSTRY CO., LTD			
Manufacturer Address	AGM TECHNOLOGY PARK, NO.187 LIANFA ROAD, TONGQIAO TOWN, ZHONGKAI HIGH-TECH DISTRICT, HUIZHOU CITY, P.R.CHINA			
Factory Name	GUANGDONG AIJIEMO ELECTRONIC INDUSTRY CO., LTD			
Factory Address	AGM TECHNOLOGY PARK, NO.187 LIANFA ROAD, TONGQIAO TOWN, ZHONGKAI HIGH-TECH DISTRICT, HUIZHOU CITY, P.R.CHINA			
Product Designation	Smart PAD Tablet			
Brand Name	AGM			
Model Name	AGM_PAD_T2			
Series Models	N/A			
Declaration of Difference	N/A			
EUT Voltage	DC 3.85V by battery			
Applicable Standard	IEEE Std. 1528:2013 FCC 47 CFR Part 2§2.1093 IEEE Std C95.1 ™-2005			
Date of receipt of test item	Aug. 30, 2024			
Test Date	Oct. 08, 2024 to Oct. 10, 2024			
Report Template	AGCRT-US-5G/SAR (2021-04-20)			

Note: The results of testing in this report apply to the product/system which was tested only.

Bibo shang

Prepared By

Bibo Zhang (Project Engineer)

Oct. 17, 2024

alvin Lin

Reviewed By

Calvin Liu (Reviewer)

Oct. 17, 2024

Max Zhang

Approved By

Max Zhang (Authorized Officer)

Oct. 17, 2024



TABLE OF CONTENTS

1. SUMMARY OF MAXIMUM SAR VALUE	5
2. GENERAL INFORMATION	6
2.1. EUT DESCRIPTION	6
3. SAR MEASUREMENT SYSTEM	8
3.1. THE SATIMO SYSTEM USED FOR PERFORMING COMPLIANCE TESTS CONSISTS OF FOLLOWING ITEMS 3.2. COMOSAR E-FIELD PROBE	9
 3.3. ROBOT 3.4. VIDEO POSITIONING SYSTEM 3.5. DEVICE HOLDER 	10
3.6. SAM TWIN PHANTOM	
4. SAR MEASUREMENT PROCEDURE	12
 4.1. SPECIFIC ABSORPTION RATE (SAR) 4.2. SAR MEASUREMENT PROCEDURE 4.3. RF EXPOSURE CONDITIONS 	13
5. TISSUE SIMULATING LIQUID	17
5.1. THE COMPOSITION OF THE TISSUE SIMULATING LIQUID 5.2. TISSUE DIELECTRIC PARAMETERS FOR HEAD AND BODY PHANTOMS 5.3. TISSUE CALIBRATION RESULT	17
6. SAR SYSTEM CHECK PROCEDURE	19
6.1. SAR System Check Procedures 6.2. SAR System Check	
7. EUT TEST POSITION	22
7.1. BODY WORN POSITION	22
8. SAR EXPOSURE LIMITS	23
9. TEST FACILITY	24
10. TEST EQUIPMENT LIST	25
11. MEASUREMENT UNCERTAINTY	26
12. CONDUCTED POWER MEASUREMENT	29
13. TEST RESULTS	31
13.1. SAR TEST RESULTS SUMMARY	
APPENDIX A. SAR SYSTEM CHECK DATA	37
APPENDIX B. SAR MEASUREMENT DATA	43
APPENDIX C. TEST SETUP PHOTOGRAPHS	53
APPENDIX D. CALIBRATION DATA	56



1. SUMMARY OF MAXIMUM SAR VALUE

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

Frequency Bond	Highest Reported 1g-SAR(W/kg)	SAR Test Limit
Frequency Band	Body-worn/hotspot (with 0mm separation)	(W/kg)
2.4 GHz WIFI	0.524	
5.2 GHz WIFI	0.869	1.6
5.8 GHz WIFI	0.860	
SAR Test Result	PASS	

This device is compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6W/kg) specified in IEEE Std. 1528:2013; FCC 47CFR § 2.1093; IEEE/ANSI C95.1:2005 and the following specific FCC Test Procedures:

• KDB 447498 D01 General RF Exposure Guidance v06

• KDB 865664 D01 SAR Measurement 100MHz to 6GHz v01r04

• KDB 248227 D01 802 11 Wi-Fi SAR v02r02



2. GENERAL INFORMATION

2.1. EUT Description

General Information	
Product Designation	Smart PAD Tablet
Test Model	AGM_PAD_T2
Hardware Version	M202E_V1
Software Version	V1.0
Device Category	Portable
RF Exposure Environment	Uncontrolled
Antenna Type	PIFA
Bluetooth	·
Operation Frequency	2402~2480MHz
Antenna Gain	1.02dBi
Bluetooth Version	V5.0
Type of modulation	BR/EDR : GFSK, Π /4-DQPSK, 8-DPSK; BLE: GFSK
Max. Peak Power(dBm)	BR/EDR: 4.167dBm ; BLE: -3.021dBm
2.4GHz WIFI	
WIFI Specification	□802.11a ⊠802.11b ⊠802.11g ⊠802.11n(20) ⊠802.11n(40)
Operation Frequency	2412~2462MHz
Max. Average Power(dBm)	11b: 13.73dBm,11g: 12.65dBm,11n(20): 12.87dBm,11n(40): 10.94dBm
Antenna Gain	1.02dBi
5GHz WIFI	
WIFI Specification	⊠802.11a ⊠802.11n20 ⊠802.11ac20 ⊠802.11n40 ⊠802.11ac40 ⊠802.11ac80
Operation Frequency	U-NII-Band 1: 5.150~5.250GHz U-NII-Band 2A: 5.250~5.350GHz U-NII-Band 2C: 5.470~5.725GHz U-NII-Band 3: 5.725~5.850GHz
Type of modulation	802.11a/n:(64-QAM, 16-QAM, QPSK, BPSK) OFDM 802.11ac :(256-QAM, 64-QAM, 16-QAM, QPSK, BPSK) OFDM
Max. Average Power(dBm)	U-NII-Band 1:12.38dBm, U-NII-Band 3:12.22dBm;
Antenna Gain	2.36dBi



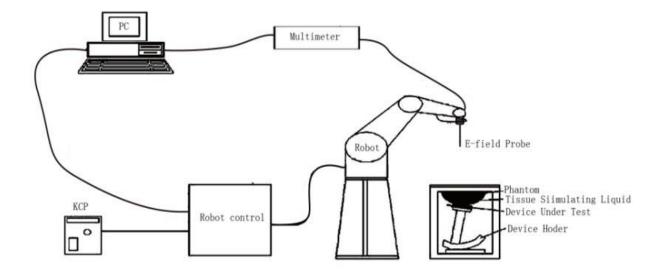
Li-ion Battery	
Brand Name	N/A
Model Name	AGM_PAD_T2
Manufacturer Name	Huizhou Zhongli Times Technology Co.,Ltd.
Capacitance	7850mAh
Rated Voltage	DC 3.85V

Note: 1.The sample used for testing is end product.

2. The test sample has no any deviation to the test method of standard mentioned in page 1.



3. SAR MEASUREMENT SYSTEM



3.1. The SATIMO system used for performing compliance tests consists of following items

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

- The PC. It controls most of the bench devices and stores measurement data. A computer running WinXP and the Opensar software.
- The E-Field probe. The probe is a 3-axis system made of 3 distinct dipoles. Each dipole returns a voltage in function of the ambient electric field.
- · The Keithley multimeter measures each probe dipole voltages.
- The SAM phantom simulates a human head. The measurement of the electric field is made inside the phantom.
- · The liquids simulate the dielectric properties of the human head tissues.
- The network emulator controls the mobile phone under test.
- The validation dipoles are used to measure a reference SAR. They are used to periodically check the bench to make sure that there is no drift of the system characteristics over time.

•The phantom, the device holder and other accessories according to the targeted measurement.



3.2. COMOSAR E-Field Probe

The SAR measurement is conducted with the dosimetric probe manufactured by SATIMO. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. SATIMO conducts the probe calibration in compliance with international and national standards (e.g. IEEE1528 etc.)Under ISO17025.The calibration data are in Appendix D.

Isotropic E-Field Probe Specification

Model	SSE2	
Manufacture	MVG	
Identification No.	2023-EPGO-414	
Frequency	0.15GHz-7.5GHz Linearity:±0.08dB(0.15GHz-7.5GHz)	
Dynamic Range	0.01W/kg-100W/kg Linearity:±0.08dB	
Dimensions	Overall length:330mm Length of individual dipoles:2mm Maximum external diameter:8mm Probe Tip external diameter:2.5mm Distance between dipoles/ probe extremity:1mm	
Application	High precision dosimetric measurement (e.g., very strong gradient fields). Only compliance testing for frequencies up 30%.	probe which enables

3.3. Robot

The COMOSAR system uses the KUKA robot from SATIMO SA (France).For the 6-axis controller COMOSAR system, the KUKA robot controller version from SATIMO is used. The XL robot series have many features that are important for

our application:

- □ High precision (repeatability 0.02 mm)
- □ High reliability (industrial design)
- □ Jerk-free straight movements
- □ Low ELF interference (the closed metallic
- construction shields against motor control fields)
- □ 6-axis controller

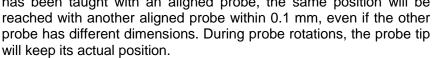




3.4. Video Positioning System

The video positioning system is used in OpenSAR to check the probe. Which is composed of a camera, LED, mirror and mechanical parts. The camera is piloted by the main computer with firewire link. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements,

such that the robot coordinates are valid for the probe tip. The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be

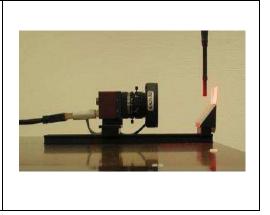


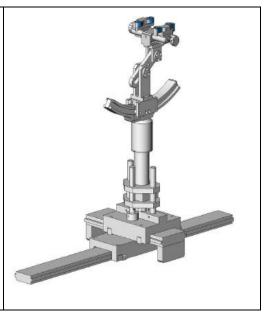
3.5. Device Holder

The COMOSAR device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles. The COMOSAR device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivitv

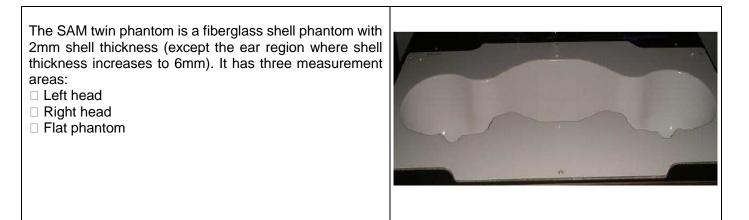
 $\epsilon r = 3$ and loss tangent $\delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.







3.6. SAM Twin Phantom



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. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.



4. SAR MEASUREMENT PROCEDURE

4.1. Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in 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 occupational/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 given mass 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 can be obtained using either of the following equations:

F

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

$$SAR = c_h \frac{dT}{dt}_{t=0}$$

Where

SAR is the specific absorption rate in watts per kilogram;

- is the r.m.s. value of the electric field strength in the tissue in volts per meter; σ is the conductivity of the tissue in siemens per metre;
- ρ is the density of the tissue in kilograms per cubic metre;
- c_h is the heat capacity of the tissue in joules per kilogram and Kelvin;

 $\frac{dT}{dt}$ | t = 0 is the initial time derivative of temperature in the tissue in kelvins per second



4.2. SAR Measurement Procedure

Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurement are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface is 2.7mm This distance cannot be smaller than the distance os sensor calibration points to probe tip as `defined in the probe properties,

Step 2: Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in SATIMO software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal found in the scanned area, within a range of the global maximum. The range (in db) is specified in the standards for compliance testing. For example, a 2db range is required in IEEE Standard 1528 standards, whereby 3db is a requirement when compliance is assessed in accordance with the ARIB standard (Japan) If one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximum are detected, the number of Zoom Scan has to be increased accordingly.

	\leq 3 GHz	> 3 GHz	
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	$5 \pm 1 \text{ mm}$	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$	
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30°±1°	20° ± 1°	
	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm	
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}	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 \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.		

Area Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100MHz to 6GHz

Step 3: Zoom Scan

Zoom Scan are used to assess the peak spatial SAR value within a cubic average volume containing 1g abd 10g of simulated tissue. The Zoom Scan measures points(refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1g and 10g and displays these values next to the job's label.



Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}},\Delta y_{\text{Zoom}}$			$\leq 2 \text{ GHz}: \leq 8 \text{ mm}$ 2 - 3 GHz: $\leq 5 \text{ mm}^*$	$3 - 4 \text{ GHz} \le 5 \text{ mm}^*$ $4 - 6 \text{ GHz} \le 4 \text{ mm}^*$	
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		$\leq 5 \text{ mm}$	$3 - 4$ GHz: ≤ 4 mm $4 - 5$ GHz: ≤ 3 mm $5 - 6$ GHz: ≤ 2 mm	
	graded	∆z _{Zoom} (1): between 1 st two points closest to phantom surface	\leq 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm	
	grid	∆z _{Zoom} (n>1): between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$		
Minimum zoom scan volume x, y, z		\geq 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm		

Zoom Scan Parameters extracted from KDB865664 d01 SAR Measurement 100MHz to 6GHz

^{*} When zoom scan is required and the <u>reported</u> 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 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

Step 4: Power Drift Measurement

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the same settings. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1.

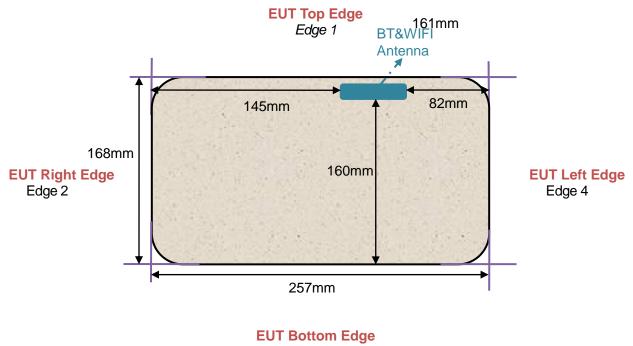


4.3. RF Exposure Conditions

Test Configuration and setting:

The device is a sport camera which support 2.4GHz & 5G Wifi, Bluetooth, and share one antenna. For SAR testing, the EUT is configured with the WLAN continuous TX tool through qualcomm software. Due the BT power is less than exemption limit, SAR is not required.

Antenna Location: (the back view)



Edge 3



SAR Test Exclusion Consideration for Adjacent Edges

Per KDB 447498 D01 cl. 4.3.1:

a) For 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determine d by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] • [$\sqrt{f}(GHz)$] \leq 3.0 for1-g SAR, and \leq 7.5 for 10-g extremity SAR.

b) For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determine d by the following:

1) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)•(f(MHz)/150)]} mW, for 100 MHz to 1500 MHz

2) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)•10]} mW, for > 1500 MHz an $d \le 6$ GHz

	1-g SAR test exclusion thresholds for WWAN						
Test Mode	Test position	Edge 1 (5mm)	Edge 2 (145mm)	Edge 3 (160mm)	Edge 4 (82mm)		
	SAR test exclusion thresholds(mW)	9.60	1046.01	1196.01	416.01		
2.4G BT	SAR Max. Avg. Burst Power(mW)	2.61	2.61	2.61	2.61		
	SAR required (YES/NO)	NO	NO	NO	NO		
	SAR test exclusion thresholds(mW)	9.61	1046.09	1196.09	416.09		
2.4G WIFI	SAR Max. Avg. Burst Power(mW)	23.60	23.60	23.60	23.60		
	SAR required (YES/NO)	YES	NO	NO	NO		
	SAR test exclusion thresholds(mW)	6.58	1015.78	1165.78	385.78		
5.2G WIFI	SAR Max. Avg. Burst Power(mW)	17.30	17.30	17.30	17.30		
	SAR required (YES/NO)	YES	NO	NO	NO		
	SAR test exclusion thresholds(mW)	6.26	1012.58	1162.58	382.58		
5.8G WIFI	SAR Max. Avg. Burst Power(mW)	16.67	16.67	16.67	16.67		
	SAR required (YES/NO)	YES	NO	NO	NO		



5. TISSUE 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 15cm. For head SAR testing the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15cm For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5% are listed in 5.2

5.1. The composition of the tissue simulating liquid

Ingredient (% Weight) Frequency (MHz)	Water	Nacl	Polysorbate 20	DGBE	1,2- Propanediol	Triton X-100	Diethylen glycol monohex ylether
2450 Head	71.88	0.16	0.0	7.99	0.0	19.97	0.0
5000 Head	65.52	0.0	0.0	0.0	0.0	17.24	17.24

5.2. Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEC/IEEE 62209-1528 have been incorporated in the following table. The body tissue dielectric parameters recommended by the IEC/IEEE 62209-1528 have been incorporated in the following table.

Target Frequency	J I	nead	b	ody
(MHz)	٤r	σ (S/m)	٤r	σ (S/m)
300	45.3	0.87	45.3	0.87
450	43.5	0.87	43.5	0.87
835	41.5	0.90	41.5	0.90
900	41.5	0.97	41.5	0.97
1450	40.5	1.20	40.5	1.20
1800 – 2000	40.0	1.40	40.0	1.40
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	38.5	2.40
5200	36.0	4.66	49.0	5.30
5300	35.9	4.76	48.9	5.42
5600	35.5	5.07	48.5	5.77
5800	35.3	5.27	48.2	6.00

(ϵr = relative permittivity, σ = conductivity and ρ = 1000 kg/m3)



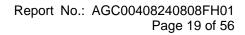
5.3. Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using SATIMO Dielectric Probe Kit and R&S Network Analyzer ZVL6.

		Tissue Stimulant Me	easurement for 2450MHz		
	Fr.	Dielectric Par	ameters (±5%)	Tissue	
	(MHz)	٤r	δ[s/m]	Temp	Test time
		39.2(37.24-41.16)	1.80(1.71-1.89)	[°C]	
Head	2412	40.36	1.73		
	2437	39.22	1.74	20.9	Oct. 08,
	2450	38.22	1.76	20.9	2024
	2462	37.96	1.80		

	Tissue Stimulant Measurement for 5200MHz									
	Fr.	Dielectric Par	ameters (±5%)	Tissue						
Hood	(MHz)	εr 36(34.2-37.8)	δ[s/m] 4.66(4.43-4.89)	Temp [°C]	Test time					
Head	5180	36.33	4.69							
	5200	35.89	4.71	21.4	Oct. 09, 2024					
	5240	34.76	4.75		2024					

	Tissue Stimulant Measurement for 5800MHz									
	Fr.	Dielectric Par	ameters (±5%)	Tissue						
	(MHz)	εr 35.3(33.535-37.065)	δ[s/m] 5.27(5.0065-5.5335)	Temp [°C]	Test time					
Head	5745	36.40	5.13							
	5785	35.37	5.16	20.7	Oct. 10,					
	5800	34.71	5.18	20.7	2024					
	5825	34.02	5.20							





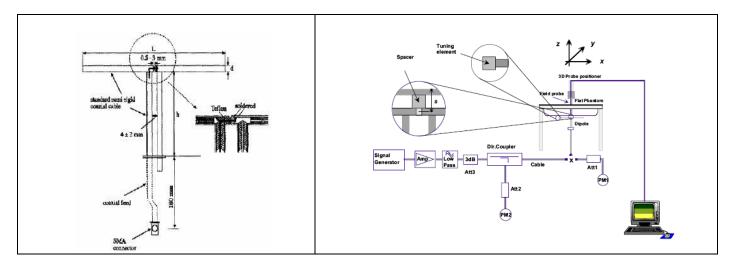
6. SAR SYSTEM CHECK PROCEDURE

6.1. SAR System Check Procedures

SAR system check is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device. The same SAR probe(s) and tissue-equivalent media combinations used with each specific SAR system for system verification must be used for device testing. When multiple probe calibration points are required to cover substantially large transmission bands, independent system verifications are required for each probe calibration point. A system verification must be performed before each series of SAR measurements using the same probe calibration point and tissue-equivalent medium. Additional system verification should be considered according to the conditions of the tissue-equivalent medium and measured tissue dielectric parameters, typically every three to four days when the liquid parameters are remeasured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

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

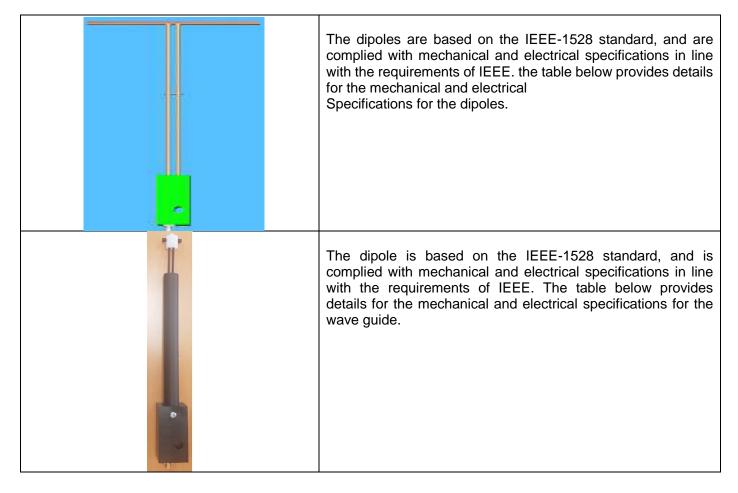
The system check verifies that the system operates within its specifications. It's performed daily or before every SAR measurement. The system check uses normal SAR measurement in the flat section of the phantom with a matched dipole at a specified distance. The system check setup is shown as below.





6.2. SAR System Check

6.2.1. Dipoles



Frequency	L (mm)	h (mm)	d (mm)
2450MHz	51.5	30.4	3.6
5000MHz	20.6	40.3	3.6



6.2.2. System Check Result

System Performance Check at 2450MHz & 5200-5800MHz for Head											
Validation Kit: SN 29/15 DIP 2G450-393 & SN 17/22 DIP 5G000-671											
Frequency		Target Reference Value(W/kg) (± 10			Normalized to 1W(W/kg)		Tissue Temp.	Test time			
[MHz]	1g	10g	1g	10g	1g	10g	[°C]				
2450	54.32	24.25	48.888-59.752	21.825-26.675	53.68	23.98	20.9	Oct. 08, 2024			
5200	73.43	21.83	66.087-80.773	19.647-24.013	73.01	22.74	21.4	Oct. 09, 2024			
5800	75.69	22.44	68.121-83.259	20.196-24.684	78.33	24.21	20.7	Oct. 10, 2024			

Note:

(1) We use a CW signal of 18dBm or 10dBm for system check, and then all SAR values are normalized to 1W forward power. The result must be within \pm 10% of target value.

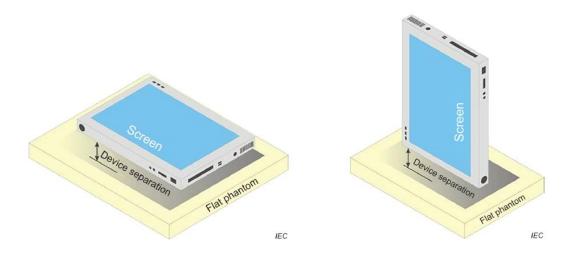


7. EUT TEST POSITION

This EUT was tested in **Back**, front and edge1.

7.1. Body Worn Position

- (1) To position the EUT parallel to the phantom surface.
- (2) To adjust the EUT parallel to the flat phantom.
- (3) To adjust the distance between the EUT surface and the flat phantom to 0mm.





8. SAR EXPOSURE LIMITS

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

Type Exposure	Uncontrolled Environment Limit (W/kg)
Spatial Peak SAR (1 g cube tissue for brain or body)	1.60
Spatial Average SAR (Whole body)	0.08
Spatial Peak SAR (Limbs)	4.0



9. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA



10. TEST EQUIPMENT LIST

Equipment description	Manufacturer/ Model	Identification No.	Software version	Current calibration date	Next calibration date
SAR Probe	MVG	2023-EPGO-414	N/A	Apr. 30, 2024	Apr. 29, 2025
Phantom	SATIMO	SN_2316_ELLI39	N/A	Validated. No cal required.	Validated. No cal required.
Liquid	SATIMO	N/A	N/A	Validated. No cal required.	Validated. No cal required.
Multimeter	Keithley 2000	4114939	N/A	May 24, 2024	May 23, 2025
SAR Software	MVG-OpenSAR	N/A	OpenSAR V4_02_35	N/A	N/A
Dipole	SATIMO SID2450	SN 29/15 DIP 2G450-393	N/A	Apr. 28,2022	Apr. 27,2025
Dipole	SID5000	SN 17/22 DIP 5G000-671	N/A	Apr. 28,2022	Apr. 27, 2025
Signal Generator	Agilent-E4438C	US41461365	V5.03	May 24, 2024	May 23, 2025
EXA Signal Analyzer	Agilent / N9010A	MY53470504	N/A	May 28, 2024	May 27, 2025
Network Analyzer	Rhode & Schwarz ZVL6	SN101443	3.2	Jul. 24, 2024	Jul. 23, 2025
Attenuator	Warison /WATT-6SR1211	S/N:WRJ34AYM2F1	N/A	June 06, 2024	June 05, 2025
Attenuator	Mini-circuits / VAT-10+	31405	N/A	June 06, 2024	June 05, 2025
Amplifier	AS0104-55_55	1004793	N/A	N/A	N/A
Directional Couple	Werlatone/ C5571-10	SN99463	N/A	Feb. 01, 2024	Jan. 31, 2026
Directional Couple	Werlatone/ C6026-10	SN99482	N/A	Feb. 01, 2024	Jan. 31, 2026
Power Sensor	NRP-Z21	104604	N/A	May 24, 2024	May 23, 2025
Power Sensor	NRP-Z23	100323	N/A	Jun. 05, 2024	Jun. 04, 2025
Power Viewer	R&S	V2.3.1.0		N/A	N/A
Calibration standard parts for network sub - port	R&S/ ZV-Z132	N/A	V2.3.1.0	Nov. 11, 2023	Nov. 10, 2024
		1	1	L	

Note: Per KDB 865664 Dipole SAR Validation, AGC Lab has adopted 3 years calibration intervals. 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 is within 20% of calibrated measurement;

4. Impedance is within 5Ω of calibrated measurement.



11. MEASUREMENT UNCERTAINTY

TT. WEASOREWENT		SATIMO Uno		2023-EPG	0-/1/				
М	easurement					/ 10 gram.			
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System									
Probe calibration	E.2.1	7.000	Ν	1	1	1	7.000	7.000	∞
Axial Isotropy	E.2.2	0.090	R	$\sqrt{3}$	√0.5	√0.5	0.037	0.037	8
Hemispherical Isotropy	E.2.2	0.090	R	√3	√0.5	√0.5	0.037	0.037	8
Boundary effect	E.2.3	1.000	R	√3	1	1	0.577	0.577	8
Linearity	E.2.4	0.890	R	√3	1	1	0.514	0.514	8
System detection limits	E.2.4	1.000	R	√3	1	1	0.577	0.577	8
Modulation response	E2.5	3.000	R	√3	1	1	1.732	1.732	8
Readout Electronics	E.2.6	0.021	N	1	1	1	0.021	0.021	∞
Response Time	E.2.7	0.000	R	$\sqrt{3}$	1	1	0.000	0.000	∞
Integration Time	E.2.8	1.400	R	√3	1	1	0.808	0.808	∞
RF ambient conditions-Noise	E.6.1	3.000	R	√3	1	1	1.732	1.732	∞
RF ambient conditions-reflections	E.6.1	3.000	R	$\sqrt{3}$	1	1	1.732	1.732	ø
Probe positioner mechanical tolerance	E.6.2	1.400	R	√3	1	1	0.808	0.808	8
Probe positioning with respect to phantom shell	E.6.3	1.400	R	$\sqrt{3}$	1	1	0.808	0.808	8
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.300	R	√3	1	1	1.328	1.328	ø
Test sample Related									
Test sample positioning	E.4.2	2.6	Ν	1	1	1	2.600	2.600	8
Device holder uncertainty	E.4.1	3	Ν	1	1	1	3.000	3.000	8
Output power variation—SAR drift measurement	E.2.9	5	R	√3	1	1	2.887	2.887	8
SAR scaling	E.6.5	5	R	√3	1	1	2.887	2.887	∞
Phantom and tissue parameter	rs				-				
Phantom shell uncertainty—shape, thickness,	E.3.1	4	R	√3	1	1	2.309	2.309	×
and permittivity Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1	1	0.84	1.900	1.596	~
Liquid conductivity measurement	E.3.3	4	R	√3	0.78	0.71	3.120	2.840	×
Liquid permittivity measurement	E.3.3	5	Ν	1	0.78	0.71	1.150	1.300	М
Liquid conductivity—temperature uncertainty	E.3.4	2.5	R	√3	0.23	0.26	1.126	1.025	8
Liquid permittivity—temperature uncertainty	E.3.4	2.5	N	1	0.23	0.26	0.332	0.375	М
Combined Standard Uncertainty			RSS				10.526	10.341	
Expanded Uncertainty (95% Confidence interval)			K=2				21.052	20.682	



0		ATIMO Unc				1.1.0			
System	Validation	uncertainty	Prob.	averaged of	over 1 gram	n / 10 gram.	1016	10 - 11	1
Uncertainty Component Measurement System	Sec.	(+- %)	Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
•				1	1	T			1
Probe calibration	E.2.1	7.000	N	1	1	1	7.000	7.000	8
Axial Isotropy	E.2.2	0.090	R	$\sqrt{3}$	1	1	0.052	0.052	8
Hemispherical Isotropy	E.2.2	0.090	R	$\sqrt{3}$	0	0	0.000	0.000	8
Boundary effect	E.2.3	1.000	R	$\sqrt{3}$	1	1	0.577	0.577	∞
Linearity	E.2.4	0.890	R	$\sqrt{3}$	1	1	0.514	0.514	8
System detection limits	E.2.4	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	8
Modulation response	E2.5	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	8
Readout Electronics	E.2.6	0.021	Ν	1	1	1	0.021	0.021	8
Response Time	E.2.7	0.0	R	$\sqrt{3}$	0	0	0.00	0.00	8
Integration Time	E.2.8	1.4	R	$\sqrt{3}$	0	0	0.00	0.00	∞
RF ambient conditions-Noise	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	8
RF ambient conditions-reflections	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	8
Probe positioner mechanical tolerance	E.6.2	1.4	R	√3	1	1	0.81	0.81	8
Probe positioning with respect to phantom shell	E.6.3	1.4	R	√3	1	1	0.81	0.81	8
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.3	R	√3	1	1	1.33	1.33	ø
System validation source									
Deviation of experimental dipole from numerical dipole	E.6.4	5.0	Ν	1	1	1	5.00	5.00	8
Input power and SAR drift measurement	8,6.6.4	5.0	R	√3	1	1	2.89	2.89	8
Dipole axis to liquid distance	8,E.6.6	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	8
Phantom and set-up									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	4.0	R	√3	1	1	2.31	2.31	8
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	Ν	1	1	0.84	1.90	1.60	ø
Liquid conductivity (temperature uncertainty)	E.3.3	2.5	R	√3	0.78	0.71	1.13	1.02	8
Liquid conductivity (measured)	E.3.3	4	Ν	1	0.78	0.71	3.12	2.84	М
Liquid permittivity (temperature uncertainty)	E.3.4	2.5	R	√3	0.23	0.26	0.33	0.38	ø
Liquid permittivity (measured)	E.3.4	5	Ν	1	0.23	0.26	1.15	1.30	М
Combined Standard Uncertainty			RSS				10.459	10.272	
Expanded Uncertainty (95% Confidence interval)			K=2				20.917	20.545	



0						/ 10 grom			
Uncertainty Component	vstem Check Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System		(1 /0)	Diot.				(1 /0)	(1 /0)	
Probe calibration drift	E.2.1.3	0.500	N	1	1	1	0.50	0.50	∞
Axial Isotropy	E.2.2	0.090	R	$\sqrt{3}$	0	0	0.00	0.00	8
Hemispherical Isotropy	E.2.2	0.090	R	√3	0	0	0.00	0.00	8
Boundary effect	E.2.3	1.000	R	√3	0	0	0.00	0.00	8
Linearity	E.2.4	0.890	R	$\sqrt{3}$	0	0	0.00	0.00	8
System detection limits	E.2.4	1.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Modulation response	E2.5	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	8
Readout Electronics	E.2.6	0.021	N	1	0	0	0.00	0.00	∞
Response Time	E.2.7	0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Integration Time	E.2.8	1.4	R	$\sqrt{3}$	0	0	0.00	0.00	∞
RF ambient conditions-Noise	E.6.1	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
RF ambient conditions-reflections	E.6.1	3.0	R	√3	0	0	0.00	0.00	∞
Probe positioner mechanical tolerance	E.6.2	1.4	R	√3	1	1	0.81	0.81	ø
Probe positioning with respect to phantom shell	E.6.3	1.4	R	√3	1	1	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.3	R	√3	0	0	0.00	0.00	×
System check source (dipole)		-	_			-			
Deviation of experimental dipoles	E.6.4	2.0	Ν	1	1	1	2.00	2.00	ø
Input power and SAR drift measurement	8,6.6.4	5.0	R	√3	1	1	2.89	2.89	œ
Dipole axis to liquid distance	8,E.6.6	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	8
Phantom and tissue parameter	rs	1		1			1	1	1
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	4	R	√3	1	1	2.31	2.31	×
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	Ν	1	1	0.84	1.90	1.60	ø
Liquid conductivity measurement	E.3.3	4	R	$\sqrt{3}$	0.78	0.71	3.12	2.84	8
Liquid permittivity measurement	E.3.3	5	Ν	1	0.78	0.71	1.15	1.30	М
Liquid conductivity—temperature uncertainty	E.3.4	2.5	R	√3	0.23	0.26	1.13	1.02	ø
Liquid permittivity—temperature uncertainty	E.3.4	2.5	N	1	0.23	0.26	0.33	0.38	М
Combined Standard Uncertainty			RSS				5.562	5.203	
Expanded Uncertainty (95% Confidence interval)			K=2				11.124	10.406	



12. CONDUCTED POWER MEASUREMENT

2.4GHz WIFI

Mode	Data Rate (Mbps)	Channel	Frequency(MHz)	Average Power (dBm)
		1	2412	13.23
802.11b	1	6	2437	13.73
		11	2462	13.26
		1	2412	12.65
802.11g	6	6	2437	12.18
		11	2462	11.81
		1	2412	12.87
802.11n HT20	6.5	6	2437	11.90
		11	2462	11.79
		1	2412	8.19
802.11n HT40	13.5	6	2437	10.94
		11	2462	9.53

Bluetooth_V5.0

Modulation	Channel	Frequency(MHz)	Peak Power (dBm)
	0	2402	3.056
GFSK	39	2441	4.167
	78	2480	3.187
	0	2402	2.183
π /4-DQPSK	39	2441	3.355
	78	2480	2.426
	0	2402	2.189
8-DPSK	39	2441	3.366
	78	2480	2.411

Bluetooth_V5.0

Modulation	Channel	Frequency(MHz)	Peak Power (dBm)
	0	2402	-4.175
GFSK 1M	19	2440	-3.021
	39	2480	-3.965



5GHz WIFI

Mode	channel	Frequency	Average Power (dBm)							
moue	onanner	ricquency				1	ate(bps)			
			6M	9M	12M	18M	24M	36M	48M	54M
	36	5180	12.32	12.13	11.96	11.93	11.86	11.80	11.70	11.68
802.11a	40	5200	12.38	12.25	12.07	11.90	11.79	11.72	11.57	11.56
	48	5240	12.36	12.32	12.12	11.98	11.92	11.85	11.76	11.67
002.110	149	5745	12.22	12.14	12.11	12.10	11.92	11.73	11.70	11.58
	157	5785	11.95	11.89	11.89	11.84	11.73	11.63	11.45	11.30
	165	5825	11.56	11.51	11.46	11.46	11.27	11.13	10.93	10.75
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	36	5180	11.16	10.98	10.89	10.87	10.75	10.60	10.58	10.47
000.44	40	5200	11.02	10.91	10.72	10.66	10.56	10.51	10.49	10.38
802.11n	48	5240	11.14	11.00	10.94	10.90	10.89	10.77	10.76	10.71
(20)	149	5745	10.96	10.84	10.81	10.71	10.60	10.47	10.42	10.33
	157	5785	10.72	10.59	10.55	10.38	10.25	10.11	10.09	9.91
	165	5825	10.46	10.46	10.29	10.28	10.27	10.08	10.02	10.00
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	38	5190	11.11	11.00	10.82	10.73	10.65	10.55	10.47	10.34
802.11n	46	5230	11.20	11.01	11.01	10.91	10.87	10.84	10.79	10.66
(40)	151	5755	11.21	11.17	11.11	11.10	11.03	10.87	10.82	10.72
	159	5795	10.63	10.50	10.32	10.25	10.14	10.12	10.02	9.84
	I		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	36	5180	11.04	10.87	10.77	10.74	10.66	10.48	10.47	10.44
	40	5200	11.10	11.06	10.90	10.71	10.51	10.38	10.25	10.14
802.11ac	48	5240	11.16	11.02	11.00	10.95	10.75	10.75	10.73	10.67
(20)	149	5745	10.97	10.93	10.75	10.74	10.73	10.72	10.53	10.51
	157	5785	10.74	10.63	10.61	10.45	10.38	10.32	10.17	9.98
	165	5825	10.52	10.49	10.42	10.27	10.18	9.99	9.93	9.75
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	38	5190	11.15	10.96	10.86	10.80	10.80	10.68	10.50	10.35
802.11ac	46	5230	11.15	10.99	10.99	10.91	10.80	10.64	10.57	10.49
(40)	151	5755	11.21	11.06	10.94	10.78	10.61	10.53	10.50	10.35
	159	5795	10.65	10.63	10.61	10.46	10.32	10.29	10.16	10.14
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11ac	42	5210	11.46	11.43	11.38	11.26	11.23	11.15	11.09	10.89
(80)	155	5775	10.91	10.82	10.76	10.57	10.52	10.47	10.28	10.09



13. TEST RESULTS

13.1. SAR Test Results Summary 13.1.1. Test position and configuration

- 1. The EUT is a Smart PAD Tablet.
- 2. Lab use the head liquid with a separation of 0mm at flat phantom to test;
- 3. For SAR testing, the device was controlled by software to test at reference fixed frequency points.

13.1.2. Operation Mode

- 1. Per KDB 447498 D01 v06 ,for each exposure position, if the highest 1-g SAR is \leq 0.8 W/kg, testing for low and high channel is optional.
- Per KDB 865664 D01 v01r04, for each frequency band, if the measured SAR is ≥0.8W/kg, testing for repeated SAR measurement is required, that the highest measured SAR is only to be tested. When the SAR results are near the limit, the following procedures are required for each device to verify these types of SAR measurement related variation concerns by repeating the highest measured SAR configuration in each frequency band.
 - (1) When the original highest measured SAR is $\geq 0.8W/kg$, repeat that measurement once.
 - (2) Perform a second repeated measurement only 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.
 - (3) Perform a third repeated measurement only if the original, first and second repeated measurement is \geq 1.5 W/kg and ratio of largest to smallest SAR for the original, first and second measurement is \geq 1.20.
- 3. Per KDB 248227 D01 v02r02 Chapter 5.2.2, when SAR measurement is required for 2.4GHz 802.11g/n OFDM configurations, the measurement and test reducing procedures for OFDM are applied. SAR is not required for the following 2.4 GHz OFDM conditions.
 - (1) When KDB Publication 447498 D01 SAR test exclusion applies to the OFDM configuration.
 - (2) 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,
- 4. Per KDB 248227 D01 v02r02 Chapter 5.3.4, SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units. The initial test position procedure is applied to next to the ear, UMPC mini-tablet and hotspot mode configurations. When the same maximum output power is specified for multiple transmission modes, the procedures in 5.3.2 are applied to determine the test configuration. Additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. The subsequent test configuration and SAR measurement procedures are described in the following.
 - (1) When SAR test exclusion provisions of KDB Publication 447498 D01 are applicable and SAR measurement is not required for the initial test configuration, SAR is also not required for the next highest maximum output power transmission mode subsequent test configuration(s) in that frequency band or aggregated band and exposure configuration.
 - (2) When the highest reported SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified



maximum output power and the adjusted SAR is \leq 1.2 W/kg, SAR is not required for that subsequent test configuration.

- (3) When the specified maximum output power is same for both UNII 1 and UNII 2A,begin SAR measuremengs in UNII 2A with the channel with the highest measured output power. If the report SAR for UNII 2A is <1.2W/kg,SAR is nor required for UNII 1;otherwise treat the remaining bands separately and test them independently for SAR.</p>
- (4) When the specified maximum output power different between UNII 1 and UNII 2A,begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤1.2W/kg,testing for the band with the lower specicied output power is not required;otherwise test is remaining separately for SAR;
- Maximum Scaling SAR in order to calculate the Maximum SAR values to test under the standard Peak Power, Calculation method is as follows: Maximum Scaling SAR =tested SAR (Max.) ×[maximum turn-up power (mw)/ maximum measurement output power(mw)]



13.1.3. SAR Test Results Summary

SAR MEASUREMENT

Depth of Liquid (cm):>15Relative Humidity (%): 49.7											
Product: Smart PAD Tablet											
Test Mode: 2.4GHz 802.11b											
Position	Mode	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tune-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/kg)	Limit W/kg		
Body back	DTS	6	2437	-0.21	0.316	13.80	13.73	0.321	1.6		
Body front	DTS	6	2437	-0.12	0.440	13.80	13.73	0.447	1.6		
Edge 1 (Top)	DTS	1	2412	0.14	0.454	13.80	13.23	0.518	1.6		
Edge 1 (Top)	DTS	6	2437	-0.05	0.484	13.80	13.73	0.492	1.6		
Edge 1 (Top)	DTS	11	2462	0.23	0.463	13.80	13.26	0.524	1.6		

Note:

• When the 1-g SAR is ≤ 0.8W/kg, testing for low and high channel is optional.

• The test separation of all above table(body part) is 0mm.

• Plots are only shown for the bold markered worst case SAR results.



SAR MEASUREMENT

Depth of Liquid (cm):>15

Relative Humidity (%): 44.9

Product: Smart PAD Tablet

Test Mode: 5.2GHz 802.11a											
Position	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tune-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/kg)	Limit (W/kg)			
Body back	40	5200	-0.10	0.759	12.40	12.38	0.763	1.6			
Body front	40	5200	0.05	0.658	12.40	12.38	0.661	1.6			
Edge 1 (Top)	36	5180	-0.06	0.851	12.40	12.32	0.867	1.6			
Edge 1 (Top)	40	5200	-0.33	0.776	12.40	12.38	0.780	1.6			
Edge 1 (Top)	48	5240	0.26	0.861	12.40	12.36	0.869	1.6			

Note:

• When the 1-g SAR is \leq 0.8W/kg, testing for low and high channel is optional.

The test separation of all above table(body part) is 0mm.

· Plots are only shown for the bold markered worst case SAR results



SAR MEASUREMENT

Depth of Liquid (cm):>15 Relative Humidity (%): 50.4

Product: Smart PAD Tablet

Test Mode: 5.8GHz 802.11a

Test Mode: 5.8GHz 802.1Ta										
Position	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Tune-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/kg)	Limit (W/kg)		
Body Back	149	5745	-0.24	0.699	12.30	12.22	0.712	1.6		
Body Back	157	5785	-0.11	0.683	12.30	11.95	0.740	1.6		
Body Back	165	5825	-0.19	0.725	12.30	11.56	0.860	1.6		
Front	157	5785	0.13	0.424	12.30	11.95	0.460	1.6		
Edge 1 (Top)	157	5785	0.09	0.525	12.30	11.95	0.569	1.6		

Note:

• When the 1-g SAR is \leq 0.8W/kg, testing for low and high channel is optional.

• The test separation of all above table(body part) is 0mm.

· Plots are only shown for the bold markered worst case SAR results



Repeated SAR										
Product: Smart PAD Tablet										
Test Mode: 5.2GH	Test Mode: 5.2GHz 802.11a									
Position	Ch.	Fr. (MHz)	Power Drift (<±5%)	Once SAR (1g) (W/kg)	Power Drift (<±5%)	Twice SAR (1g) (W/kg)	Power Drift (<±5%)	Third SAR (1g) (W/kg)	Limit W/kg	
Edge 1 (Top)	48	5240	0.13	0.823					1.6	

The second repeated SAR judge reference										
Product: Smart PAD Tablet										
Band	Position	Ch.	Fr. (MHz)	Orignal SAR (1g) (W/kg)	First SAR (1g) (W/kg)	Ratio	Limit			
5.2GHz 802.11a	Edge 1 (Top)	48	5240	0.861	0.823	1.046	<1.2			



APPENDIX A. SAR SYSTEM CHECK DATA

Test Laboratory: AGC Lab System Check Head 2450 MHz

DUT: Dipole 2450 MHz Type: SID 2450

Date: Oct. 08, 2024

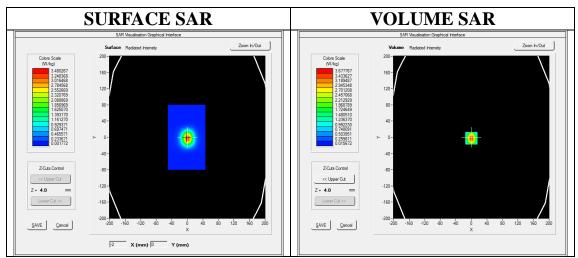
Communication System: CW; Communication System Band: D2450 (2450.0 MHz); Duty Cycle: 1:1; Conv.F=2.16 Frequency: 2450 MHz; Medium parameters used: f = 2450 MHz; σ =1.76 mho/m; ϵ r =38.22; ρ = 1000 kg/m³; Phantom section: Flat Section; Input Power=18dBm

Ambient temperature (°C): 21.2, Liquid temperature (°C): 20.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

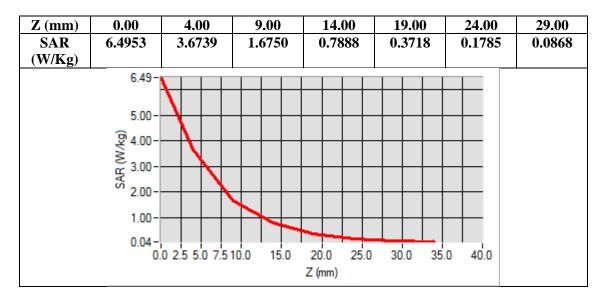
Configuration/System Check 2450 MHz Head/Area Scan: Measurement grid: dx=8mm, dy=8mm **Configuration/System Check 2450 MHz Head/Zoom Scan:** Measurement grid: dx=5mm,dy=5mm, dz=5mm

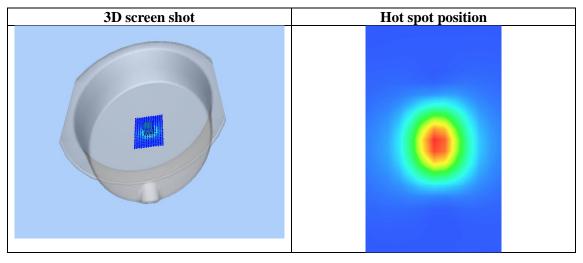


Maximum location: X=0.00, Y=-2.00 SAR Peak: 6.40 W/kg

SAR 10g (W/Kg)	1.512791
SAR 1g (W/Kg)	3.387055









Date: Oct. 09, 2024

Test Laboratory: AGC Lab System Check Head 5200 MHz DUT: Dipole 5000MHz Type: SID5000

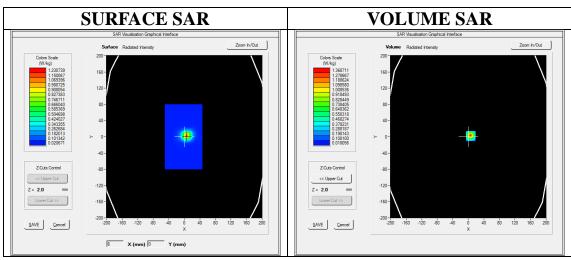
Communication System: CW; Communication System Band: D5000 (5000.0 MHz); Duty Cycle: 1:1; Conv.F=1.53 Frequency: 5200 MHz; Medium parameters used: f = 5250 MHz; σ =4.71 mho/m; ϵ r =35.89; ρ = 1000 kg/m³; Phantom section: Flat Section; Input Power=18dBm

Ambient temperature (°C): 21.8, Liquid temperature (°C): 21.4

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

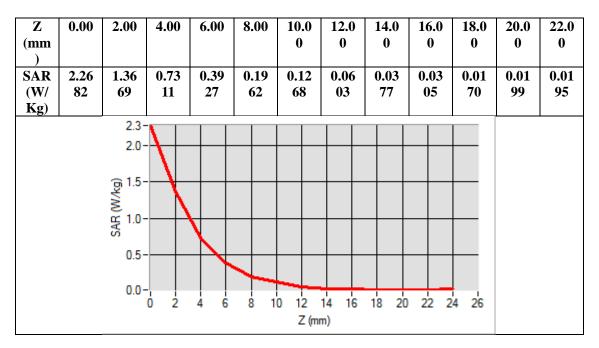
Configuration/System Check 5200 MHz Head/Area Scan: Measurement grid: dx=8mm, dy=8mm **Configuration/System Check 5200 MHz Head/Zoom Scan:** Measurement grid: dx=4mm,dy=4mm, dz=2mm

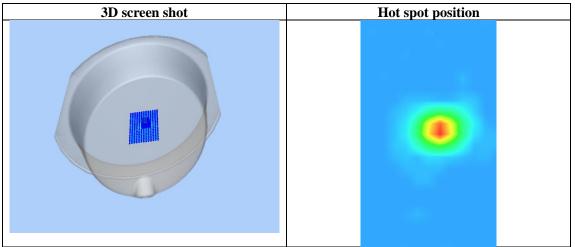


Maximum location: X=6.00, Y=2.00 SAR Peak: 2.39 W/kg

SAR 10g (W/Kg)	0.227402
SAR 1g (W/Kg)	0.730118









Date: Oct. 10, 2024

Test Laboratory: AGC Lab System Check Head 5800 MHz DUT: Dipole 5000MHz Type: SID5000

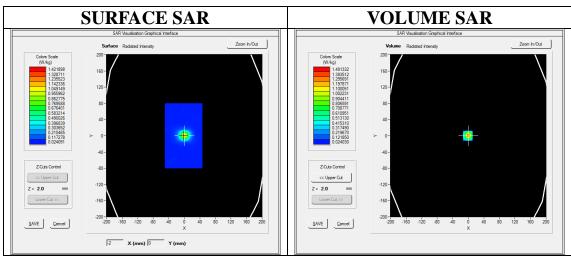
Communication System: CW; Communication System Band: D5000 (5000.0 MHz); Duty Cycle: 1:1; Conv.F=1.37 Frequency: 5800 MHz; Medium parameters used: f = 5800 MHz; σ =5.18 mho/m; ϵ r =34.71; ρ = 1000 kg/m³; Phantom section: Flat Section; Input Power=18dBm

Ambient temperature (°C): 20.9, Liquid temperature (°C): 20.7

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

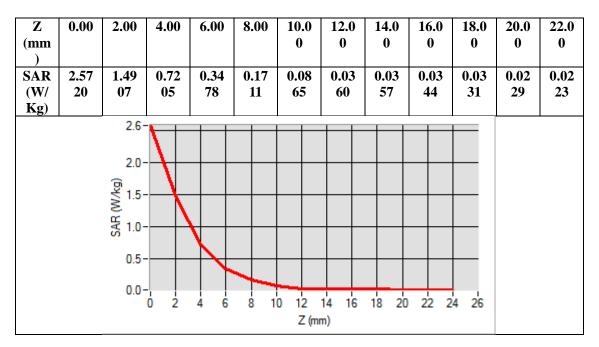
Configuration/System Check 5800 MHz Head/Area Scan: Measurement grid: dx=8mm, dy=8mm **Configuration/System Check 5800 MHz Head/Zoom Scan:** Measurement grid: dx=4mm,dy=4mm, dz=2mm

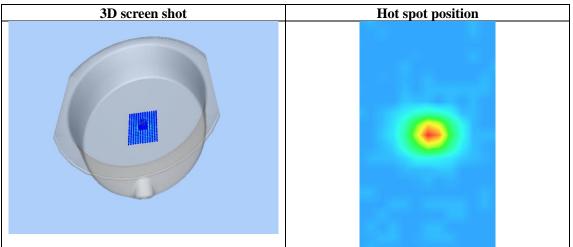


Maximum location: X=-1.00, Y=0.00 SAR Peak: 2.75 W/kg

SAR 10g (W/Kg)	0.242094	
SAR 1g (W/Kg)	0.783328	









APPENDIX B. SAR MEASUREMENT DATA

2.4GHz 802.11b Test Laboratory: AGC Lab 802.11b Mid- Edge 1 (Top) DUT: Smart PAD Tablet; Type: AGM_PAD_T2

Date: Oct. 08, 2024

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=2.16; Frequency: 2437 MHz; Medium parameters used: f = 2450 MHz; σ = 1.74mho/m; ϵ r =39.22; ρ = 1000 kg/m³; Phantom section: Flat Section

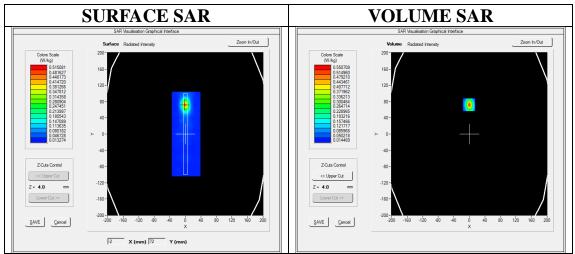
Ambient temperature (°C):21.2, Liquid temperature (°C): 20.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- · Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/802.11b Mid- Edge 1 (Top) /Area Scan: Measurement grid: dx=8mm, dy=8mm **Configuration/802.11b Mid- Edge 1 (Top) /Zoom Scan:** Measurement grid: dx=5mm,dy=5mm, dz=5mm;

Area Scan	dx=8mm dy=8mm, h= 5.00 mm		
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm		
Phantom	ELLI		
Device Position	Edge 1 (Top)		
Band	2450MHz		
Channels	Middle		
Signal	Crest factor: 1.0		

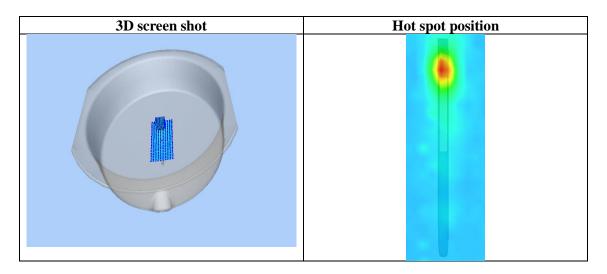


Maximum location: X=-1.00, Y=72.00 SAR Peak: 1.04 W/kg

SAR 10g (W/Kg)	0.179685
SAR 1g (W/Kg)	0.484489



Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR	1.0441	0.5507	0.2208	0.1007	0.0484	0.0339	0.0203
(W/Kg)							
	1.0-						
	0.8	\mathbf{V}	+ $+$ $+$ $+$		+ $+$ $+$ $+$		
	g						
	(^D WW) WWS 0.4				+ $+$ $+$ $+$		
	¥.						
	ਨੇ ^{0.4} -						
	0.2-						
	0.2						
	0.0-						
	0.0	2.5 5.0 7.5 1		20.0 25.0	30.0 35.0	0 40.0	
				Z (mm)			





Date: Oct. 08, 2024

Test Laboratory: AGC Lab 802.11b High- Edge 1 (Top) DUT: Smart PAD Tablet; Type: AGM_PAD_T2

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=2.16; Frequency: 2462 MHz; Medium parameters used: f = 2450 MHz; σ = 1.80mho/m; ϵ r =37.96; ρ = 1000 kg/m³; Phantom section: Flat Section

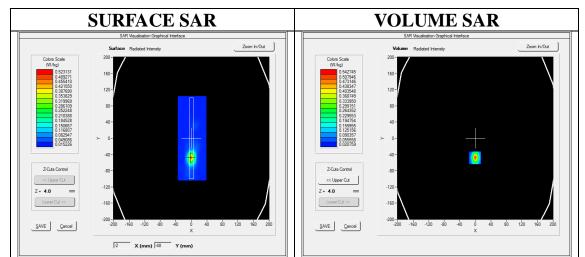
Ambient temperature (°C):21.2, Liquid temperature (°C): 20.9

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/802.11b High - Edge 1 (Top) /Area Scan: Measurement grid: dx=8mm, dy=8mm **Configuration/802.11b High - Edge 1 (Top) /Zoom Scan:** Measurement grid: dx=5mm,dy=5mm, dz=5mm;

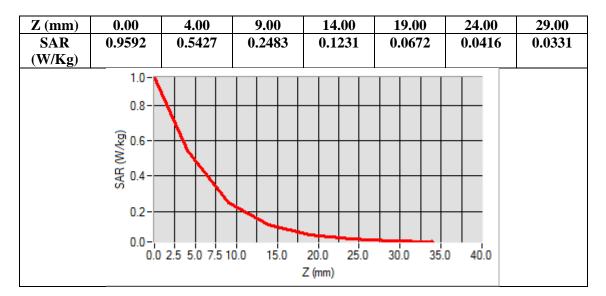
Area Scan	dx=8mm dy=8mm, h= 5.00 mm	
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm	
Phantom	ELLI	
Device Position	Edge 1 (Top)	
Band	2450MHz	
Channels	High	
Signal	Crest factor: 1.0	

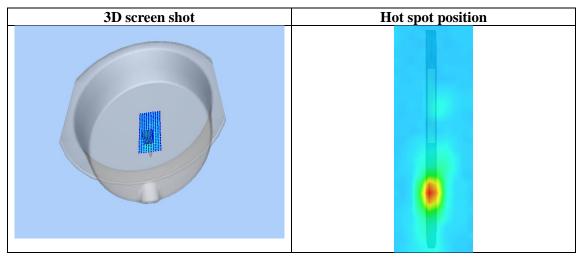


Maximum location: X=-1.00, Y=-48.00 SAR Peak: 0.96 W/kg

SAR 10g (W/Kg)	0.177970
SAR 1g (W/Kg)	0.462551









5.2GHz 802.11a Test Laboratory: AGC Lab 802.11a CH48- Edge 1 (Top) DUT: Smart PAD Tablet; Type: AGM_PAD_T2

Date: Oct. 09, 2024

Communication System: Wi-Fi; Communication System Band: 802.11a; Duty Cycle: 87%; Conv.F=1.53; Frequency: 5240MHz; Medium parameters used: f = 5250 MHz; σ = 4.75mho/m; ϵ r =34.76; ρ = 1000 kg/m³; Phantom section: Flat Section

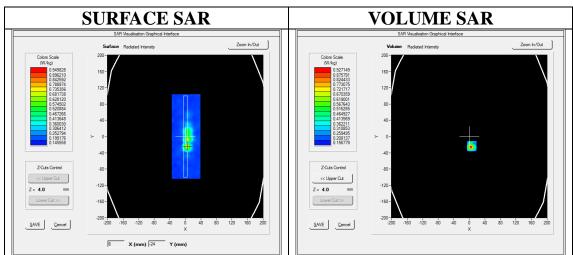
Ambient temperature (°C): 21.8, Liquid temperature (°C): 21.4

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/802.11a CH48- Edge 1 (Top) /Area Scan: Measurement grid: dx=8mm, dy=8mm Configuration/802.11a CH48- Edge 1 (Top) /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

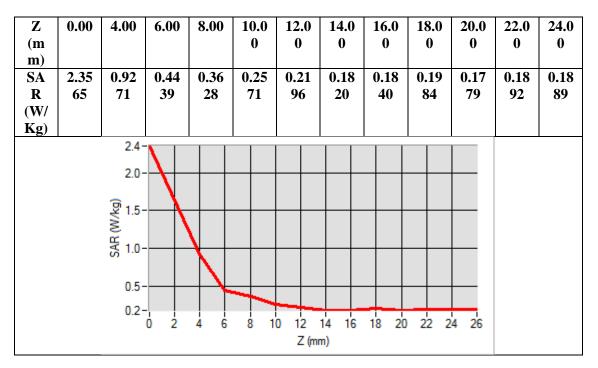
Area Scan	dx=8mm dy=8mm, h= 5.00 mm	
ZoomScan	7x7x12 dx=4mm dy=4mm dz=2mm	
Phantom	ELLI	
Device Position	Edge 1 (Top)	
Band	5200MHz	
Channels	CH48	
Signal	Crest factor: 1.15	



Maximum location: X=6.00, Y=-24.00 SAR Peak: 2.38 W/kg

SAR 10g (W/Kg)	0.333370
SAR 1g (W/Kg)	0.861374





3D screen shot	Hot spot position	



5.8GHz 802.11a Test Laboratory: AGC Lab 802.11a CH165- Back DUT: Smart PAD Tablet; Type: AGM_PAD_T2

Date: Oct. 10, 2024

Communication System: Wi-Fi; Communication System Band: 802.11a; Duty Cycle: 97%; Conv.F=1.37; Frequency: 5825MHz; Medium parameters used: f = 5800 MHz; σ = 5.20mho/m; ϵ r =34.02; ρ = 1000 kg/m³; Phantom section: Flat Section

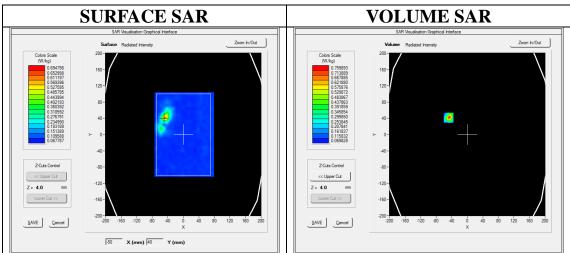
Ambient temperature (°C): 20.9, Liquid temperature (°C): 20.7

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- · Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/ 802.11a CH165 - Back /Area Scan: Measurement grid: dx=8mm, dy=8mm Configuration/ 802.11a CH165 - Back /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

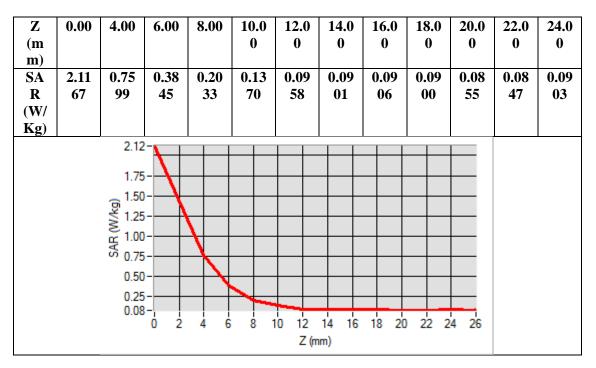
Area Scan	dx=8mm dy=8mm, h= 5.00 mm	
ZoomScan	7x7x12 dx=4mm dy=4mm dz=2mm	
Phantom	ELLI	
Device Position	Back	
Band	5800MHz	
Channels	CH165	
Signal	Crest factor: 1.03	

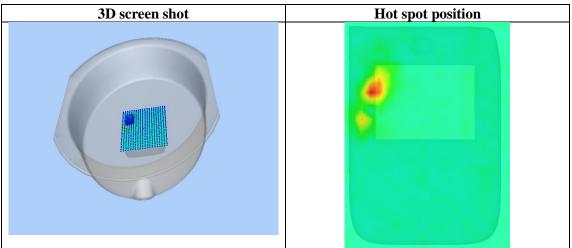


Maximum location: X=-48.00, Y=41.00 SAR Peak: 2.09 W/kg

SAR 10g (W/Kg)	0.255939
SAR 1g (W/Kg)	0.724618









Repeated SAR Test Laboratory: AGC Lab 802.11a CH48- Edge 1 (Top) DUT: Smart PAD Tablet; Type: AGM_PAD_T2

Date: Oct. 09, 2024

Communication System: Wi-Fi; Communication System Band: 802.11a; Duty Cycle: 87%; Conv.F=1.53; Frequency: 5240MHz; Medium parameters used: f = 5250 MHz; σ = 4.75mho/m; ϵ r =34.76; ρ = 1000 kg/m³; Phantom section: Flat Section

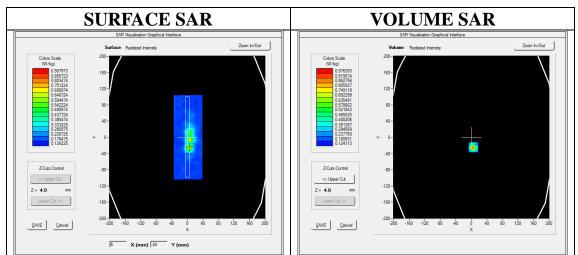
Ambient temperature (°C): 21.8, Liquid temperature (°C): 21.4

SATIMO Configuration:

- Probe: SSE2; Calibrated: Apr. 30, 2024; Serial No.: 2023-EPGO-414
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- · Phantom: ELLI39 Phantom
- Measurement SW: OpenSAR V4_02_35

Configuration/802.11a CH48- Edge 1 (Top) /Area Scan: Measurement grid: dx=8mm, dy=8mm Configuration/802.11a CH48- Edge 1 (Top) /Zoom Scan: Measurement grid: dx=4mm,dy=4mm, dz=2mm

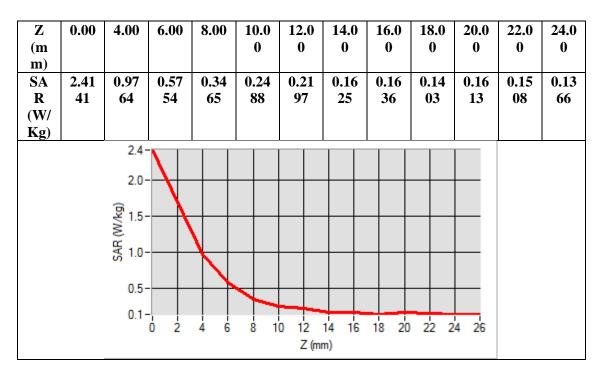
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x12 dx=4mm dy=4mm dz=2mm
Phantom	ELLI
Device Position	Edge 1 (Top)
Band	5200MHz
Channels	CH48
Signal	Crest factor: 1.15



Maximum location: X=5.00, Y=-25.00 SAR Peak: 2.37 W/kg

SAR 10g (W/Kg)	0.306644	
SAR 1g (W/Kg)	0.823458	





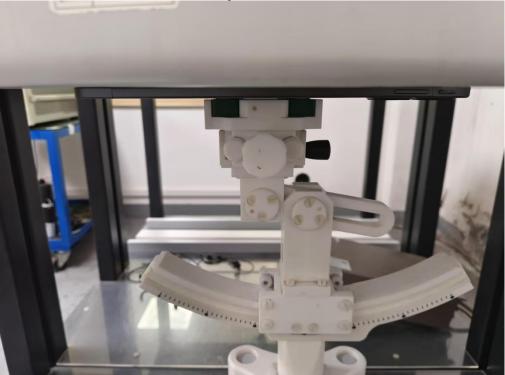
3D screen shot	Hot spot position



Report No.: AGC00408240808FH01 Page 53 of 56

APPENDIX C. TEST SETUP PHOTOGRAPHS

Body Front 0mm



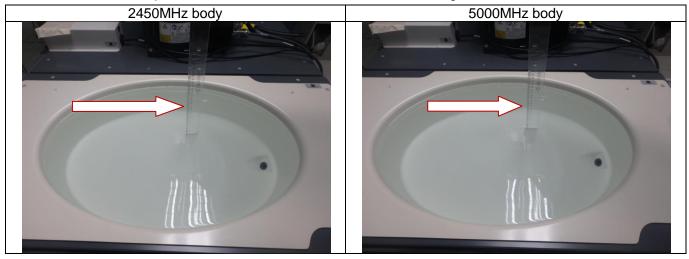






DEPTH OF THE LIQUID IN THE PHANTOM-ZOOM IN

Note : The position used in the measurement were according to IEEE Std. 1528:2013





Report No.: AGC00408240808FH01 Page 56 of 56

APPENDIX D. CALIBRATION DATA

Refer to Attached files.

----END OF REPORT----



Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").

2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.

3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.

4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.

5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.

6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.

7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.

8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.

9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.