

TEST REPORT

Applicant: Tiinlab Corporation

Address: No. 3333, Liuxian Avenue, Tower A, 35th Floor,

Tanglang City, Nanshan District, Shenzhen, China

Equipment Type: Wireless Earphones

Model Name: S70-

Brand Name: 1MORE

FCC ID: 2ASDI-S70

Test Standard: FCC 47 CFR Part 2.1093

(refer to section 3.1)

Maximum SAR: Head (1 g@0mm): 0.89 W/kg

Sample Arrival Date: Apr. 23, 2024

Test Date: May 10, 2024

Date of Issue: Jul. 24, 2024

ISSUED BY:

Liong Li Wing

Shenzhen BALUN Technology Co., Ltd.

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Xu Rui

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Revision History			
Version	Issue Date	Revisions Content	
Rev. 01	Jul. 04, 2024	Initial Issue	
Rev. 02	Jul. 22, 2024	1. Added the BLE Duty Cycle of Section	
		8.1, BLE SAR test data of Section 10.1.	
		2. Updated the power list of Section 8.1.	
Rev. 03	Jul. 23, 2024	Added the BLE Highest SAR Values of	
		Section 3.3, BLE SAR test plots of	
		ANNEX C.	
Rev. 04	Jul. 24, 2024	Added the liquid parameters L M H	
		<u>channel in page 37.</u>	

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.	
Addross	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road,	
Address	Nanshan District, Shenzhen, Guangdong Province, P. R. China	
Phone Number +86 755 6685 0100		

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.	
Ivallie	Sherizhen dalon fechnology Co., Ltd.	
	☑ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi	
	Road, Nanshan District, Shenzhen, Guangdong Province, P. R.	
Location	China	
Location	☐ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park,	
	No. 1008, Songbai Road, Yangguang Community, Xili Sub-district,	
	Nanshan District, Shenzhen, Guangdong Province, P. R. China	
Accreditation	The laboratory is a testing organization accredited by FCC as a	
Certificate	accredited testing laboratory. The designation number is CN1196.	

1.3 Test Environment Condition

Ambient Temperature	18℃ to 25℃
Ambient Relative	200/ to 700/
Humidity	30% to 70%



2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Tiinlab Corporation	
Address	No. 3333, Liuxian Avenue, Tower A, 35th Floor, Tanglang City,	
	Nanshan District, Shenzhen, China	

2.2 Manufacturer Information

Manufacturer Tiinlab Corporation		
Addross	No. 3333, Liuxian Avenue, Tower A, 35th Floor, Tanglang City,	
Address	Nanshan District, Shenzhen, China	

2.3 General Description for Equipment under Test (EUT)

EUT Name	Wireless Earphones
Model Name Under Test	S70-
Series Model Name	N/A
Description of Model	N/A
name differentiation	N/A
Hardware Version	V1.3
Software Version	V1.0.5
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

	Battery	
Ancillary Equipment 1	Brand Name	N/A
	Model No.	75150
	Serial No.	N/A
	Capacity	60mAh/0.23Wh
	Rated Voltage	3.7 V
	Limit Charge Voltage	4.2 V
	Manufacturer	Huizhou Everpower Technology Co., Ltd.

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2.5 Technical Information

Network and Wireless	Divistanth (DD LEDD LDLE)
connectivity	Bluetooth (BR+EDR+BLE)

The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	Bluetooth	
Frequency Range	Bluetooth	2400 ~ 2483.5 MHz
Antenna Type	LDS Antenna	
Hotspot Function	Not Support	
Exposure Category	General Population/Unco	ontrolled exposure
Product Type	Portable Device	
EUT Type	☑ Production unit ☐ Identical prototype	



3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528- 2013	IEEE Recommended Practice for Determining the Peak Spatial- Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
5	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
6	KDB 865664 D02 v01r02	RF Exposure Reporting



3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user.

Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Table of Exposure Limits:

	SAR Value (W/Kg)			
Body Position	General Population/	Occupational/		
	Uncontrolled Exposure	Controlled Exposure		
Whole-Body SAR	0.08	0.4		
(averaged over the entire body)	0.00			
Partial-Body SAR	1.60	8.0		
(averaged over any 1 gram of tissue)	1.00	8.0		
SAR for hands, wrists, feet and				
ankles	4.0	20.0		
(averaged over any 10 grams of tissue)				

NOTE:

General Population/Uncontrolled Exposure: Locations where there is the exposure of individuals who have no knowledge or control of their exposure. General population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Occupational/Controlled Exposure: Locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

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3.3 Test Result Summary

3.3.1 Highest SAR Values

Equipment		Maximum Report SAR (W/kg)		
Equipment Class	Band	Head (0mm)		
Class		1g SAR		
		Left Ear	Right Ear	
DSS	DH5	0.80	0.89	
DTS	BLE	0.66	0.82	
Limits	(W/kg)	1.6		
Test	Verdict	Pa	ISS	

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3.4 Test Uncertainty

According to KDB 865664 D01, When the highest measured 1 g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis is not required in SAR reports submitted for equipment approval.

The maximum 1 g SAR for the EUT in this report is 0.89 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.



4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

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

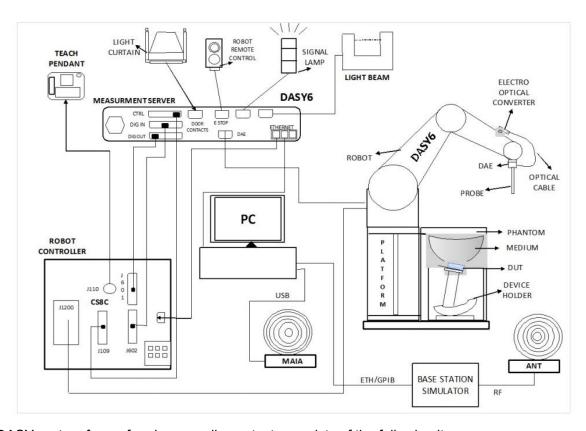
Where: σ is the conductivity of the tissue,

ρ is the mass density of the tissue and E is the RMS electrical field strength.



4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

- 1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- 2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, ADconversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is
 battery powered with standard or rechargeable batteries. The signal is optically transmitted to the
 EOC.
- 4. A unit to operate the optical surface detector which is connected to the EOC.
- 5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
- 6. The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
- 7. DASY5 software and SEMCAD data evaluation software.
- 8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- 9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
- 10. The device holder for handheld mobile phones.
- 11. Tissue simulating liquid mixed according to the given recipes.
- 12. System validation dipoles allowing to validate the proper functioning of the system.



4.2.2 Robot

The Dasy SAR system uses the high precision robots. Symmetrical design with triangular core Built-in optical fiber for surface detection system For the 6-axis controller system, Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents). The robot series have many features that are important for our application:



- High precision (repeatability ±0.02 mm)
- High reliability (industrial design)
 - Low maintenance costs
 (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brush less synchron motors; no stepper motors)
- Low ELF interference (motor control _elds shielded via the closed metallic construction shields)



4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4 SN: 7607 with following specifications is used.

Construction Symmetrical design with triangular core Built-in optical fiber for surface detection system

Built-in shielding against static charges PEEK enclosure material (resistant to organic

solvents, e.g., glycolether)

Calibration ISO/IEC 17025 calibration service available

Frequency 4 MHz to 10 GHz; Linearity: ± 0.2 dB

Directivity ± 0.2 dB in HSL (rotation around probe axis); ± 0.4 dB in HSL (rotation normal to probe

axis)

Dynamic range $5 \mu W/g$ to > 100 mW/g; Linearity: $\pm 0.2 dB$

Dimensions Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from

probe tip to dipole centers: 1.0 mm

Application General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic

scanning in arbitrary phantoms (EX3DV4)



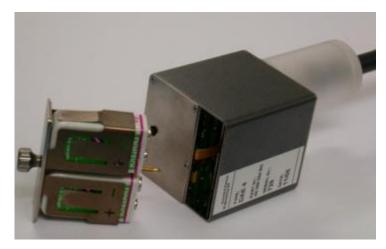
E-Field Probe Calibration Process

Probe calibration is realized, in compliance with IEC/IEEE 62209-1528 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the IEC/IEEE 62209-1528 annexe technique using reference guide at the five frequencies.



4.2.4 Data Acquisition Electronics

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



- Input Impedance: 200MOhm
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB



4.2.5 Phantoms

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



- ·Left head
- ·Right head
- ·Flat phantom

Photo of Phantom SN1859



Serial Number	per Material		Height
SN 1859 SAM	Vinylester, glass fiber reinforced	1000	500



4.2.6 Device Holder

The DASY6 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA"s only. If necessary an additional support of polystyrene material is used. Larger DUT"s (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.

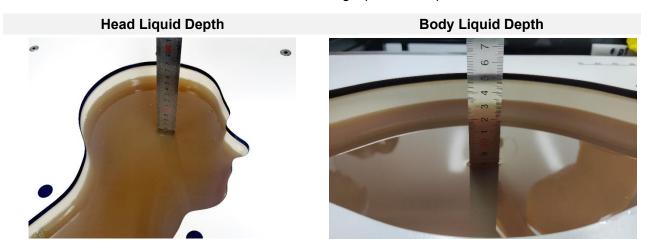


The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1°.



4.2.7 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.



The following table gives the recipes for tissue simulating liquid.

TSL	Manufacturer / Model	Freq Range (MHz)	Main Ingredients
Head WideBand	SPEAG HBBL600- 10000V6	600-10000	Ethanediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4- diol, Alkoxylated alcohol



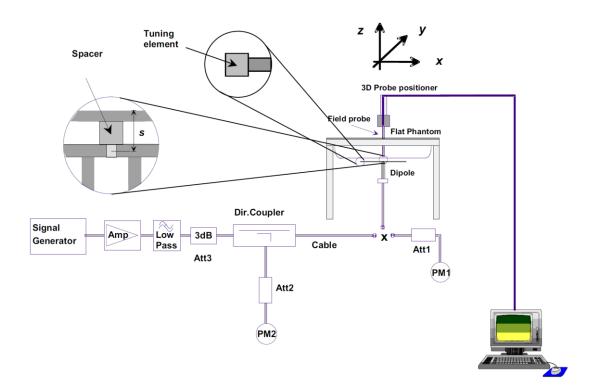
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

5.2 System Check Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:





6 TEST POSITION CONFIGURATIONS

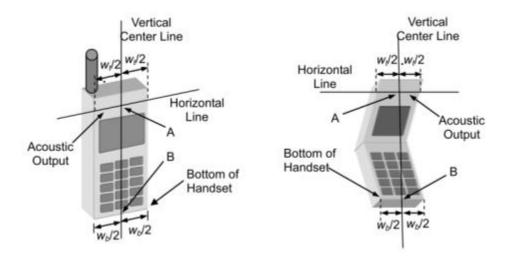
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

6.1.1 Two Imaginary Lines on the Handset

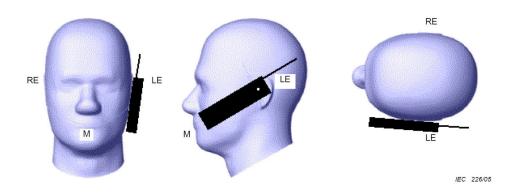
- (a) The vertical center line passes through two points on the front side of the handset the midpoint of the width w t of the handset at the level of the acoustic output, and the midpoint of the width w b of the bottom of the handset.
- (b) The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- (c) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.





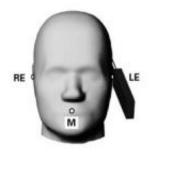
6.1.2 Cheek Position

- (a) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- (b) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.

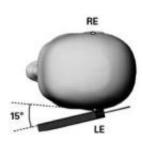


6.1.3 Tilted Position

- (a) To position the device in the "cheek" position described above.
- (b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.



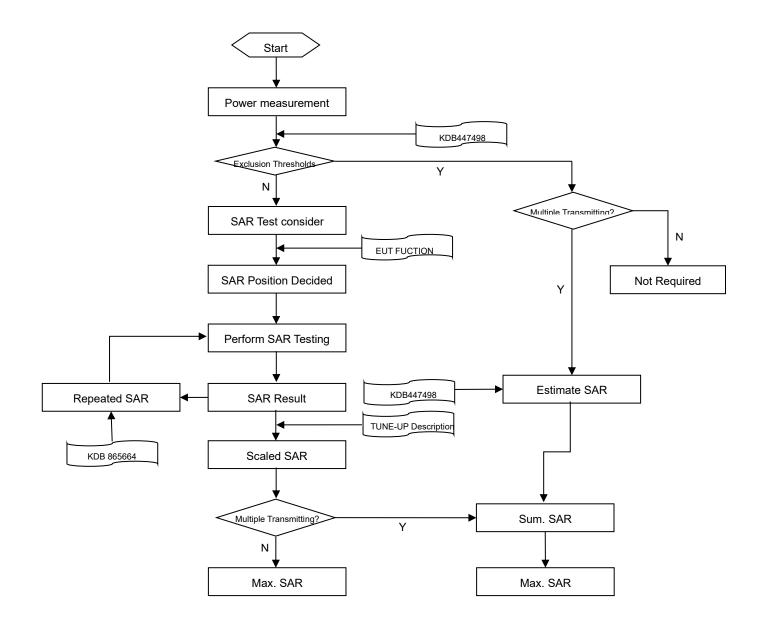






7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram





7.2 SAR Scan General Requirement

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Boththe probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1 g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

			≤3GHz	>3GHz	
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm ½·δ·ln(2)±0.5 mm		
Maximum probe angle from	-	s to phantom surface	30°±1°	20°±1°	
			≤ 2 GHz: ≤ 15 mm 3–4 GHz: ≤ 12 mm 2 – 3 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 ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.		
Maximum zoom scan spa	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*	
	uniform grid: Δz Zoom (n)		≤ 5 mm	3–4 GHz: ≤ 4 mm 4–5 GHz: ≤ 3 mm 5–6 GHz: ≤ 2 mm	
Maximum zoom scan spatial resolution, normal to phantom surface	esolution, o phantom	Δz 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	
cunace	grid	Δz Zoom (n>1): between subsequent points	≤ 1.5·Δz Zoom (n-1)		
Minimum zoom scan volume	X. V. Z		≥30 mm	3–4 GHz: ≥ 28 mm 4–5 GHz: ≥ 25 mm 5–6 GHz: ≥ 22 mm	

Note:

- 1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
- 2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

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7.3 Measurement Procedure

The following steps are used for each test position

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

7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SARdistribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.

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



8 CONDUCTED RF OUPUT POWER

8.1 Bluetooth

		Left ea	r			
Mode	GFSK			π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	7.64	7.61	7.31	6.04	6.11	5.82
Tune-Up Limit (dBm)	9.00	9.00	9.00	7.00	7.00	7.00
SAR Test Require	Yes	Yes	Yes	No	No	No
Mode		8-DPSK		1		
Channel	0	39	78	1	1	1
Frequency (MHz)	2402	2441	2480	1	1	1
Average Power (dBm)	6.03	6.06	5.79	1	1	1
Tune-Up Limit (dBm)	7.00	7.00	7.00	1	1	1
SAR Test Require	No	No	No	1	1	/
Mode		BLE-1Mbps		BLE-2Mbps		
Channel	0	19	39	1	19	38
Frequency (MHz)	2402	2440	2480	2404	2440	2478
Average Power (dBm)	8.64	8.59	8.44	8.61	8.58	8.43
Tune-Up Limit (dBm)	9.00	9.00	9.00	9.00	9.00	9.00
SAR Test Require	Yes	Yes	Yes	No	No	No



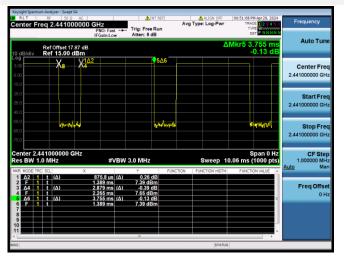
	Right ear					
Mode		GFSK		π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	8.11	8.11	7.82	6.17	6.31	6.15
Tune-Up Limit (dBm)	9.00	9.00	9.00	7.00	7.00	7.00
SAR Test Require	Yes	Yes	Yes	No	No	No
Mode		8-DPSK		/		
Channel	0	39	78	1	1	1
Frequency (MHz)	2402	2441	2480	1	1	1
Average Power (dBm)	6.17	6.33	6.10	1	1	1
Tune-Up Limit (dBm)	7.00	7.00	7.00	1	1	1
SAR Test Require	No	No	No	1	1	1
Mode		BLE-1Mbps			BLE-2Mbps	
Channel	0	19	39	1	19	38
Frequency (MHz)	2402	2440	2480	2404	2440	2478
Average Power (dBm)	8.88	8.82	8.58	8.84	8.83	8.57
Tune-Up Limit (dBm)	9.00	9.00	9.00	9.00	9.00	9.00
SAR Test Require	Yes	Yes	Yes	No	No	No



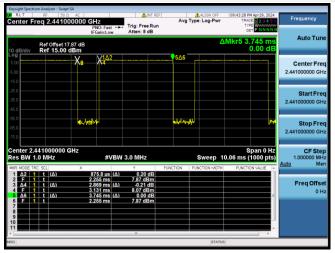
Note: The Left ear Bluetooth DH5 duty cycle is 76.67%, BLE-1M duty cycle is 60.45% and Right ear Bluetooth DH5 duty cycle is 76.61%, BLE-1M duty cycle is 60.37% as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

Duty Cycle

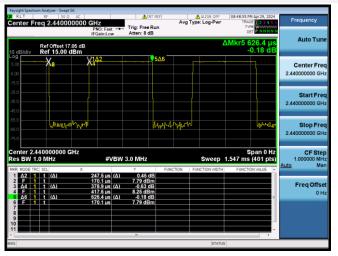
GFSK-Left ear



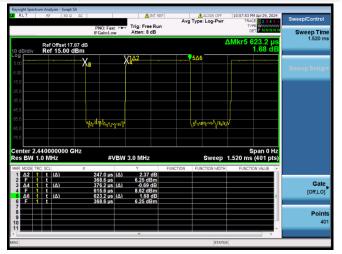
GFSK-Right ear



BLE-1M-Left ear



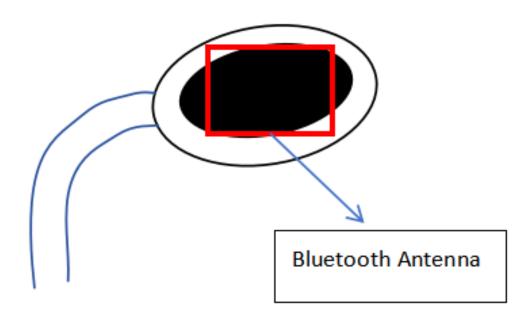
BLE-1M-Right ear





9 TEST EXCLUSION CONSIDERATION

9.1 Antenna location sketch



Antenna	Support Bands
Antenna BT	Bluetooth



9.2 SAR Test Exclusion Consideration Table

According with FCC KDB 447498 D04, Appendix B, The SAR-based exemption formula applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). The following table shows the power threshold from 5mm to 50mm.

Power Thresholds (mW)						
Fraguanay	At separation					
Frequency	distance of					
(MHz)	≤5 mm	10 mm	15 mm	20 mm	25 mm	
300	39 mW	65 mW	88 mW	110 mW	129 mW	
450	22 mW	44 mW	67 mW	89 mW	112 mW	
835	9 mW	25 mW	44 mW	66 mW	90 mW	
1900	3 mW	12 mW	26 mW	44 mW	66 mW	
2450	3 mW	10 mW	22 mW	38 mW	59 mW	
3600	2 mW	8 mW	18 mW	32 mW	49 mW	
5800	1 mW	6 mW	14 mW	25 mW	40 mW	
Fraguanay	At separation					
Frequency	distance of					
(MHz)	30 mm	35 mm	40 mm	45 mm	50 mm	
300	148 mW	166 mW	184 mW	201 mW	217 mW	
450	135 mW	158 mW	180 mW	203 mW	226 mW	
835	116 mW	145 mW	175 mW	207 mW	240 mW	
1900	92 mW	122 mW	157 mW	195 mW	236 mW	
2450	83 mW	111 mW	143 mW	179 mW	219 mW	
3600	71 mW	96 mW	125 mW	158 mW	195 mW	
5800	58 mW	80 mW	106 mW	136 mW	169 mW	



9.2.1 SAR Test Consideration

This host is Wireless Earphones, under normal use the RF exposure scenarios are shown in the table below:

RF exposure Position	RF exposure scenarios
Front Side	Body
Back Side	Body
Left Edge	Body
Right Edge	Body
Top Edge	Body

Left Ear Body RF exposure scenarios

Test Position Configurations	Mode	Bluetooth
Calculated	Frequency (MHz)	2480
	Distance to User (mm)	5.00
	Max. Peak Power (dBm)	9.00
Front Side	Max. Peak Power (mW)	7.94
	Exclusion Threshold (mW)	2.72
	SAR Test Required	Yes
	Distance to User (mm)	5.00
	Max. Peak Power (dBm)	9.00
Back Side	Max. Peak Power (mW)	7.94
	Exclusion Threshold (mW)	2.72
	SAR Test Required	Yes
	Distance to User (mm)	5.00
	Max. Peak Power (dBm)	9.00
Left Edge	Max. Peak Power (mW)	7.94
	Exclusion Threshold (mW)	2.72
	SAR Test Required	Yes
	Distance to User (mm)	5.00
	Max. Peak Power (dBm)	9.00
Right Edge	Max. Peak Power (mW)	7.94
	Exclusion Threshold (mW)	2.72
	SAR Test Required	Yes
	Distance to User (mm)	5.00
	Max. Peak Power (dBm)	9.00
Top Edge	Max. Peak Power (mW)	7.94
	Exclusion Threshold (mW)	2.72
	SAR Test Required	Yes



Right Ear Body RF exposure scenarios

Test Position Configurations	Mode	Bluetooth		
Calculated	Frequency (MHz)	2480		
	Distance to User (mm)	5.00		
	Max. Peak Power (dBm)	9.00		
Front Side	Max. Peak Power (mW)	7.94		
	Exclusion Threshold (mW)	2.72		
	SAR Test Required	Yes		
	Distance to User (mm)	5.00		
	Max. Peak Power (dBm)	9.00		
Back Side	Max. Peak Power (mW)	7.94		
	Exclusion Threshold (mW)	2.72		
	SAR Test Required	Yes		
	Distance to User (mm)	5.00		
	Max. Peak Power (dBm)	9.00		
Left Edge	Max. Peak Power (mW)	7.94		
	Exclusion Threshold (mW)	2.72		
	SAR Test Required	Yes		
	Distance to User (mm)	5.00		
	Max. Peak Power (dBm)	9.00		
Right Edge	Max. Peak Power (mW)	7.94		
	Exclusion Threshold (mW)	2.72		
	SAR Test Required	Yes		
	Distance to User (mm)	5.00		
	Max. Peak Power (dBm)	9.00		
Top Edge	Max. Peak Power (mW)	7.94		
	Exclusion Threshold (mW)	2.72		
	SAR Test Required	Yes		



Note:

- Maximum power is the source-based time-average power and represents the maximum RF output power including tuneup tolerance among production units
- 2. Per KDB 447498 D04, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
- 3. Per KDB 447498 D04, standalone SAR test exclusion threshold is applied; If the distance of the antenna to the user is < 5mm, 5mm is used to determine SAR exclusion threshold
- 4. Per KDB 447498 D04, for separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive), the threshold Pth (mW) is given by Following:

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

where

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

- a. f(GHz) is the RF channel transmit frequency in GHz
- b. d is the separation distance (cm), The result is rounded to one decimal place for comparison
- c. ERP_{20cm} are determined by:

$$ERP_{20cm}(mW) = f(x) = \begin{cases} 2040f & 0.3GHz \le f < 1.5GHz \\ 3060 & 1.5GHz \le f \le 6GHz \end{cases}$$

5. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion.8. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate

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10 TEST RESULT

10.1 Bluetooth

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No.
Headset-Left	Front Side	0	0	2402	0.05	0.422	7.04	0.00	4 200	70.07	4 204	0.240	/
Bluetooth GFSK-DH5	Back Side	0	0	2402 2402	0.05 -0.02	0.122 0.446	7.64	9.00	1.368	76.67 76.67	1.304	0.218 0.796	1#
	Left Edge	0	0	2402	0.12	0.446	7.64	9.00	1.368	76.67	1.304	0.796	/
	Right Edge	0	0	2402	-0.12	0.016	7.64	9.00	1.368	76.67	1.304	0.032	/
	Top Edge	0	0	2402	0.05	0.021	7.64	9.00	1.368	76.67	1.304	0.037	/
	Back Side	0	39	2441	-0.06	0.412	7.61	9.00	1.377	76.67	1.304	0.740	/
	Back Side	0	78	2480	0.12	0.403	7.31	9.00	1.476	76.67	1.304	0.776	/
Bluetooth	Front Side	0	0	2402	-0.13	0.105	8.64	9.00	1.086	60.49	1.653	0.188	/
	Back Side	0	0	2402	-0.15	0.370	8.64	9.00	1.086	60.49	1.653	0.664	3#
	Left Edge	0	0	2402	-0.03	0.015	8.64	9.00	1.086	60.49	1.653	0.027	/
	Right Edge	0	0	2402	0.06	0.019	8.64	9.00	1.086	60.49	1.653	0.034	/
BLE-1M	Top Edge	0	0	2402	0.06	0.035	8.64	9.00	1.086	60.49	1.653	0.063	/
	Back Side	0	19	2440	0.05	0.338	8.59	9.00	1.099	60.49	1.653	0.614	/
	Back Side	0	39	2480	-0.06	0.339	8.44	9.00	1.138	60.49	1.653	0.638	/
Headset-Right	t ear				Į.			I.		l	1	l.	Į.
	Front Side	0	39	2441	0.11	0.134	8.11	9.00	1.227	76.61	1.305	0.215	1
	Back Side	0	39	2441	0.00	0.557	8.11	9.00	1.227	76.61	1.305	0.892	2#
Bluetooth GFSK-DH5	Left Edge	0	39	2441	0.16	0.026	8.11	9.00	1.227	76.61	1.305	0.042	1
	Right Edge	0	39	2441	0.15	0.021	8.11	9.00	1.227	76.61	1.305	0.034	1
	Top Edge	0	39	2441	-0.08	0.037	8.11	9.00	1.227	76.61	1.305	0.059	1
	Back Side	0	0	2402	0.09	0.533	8.11	9.00	1.227	76.61	1.305	0.853	1
	Back Side	0	78	2480	0.05	0.504	7.82	9.00	1.312	76.61	1.305	0.863	1
Bluetooth BLE-1M	Front Side	0	0	2402	0.06	0.115	8.88	9.00	1.028	60.37	1.656	0.196	1
	Back Side	0	0	2402	0.06	0.479	8.88	9.00	1.028	60.37	1.656	0.815	1
	Left Edge	0	0	2402	0.07	0.021	8.88	9.00	1.028	60.37	1.656	0.036	1
	Right Edge	0	0	2402	-0.12	0.018	8.88	9.00	1.028	60.37	1.656	0.031	1
	Top Edge	0	0	2402	-0.03	0.032	8.88	9.00	1.028	60.37	1.656	0.054	1
	Back Side	0	19	2440	0.12	0.464	8.82	9.00	1.042	60.37	1.656	0.801	1
	Back Side	0	39	2480	0.08	0.449	8.58	9.00	1.102	60.37	1.656	0.819	4#



11 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are ≤ 1.45 W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is ≤ 1.10 , the highest SAR configuration for either head or body tissue-equivalent medium may be used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

- 1. When the highest measured SAR is < 0.80 W/kg, repeated measurement is not required.
- 2. When the highest measured SAR is >= 0.80 W/kg, repeat that measurement once.
- 3. If the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20, or when the original or repeated measurement is >= 1.45 W/kg, perform a second repeated measurement.
- 4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20, and the original, first or second repeated measurement is >= 1.5 W/kg, perform a third repeated measurement.

Note: For 1g SAR, the highest measured 1g SAR is 0.56 < 0.80 W/kg, repeated measurement is not required.

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12 SIMULTANEOUS TRANSMISSION

Note: The product has only one antenna for Bluetooth, so simultaneous transmission evaluation is not required in this report.



13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY6	16.0.0.116	N/A	N/A
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2021/05/19	2024/05/19
E-Field Probe	Speag	EX3DV4	SN: 7607	2023/07/04	2024/07/04
Data Acquisition Electronicsr	Speag	DAE4	SN: 1710	2024/01/03	2025/01/03
Signal Generator	R&S	SMB100A	177746	2024/04/24	2025/04/24
Power Meter	R&S	NRVD-B2	835843/014	2023/09/05	2024/09/05
Power Sensor	R&S	NRV-Z4	100381	2023/09/05	2024/09/05
Power Sensor	R&S	NRV-Z2	100211	2023/09/05	2024/09/05
Network Analyzer	Agilent	E5071C	MY46103472	2023/11/14	2024/11/14
Thermometer	Elitech	RC-4	EF5238001628	2023/10/09	2024/10/09
Thermometer	Elitech	RC-4HC	EF7239002652	2023/11/17	2024/11/17
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 1859	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

Note: For dipole antennas, BALUN has adopted 3 years as calibration intervals, and on annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

- 1. There is no physical damage on the dipole;
- 2. System validation with specific dipole is within 10% of calibrated value;
- 3. Return-loss in within 20% of calibrated measurement.
- 4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.



ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using a DAK3.5 Dielectric Probe Kit.

Date	Liquid Type	Fre. (MHz)	Temp.	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ε)	Target Conductivity (σ) (S/m)	Target Permittivity (ε)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2024.05.10	Head	2402	21.2	1.75	40.02	1.76	39.29	-0.57	1.86
2024.05.10	Head	2440	21.2	1.79	39.77	1.79	39.22	0.00	1.40
2024.05.10	Head	2441	21.2	1.79	39.76	1.79	39.22	0.00	1.38
2024.05.10	Head	2450	21.2	1.80	39.68	1.80	39.20	0.00	1.22
2024.05.10	Head	2480	21.2	1.84	39.46	1.83	39.16	0.55	0.77
Note: The tole	Note: The tolerance limit of Conductivity and Permittivity is+ 5%								

Note: The tolerance limit of Conductivity and Permittivity is± 5%.

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ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by SPEAG, the validation data should be within its specification of 10 %(for 1 g).

Data	Liquid	Freq.	Power	Measured	Normalized	Dipole SAR	Tolerance		
Date	Туре	(MHz)	(mW)	SAR (W/kg)	SAR (W/kg)	(W/kg)	(%)		
2024.05.10	Head	2450	100	5.36	53.60	53.00	1.13		
Note: The tolerar	Note: The tolerance limit of System validation ±10%.								



System Performance Check Data (2450MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type	
D2450V2, SPEAG	10.0 x 10.0 x 3.0	Dipole	

Exposure Conditions

Phanto	Position	Band	Group	Frequenc	Conversio	TSL	TSL	Ambient	Liquid
m	, Test		,	y [MHz],	n Factor	Conductivit	Permittivit	Temperatur	Temperatur
Section,	Distanc		UID	Channel		y [S/m]	у	е	е
TSL	e [mm]			Number				[°C]	[°C]
TSL Flat,	e [mm]	D245	CW,	Number 2450.0,	7.47	1.80	39.7	[℃] 22.3	[°C] 21.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date	
Twin-SAM V5.0 (30deg	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03	
probe tilt) - 1859				

Scan Setup Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-05-10	2024-05-10
[mm]			psSAR1g	5.30	5.36
Grid Steps	10.0 x 10.0	5.0 x 5.0 x 1.5	[W/kg]		
[mm]			psSAR10g	2.41	2.47
Sensor Surface	3.0	1.4	[W/kg]		
[mm]			Power Drift	-0.02	0.11
Graded Grid	Yes	Yes	[dB]		
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor		
Surface	VMS + 6p	VMS + 6p	[dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		80.6
			Dist 3dB Peak		8.9
			[mm]		

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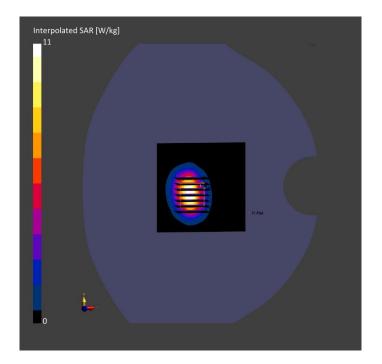
E-mail: qc@baluntek.com

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ANNEX C TEST DATA

Meas.1 Body Plane with Back Side 0mm on 0 Channel in Bluetooth mode with Left ear Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
S70	30.0 x 15.0 x 10.0	Wireless Earphones

Exposure Conditions

Phanto	Position	Ban	Group,	Frequenc	Conversio	TSL	TSL	Ambient	Liquid
m	, Test	d	UID	y [MHz],	n Factor	Conductivit	Permittivit	Temperatur	Temperatur
Section,	Distanc			Channel		y [S/m]	у	е	е
TSL	e [mm]			Number				[°C]	[°C]
Flat,	BACK,	ISM	Bluetooth	2402.0,	7.47	1.75	40.0	22.3	21.2
HSL	0.00	2.4	,	0					
		GHz	10032-						
		Band	CAA						

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date	
Twin-SAM V5.0 (30deg	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03	
probe tilt) - 1859				

Scan Setup Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	96.0 x 96.0	30.0 x 30.0 x 30.0	Date	2024-05-10	2024-05-10
[mm]			psSAR1g	0.412	0.446
Grid Steps	12.0 x 12.0	5.0 x 5.0 x 5.0	[W/kg]		
[mm]			psSAR10g	0.139	0.142
Sensor Surface	3.0	1.4	[W/kg]		
[mm]			Power Drift	-0.03	-0.02
Graded Grid	Yes	Yes	[dB]		
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor		
Surface	VMS + 6p	VMS + 6p	[dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		31.4
			Dist 3dB Peak		4.0
			[mm]		

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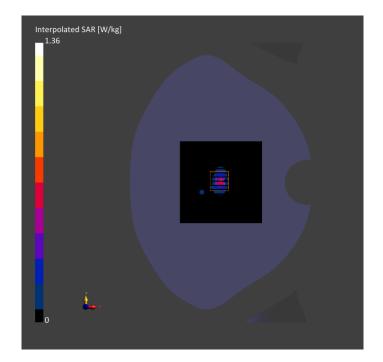
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Meas.2 Body Plane with Back Side 0mm on 39 Channel in Bluetooth mode with Right ear

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type	
S70	30.0 x 15.0 x 10.0	Wireless Earphones	

Exposure Conditions

Phanto	Position	Ban	Group,	Frequenc	Conversio	TSL	TSL	Ambient	Liquid
m	, Test	d	UID	y [MHz],	n Factor	Conductivit	Permittivit	Temperatur	Temperatur
Section,	Distanc			Channel		y [S/m]	у	е	е
TSL	e [mm]			Number				[°C]	[°C]
Flat,	BACK,	ISM	Bluetooth	2441.0,	7.47	1.79	39.8	22.3	21.2
HSL	0.00	2.4	,	39					
		GHz	10032-						
		Band	CAA						

Hardware Setup

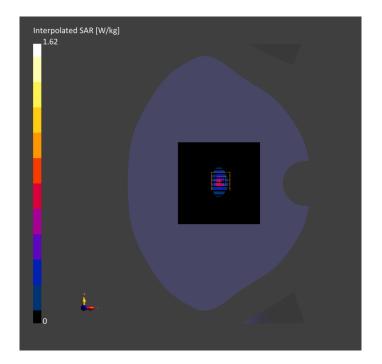
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03
probe tilt) - 1859			

Scan Setup

Measurement Results

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	96.0 x 96.0	30.0 x 30.0 x 30.0	Date	2024-05-10	2024-05-10
[mm]			psSAR1g	0.478	0.557
Grid Steps	12.0 x 12.0	5.0 x 5.0 x 5.0	[W/kg]		
[mm]			psSAR10g	0.164	0.173
Sensor Surface	3.0	1.4	[W/kg]		
[mm]			Power Drift	-0.15	0.00
Graded Grid	Yes	Yes	[dB]		
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor		
Surface	VMS + 6p	VMS + 6p	[dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		33.3
			Dist 3dB Peak		5.0
			[mm]		







Meas.3 Body Plane with Back Side 0mm on 0 Channel in Bluetooth BLE mode with Left ear Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type	
S70	30.0 x 15.0 x 10.0	Wireless Earphones	

Exposure Conditions

Phantom	Position,	Band	Group,	Frequency	Conversion	TSL	TSL	Ambient	Liquid
Section,	Test		UID	[MHz],	Factor	Conductivity	Permittivity	Temperature	Temperature
TSL	Distance			Channel		[S/m]		[°C]	[°C]
	[mm]			Number					
Flat,	BACK,	ISM	Bluetooth,	2402.0,	7.47	1.75	40.0	22.3	21.2
Flat, HSL	BACK, 0.00	ISM 2.4	Bluetooth, 10030-	2402.0, 0	7.47	1.75	40.0	22.3	21.2
•	,		,	,	7.47	1.75	40.0	22.3	21.2

Hardware Setup

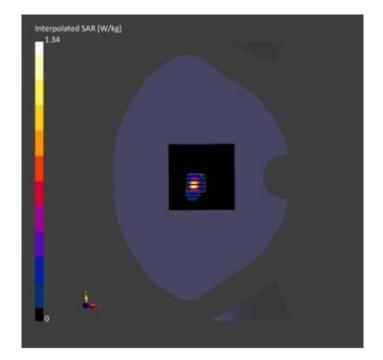
Phantom			TSL, Measured Da	te	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM	V5.0	(30deg	HBBL-600-10000	2024-05-10	EX3DV4 - SN7607, 2023-07-04	4 DAE4 Sn1710, 2024-01-03
probe tilt) -	1859					

Scan Setup

Measurement Results

		Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid	Extents	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-05-10	2024-05-10
[mm]				psSAR1g	0.361	0.370
Grid Ste	eps [mm]	10.0 x 10.0	5.0 x 5.0 x 5.0	[W/kg]		
Sensor	Surface	3.0	1.4	psSAR10g	0.111	0.108
[mm]				[W/kg]		
Graded	Grid	Yes	Yes	Power Drift	-0.03	-0.15
Grading	g Ratio	1.5	1.5	[dB]		
MAIA		N/A	N/A	Power Scaling	Disabled	Disabled
Surface	•	VMS + 6p	VMS + 6p	Scaling Factor		
Detection	on			[dB]		
Scan M	ethod	Measured	Measured	TSL Correction	No correction	No correction
				M2/M1 [%]		23.5
				Dist 3dB Peak		3.0
				[mm]		







Meas.4 Body Plane with Back Side 0mm on 39 Channel in Bluetooth BLE mode with Right ear Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type	
S70	30.0 x 15.0 x 10.0	Wireless Earphones	

Exposure Conditions

Phantom	Position,	Band	Group,	Frequency	Conversion	TSL	TSL	Ambient	Liquid
Section,	Test		UID	[MHz],	Factor	Conductivity	Permittivity	Temperature	Temperature
TSL	Distance			Channel		[S/m]		[°C]	[°C]
	[mm]			Number					
Flat,	BACK,	ISM	Bluetooth,	2480.0,	7.47	1.84	39.5	22.3	21.2
Flat, HSL	0.00	1SM 2.4	Bluetooth, 10030-	2480.0, 39	7.47	1.84	39.5	22.3	21.2
•	,		•	,	7.47	1.84	39.5	22.3	21.2

Hardware Setup

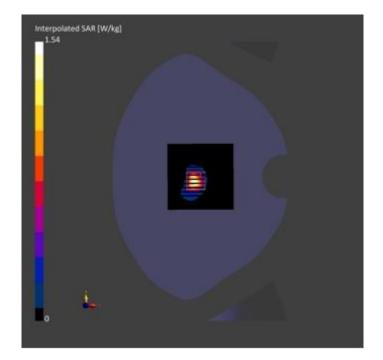
Phantom			TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM	V5.0	(30deg	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03
probe tilt) -	1859				

Scan Setup

Measurement Results

Coun Cotup			Mododi omone i	Courto	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-05-10	2024-05-10
[mm]			psSAR1g	0.355	0.449
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 5.0	[W/kg]		
Sensor Surface	3.0	1.4	psSAR10g	0.135	0.124
[mm]			[W/kg]		
Graded Grid	Yes	Yes	Power Drift	-0.02	0.08
Grading Ratio	1.5	1.5	[dB]		
MAIA	N/A	N/A	Power Scaling	Disabled	Disabled
Surface	VMS + 6p	VMS + 6p	Scaling Factor		
Detection			[dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		25.2
			Dist 3dB Peak		4.0
			[mm]		





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ANNEX D EUT EXTERNAL PHOTOS

Please refer the document "BL-SZ2441272-AW.pdf".

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document "BL-SZ2441272-AS.pdf".

ANNEX F CALIBRATION REPORT

Please refer the document "BL-SZ2441272-AC.pdf".

ANNEX G TUNE-UP PROCEDURE

Please refer the document "BL-SZ2441272-AT.pdf".

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