SAR EVALUATION REPORT

FCC 47 CFR § 2.1093
IEEE Std. 1528-2013
RSS-102 Issue 5
IEC/IEEE 62209-1528:2020

For
Remote Controller

FCC ID: 2AVIGBR0012
IC: 25780-2AVIGBR0012

FCC Model: ERF2*36H, ERF2*36H****
IC Model: ERF2C36H, ERF2C36H(0011)

Report Number: 4790781926-SAR-1

Issue Date: Mar. 21, 2023

Prepared for
Hisense Visual Technology Co., Ltd.
No. 218, Qianwangang Road, Economy & Technology Development Zone, Qingdao, China

Prepared by
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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	Mar. 21, 2023	Initial Issue	\

1. The Measurement result for the sample received is<Pass> according to < IEEE Std. 1528-2013> < RSS-102 Issue 5> when <Accuracy Method> decision rule is applied.
2. This report is only published to and used by the applicant, and it is not for evidence purpose in China.

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1. Attestation of Test Results

Applicant Name	Hisense Visual Technology Co., Ltd.	
Address	No. 218, Qianwangang Road, Economy & Technology Development Zone, Qingdao, China	
Manufacturer	Hisense Visual Technology Co., Ltd.	
Address	No. 218, Qianwangang Road, Economy & Technology Development Zone, Qingdao, China	
EUT Name	Remote Control	
FCC Model	ERF2*36H, ERF2*36H******	
Model Difference	the main difference of ERF2*36H and ERF2*36H****** applied for this application are the equipment color, Key definition, sales area and salesman, which do not affect the material, electromagnetic compatibility and safety electrical performance of the product the "*" is one or more any alphanumeric character or blank, representing different parameters and functions	
ISED Model	ERF2C36H, ERF2C36H(0011)	
Model Difference	the main difference of ERF2C36H and ERF2C36H(0011) models applied for this application are the equipment color, Key definition, sales area and salesman, which do not affect the material, electromagnetic compatibility and safety electrical performance of the product the "*" is one or more any alphanumeric character or blank, representing different parameters and functions	
Sample Status	Normal	
Sample Received Date	Mar 11, 2023	
Date of Tested	Mar 15, 2023	
Applicable Standards	FCC 47 CFR § 2.1093 IEEE Std. 1528-2013 KDB publication RSS-102 Issue 5 IEC/IEEE 62209-1528:2020	
SAR Limits (W/Kg)		
Exposure Category	Peak spatial-average (1g of tissue)	Extremities (hands, wrists, ankles, etc.) (10g of tissue)
General population / Uncontrolled exposure	1.6	4
The Highest Reported SAR (W/kg)		
RF Exposure Conditions	**Equipment Class**	
	Bluetooth	
Body(1-g)	0.023	
Simultaneous Transmission	/	
Test Results	Pass	

Prepared By:	Reviewed By:	Approved By:
Burt Hu Laboratory Engineer	Denny Huang Senior Project Engineer	Stephen Guo Laboratory Manager

2. Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with IEEE Std.1528-2013, RSS-102 Issue 5, the following FCC Published RF exposure KDB procedures:

- 447498 D01 General RF Exposure Guidance for Equipment Authorization DR05-44791
- 690783 D01 SAR Listings on Grants v01r03
- 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- 865664 D02 RF Exposure Reporting v01r02

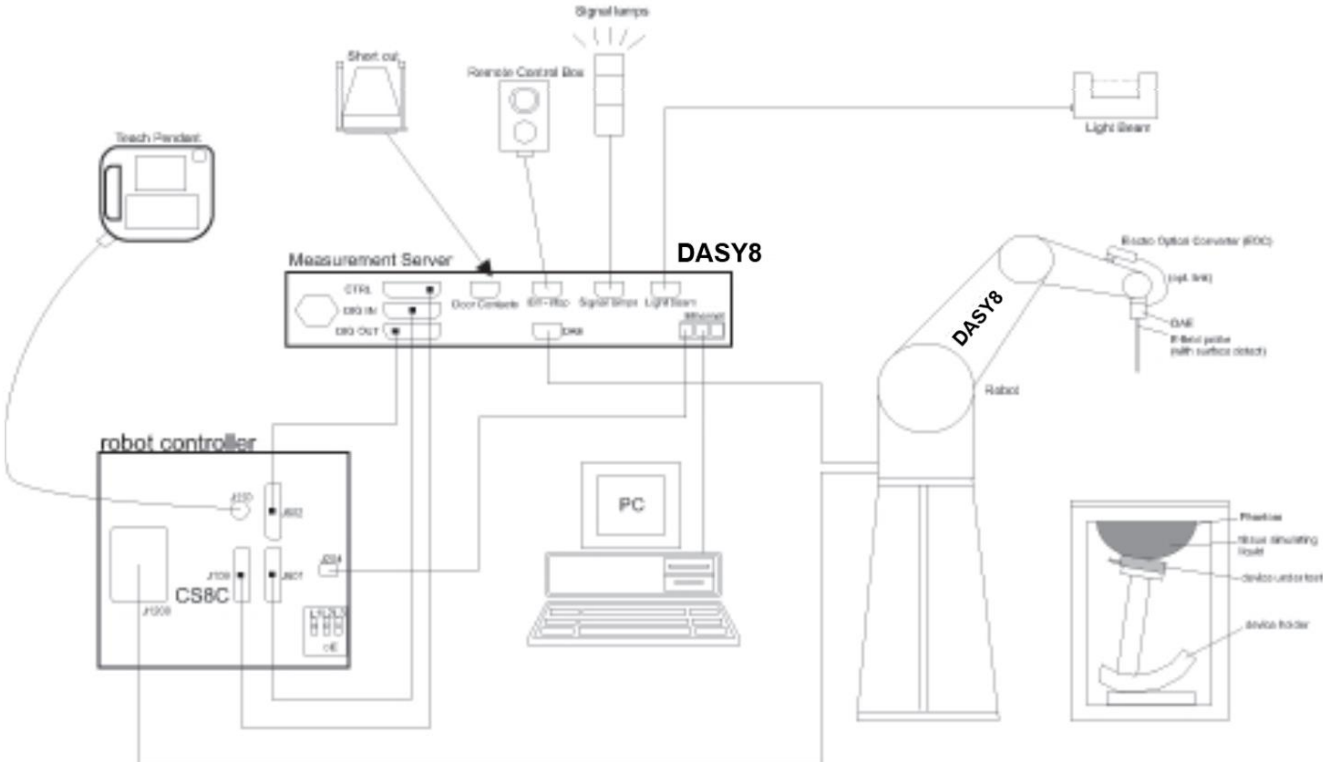
3. Facilities and Accreditation

Test Location	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Address	Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch has been assessed and proved to be in compliance with A2LA. **FCC (FCC Recognized No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules **IC(Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320. **VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011
Description	All measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

4. SAR Measurement System & Test Equipment

4.1. SAR Measurement System

The DASY8 system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (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.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win10 and the DASY8 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

4.2. SAR Scan Procedures

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. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. The minimum distance of probe sensors to surface is 2.1 mm. 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 Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 mm ± 1 mm	$\frac{1}{2}\cdot\delta\cdot\ln(2)$ 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 1 g and 10 g 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 Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

<table>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}</td><td>≤ 2 GHz: ≤ 8 mm
2 – 3 GHz: ≤ 5 mm*</td><td>3 – 4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2">uniform grid: $\Delta z_{Zoom}(n)$</td><td>≤ 5 mm</td><td>3 – 4 GHz: ≤ 4 mm
4 – 5 GHz: ≤ 3 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="2">graded grid</td><td>$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface</td><td>≤ 4 mm</td><td>3 – 4 GHz: ≤ 3 mm
4 – 5 GHz: ≤ 2.5 mm
5 – 6 GHz: ≤ 2 mm</td></tr>
<tr><td>$\Delta z_{Zoom}(n>1)$: between subsequent points</td><td colspan="2">$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$ mm</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">x, y, z</td><td>≥ 30 mm</td><td>3 – 4 GHz: ≥ 28 mm
4 – 5 GHz: ≥ 25 mm
5 – 6 GHz: ≥ 22 mm</td></tr>
</table>

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.

Step 5: Z-Scan (FCC only)

The Z Scan measures points along a vertical straight line. The line runs along the Z-axis of a one-dimensional grid. In order to get a reasonable extrapolation the extrapolated distance should not be larger than the step size in Z-direction.

4.3. Test Equipment

The measuring equipment used to perform the tests documented in this report has been calibrated in accordance with the manufacturers' recommendations, and is traceable to recognized national standards.

Name of equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
ENA Network Analyzer	Keysight	E5080A	MY55100583	2023.10.16
Dielectric Probe kit	SPEAG	SM DAK 040 SA	1155	2025.02.27
DC power supply	Keysight	E36103A	MY55350020	2023.10.16
Signal Generator	Rohde & Schwarz	SME06	837633\001	2023.08.14
BI-Directional Coupler	KRYTAR	1850	54733	2023.10.16
Peak and Average Power Sensor	Keysight	E9325A	MY62220002	2023.10.25
Peak and Average Power Sensor	Keysight	E9325A	MY62220003	2023.10.25
Dual Channel PK Power Meter	Keysight	N1912A	MY55416024	2023.10.16
Amplifier	CORAD TECHNOLOGY LTD	AMF-4D-00400600-50-30P	1983561	NCR
Dosimetric E-Field Probe	SPEAG	EX3DV4	7733	2023.08.01
Data Acquisition Electronic	SPEAG	DAE4	1739	2023.07.28
Dipole Kit 2450 MHz	SPEAG	D2450V2	977	2024.12.16
Software	SPEAG	DASY8	N/A	NCR
ELI Phantom	SPEAG	ELI V8.0	2178	NCR
Thermometer	/	GX-138	150709653	2023.10.21
Thermometer	VICTOR	ITHX-SD-5	18470005	2023.10.21

Note:
1) Per KDB865664D01 v01r04 requirements for dipole calibration, the test laboratory has adopted three-year extended calibration interval. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.
a) There is no physical damage on the dipole;
b) System check with specific dipole is within 10% of calibrated value;
c) The most recent return-loss result, measured at least annually, deviates by no more than 20% from the previous measurement.
d) The most recent measurement of the real or imaginary parts of the impedance, measured at least annually is within 5Ω from the previous measurement.
2) Network analyzer probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.

5. Measurement Uncertainty

5.1. Uncertainty budget list (30MHz to 3GHz).

Uncertainty component	Tol. (±%)	Prob. Dist.	Div.	C_i (1g)	C_i (10g)	U_i, 1g (±%)	U_i, 10g (±%)
Measurement system							
Probe Calibration	6.1	N	1	1	1	6.1	6.1
Axial Isotropy	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	1.9	1.9
Hemispherical Isotropy	9.6	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	3.9	3.9
Boundary Effects	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Linearity	4.7	R	$\sqrt{3}$	1	1	2.7	2.7
System Detection Limits	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Modulation Response[m]	2.4	R	$\sqrt{3}$	1	1	1.4	1.4
Readout Electronics	0.3	N	1	1	1	0.3	0.3
Response Time	0.8	R	$\sqrt{3}$	1	1	0.5	0.5
Integration Time	2.6	R	$\sqrt{3}$	1	1	1.5	1.5
RF Ambient Noise	3.0	R	$\sqrt{3}$	1	1	1.7	1.7
RF Ambient Reflections	3.0	R	$\sqrt{3}$	1	1	1.7	1.7
Probe Positioner	0.4	R	$\sqrt{3}$	1	1	0.2	0.2
Probe Positioning	2.9	R	$\sqrt{3}$	1	1	1.7	1.7
Max. SAR Eval.	2.0	R	$\sqrt{3}$	1	1	1.2	1.2
Test sample related							
Device Positioning	2.9	N	1	1	1	2.9	2.9
Device Holder	3.6	N	1	1	1	3.6	3.6
Power Drift	5.0	R	$\sqrt{3}$	1	1	2.9	2.9
Power Scaling	0	R	$\sqrt{3}$	1	1		
Phantom and set-up							
Phantom Uncertainty	6.1	R	$\sqrt{3}$	1	1	3.5	3.5
SAR correction	1.9	R	$\sqrt{3}$	1	0.84	1.1	0.9
Liquid Conductivity (mea.)	2.5	R	$\sqrt{3}$	0.78	0.71	1.1	1.0
Liquid Permittivity (mea.)	2.5	R	$\sqrt{3}$	0.26	0.26	0.4	0.4
Temp. unc. - Conductivity	3.4	R	$\sqrt{3}$	0.23	0.26	0.5	0.5
Temp. unc. - Permittivity	0.4	R	$\sqrt{3}$	0.78	0.71	0.2	0.2
Combined standard uncertainty						10.58	10.54
Expanded uncertainty (95% confidence interval) k=2						21.27	21.20

5.2. Uncertainty budget list (3GHz to 6GHz).

Uncertainty component	Tol. (±%)	Prob. Dist.	Div.	C_i (1g)	C_i (10g)	U_i, 1g (±%)	U_i, 10g (±%)
Measurement system							
Probe Calibration	6.65	N	1	1	1	6.65	6.65
Axial Isotropy	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	1.9	1.9
Hemispherical Isotropy	9.6	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	3.9	3.9
Boundary Effects	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Linearity	4.7	R	$\sqrt{3}$	1	1	2.7	2.7
System Detection Limits	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
Modulation Response	2.4	R	$\sqrt{3}$	1	1	1.4	1.4
Readout Electronics	0.3	N	1	1	1	0.3	0.3
Response Time	0.8	R	$\sqrt{3}$	1	1	0.5	0.5
Integration Time	2.6	R	$\sqrt{3}$	1	1	1.5	1.5
RF Ambient Noise	3.0	R	$\sqrt{3}$	1	1	1.7	1.7
RF Ambient Reflections	3.0	R	$\sqrt{3}$	1	1	1.7	1.7
Probe Positioner	0.4	R	$\sqrt{3}$	1	1	0.2	0.2
Probe Positioning	6.7	R	$\sqrt{3}$	1	1	3.9	3.9
Max. SAR Eval.	4.0	R	$\sqrt{3}$	1	1	2.3	2.3
Test sample related							
Device Positioning	2.9	N	1	1	1	2.9	2.9
Device Holder	3.6	N	1	1	1	3.6	3.6
Power Drift	5.0	R	$\sqrt{3}$	1	1	2.9	2.9
Power Scaling	0	R	$\sqrt{3}$	1	1	0.0	0.0
Phantom and set-up							
Phantom Uncertainty	6.1	R	$\sqrt{3}$	1	1	3.5	3.5
SAR correction	1.9	R	$\sqrt{3}$	1	0.84	1.1	0.9
Liquid Conductivity (mea.)	2.5	R	$\sqrt{3}$	0.78	0.71	1.1	1.0
Liquid Permittivity (mea.)	2.5	R	$\sqrt{3}$	0.26	0.26	0.4	0.4
Temp. unc. - Conductivity	3.4	R	$\sqrt{3}$	0.23	0.26	0.5	0.5
Temp. unc. - Permittivity	0.4	R	$\sqrt{3}$	0.78	0.71	0.2	0.2
Combined standard uncertainty						11.62	11.58
Expanded uncertainty (95% confidence interval) k=2						23.35	23.28

6. Device Under Test (DUT) Information

6.1. DUT Description

EUT is a remote control with BLE 1M 2.4GHz wireless technology	
Dimension	Overall (Length x Width x Height): 210.2 mm x 45mm x 20.1 mm
Accessory	None

6.2. Wireless Technology

Wireless technology	Frequency band
BLE	2.4 GHz

6.3. Antenna Gain

Antenna type	Band	Gain(dBi)
PCB	2.4 GHz	-0.28

7. Conducted Output Power Measurement and tune-up tolerance

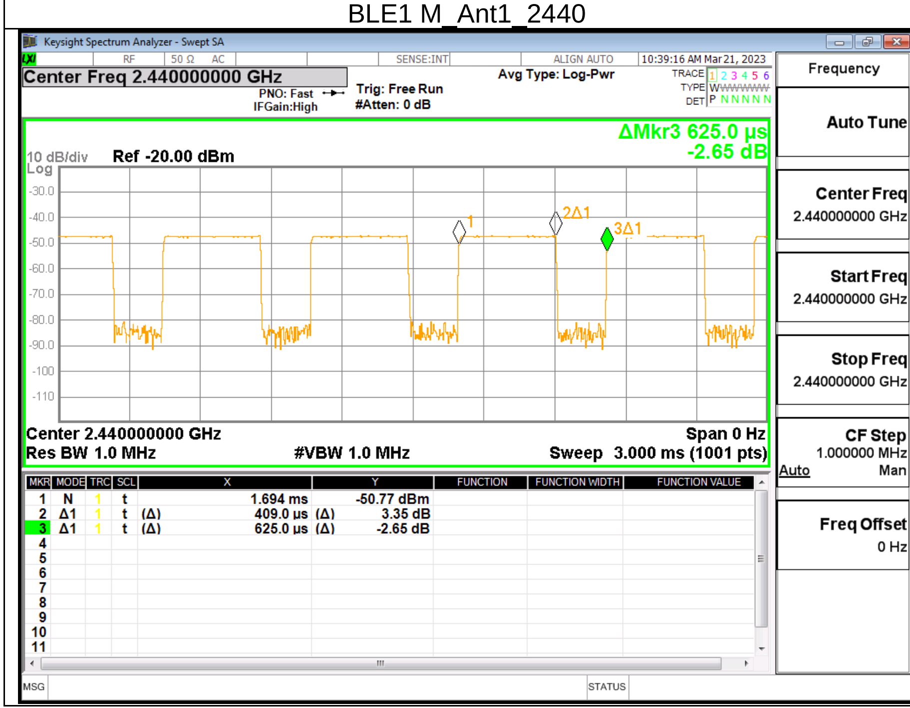
7.1. Power measurement result Bluetooth

Test Mode	Channel	Average Conducted Power (dBm)	Tune-up(dBm)	Duty Cycle (%)
BLE 1M	2402	4.65	5.0	65.44
	2440	4.93		
	2480	4.94		

7.2. Duty cycle

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)
BLE 1M	0.409	0.625	0.6544	65.44

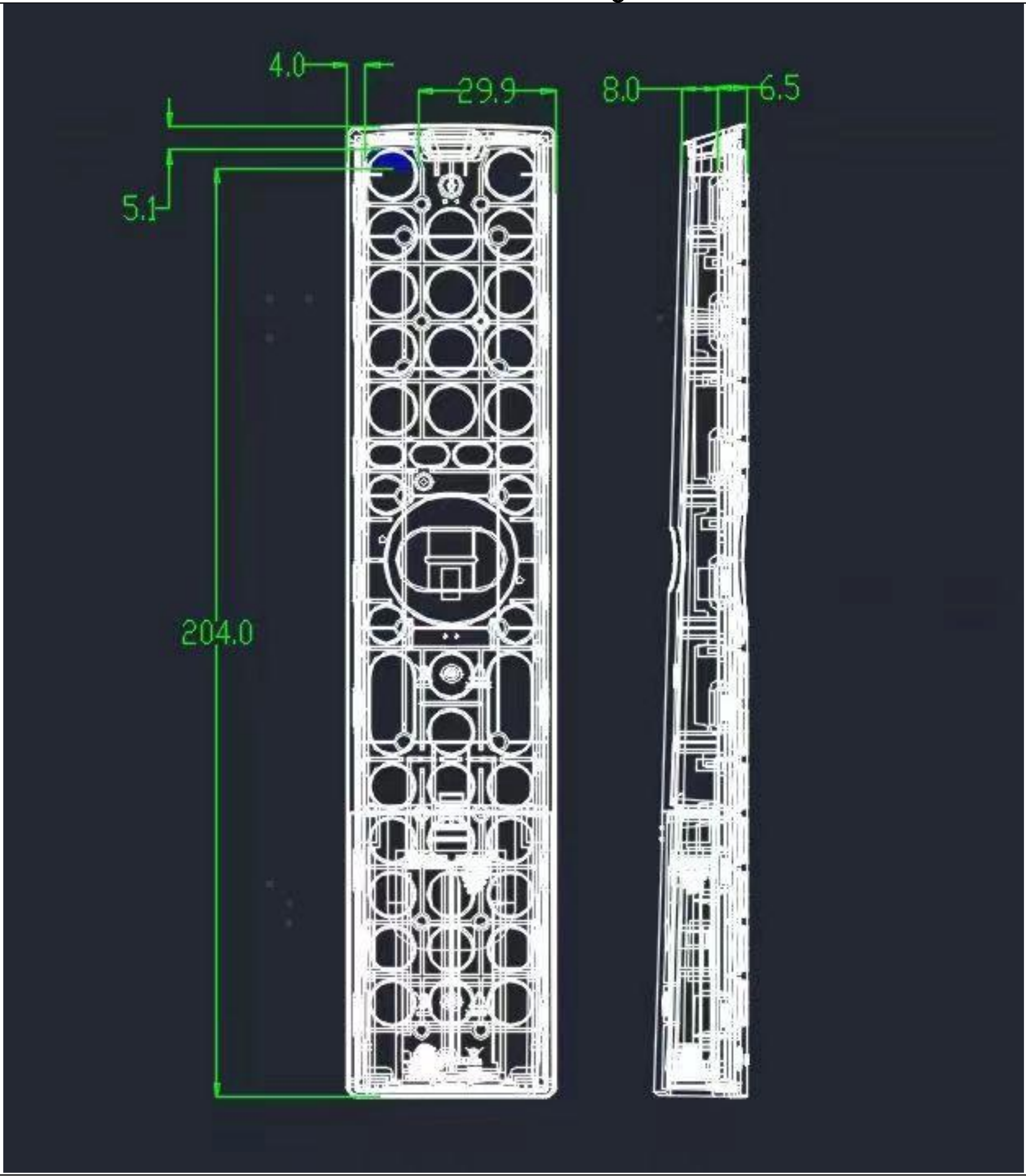
BLE1 M_Ant1_2440



8. RF Exposure Conditions

Refer to the diagram inEdge the device which attached below for the specific details of the antenna-to-edges distances. As per KDB 941225 D06, when the antenna to-edge-distance is greater than 2.5 cm, SAR evaluation is not required for the corresponding position.

Antenna location diagram



	Test Position	antenna to-edge-distance	Test required
Ant	Front Edge	<25mm	Yes
	Back Edge	<25mm	Yes
	Left Edge	<25mm	Yes
	Right Edge	>25mm	No
	Top Edge	<25mm	Yes
	Bottom Edge	>25mm	No

9. Dielectric Property Measurements & System Check

9.1. Dielectric Property Measurements

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within ± 2°C 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.
Tissue dielectric parameters were measured at the low, middle and high frequency of each operating frequency range of the test device.

Tissue Dielectric Parameters

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

Target Frequency (MHz)	Head		Body	
	ε_r	σ (S/m)	ε_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5000	36.2	4.45	49.3	5.07
5100	36.1	4.55	49.1	5.18
5200	36.0	4.66	49.0	5.30
5300	35.9	4.76	48.9	5.42
5400	35.8	4.86	48.7	5.53
5500	35.6	4.96	48.6	5.65
5600	35.5	5.07	48.5	5.77
5700	35.4	5.17	48.3	5.88
5800	35.3	5.27	48.2	6.00

IEEE Std 1528-2013
Refer to Table 3 within the IEEE Std 1528-2013
Dielectric Property Measurements Results:

Liquid	Freq.	Liquid Parameters				Delta(%)		Limit (%)	Temp. (℃)	Test Date
		Measured		Target						
		ϵ_r	σ	ϵ_r	σ	ϵ_r	σ			
Head 2450	2360	40.00	1.65	39.36	1.72	1.63	-4.07	±5	22.5	2023.3.15
	2402	39.70	1.71	39.29	1.76	1.04	-2.84	±5		
	2440	39.90	1.76	39.22	1.79	1.73	-1.68	±5		
	2450	39.00	1.76	39.20	1.80	-0.51	-2.22	±5		
	2480	39.70	1.78	39.16	1.83	1.38	-2.73	±5		
	2540	39.40	1.87	39.09	1.90	0.79	-1.58	±5		

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 conEdgered 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 Edge of the phantom). The standard measuring distance was 10mm (above 1GHZ) and 15mm (below 1GHz) from dipole center to the simulating liquid surface.
- For area scan, standard grid spacing for head measurements is 15 mm in x- and y- dimension(≤2GHz), 12 mm in x- and y-dimension(2-4 GHz) and 10mm in x- and y- dimension(4-6GHz).
- For zoom scan, Δx_{zoom}, Δy_{zoom}≤ 2GHz - ≤8mm, 2-4GHz - ≤5 mm and 4-6 GHz-≤4mm; Δz_{zoom} ≤3GHz - ≤5 mm, 3-4 GHz- ≤4mm and 4-6GHz-≤2mm.
- Distance between probe sensors and phantom surface was set to 3 mm except for 5 GHz band. For 5GHz band, Distance between probe sensors and phantom surface was set to 2.5 mm
- The dipole input power (forward power) was set to 100 mW or 250 mW depend on the certificate of the dipoles.
- The results are normalized to 1 W input power.

System Check Results

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.

T.S. Liquid		Measured Results		Target (Ref. value)	Delta (%)	Limit (%)	Temp. (℃)	Test Date
		Zoom Scan (W/Kg)	Normalize to 1W (W/Kg)					
Head 2450	1-g	14.100	56.40	53.20	6.02	±10	22.5	2023.3.15
	10-g	6.560	26.24	24.20	8.43	±10		

10. Measured and Reported (Scaled) SAR Results

10.1. SAR Test Results of Bluetooth

Scenario and Distance (Body 0mm)	Test Mode	Channel/ Frequency	Power (dBm)		SAR Value	Power Drift	Duty Factor (%)	Scaled (W/Kg)
			Tune-up	Meas.	1-g (W/Kg)			
Front Edge	BLE 1M	39/2480	5.0	4.94	0.011	-0.06	65.44	0.017
Back Edge	BLE 1M	39/2480	5.0	4.94	0.015	-0.09	65.44	0.023
Left Edge	BLE 1M	39/2480	5.0	4.94	<0.01	0.00	65.44	<0.01
Top Edge	BLE 1M	39/2480	5.0	4.94	<0.01	0.00	65.44	<0.01
Back Edge	BLE 1M	0/2402	5.0	4.65	0.013	0.05	65.44	0.022
Back Edge	BLE 1M	19/2440	5.0	4.93	0.013	-0.04	65.44	0.020

11. Simultaneous Transmission SAR Analysis

Per KDB 447498D01, SAR compliance for simultaneous transmission must be conEdgered when the maximum duration of overlapping transmissions, including network hand-offs, is greater than 30 seconds. This device could not contain multiple transmitters that may operate simultaneously, and therefore no requires a simultaneous transmission analysis.

Appendixes

Refer to separated files for the following appendixes.

4790781926-SAR-1 App A Photo

4790781926-SAR-1 App B Highest Test Plots

4790781926-SAR-1 App C System Check Plots

4790781926-SAR-1 App D Cal. Certificates

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