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TEST REPORT

For SAR

Report No. ..... :	**CHTEW23120015**
Project No. ..... :	**SHT2311058901EW**
FCC ID ..... :	**2BDQY-TA2C-CS8**
Applicant's name ..... :	**ODS Corporation**
Address.....:	2-5 Kanda suda cho, Chiyoda ku, Tokyo 101-0041, Japan
Test item description ..... :	**TABLET PC**
Trade Mark .....:	-
Model/Type reference.....:	TA2C-CS8
Listed Model(s) .....:	-
Standard ..... :	**FCC 47 CFR Part2.1093** **IEEE Std C95.1: 1999 Edition** **IEEE Std 1528: 2013**
Date of receipt of test sample.....:	Nov. 21, 2023
Date of testing.....:	Dec. 06, 2023- Dec. 20, 2023
Date of issue.....:	Dec. 28, 2023
Result..... .....:	**PASS**

Report verification:

Compiled by (position+printedname+signature)...:	File administrators:Xiaodong Zhao	Xiaodong Zhao
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Testing Laboratory Name ..... :	**Shenzhen Huatongwei International Inspection Co., Ltd**
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The test report merely correspond to the test sample.

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1 . Statement of Compliance

Maximum Reported SAR (W/kg @1g)					
Type	Test setting	WIFI 2.4G	WIFI 5G	BT	Simultaneous TX
Body	Dist.= 0mm	1.258	1.323	0.162	1.485

Note:

1. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg@1g) specified in FCC 47 CFR part 2 (2.1093) and IEEE Std C95.1,
2. This device had been tested in accordance with the measurement methods and procedures specified in IEEE 1528 and FCC KDB publications.

2 . Test Standards and Report version

2.1. Test Standards

The tests were performed according to following standards:

FCC 47 Part 2.1093: Radiofrequency radiation exposure evaluation: portable devices.
IEEE Std C95.1, 1999 Edition: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
IEEE Std 1528™-2013: IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

FCC published RF exposure KDB procedures:
865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04: SAR Measurement Requirements for 100 MHz to 6 GHz
865664 D02 RF Exposure Reporting v01r02: RF Exposure Compliance Reporting and Documentation Considerations
447498 D04 Interim General RF Exposure Guidance v01: Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
248227 D01 802 11 Wi-Fi SAR v02r02: SAR Measurement Proceduresfor802.11 a/b/g Transmitters
616217 D04 SAR for laptop and tablets v01r02: describes the SAR evaluation requirements for laptop, notebook, netbook and tablet computers

TCB workshop April, 2019; Page 19, Tissue Simulating Liquids (TSL)

2.2. Report version

Revision No.	Date of issue	Description
N/A	2023-12-28	Original

3. Summary

3.1. Client Information

Applicant:	ODS Corporation
Address:	2-5 Kanda suda cho, Chiyoda ku, Tokyo 101-0041, Japan
Manufacturer:	ODS Corporation
Address:	2-5 Kanda suda cho, Chiyoda ku, Tokyo 101-0041, Japan

3.2. Product Description

Main unit	
Name of EUT:	TABLET PC
Trade Mark:	-
Model No.:	TA2C-CS8
Listed Model(s):	-
Power supply:	3.8VDC, 6000mAh, (Supplied by Rechargeable Li-ion Battery) or 5VDC (Supplied by external adapter for Charging rechargeable battery)
Hardware version:	B192C
Software version:	ODS-STANDARD_TA2C-CS8
Device Dimension:	Length x Width x Thickness (mm): 254 x 164 x 10
Device Category:	Portable
Product stage:	Production unit
RF Exposure Environment:	General Population/Uncontrolled
HTW test sample No.:	YPHT23110589001

3.3. RF Specification Description

Wi-Fi 2.4G				
Support type:	☒ 802.11b	☒ 802.11g	☒ 802.11n	☐ 802.11ax
Support bandwidth:	☒ 20MHz	☐ 40MHz		
Wi-Fi 5G				
Operation Band:	☒ U-NII-1	☒ U-NII-2A	☒ U-NII-2C	☒ U-NII-3
Support type:	☒ 802.11a	☒ 802.11n	☒ 802.11ac	☐ 802.11ax
Support bandwidth:	☒ 20MHz	☒ 40MHz	☒ 80MHz	☐ 160MHz
Bluetooth				
Support type:	☒ BR	☒ EDR	☒ BLE-1Mbps	☒ BLE-2Mbps

3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.	
Laboratory Location	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China	
Contact information:	Tel: 86-755-26715499 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn	
Qualifications:	Type	Accreditation Number
	FCC Registration Number	762235
	FCC Designation Number	CN1181

3.5. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Ambient temperature	18 °C to 25 °C
Ambient humidity	30%RH to 70%RH
Air Pressure	950-1050mbar

4. Equipments Used during the Test

Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Cal. date (YY-MM-DD)	Due date (YY-MM-DD)
●	Data Acquisition Electronics DAEx	SPEAG	HTWE0313-05	DAE4	1549	2023/03/27	2024/03/26
●	E-field Probe	SPEAG	HTWE0313-06	EX3DV4	7494	2023/04/17	2024/04/16
Tissue-equivalent liquids Validation							
●	Dielectric Assessment Kit	SPEAG	HTWE0315-02	DAK-3.5	1267	N/A	N/A
●	Network analyzer	Keysight	HTWE0331	E5071C	MY46733048	2023/08/18	2024/08/17
System Validation							
●	System Validation Dipole	SPEAG	HTWE0314-07	D2450V2	1009	2021/01/25	2024/01/24
●	System Validation Dipole	SPEAG	HTWE0314-09	D5GHzV2	1273	2021/01/26	2024/01/25
●	Signal Generator	R&S	HTWE0276	SMB100A	114360	2023/05/23	2024/05/22
●	Power Viewer for Windows	R&S		N/A	N/A	N/A	N/A
●	Power sensor	R&S	HTWE0278	NRP18A	101010	2023/05/23	2024/05/22
●	Power sensor	R&S	HTWE0389	NRP18A	101386	2023/03/29	2024/03/28
●	Power Amplifier	BONN	HTWE0336	BLWA 0160-2M	1811887	2023/11/09	2024/11/08
●	Dual Directional Coupler	Mini-Circuits	HTWE0335	ZHDC-10-62-S+	F975001814	2023/11/09	2024/11/08
●	Attenuator	Mini-Circuits	HTWE0333	VAT-3W2+	1819	2023/11/09	2024/11/08
●	Attenuator	Mini-Circuits	HTWE0334	VAT-10W2+	1741	2023/11/09	2024/11/08

Note:

1. *The Probe,Dipole and DAE calibration reference to the Appendix E and F.*
2. *Referring to KDB865664 D01, the dipole calibration interval can be extended to 3 years with justifcatio. The dipole are also not physically damaged or repaired during the interval.*

5. Measurement Uncertainty

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg.
The expanded SAR measurement uncertainty must be ≤ 30%, for a confidence interval of k = 2. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528 is not required in SAR reports submitted for equipment approval.

Therefore, the measurement uncertainty is not required.

6. SAR Measurement System Configuration

6.1. SAR Measurement Set-up

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

A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).

A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.

A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.

A unit to operate the optical surface detector which is connected to the EOC.

The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.

The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 2003.

DASY5 software and SEMCAD data evaluation software.

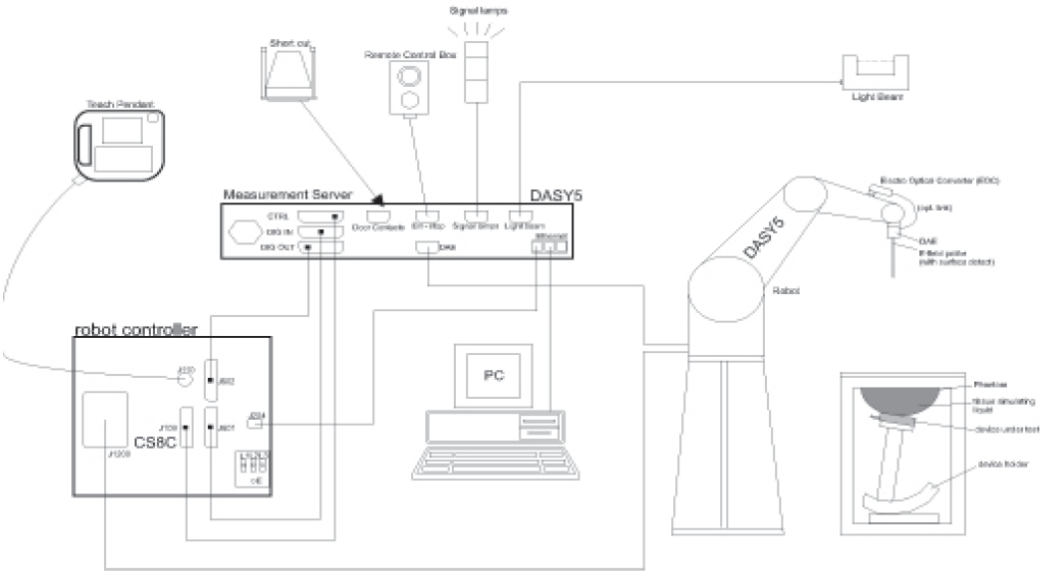
Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.

The generic twin phantom enabling the testing of left-hand and right-hand usage.

The device holder for handheld Mobile Phones.

Tissue simulating liquid mixed according to the given recipes.

System validation dipoles allowing to validate the proper functioning of the system.



6.2. DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

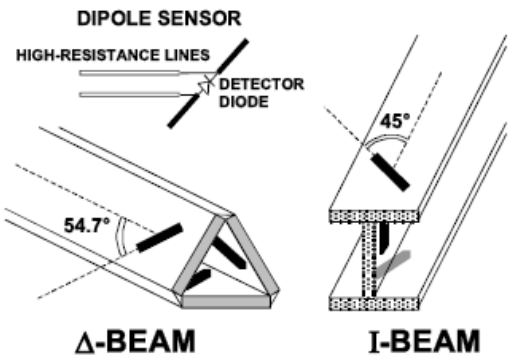
- **Probe Specification**

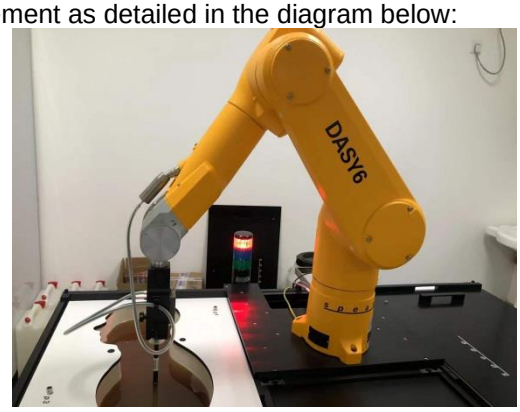
Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available.
Frequency	4 MHz to 10 GHz; Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 µW/g to > 100 W/kg; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 6 GHz Dosimetry in strong gradient fields Compliance tests of Mobile Phones
Compatibility	DASY3, DASY4, DASY52 SAR and higher, EASY4/MRI

- **Isotropic E-Field Probe**

The isotropic E-Field probe has been fully calibrated and assessed for isotropicity, and boundary effect within a controlled environment. Depending on the frequency for which the probe is calibrated the method utilized for calibration will change.

The E-Field probe utilizes a triangular sensor arrangement as detailed in the diagram below:





6.3. Phantoms

Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI isfully compatible with standard and all known tissuesimulating liquids. ELI has been optimized regarding its performance and can beintegrated into our standard phantom tables. A cover prevents evaporation ofthe liquid. Reference markings on the phantom allow installation of thecomplete setup, including all predefined phantom positions and measurementgrids, by teaching three points. The phantom is compatible with all SPEAGdosimetric probes and dipoles.

ELI Phantom

6.4. Device Holder

The device was placed in the device holder (illustrated below) that is supplied by SPEAG as an integral part of the DASY system.
The DASY device holder is designed to cope with the different positions given in the standard. It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales is the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.

Device holder supplied by SPEAG

7. SAR Test Procedure

7.1. Scanning Procedure

Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. Measure the local SAR at a test point within 8 mm of the phantom inner surface that is closest to the DUT. This distance cannot be smaller than the distance of 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 DASY 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 2 dB range is required in IEEE Standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan). If only one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of Zoom Scans has to be increased accordingly.

Area Scan Resolutions per FCC KDB Publication 865664 D01v04

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 mm ± 1 mm	½·δ·ln(2) mm ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Step 3: Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1g and 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 1 g and 10 g and displays these values next to the job's label.

Zoom Scan Resolutions per FCC KDB Publication 865664 D01v04

Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$ mm	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details. * When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB Publication 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 last Power Reference Measurement. 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. The SAR drift shall be kept within ± 5 %.

7.2. Data Storage and Evaluation

Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors),s together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension “.DA4”. The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [W/kg], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

Data Evaluation

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	Sensitivity:	Normi, ai0, ai1, ai2
	Conversion factor:	ConvFi
	Diode compression point:	Dcpi
Device parameters:	Frequency:	f
	Crest factor:	cf
Media parameters:	Conductivity:	σ
	Density:	ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics. If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot \frac{cf}{dcp_i}$$

Vi: compensated signal of channel (i = x, y, z)
Ui: input signal of channel (i = x, y, z)
cf: crest factor of exciting field (DASY parameter)
dcpi: diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

$$\mathrm{E-fieldprobes:} \qquad E_i = \sqrt{\frac{V_i}{Norm_i \cdot ConvF}}$$

$$\mathrm{H-fieldprobes:} \qquad H_i = \sqrt{V_i} \cdot \frac{a_{i0} + a_{i1} f + a_{i2} f^2}{f}$$

Vi: compensated signal of channel (i = x, y, z)
Normi: sensor sensitivity of channel (i = x, y, z), [mV/(V/m)2] for E-field Probes
ConvF: sensitivity enhancement in solution
aij: sensor sensitivity factors for H-field probes
f: carrier frequency [GHz]
Ei: electric field strength of channel i in V/m
Hi: magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = \sqrt{E_x^2 + E_y^2 + E_z^2}$$

The primary field data are used to calculate the derived field units.

$$SAR = E_{tot}^2 \cdot \frac{\sigma}{\rho \cdot 1'000}$$

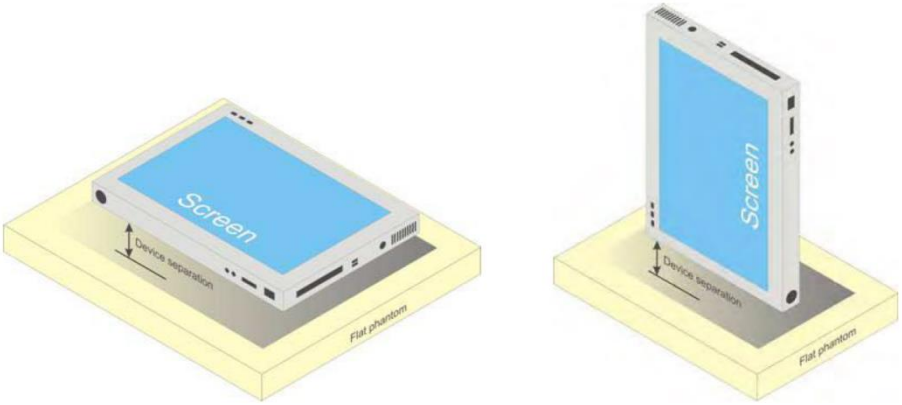
SAR: local specific absorption rate in W/kg
Etot: total field strength in V/m
σ: conductivity in [mho/m] or [Siemens/m]
ρ: equivalent tissue density in g/cm3

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid.

8. Position of the wireless device in relation to the phantom

8.1. Body Position

Other devices that fall into this category include tablet type portable computers and credit card transaction authorisation terminals, point-of-sale and/or inventory terminals. Where these devices may be torso or limb-supported, the same principles for body-supported devices are applied.



b) Tablet form factor portable computer

9. Dielectric Property Measurements & System Check

9.1. Tissue Dielectric Parameters

The temperature of the tissue-equivalent medium used during measurement must also be within 18℃ to 25℃ and within ± 2℃ of the temperature when the tissue parameters are characterized.
The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3-4 days of use; or earlier if the dielectric parameters can become out of tolerance; for example, when the parameters are marginal at the beginning of the measurement series.
The dielectric constant (ε_r) and conductivity (σ) of typical tissue-equivalent media recipes are expected to be within ± 5% of the required target values; but for SAR measurement systems that have implemented the SAR error compensation algorithms documented in IEEE Std 1528, to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, the tolerance for ε_r and σ may be relaxed to ± 10%. This is limited to frequencies ≤ 3 GHz.

Tissue Dielectric Parameters
FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

Tissue dielectric parameters for Head		
Target Frequency (MHz)	Head	
	ε_r	σ(S/m)
750	41.9	0.89
835	41.5	0.90
1750	40.1	1.37
1800-2000	40.0	1.40
2450	39.2	1.80
2600	39.0	1.96
5200	36.0	4.66
5300	35.9	4.76
5500	35.6	4.96
5600	35.5	5.07
5800	35.3	5.27

Measurement Results:

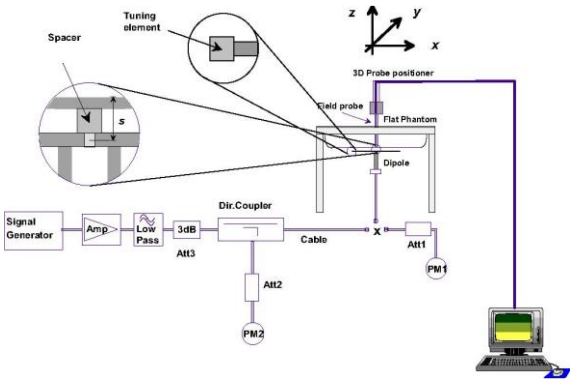
Dielectric performance of Head tissue simulating liquid									
Frequency (MHz)	ε_r		σ(S/m)		Delta (ε_r)	Delta (σ)	Limit	Temp (℃)	Date
	Target	Measured	Target	Measured					
2450	39.20	40.13	1.800	1.811	2.37%	0.61%	±5%	22.2	2023/12/6
5250	35.93	37.15	4.706	4.642	3.40%	-1.36%	±5%	22.2	2023/12/18
5600	35.53	36.57	5.065	5.052	2.93%	-0.26%	±5%	22.2	2023/12/19
5750	35.36	36.33	5.219	5.230	2.74%	0.21%	±5%	22.2	2023/12/20

9.2. System Check

SAR system verification 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 re-measured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

System Performance Check Measurement Conditions:

- The measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness: 2.0±0.2 mm (bottom plate) filled with Body or Head simulating liquid of the following parameters.
- The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥10.0 cm for measurements > 3 GHz.
- The DASY system with an E-Field Probe was used for the measurements.
- The dipole was mounted on the small tripod so that the dipole feed point was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10 mm (above 1 GHz) and 15 mm (below 1 GHz) from dipole center to the simulating liquid surface.
- The coarse grid with a grid spacing of 15 mm was aligned with the dipole.
  For 5 GHz band - The coarse grid with a grid spacing of 10 mm was aligned with the dipole.
- Special 7x7x7 (below 3 GHz) and/or 8x8x7 (above 3 GHz) fine cube was chosen for the cube.
- The results are normalized to 1 W input power.



System Performance Check Setup

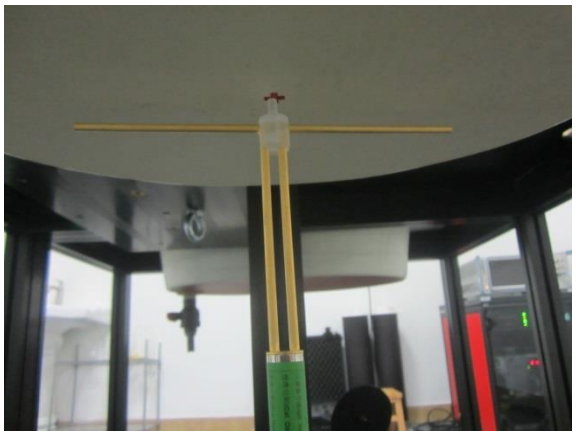


Photo of Dipole Setup

Measurement Results:

Head											
Frequency (MHz)	1g SAR			10g SAR			Delta (1g)	Delta (10g)	Limit	Temp (℃)	Date
	Target 1W	Normalize to 1W	Measured 250mW	Target 1W	Normalize to 1W	Measured 250mW					
2450	52.00	56.00	14.00	23.90	26.04	6.51	7.69%	8.95%	±10%	22.4	2023/12/6
Frequency (MHz)	1g SAR			10g SAR			Delta (1g)	Delta (10g)	Limit	Temp (℃)	Date
	Target 1W	Normalize to 1W	Measured 100mW	Target 1W	Normalize to 1W	Measured 100mW					
5250	78.20	82.10	8.21	22.30	23.40	2.34	4.99%	4.93%	±10%	22.2	2023/12/18
5600	81.60	85.40	8.54	23.30	24.40	2.44	4.66%	4.72%	±10%	22.2	2023/12/19
5750	79.30	78.70	7.87	22.50	22.60	2.26	-0.76%	0.44%	±10%	22.2	2023/12/20

Note:

The 1-g and 10-g SAR measured with a reference dipole, using the required tissue-equivalent medium at the test frequency, must be within ±10% of the manufacturer calibrated dipole SAR target.

Plots of System Performance Check

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab Date: 12/6/2023

SystemPerformanceCheck-Head 2450MHz

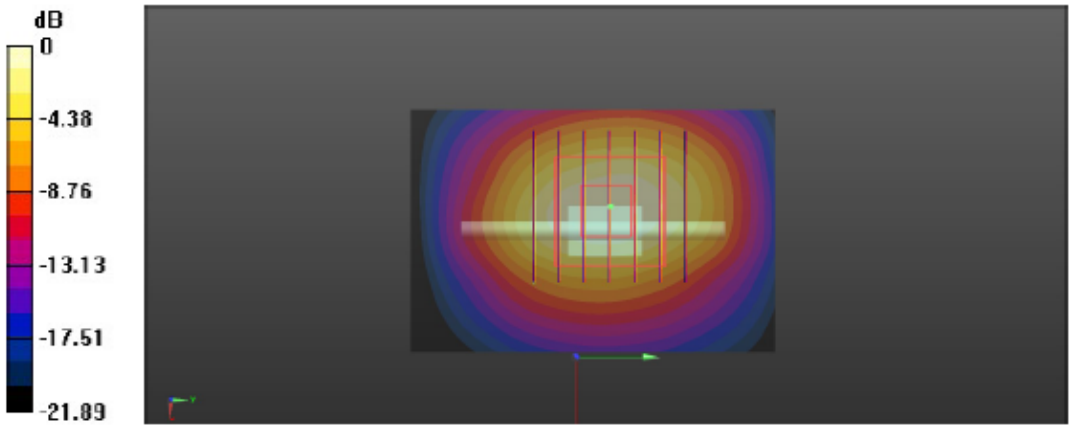
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.811 S/m; ε_r = 40.131; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient Temperature:22.7°C;Liquid Temperature:22.2°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.01, 8.01, 8.01) @ 2450 MHz; Calibrated: 4/17/2023
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/27/2023
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Head/d=10mm,Pin=250mW/Area Scan (41x61x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 19.9 W/kg

Head/d=10mm,Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.29 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 29.0 W/kg
SAR(1 g) = 14 W/kg; SAR(10 g) = 6.51 W/kg
Maximum value of SAR (measured) = 18.5 W/kg



0 dB = 18.5 W/kg = 12.67 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab Date: 12/18/2023

SystemPerformanceCheck-Head 5250MHz

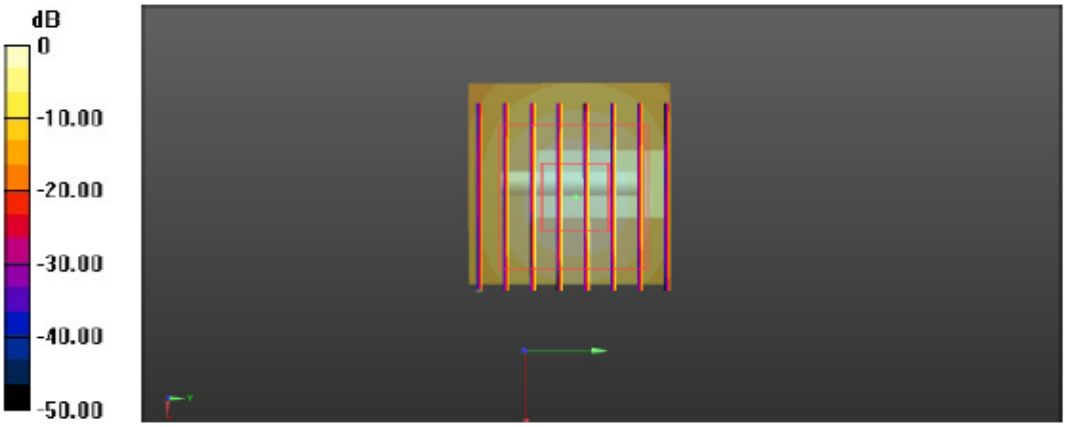
Communication System: UID 0, Generic WIFI (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.642 S/m; ε_r = 37.151; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient Temperature:22.7°C;Liquid Temperature:22.2°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.67, 5.67, 5.67) @ 5250 MHz; Calibrated: 4/17/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/27/2023
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Head/d=10mm,pin=100mW/Area Scan (31x31x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 21.8 W/kg

Head/d=10mm,pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 71.95 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 34.2 W/kg
SAR(1 g) = 8.21 W/kg; SAR(10 g) = 2.34 W/kg
Maximum value of SAR (measured) = 19.4 W/kg



0 dB = 19.4 W/kg = 12.88 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab Date: 12/19/2023

SystemPerformanceCheck-Head 5600MHz

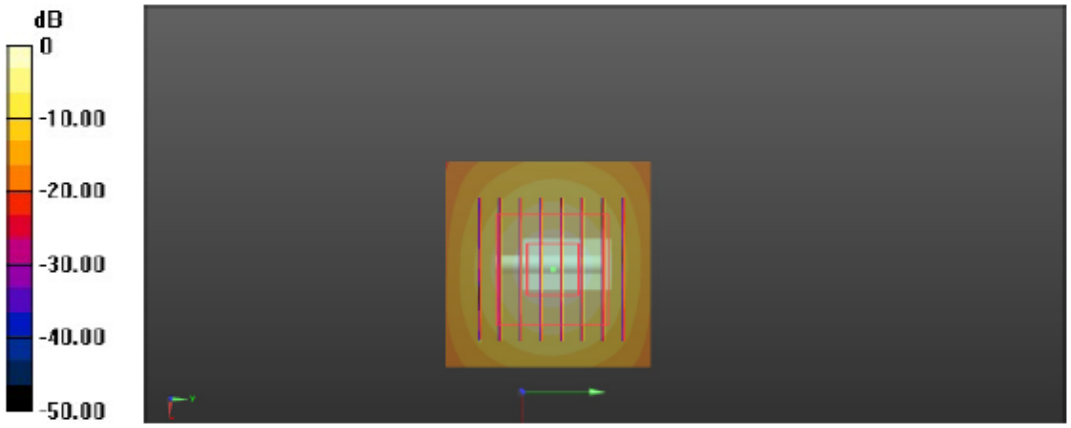
Communication System: UID 0, Generic WIFI (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.052 S/m; ε_r = 36.57; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient Temperature:22.7°C;Liquid Temperature:22.2°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.07, 5.07, 5.07) @ 5600 MHz; Calibrated: 4/17/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/27/2023
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Head/d=10mm, Pin=100mW/Area Scan (41x41x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 22.4 W/kg

Head/d=10mm, Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 73.11 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 37.9 W/kg
SAR(1 g) = 8.54 W/kg; SAR(10 g) = 2.44 W/kg
Maximum value of SAR (measured) = 20.7 W/kg



0 dB = 22.4 W/kg = 13.51 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab Date: 12/20/2023

SystemPerformanceCheck-Head 5750MHz

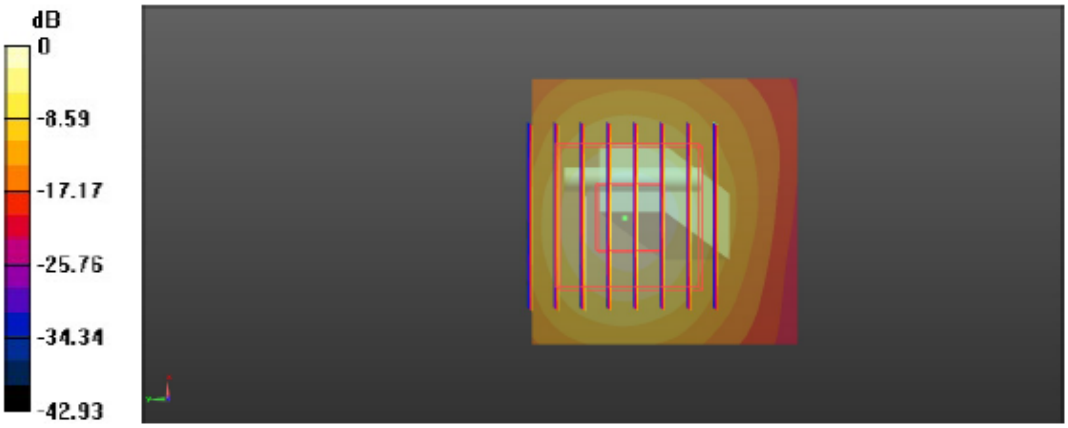
Communication System: UID 0, Generic WIFI (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.23 S/m; ε_r = 36.327; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient Temperature:22.7°C;Liquid Temperature:22.2°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.14, 5.14, 5.14) @ 5750 MHz; Calibrated: 4/17/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/27/2023
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Head/d=10mm, Pin=100mW/Area Scan (41x41x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.2 W/kg

Head/d=10mm, Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 52.76 V/m; Power Drift = 0.21 dB
Peak SAR (extrapolated) = 34.6 W/kg
SAR(1 g) = 7.87 W/kg; SAR(10 g) = 2.26 W/kg
Maximum value of SAR (measured) = 19.6 W/kg



0 dB = 19.6 W/kg = 12.92 dBW/kg

10. SAR Exposure Limits

SAR assessments have been made in line with the requirements of FCC 47 CFR § 2.1093.

Type Exposure	Limit (W/kg)	
	General Population/ Uncontrolled Exposure Environment	Occupational/ Controlled Exposure Environment
Spatial Average SAR (whole body)	0.08	0.4
Spatial Peak SAR (1g cube tissue for head and trunk)	**1.6**	8.0
Spatial Peak SAR (10g for limb)	4.0	20.0

Note:

1. *Population/Uncontrolled Environments: are defined as locations where there is the exposure of individual who have no knowledge or control of their exposure.*
2. *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).*

11. Conducted Power Measurement Results and Tune-up

Please refer to Appendix Report

Note:

Wi-Fi

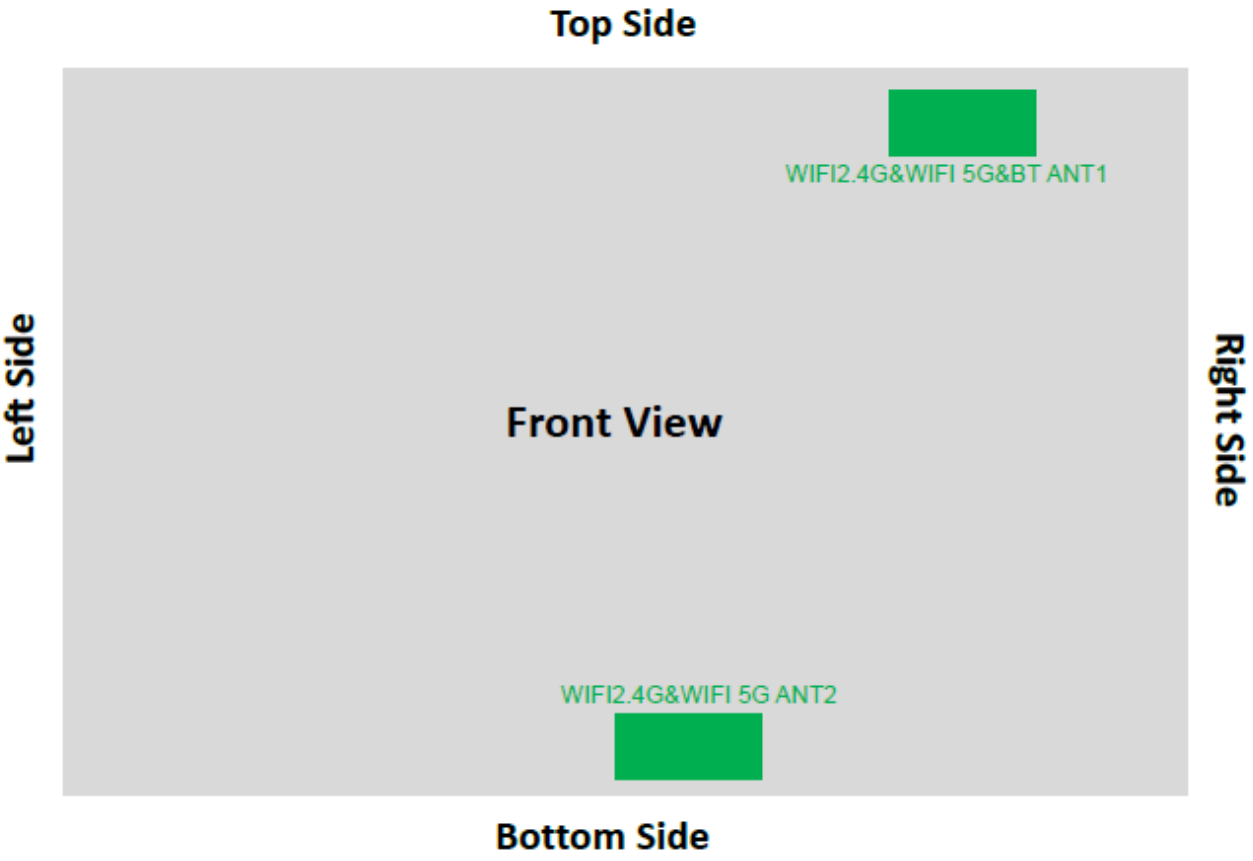
For 2.4GHz Wi-Fi SAR testing, highest average RF output power channel for the lowest data rate for 802.11b were for SAR evaluation.

The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures.

SAR testing is not required for OFDM mode(s) 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.

12. RF Exposure Conditions (Test Configurations)

12.1. Antenna Location



12.2. Standalone SAR test exclusion considerations

KDB 447498 D04 Appendix B:

$$P_{\text{th}}\ (\text{mW}) = ERP_{20\ \text{cm}}\ (\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \le f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \le f \le 6\ \text{GHz} \end{cases} \qquad (\text{B.1})$$

$$P_{\text{th}}\ (\text{mW}) = \begin{cases} ERP_{20\ \text{cm}}(d/20\ \text{cm})^x & d \le 20\ \text{cm} \\ ERP_{20\ \text{cm}} & 20\ \text{cm} < d \le 40\ \text{cm} \end{cases} \qquad (\text{B.2})$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\ \text{cm}}\sqrt{f}}\right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20\text{cm}}$ is per Formula (B.1).

ANT1:

Tx Interface	Frequency (GHz)	Output Power		separation distances (mm)					Calculated Threshold Value(mW)				
		dBm	mW	Rear	Left	Right	Top	Bottom	Rear	Left	Right	Top	Bottom
WIFI 2.4G	2.462	18.00	63.1	5	187	34	5	144	2.7 Measured	2692.6 Exempt	105.0 Exempt	2.7 Measured	1637.6 Exempt
WIFI 5G U-NII-1	5.250	10.50	11.2	5	187	34	5	144	1.5 Measured	2663.0 Exempt	78.4 Exempt	1.5 Measured	1651.4 Exempt
WIFI 5G U-NII-2A	5.350	10.50	11.2	5	187	34	5	144	1.5 Measured	2662.3 Exempt	77.9 Exempt	1.5 Measured	1549.4 Exempt
WIFI 5G U-NII-2C	5.725	11.50	14.1	5	187	34	5	144	1.4 Measured	2659.6 Exempt	75.9 Exempt	1.4 Measured	1541.9 Exempt
WIFI 5G U-NII-3	5.850	11.50	14.1	5	187	34	5	144	1.4 Measured	2658.8 Exempt	75.2 Exempt	1.4 Measured	1539.5 Exempt
BT	2.480	10.50	11.2	5	187	34	5	144	2.7 Measured	2692.3 Exempt	104.7 Exempt	2.7 Measured	1636.7 Exempt

ANT2:

Tx Interface	Frequency (GHz)	Output Power		separation distances (mm)					Calculated Threshold Value(mW)				
		dBm	mW	Rear	Left	Right	Top	Bottom	Rear	Left	Right	Top	Bottom
WIFI 2.4G	2.462	18.00	63.1	5	124	99	148	5	2.7 Measured	1232.0 Exempt	802.6 Exempt	1725.2 Exempt	2.7 Measured
WIFI 5G U-NII-1	5.250	10.50	11.2	5	124	99	148	5	1.5 Measured	1138.8 Exempt	714.9 Exempt	1641.9 Exempt	1.5 Measured
WIFI 5G U-NII-2A	5.350	10.50	11.2	5	124	99	148	5	1.5 Measured	1136.6 Exempt	712.9 Exempt	1639.8 Exempt	1.5 Measured
WIFI 5G U-NII-2C	5.725	11.50	14.1	5	124	99	148	5	1.4 Measured	1128.6 Exempt	705.6 Exempt	1632.6 Exempt	1.4 Measured
WIFI 5G U-NII-3	5.850	11.50	14.1	5	124	99	148	5	1.4 Measured	1126.1 Exempt	703.2 Exempt	1630.3 Exempt	1.4 Measured

12.3. Required Test Configurations

The table below identifies the standalone test configurations required for this device according to the findings in Section 12.2:

ANT1:

Test Configurations	Rear	Left	Right	Top	Bottom
WIFI 2.4G	Yes	No	No	Yes	No
WIFI 5G U-NII-1	Yes	No	No	Yes	No
WIFI 5G U-NII-2A	Yes	No	No	Yes	No
WIFI 5G U-NII-2C	Yes	No	No	Yes	No
WIFI 5G U-NII-3	Yes	No	No	Yes	No
Bluetooth	Yes	No	No	Yes	No

ANT2:

Test Configurations	Rear	Left	Right	Top	Bottom
WIFI 2.4G	Yes	No	No	No	Yes
WIFI 5G U-NII-1	Yes	No	No	No	Yes
WIFI 5G U-NII-2A	Yes	No	No	No	Yes
WIFI 5G U-NII-2C	Yes	No	No	No	Yes
WIFI 5G U-NII-3	Yes	No	No	No	Yes

13. Measured and Reported SAR Results

Measurement Results:
Please refer to Appendix Report

Measurement data plots:
Please refer to Appendix D

Note:
SAR Test Reduction criteria are as follows:
- *Reported SAR(W/kg) for WWAN = Measured SAR *Tune-up Scaling Factor*
- *Reported SAR(W/kg) for Wi-Fi and Bluetooth = Measured SAR * Tune-up scaling factor * Duty Cycle scaling factor*
- *Duty Cycle scaling factor = 1 / Duty cycle (%)*

KDB 447498 D04 Interim General RF Exposure Guidance v01:
Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
- *≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz*
- *≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz*
- *≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz*

KDB 248227 D01 SAR meas for 802.11:
When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.
SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.
The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the initial test position(s) by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The initial test position(s) is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the reported SAR for the initial test position is:
- *≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.*
- *> 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions are tested.*
  - *For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.*
  - *When it is unclear, all equivalent conditions must be tested.*
- *For all positions/configurations tested using the initial test position and subsequent test positions,when the reported SAR is > 0.8 W/kg, measure the SAR for these positions/configurations on the*

subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required test channels are considered.

- *The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.*

- *When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.*
- *When the specified maximum output power is 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 ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.*

To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

14. SAR Measurement Variability

In accordance with published RF Exposure KDB 865664 D01 SAR measurement 100 MHz to 6 GHz. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

1) Repeated measurement is not required when the original highest measured SAR is <0.8 or 2 W/kg (1-g or 10-g respectively); steps 2) through 4) do not apply.
2) When the original highest measured SAR is ≥ 0.8 or 2 W/kg (1-g or 10-g respectively), repeat that measurement once.
3) 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 or 3.6 W/kg (~ 10% from the 1-g or 10-g respective SAR limit).
4) Perform a third repeated measurement only if the original, first, or second repeated measurement is ≥ 1.5 or 3.75 W/kg (1-g or 10-g respectively) and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Band	Test Position	Frequency		Highest Measured SAR (W/kg)	First Repeated		Second Repeated	
		CH	MHz		Measured SAR(W/kg)	Largest to Smallest SAR Ratio	Measured SAR(W/kg)	Largest to Smallest SAR Ratio
WIFI 2.4G	Rear	1	2412	0.985	0.976	1.01	N/A	N/A
WIFI 5G U-NII-1	Rear	36	5180	0.846	0.830	1.02	N/A	N/A
WIFI 5G U-NII-2A	Rear	54	5270	0.892	0.881	1.01	N/A	N/A
WIFI 5G U-NII-2C	Rear	102	5510	0.814	0.805	1.01	N/A	N/A
WIFI 5G U-NII-3	Rear	154	5795	0.854	0.839	1.02	N/A	N/A

15. Simultaneous Transmission analysis

15.1. Simultaneous Transmission

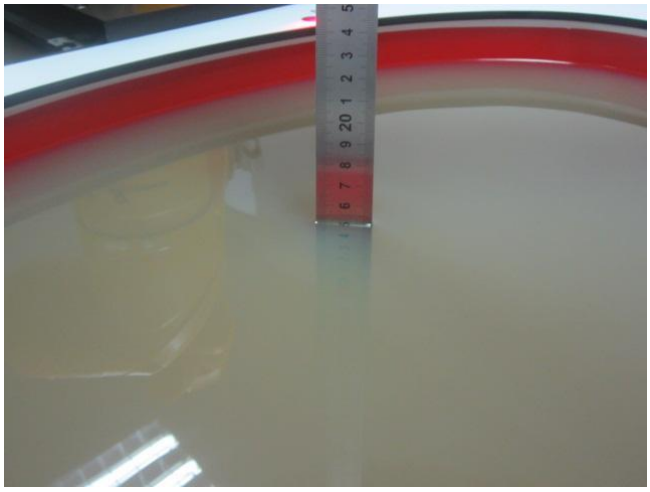
No.	Simultaneous Transmission Configurations	Body	Note
1	WLAN (data) + Bluetooth (data)	Yes	

Note:
The reported SAR summation is calculated based on the same configuration and test position

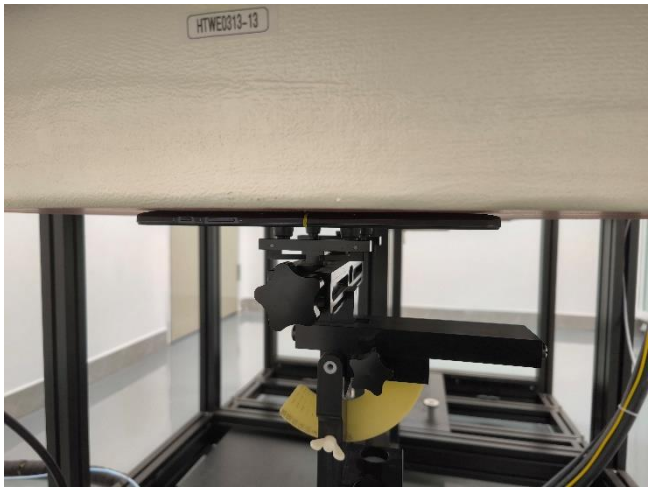
Simultaneous Transmission data:

Please refer to Appendix Report

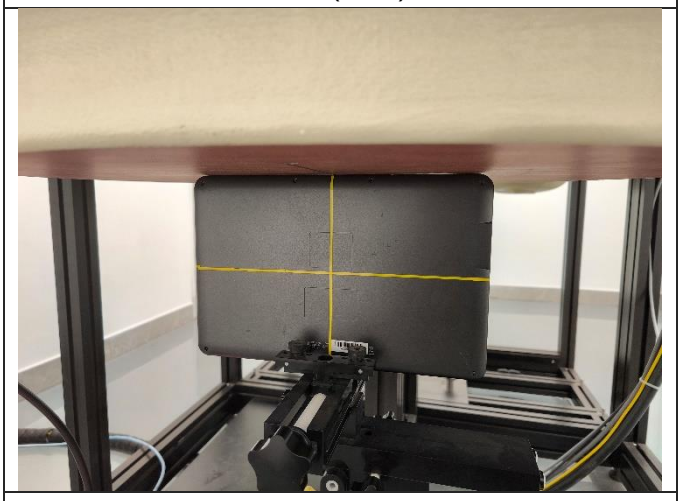
16. Test Setup Photos



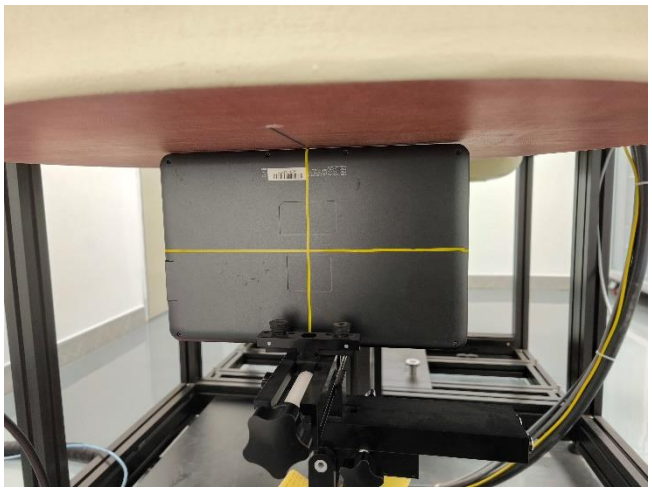
Liquid depth in the Body phantom



Rear(0mm)



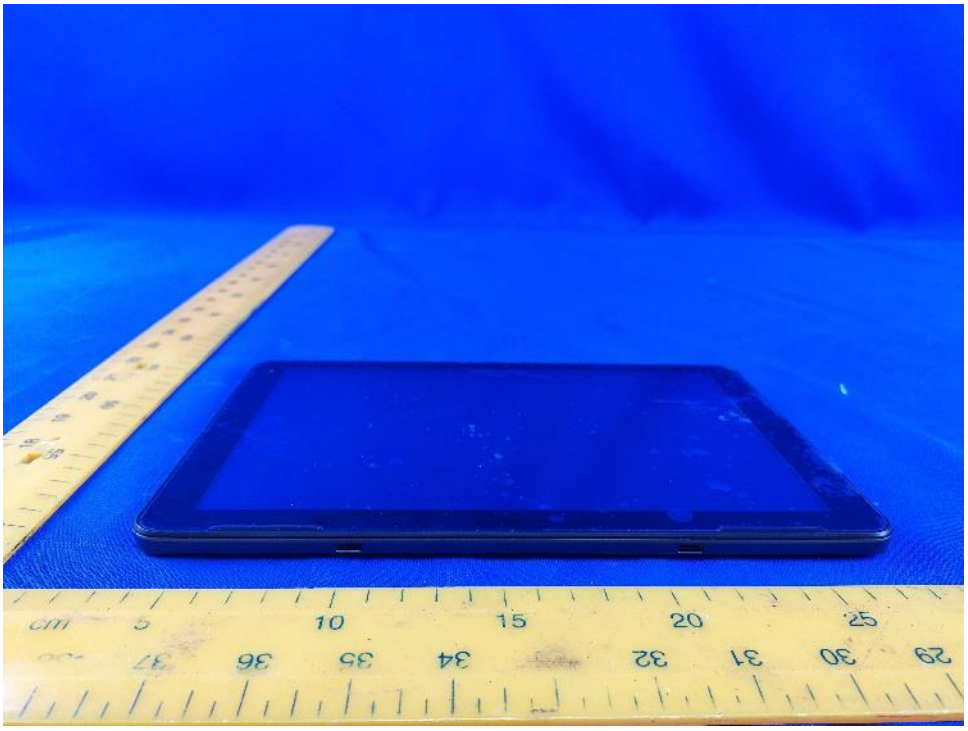
Top Side (0mm)

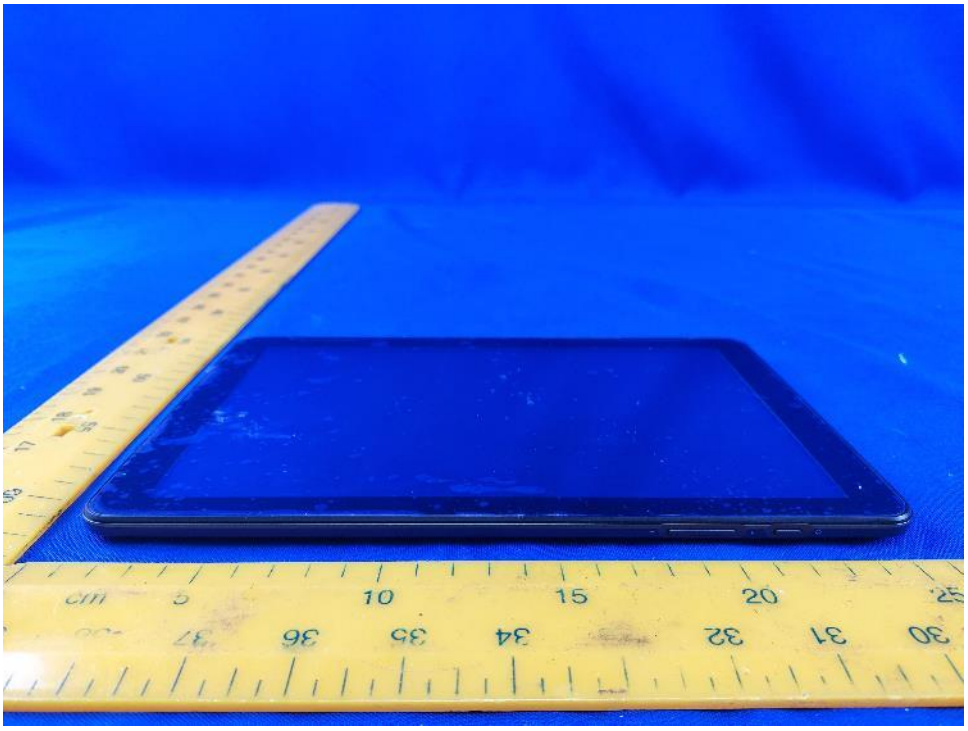


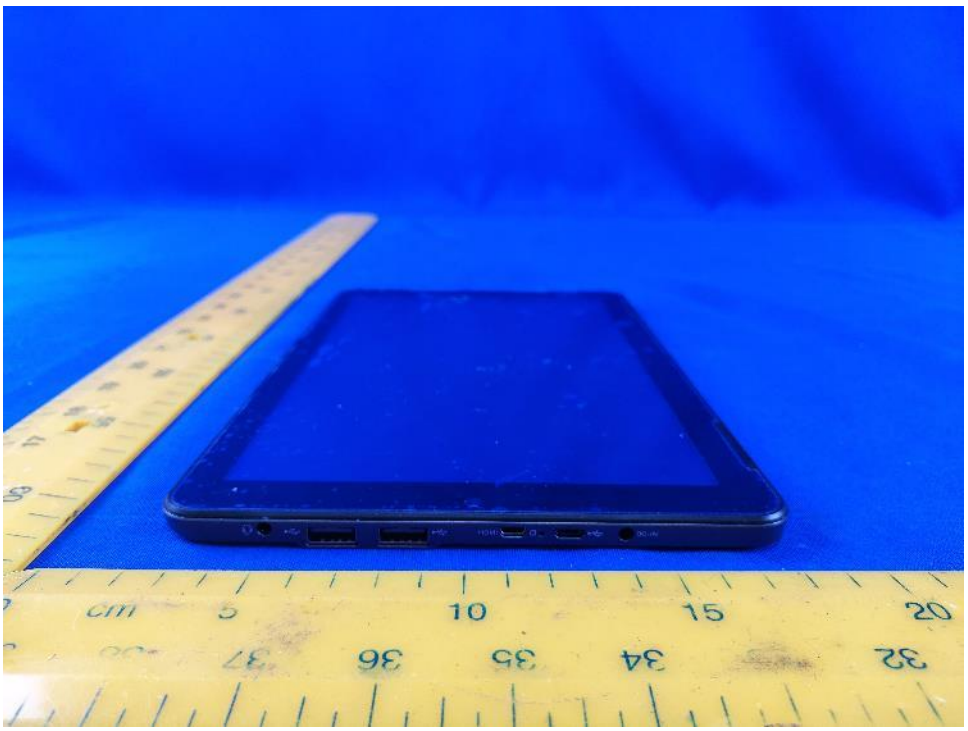
Bottom Side (0mm)

17. External and Internal Photos of the EUT

External Photos

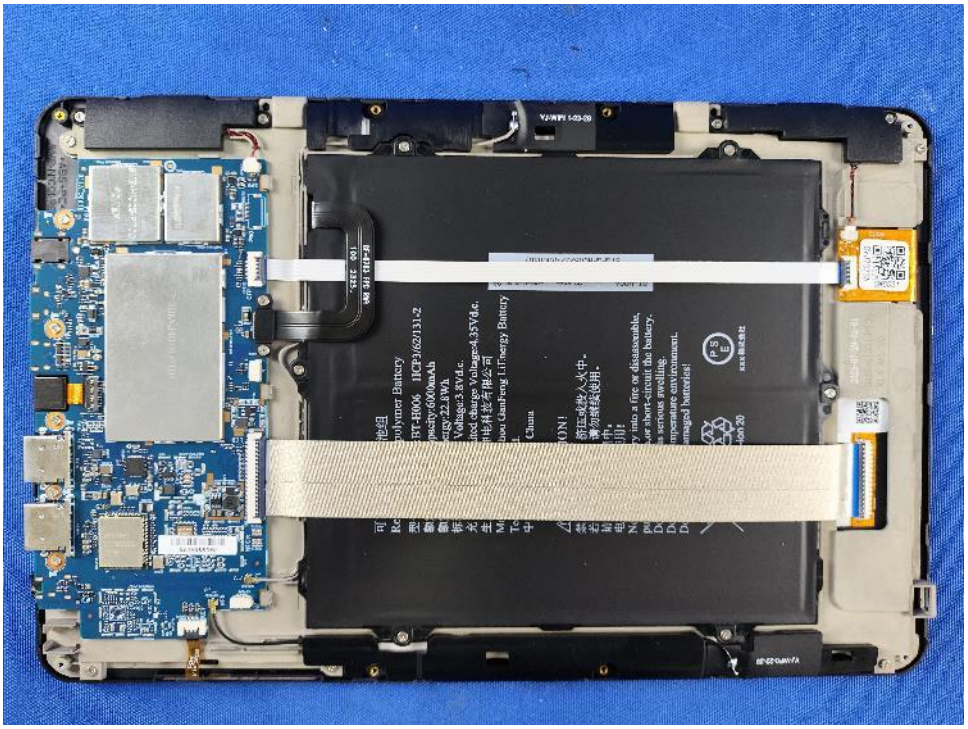


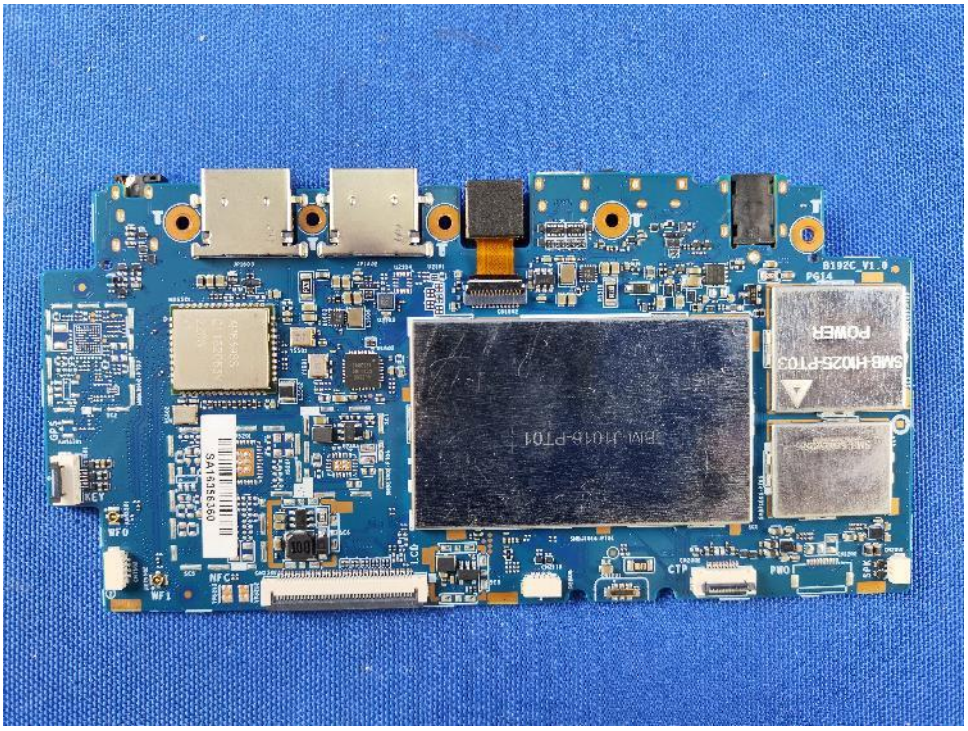


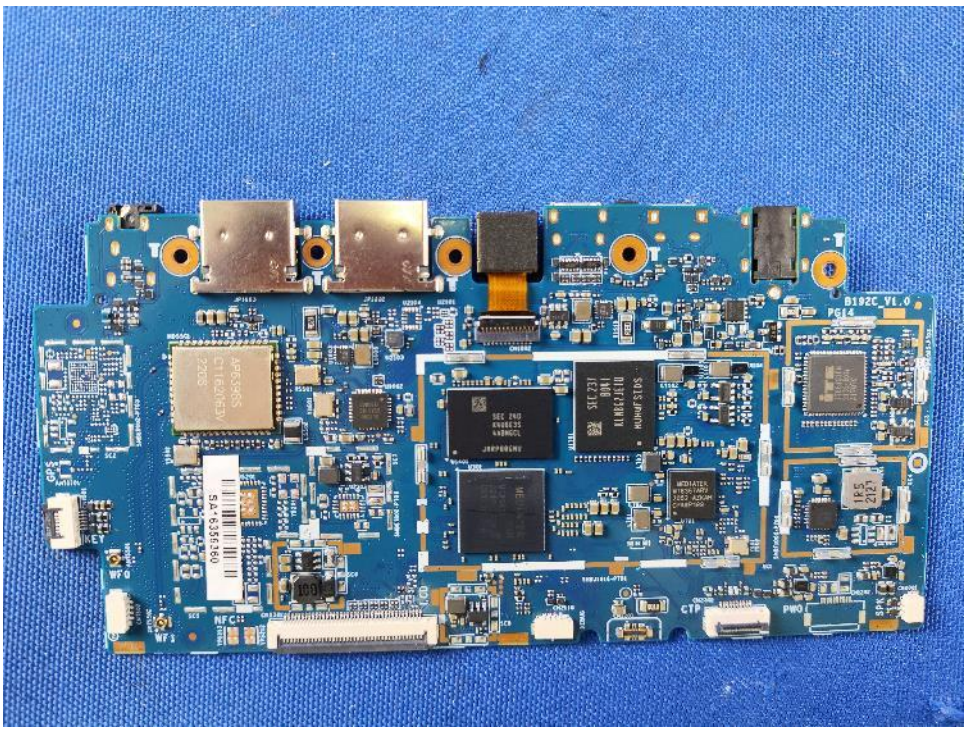


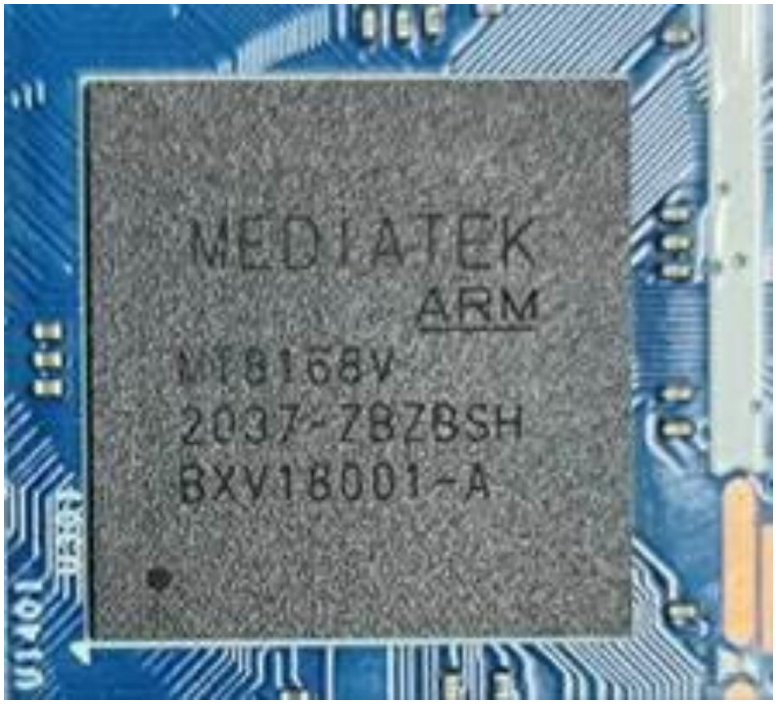
LOCK
OPEN
Power Supply
MODEL/モデル:ICP30A-050-3000
INPUT/入力:100-240V~
50/60Hz 0.8A
OUTPUT/出力:5.0V 3.0A 15.0W
UK CA
オーディーエス（株） Made in China 2306

Internal Photos

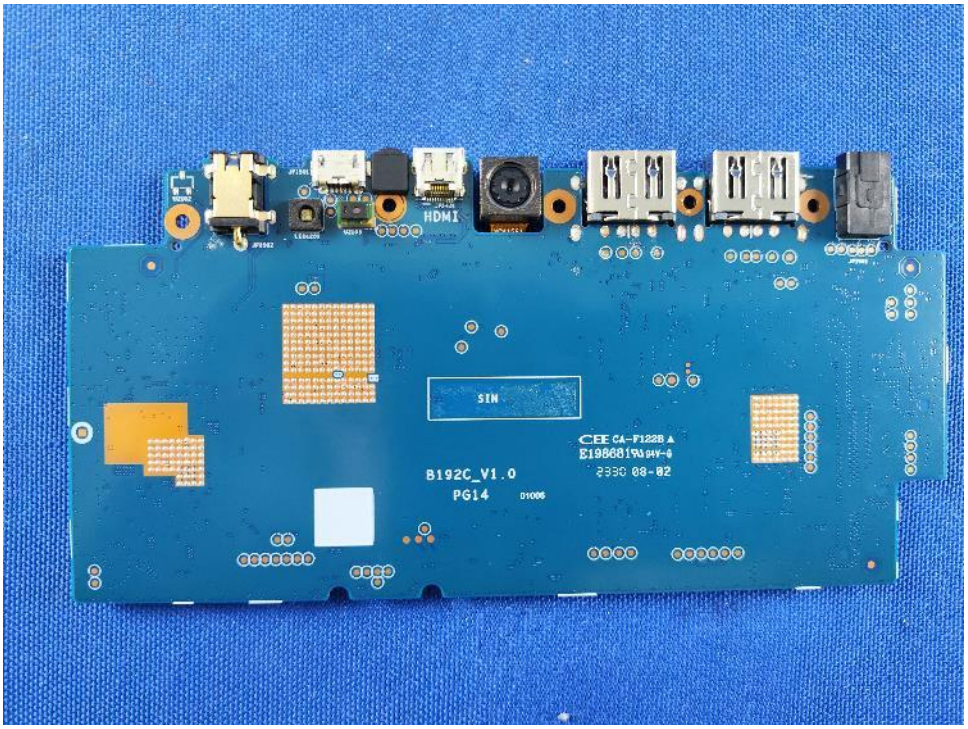




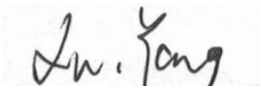




TABLET PC with two alternative CPU which is identical with each other except for model number.



---------End of Report----------

Project No.	SHT2311058901EW		
Test sample No.	YPHT23110589001	Model No.	TA2C-CS8
Start test date	2023/12/6	Finish date	2023/12/20
Temperature	22.7°C	Humidity	44%
Test Engineer	Xiaodong Zhao	Auditor	

Appendix clause	Test Item	Result
A	Conducted Power Measurement Results	PASS
B	SAR Measurement Results	PASS
C	Simultaneous Transmission analysis	PASS

Appendix A: Conducted Power Measurement Results-WIFI/Bluetooth

WIFI 2.4G							
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)			Tune-up limit (dBm)	Duty Cycle
			ANT1	ANT2	MIMO		
802.11b	1	2412	16.70	17.70	-	18.00	96.07%
	6	2437	17.00	17.30	-	18.00	96.07%
	11	2462	16.70	16.80	-	17.00	96.07%
802.11g	1	2412	15.80	16.90	-	17.00	80.73%
	6	2437	15.90	17.00	-	17.50	80.73%
	11	2462	15.90	16.40	-	17.00	80.73%
802.11n (HT20)	1	2412	14.50	15.30	17.93	18.00	79.61%
	6	2437	14.40	15.00	17.72	18.00	79.71%
	11	2462	14.30	15.20	17.78	18.00	79.61%

WIFI 5G U-NII-1							
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)			Tune-up limit (dBm)	Duty Cycle
			ANT1	ANT2	MIMO		
802.11ac (VHT20)	36	5180	9.90	10.30	13.11	13.50	78.31%
	40	5200	9.70	10.20	12.97	13.50	77.89%
	48	5240	9.70	10.10	12.91	13.50	78.42%
802.11n (HT20)	36	5180	10.10	10.30	13.21	13.50	80.00%
	40	5200	9.60	10.30	12.97	13.50	80.00%
	48	5240	9.50	10.00	12.77	13.50	79.61%
802.11a	36	5180	10.20	10.40	-	10.50	81.11%
	40	5200	9.70	10.20	-	10.50	81.19%
	48	5240	9.60	10.10	-	10.50	81.11%
802.11ac (VHT40)	38	5190	9.20	9.30	12.26	12.50	68.22%
	46	5230	9.10	9.10	12.11	12.50	68.22%
802.11n (HT40)	38	5190	9.70	10.10	12.91	13.00	70.92%
	46	5230	9.60	10.30	12.97	13.00	71.13%
802.11ac (VHT80)	42	5210	8.30	8.50	11.41	12.00	60.95%

WIFI 5G U-NII-2A							
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)			Tune-up limit (dBm)	Duty Cycle
			ANT1	ANT2	MIMO		
802.11ac (VHT20)	52	5260	10.10	10.30	13.21	13.50	78.31%
	56	5280	9.70	10.00	12.86	13.50	78.31%
	64	5320	9.50	10.10	12.82	13.50	78.31%
802.11n (HT20)	52	5260	10.30	10.20	13.26	13.50	80.00%
	56	5280	10.00	10.40	13.21	13.50	80.10%
	64	5320	9.90	10.20	13.06	13.50	80.00%
802.11a	52	5260	10.10	10.10	-	10.50	80.73%
	56	5280	10.00	10.50	-	10.50	81.11%
	64	5320	9.70	10.00	-	10.50	81.11%
802.11ac (VHT40)	54	5270	9.30	9.50	12.41	12.50	68.22%
	62	5310	9.20	9.30	12.26	12.50	67.69%
802.11n (HT40)	54	5270	10.20	10.40	13.31	13.50	70.42%
	62	5310	10.00	10.40	13.21	13.50	71.13%
802.11ac (VHT80)	58	5290	8.30	8.40	11.36	12.00	60.95%

WIFI 5G U-NII-2C							
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)			Tune-up limit (dBm)	Duty Cycle
			ANT1	ANT2	MIMO		
802.11ac (VHT20)	100	5500	10.20	10.10	13.16	13.50	78.31%
	116	5580	10.30	10.20	13.26	13.50	78.31%
	140	5700	10.40	10.10	13.26	13.50	78.31%
802.11n (HT20)	100	5500	10.30	10.60	13.46	13.50	80.00%
	116	5580	10.20	10.50	13.36	13.50	79.61%
	140	5700	10.20	10.50	13.36	13.50	80.00%
802.11a	100	5500	10.80	11.10	-	11.50	80.73%
	116	5580	10.70	10.90	-	11.50	81.11%
	140	5700	10.90	11.00	-	11.50	81.19%
802.11ac (VHT40)	102	5510	9.30	9.30	12.31	12.50	68.22%
	110	5550	9.00	9.20	12.11	12.50	67.69%
	134	5670	8.90	9.10	12.01	12.50	68.22%
802.11n (HT40)	102	5510	10.40	10.60	13.51	14.00	70.92%
	110	5550	10.30	10.50	13.41	14.00	70.92%
	134	5670	10.20	10.50	13.36	14.00	71.13%
802.11ac (VHT80)	106	5530	8.20	8.30	11.26	12.00	60.38%
	122	5610	8.30	8.40	11.36	12.00	60.38%

WIFI 5G U-NII-3							
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)			Tune-up limit (dBm)	Duty Cycle
			ANT1	ANT2	MIMO		
802.11ac (VHT20)	149	5745	10.50	10.50	13.51	14.00	77.89%
	157	5785	10.30	10.40	13.36	14.00	78.31%
	165	5825	10.30	10.30	13.31	14.00	78.31%
802.11n (HT20)	149	5745	10.50	10.70	13.61	14.00	80.00%
	157	5785	10.30	10.30	13.31	14.00	79.61%
	165	5825	10.40	10.50	13.46	14.00	80.10%
802.11a	149	5745	10.70	11.20	-	11.50	81.19%
	157	5785	10.90	11.00	-	11.50	81.11%
	165	5825	10.80	11.10	-	11.50	80.73%
802.11ac (VHT40)	151	5755	9.40	9.50	12.46	13.00	68.22%
	159	5795	9.20	9.30	12.26	13.00	68.22%
802.11n (HT40)	151	5755	10.40	10.60	13.51	14.00	70.92%
	159	5795	10.50	10.70	13.61	14.00	70.92%
802.11ac (VHT80)	155	5775	8.30	8.40	11.36	12.00	60.95%

Bluetooth						
Mode		Channel	Frequency (MHz)	Conducted Power (dBm)	Tune-up limit (dBm)	Duty Cycle
EDR	GFSK	0	2402	7.98	8.50	76.60%
		39	2441	8.08	8.50	76.60%
		78	2480	7.65	8.50	76.60%
	π/4QPSK	0	2402	9.52	10.00	77.66%
		39	2441	9.90	10.00	77.66%
		78	2480	9.70	10.00	77.66%
	8DPSK	0	2402	9.96	10.00	76.60%
		39	2441	10.32	10.50	76.60%
		78	2480	10.10	10.50	76.60%
BLE 1Mbps	GFSK	0	2402	8.65	9.00	65.42%
		19	2440	8.91	9.00	62.60%
		39	2480	8.50	9.00	62.44%
BLE 2Mbps	GFSK	0	2402	8.80	9.00	35.71%
		19	2440	8.95	9.00	37.56%
		39	2480	8.57	9.00	35.71%

Appendix B:SAR Measurement Results

WIFI 2.4G												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
ANT1 802.11b	Rear	1	2412	16.70	18.00	1.349	96.07%	1.041	-0.14	0.855	1.201	-
		6	2437	17.00	18.00	1.259	96.07%	1.041	-0.02	0.929	1.217	-
		11	2462	16.70	17.00	1.072	96.07%	1.041	-0.08	0.857	0.956	-
	Top	1	2412	16.70	18.00	1.349	96.07%	1.041	-0.11	0.832	1.168	-
		6	2437	17.00	18.00	1.259	96.07%	1.041	-0.06	0.907	1.189	-
		11	2462	16.70	17.00	1.072	96.07%	1.041	0.03	0.835	0.931	-
ANT2 802.11b	Rear	1	2412	17.70	18.00	1.072	96.07%	1.041	-0.12	0.977	1.090	-
		6	2437	17.30	18.00	1.175	96.07%	1.041	0.06	0.914	1.118	-
		11	2462	16.80	17.00	1.047	96.07%	1.041	-0.08	0.852	0.929	-
	Bottom	1	2412	17.70	18.00	1.072	96.07%	1.041	-0.17	0.933	1.041	-
		6	2437	17.30	18.00	1.175	96.07%	1.041	-0.06	0.877	1.073	-
		11	2462	16.80	17.00	1.047	96.07%	1.041	-0.15	0.829	0.904	-
MIMO 802.11n (HT20)	Rear	1	2412	17.93	18.00	1.017	79.61%	1.256	-0.09	0.985	1.258	1
		6	2437	17.72	18.00	1.066	79.71%	1.255	-0.14	0.845	1.131	-
		11	2462	17.78	18.00	1.051	79.61%	1.256	-0.05	0.818	1.080	-
	Top	1	2412	17.93	18.00	1.017	79.61%	1.256	-0.09	0.917	1.171	-
		6	2437	17.72	18.00	1.066	79.71%	1.255	-0.12	0.812	1.086	-
		11	2462	17.78	18.00	1.051	79.61%	1.256	-0.03	0.804	1.062	-
	Bottom	1	2412	17.93	18.00	1.017	79.61%	1.256	0.01	0.798	1.019	-
		6	2437	17.72	18.00	1.066	79.71%	1.255	-0.12	0.711	0.951	-
		11	2462	17.78	18.00	1.051	79.61%	1.256	-0.07	0.742	0.980	-

WIFI 5G U-NII-1												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
ANT1 802.11a	Rear	36	5180	10.20	10.50	1.072	81.11%	1.233	-0.11	0.816	1.078	-
		40	5200	9.70	10.50	1.202	81.19%	1.232	-0.05	0.719	1.065	-
		48	5240	9.60	10.50	1.230	81.11%	1.233	-0.09	0.711	1.078	-
	Top	36	5180	10.20	10.50	1.072	81.11%	1.233	-0.02	0.789	1.042	-
		40	5200	9.70	10.50	1.202	81.19%	1.232	0.01	0.702	1.040	-
		48	5240	9.60	10.50	1.230	81.11%	1.233	-0.14	0.695	1.054	-
ANT2 802.11a	Rear	36	5180	10.40	10.50	1.023	81.11%	1.233	-0.08	0.807	1.018	-
		40	5200	10.20	10.50	1.072	81.19%	1.232	-0.06	0.785	1.036	-
		48	5240	10.10	10.50	1.096	81.11%	1.233	-0.10	0.774	1.046	-
	Bottom	36	5180	10.40	10.50	1.023	81.11%	1.233	-0.06	0.782	0.987	-
		40	5200	10.20	10.50	1.072	81.19%	1.232	-0.03	0.751	0.991	-
		48	5240	10.10	10.50	1.096	81.11%	1.233	-0.12	0.739	0.999	-
MIMO 802.11n (HT20)	Rear	36	5180	13.21	13.50	1.069	80.00%	1.250	-0.12	0.846	1.130	2
		40	5200	12.97	13.50	1.129	80.00%	1.250	-0.09	0.793	1.119	-
		48	5240	12.77	13.50	1.184	79.61%	1.256	-0.07	0.758	1.127	-
	Top	36	5180	13.21	13.50	1.069	80.00%	1.250	-0.10	0.811	1.083	-
		40	5200	12.97	13.50	1.129	80.00%	1.250	-0.03	0.771	1.088	-
		48	5240	12.77	13.50	1.184	79.61%	1.256	-0.14	0.736	1.094	-
	Bottom	36	5180	13.21	13.50	1.069	80.00%	1.250	-0.11	0.640	0.855	-
		40	5200	12.97	13.50	1.129	80.00%	1.250	-0.08	0.611	0.862	-
		48	5240	12.77	13.50	1.184	79.61%	1.256	-0.02	0.597	0.888	-

WIFI 5G U-NII-2A												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
ANT1 802.11a	Rear	52	5260	10.10	10.50	1.096	80.73%	1.239	-0.14	0.862	1.171	-
		56	5280	10.00	10.50	1.122	81.11%	1.233	-0.08	0.850	1.176	-
		64	5320	9.70	10.50	1.202	81.11%	1.233	-0.19	0.779	1.155	-
	Top	52	5260	10.10	10.50	1.096	80.73%	1.239	-0.09	0.844	1.146	-
		56	5280	10.00	10.50	1.122	81.11%	1.233	-0.02	0.832	1.151	-
		64	5320	9.70	10.50	1.202	81.11%	1.233	-0.07	0.751	1.113	-
ANT2 802.11a	Rear	52	5260	10.10	10.50	1.096	80.73%	1.239	-0.11	0.746	1.013	-
		56	5280	10.50	10.50	1.000	81.11%	1.233	-0.09	0.787	0.970	-
		64	5320	10.00	10.50	1.122	81.11%	1.233	-0.07	0.731	1.011	-
	Bottom	52	5260	10.10	10.50	1.096	80.73%	1.239	-0.14	0.722	0.981	-
		56	5280	10.50	10.50	1.000	81.11%	1.233	-0.05	0.753	0.928	-
		64	5320	10.00	10.50	1.122	81.11%	1.233	-0.12	0.709	0.981	-
MIMO 802.11n (HT40)	Rear	54	5270	13.31	13.50	1.044	70.42%	1.420	-0.10	0.892	1.323	3
		62	5310	13.21	13.50	1.068	71.13%	1.406	-0.18	0.851	1.278	-
	Top	54	5270	13.31	13.50	1.044	70.42%	1.420	-0.06	0.870	1.290	-
		62	5310	13.21	13.50	1.068	71.13%	1.406	-0.17	0.832	1.249	-
	Bottom	54	5270	13.31	13.50	1.044	70.42%	1.420	-0.08	0.755	1.120	-
		62	5310	13.21	13.50	1.068	71.13%	1.406	-0.04	0.738	1.108	-

WIFI 5G U-NII-2C												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
ANT1 802.11a	Rear	100	5500	10.80	11.50	1.175	80.73%	1.239	-0.09	0.765	1.113	-
		116	5580	10.70	11.50	1.202	81.11%	1.233	-0.02	0.742	1.100	-
		140	5700	10.90	11.50	1.148	81.19%	1.232	0.01	0.795	1.124	-
	Top	100	5500	10.80	11.50	1.175	80.73%	1.239	-0.17	0.744	1.083	-
		116	5580	10.70	11.50	1.202	81.11%	1.233	-0.03	0.723	1.072	-
		140	5700	10.90	11.50	1.148	81.19%	1.232	-0.14	0.751	1.062	-
ANT2 802.11a	Rear	100	5500	11.10	11.50	1.096	80.73%	1.239	-0.18	0.804	1.092	-
		116	5580	10.90	11.50	1.148	81.11%	1.233	-0.07	0.779	1.103	-
		140	5700	11.00	11.50	1.122	81.19%	1.232	-0.15	0.783	1.082	-
	Bottom	100	5500	11.10	11.50	1.096	80.73%	1.239	-0.10	0.781	1.061	-
		116	5580	10.90	11.50	1.148	81.11%	1.233	-0.02	0.752	1.064	-
		140	5700	11.00	11.50	1.122	81.19%	1.232	-0.09	0.777	1.074	-
MIMO 802.11n (HT40)	Rear	102	5510	13.51	14.00	1.119	70.92%	1.410	-0.05	0.814	1.284	4
		110	5550	13.41	14.00	1.145	70.92%	1.410	-0.18	0.792	1.279	-
		134	5670	13.36	14.00	1.158	71.13%	1.406	-0.06	0.781	1.271	-
	Top	102	5510	13.51	14.00	1.119	70.92%	1.410	-0.04	0.755	1.191	-
		110	5550	13.41	14.00	1.145	70.92%	1.410	-0.03	0.736	1.188	-
		134	5670	13.36	14.00	1.158	71.13%	1.406	-0.18	0.729	1.187	-
	Bottom	102	5510	13.51	14.00	1.119	70.92%	1.410	-0.05	0.689	1.087	-
		110	5550	13.41	14.00	1.145	70.92%	1.410	-0.14	0.675	1.090	-
		134	5670	13.36	14.00	1.158	71.13%	1.406	-0.06	0.663	1.079	-

WIFI 5G U-NII-3												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
ANT1 802.11a	Rear	149	5745	10.70	11.50	1.202	81.19%	1.232	-0.20	0.793	1.174	-
		157	5785	10.90	11.50	1.148	81.11%	1.233	-0.14	0.811	1.148	-
		165	5825	10.80	11.50	1.175	80.73%	1.239	-0.09	0.785	1.142	-
	Top	149	5745	10.70	11.50	1.202	81.19%	1.232	-0.15	0.766	1.134	-
		157	5785	10.90	11.50	1.148	81.11%	1.233	-0.03	0.789	1.117	-
		165	5825	10.80	11.50	1.175	80.73%	1.239	-0.14	0.757	1.102	-
ANT2 802.11a	Rear	149	5745	11.20	11.50	1.072	81.19%	1.232	-0.07	0.832	1.098	-
		157	5785	11.00	11.50	1.122	81.11%	1.233	-0.12	0.807	1.116	-
		165	5825	11.10	11.50	1.096	80.73%	1.239	-0.06	0.819	1.112	-
	Bottom	149	5745	11.20	11.50	1.072	81.19%	1.232	-0.16	0.808	1.066	-
		157	5785	11.00	11.50	1.122	81.11%	1.233	-0.09	0.786	1.087	-
		165	5825	11.10	11.50	1.096	80.73%	1.239	-0.10	0.791	1.074	-
MIMO 802.11n (HT40)	Rear	151	5755	13.51	14.00	1.119	70.92%	1.410	-0.03	0.832	1.313	-
		159	5795	13.61	14.00	1.094	70.92%	1.410	-0.19	0.854	1.317	5
	Top	151	5755	13.51	14.00	1.119	70.92%	1.410	-0.17	0.808	1.275	-
		159	5795	13.61	14.00	1.094	70.92%	1.410	-0.11	0.821	1.266	-
	Bottom	151	5755	13.51	14.00	1.119	70.92%	1.410	-0.05	0.669	1.056	-
		159	5795	13.61	14.00	1.094	70.92%	1.410	-0.02	0.698	1.076	-

Bluetooth												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
EDR 8DPSK	Rear	0	2402	9.96	10.00	1.009	76.60%	1.305	-	-	-	-
		39	2441	10.32	10.50	1.042	76.60%	1.305	-0.07	0.119	0.162	6
		78	2480	10.10	10.50	1.096	76.60%	1.305	-	-	-	-
	Top	0	2402	9.96	10.00	1.009	76.60%	1.305	-	-	-	-
		39	2441	10.32	10.50	1.042	76.60%	1.305	-0.14	0.101	0.137	-
		78	2480	10.10	10.50	1.096	76.60%	1.305	-	-	-	-

Appendix C: Simultaneous Transmission analysis

WLAN + BT				
WLAN Band	Exposure Position	Max SAR (W/kg)		Summed SAR
		WLAN	BT	(W/kg)
WIFI 2.4G	Rear	1.258	0.162	1.420
	Top side	1.189	0.137	1.326
	Bottom side	1.073	-	1.073
WIFI 5G U-NII-1	Rear	1.130	0.162	1.292
	Top side	1.094	0.137	1.231
	Bottom side	0.999	-	0.999
WIFI 5G U-NII-2A	Rear	1.323	0.162	**1.485**
	Top side	1.290	0.137	1.427
	Bottom side	1.249	-	1.249
WIFI 5G U-NII-2C	Rear	1.284	0.162	1.446
	Top side	1.191	0.137	1.328
	Bottom side	1.090	-	1.090
WIFI 5G U-NII-3	Rear	1.317	0.162	1.479
	Top side	1.275	0.137	1.412
	Bottom side	1.087	-	1.087

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab Date: 12/6/2023

WIFI 2.4G MIMO Body

Communication System: UID 0, Generic WIFI (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.778 S/m; ε_r = 40.198; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient Temperature:22.7°C;Liquid Temperature:22.2°C

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.01, 8.01, 8.01) @ 2412 MHz; Calibrated: 4/17/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/27/2023
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear 0mm/CH1/Area Scan (161x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

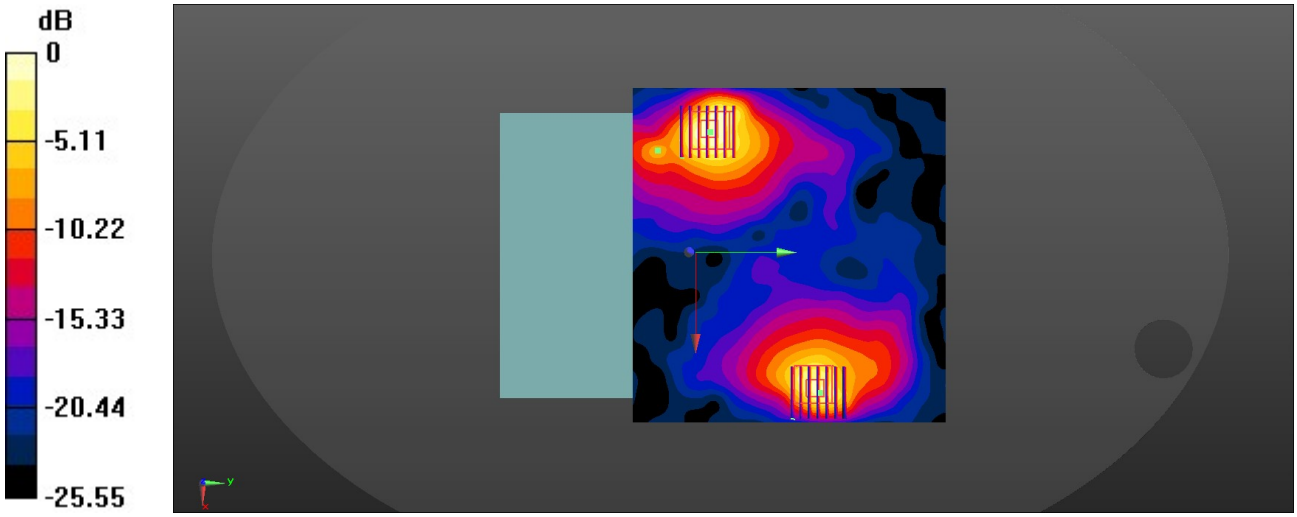
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.84 W/kg

Rear 0mm/CH1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.735 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 2.53 W/kg
SAR(1 g) = 0.985 W/kg; SAR(10 g) = 0.475 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 2.13 W/kg

Rear 0mm/CH1/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.735 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 2.32 W/kg
SAR(1 g) = 0.828 W/kg; SAR(10 g) = 0.335 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.64 W/kg



0 dB = 1.64 W/kg = 2.15 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab Date: 12/18/2023

WIFI 5G U-NII-1 MIMO Body

Communication System: UID 0, Generic WIFI (0); Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5180 MHz; σ = 4.562 S/m; ε_r = 37.102; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient Temperature:22.9°C;Liquid Temperature:22.4°C

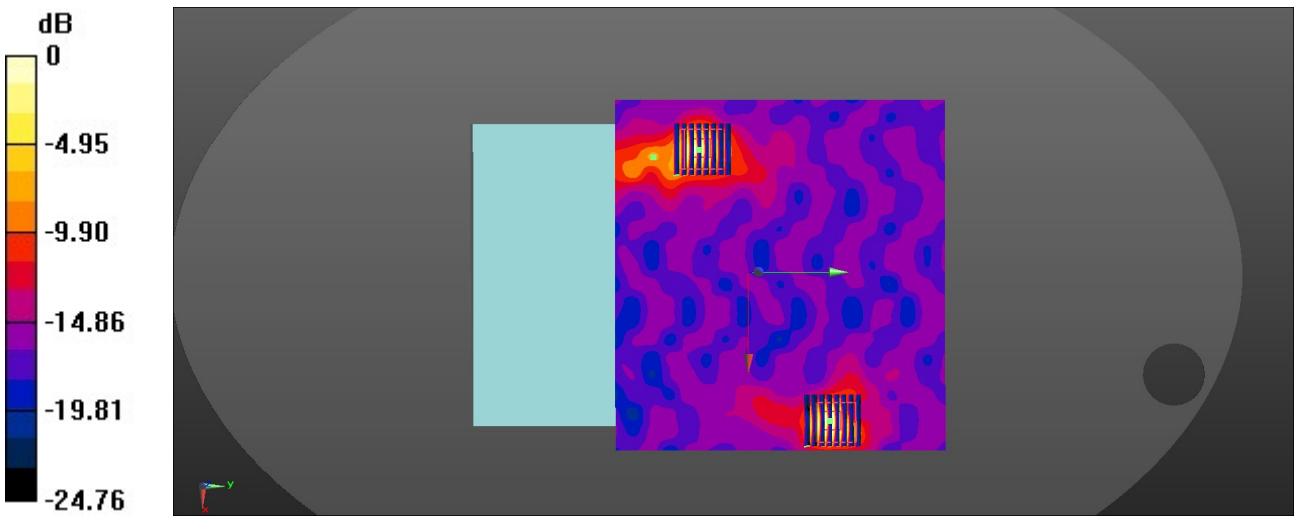
DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.67, 5.67, 5.67) @ 5180 MHz; Calibrated: 4/17/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/27/2023
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear 0mm/CH36/Area Scan (191x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.02 W/kg

Rear 0mm/CH36/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.217 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 4.66 W/kg
SAR(1 g) = 0.846 W/kg; SAR(10 g) = 0.187 W/kg
Maximum value of SAR (measured) = 2.17 W/kg

Rear 0mm/CH36/Zoom Scan (8x8x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.217 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 2.72 W/kg
SAR(1 g) = 0.574 W/kg; SAR(10 g) = 0.145 W/kg
Maximum value of SAR (measured) = 1.44 W/kg



0 dB = 1.44 W/kg = 1.58 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab Date: 12/18/2023

WIFI 5G U-NII-2A MIMO Body

Communication System: UID 0, Generic WIFI (0); Frequency: 5270 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5270 MHz; σ = 4.669 S/m; ε_r = 37.143; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient Temperature:22.9°C;Liquid Temperature:22.4°C

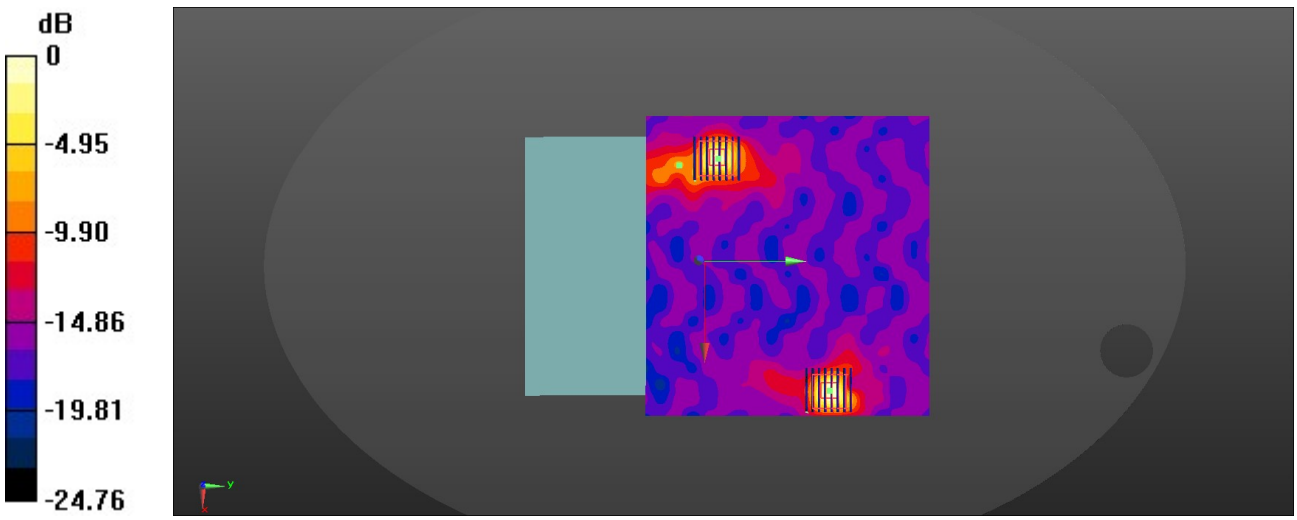
DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.67, 5.67, 5.67) @ 5270 MHz; Calibrated: 4/17/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/27/2023
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear 0mm/CH54/Area Scan (191x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.13 W/kg

Rear 0mm/CH54/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.250 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 4.92 W/kg
SAR(1 g) = 0.892 W/kg; SAR(10 g) = 0.197 W/kg
Maximum value of SAR (measured) = 2.29 W/kg

Rear 0mm/CH54/Zoom Scan (8x8x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.250 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 2.87 W/kg
SAR(1 g) = 0.605 W/kg; SAR(10 g) = 0.153 W/kg
Maximum value of SAR (measured) = 1.52 W/kg



0 dB = 1.52 W/kg = 1.82 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd.,SAR Lab Date: 12/19/2023

WIFI 5G U-NII-2C MIMO Body

Communication System: UID 0, Generic WIFI (0); Frequency: 5510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5510 MHz; σ = 4.944 S/m; ε_r = 36.742; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient Temperature:22.7°C;Liquid Temperature:22.2°C

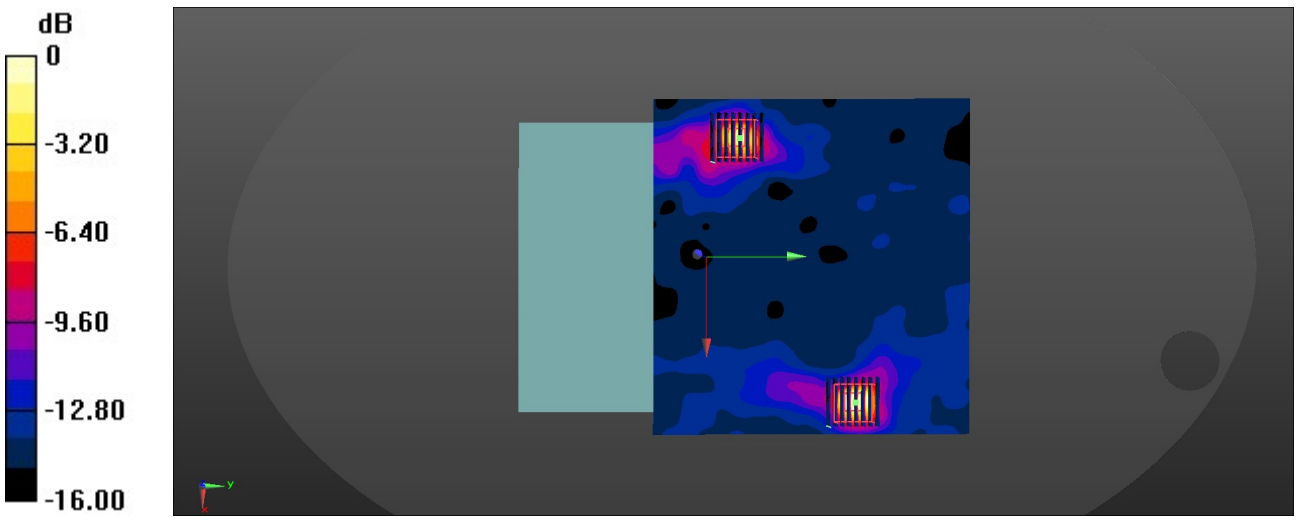
DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(5.07, 5.07, 5.07) @ 5510 MHz; Calibrated: 4/17/2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/27/2023
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Rear 0mm/CH102/Area Scan (191x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.11 W/kg

Rear 0mm/CH102/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.144 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 4.33 W/kg
SAR(1 g) = 0.814 W/kg; SAR(10 g) = 0.226 W/kg
Maximum value of SAR (measured) = 2.13 W/kg

Rear 0mm/CH102/Zoom Scan (8x8x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.144 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 2.59 W/kg
SAR(1 g) = 0.613 W/kg; SAR(10 g) = 0.194 W/kg
Maximum value of SAR (measured) = 1.71 W/kg



0 dB = 1.71 W/kg = 1.57 dBW/kg