

SAR EVALUATION REPORT

FCC 47 CFR § 2.1093 IEEE Std 1528-2013 RSS-102 Issue 5

For Wireless Dongle

FCC ID: JNZA00150 IC ID: 4418A-A00150 Model Name: A00150

Report Number: 4789988012-US-S0-V0 Issue Date: 7/26/2021

Prepared for

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REVISION HISTORY

Rev.	Date	Revisions	Revised By
V0	7/26/2021	Initial Issue	Sally Lu

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1. Attestation of Test Results

Applicant Name	Logitech Far East Ltd.			
FCC ID	JNZA00150			
IC ID	4418A-A00150			
Model Name	A00150			
Exposure Category	General Population/Uncontrolled Exposure			
Applicable Standards	FCC 47 CFR § 2.1093			
	Published RF exposure KDB procedures			
	IEEE Std 1528-2013			
	RSS-102 Issue 5			
Evenouse Cotogon	SAR Limits (W/Kg)			
Exposure Category	Peak spatial-average(1g of tissue)			
General population/Uncontrolled exposure	1.6			
DE E Conditions	Equipment Class - Highest Reported SAR (W/kg)			
RF Exposure Conditions	Bluetooth			
Head	0.383			
Date Tested	7/1/2021 ~ 7/22/2021			
Test Results	Pass			

Underwriters Laboratories Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Underwriters Laboratories Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Underwriters Laboratories Taiwan Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Underwriters Laboratories Taiwan Co., Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of any government. This report is written to support regulatory compliance of the applicable standards stated above.

Approved and Authorized By:	Prepared By:			
Jeff Shilo	Sally la			
Jeff Shih	Sally Lu			
Senior Project Engineer	Project Handler			
Underwriters Laboratories Taiwan Co., Ltd.	Underwriters Laboratories Taiwan Co., Ltd.			

2. Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE STD 1528-2013, the following FCC Published RF exposure KDB procedures:

- 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
- 865664 D02 RF Exposure Reporting v01r02
- o 447498 D01 General RF Exposure Guidance v06
- 447498 D02 SAR Procedures for Dongle Xmtr v02r01

3. Facilities and Accreditation

The test sites and measurement facilities used to collect data are located at

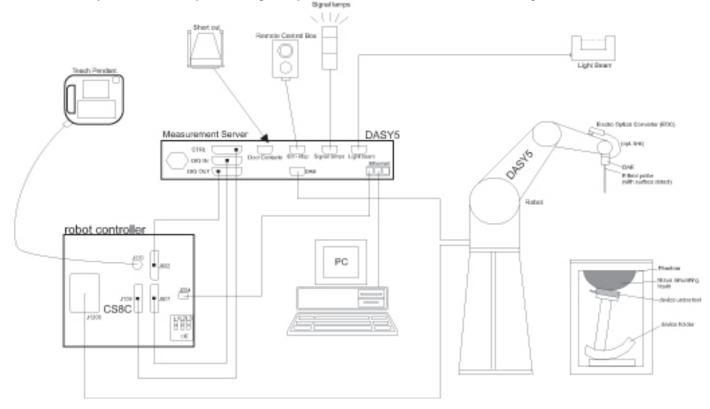
Underwriters Laboratories Taiwan Co., Ltd.,
SAR Room

Underwriters Laboratories Taiwan Co., Ltd. is accredited by TAF, Laboratory Code 3398.

4. SAR Measurement System & Test Equipment

4.1. SAR Measurement System

The DASY5 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, 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.
- 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 Win7 or Win10 and the DASY5 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 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$		
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°		
	\leq 2 GHz: \leq 15 mm 2 – 3 GHz: \leq 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm		
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.			

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

				> 3 GHz	
Maximum zoom scan spatial resolution: Δx_{Zoom} , Δy_{Zoom}			\leq 2 GHz: \leq 8 mm 2 – 3 GHz: \leq 5 mm [*]	$3 - 4 \text{ GHz: } \le 5 \text{ mm}^*$ $4 - 6 \text{ GHz: } \le 4 \text{ mm}^*$	
	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	$3 - 4 \text{ GHz: } \le 4 \text{ mm}$ $4 - 5 \text{ GHz: } \le 3 \text{ mm}$ $5 - 6 \text{ GHz: } \le 2 \text{ mm}$	
Maximum zoom scan spatial resolution, normal to phantom surface	graded	Δz _{Zoom} (1): between 1 st two points closest to phantom surface	≤ 4 mm	$3 - 4 \text{ GHz: } \le 3 \text{ mm}$ $4 - 5 \text{ GHz: } \le 2.5 \text{ mm}$ $5 - 6 \text{ GHz: } \le 2 \text{ mm}$	
	grid Δz _{Zoom} (n>1): between subsequent points		$\leq 1.5 \cdot \Delta z_{Z_{00m}}(n-1)$		
Minimum zoom scan volume	x, y, z		≥ 30 mm	$3 - 4 \text{ GHz:} \ge 28 \text{ mm}$ $4 - 5 \text{ GHz:} \ge 25 \text{ mm}$ $5 - 6 \text{ GHz:} \ge 22 \text{ mm}$	

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

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.

When zoom scan is required and the <u>reported</u> SAR from the <u>area scan based 1-g SAR estimation</u> procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

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.

Dielectric Property Measurements

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date	
Network Analyzer	Anritsu	MS46322B	1740002	2022/1/7	
Dielectric Assessment Kit	SPEAG	DAK-3.5	1250	2021/9/15	
Thermometer	DER EE	DE-3003	P0006880	2021/12/21	

System Check

<u> </u>							
Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date			
EXG-B RF Vector Signal Generator	Keysight Technologies	N5172B	MY56200315	2022/5/26			
Power Meter	Keysight Technologies	N1914A	MY56360007	2021/12/20			
Power Sensor	Keysight Technologies	N8481H	MY56350009	2021/12/20			
Power Meter	Anritsu	ML2495A	1645002	2021/12/20			
Power Sensor	Anritsu	MA2411B	1531202	2021/12/20			
Dosimetric E-Field Probe	SPEAG	EX3DV4	3901	2021/9/22			
Data Acquisition Electronice	SPEAG	DAE4	1360	2021/9/1			
System Validation Dipole	SPEAG	D2450V2	988	2021/11/9			
System Validation Dipole	SPEAG	D5GHzV2	1244	2021/11/9			
Humidity/Temp meter	TECPEL	DTM-20	17020735	2022/4/11			
Thermometer	DER EE	DE-3003	P0006880	2021/12/21			

UL Software

	Software Version
DASY NEO52 D10.4 S14.6.14	
SEMCAD-X-PostPro	

5. Measurement Uncertainty

Measurement uncertainty for 300 MHz to 3 GHz

Source of Uncertainty	Tolerance (± %)	Probability Distribution	Divisor	Ci (1g)	(10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	
Measurement System								
Probe Calibration	6.00	Normal	1	1	1	6.00	6.00	
Axial Isotropy	4.70	Rectangular	1.732	0.7	0.7	1.90	1.90	
Hemispherical Isotropy	9.60	Rectangular	1.732	0.7	0.7	3.88	3.88	
Boundary Effect	1.00	Rectangular	1.732	1	1	0.58	0.58	
Probe Linearity	4.70	Rectangular	1.732	1	1	2.71	2.71	
System Detection Limits	0.25	Rectangular	1.732	1	1	0.14	0.14	
Readout Electronics	0.30	Normal	1	1	1	0.30	0.30	
Probe Modulation Response	2.40	Rectangular	1.732	1	1	1.39	1.39	
Response Time	0.00	Rectangular	1.732	1	1	0.00	0.00	
Integration Time	2.60	Rectangular	1.732	1	1	1.50	1.50	
RF Ambient Conditions – Noise	3.00	Rectangular	1.732	1	1	1.73	1.73	
RF Ambient Conditions – Reflections	3.00	Rectangular	1.732	1	1	1.73	1.73	
Probe Positioner Mechanical Restrictions	0.40	Rectangular	1.732	1	1	0.23	0.23	
Probe Positioning with Respect to Phantom Shell	2.90	Rectangular	1.732	1	1	1.67	1.67	
Interpolation, Extrapolation and Averaged SAR calculation algorithms of the Postprocessor	2.00	Rectangular	1.732	1	1	1.15	1.15	
Test Sample Related								
Device Positioning	2.90	Normal	1	1	1	2.90	2.90	
Device Holder Disturbance	3.60	Normal	1	1	1	3.60	3.60	
DUT Power Drift of Measured SAR	5.00	Rectangular	1.732	1	1	2.89	2.89	
SAR Scaling	0.00	Rectangular	1.732	1	1	0.00	0.00	
Phantom and Setup								
Phantom Uncertainty - Shape, Thickness and Permittivity	7.20	Rectangular	1.732	1	1	4.16	4.16	
SAR Correction for Deviations in Permittivity and Conductivity	1.90	Normal	1	1	0.84	1.90	1.60	
Liquid Conductivity - measurement(DAK)	2.50	Normal	1	0.78	0.71	1.95	1.78	
Liquid Permittivity - measurement(DAK)	2.50	Normal	1	0.23	0.26	0.58	0.65	
Liquid Conductivity – Temperature Uncertainty	3.40	Rectangular	1.732	0.78	0.71	1.53	1.39	
Liquid Permittivity – Temperature Uncertainty	0.40	Rectangular	1.732	0.23	0.26	0.05	0.06	
Combined Standard Uncertainty (K=1)						11.57	11.48	
Expanded Uncertainty U (K=2)						23.14	22.97	

Measurement uncertainty for 3 GHz to 6 GHz

Measurement uncertainty for 3 GHz to 6 GHz Source of Uncertainty	Tolerance (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty	Standard Uncertainty
						(± %, 1g)	(± %, 10g)
Measurement System							
Probe Calibration	6.55	Normal	1	1	1	6.55	6.55
Axial Isotropy	4.70	Rectangular	1.732	0.7	0.7	1.90	1.90
Hemispherical Isotropy	9.60	Rectangular	1.732	0.7	0.7	3.88	3.88
Boundary Effect	2.00	Rectangular	1.732	1	1	1.15	1.15
Probe Linearity	4.70	Rectangular	1.732	1	1	2.71	2.71
System Detection Limits	0.25	Rectangular	1.732	1	1	0.14	0.14
Readout Electronics	0.30	Normal	1	1	1	0.30	0.30
Probe Modulation Response	2.40	Rectangular	1.732	1	1	1.39	1.39
Response Time	0.00	Rectangular	1.732	1	1	0.00	0.00
Integration Time	2.60	Rectangular	1.732	1	1	1.50	1.50
RF Ambient Conditions – Noise	3.00	Rectangular	1.732	1	1	1.73	1.73
RF Ambient Conditions – Reflections	3.00	Rectangular	1.732	1	1	1.73	1.73
Probe Positioner Mechanical Restrictions	0.40	Rectangular	1.732	1	1	0.23	0.23
Probe Positioning with Respect to Phantom Shell	6.70	Rectangular	1.732	1	1	3.87	3.87
Interpolation, Extrapolation and Averaged SAR calculation algorithms of the Postprocessor	4.00	Rectangular	1.732	1	1	2.31	2.31
Test Sample Related							
Device Positioning	2.90	Normal	1	1	1	2.90	2.90
Device Holder Disturbance	3.60	Normal	1	1	1	3.60	3.60
DUT Power Drift of Measured SAR	5.00	Rectangular	1.732	1	1	2.89	2.89
SAR Scaling	0.00	Rectangular	1.732	1	1	0.00	0.00
Phantom and Setup							
Phantom Uncertainty - Shape, Thickness and Permittivity	7.60	Rectangular	1.732	1	1	4.39	4.39
SAR Correction for Deviations in Permittivity and Conductivity	1.90	Normal	1	1	0.84	1.90	1.60
Liquid Conductivity - measurement(DAK)	2.50	Normal	1	0.78	0.71	1.95	1.78
Liquid Permittivity - measurement(DAK)	2.50	Normal	1	0.23	0.26	0.58	0.65
Liquid Conductivity – Temperature Uncertainty	3.40	Rectangular	1.732	0.78	0.71	1.53	1.39
Liquid Permittivity – Temperature Uncertainty	0.40	Rectangular	1.732	0.23	0.26	0.05	0.06
Combined Standard Uncertainty (K=1)						12.65	12.57
Expanded Uncertainty U (K=2)						25.29	25.13

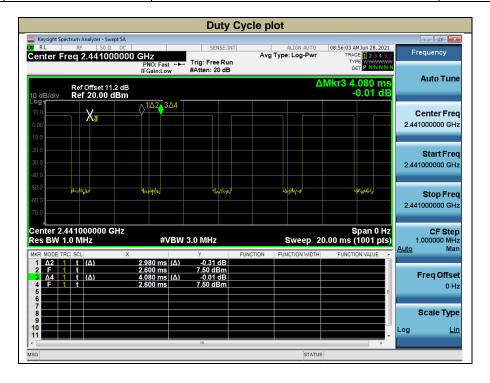
6. Device Under Test (DUT) Information

6.1. DUT Description

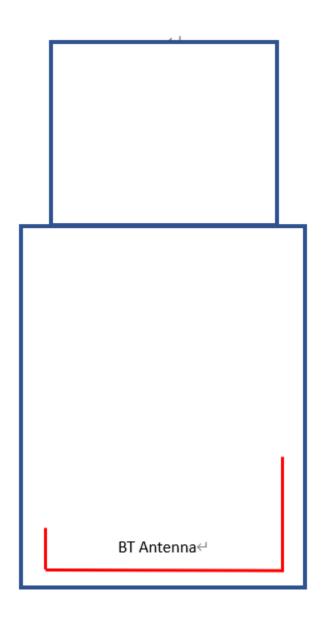
Product	Wireless Dongle
Brand Name	logitech G
Model Name	A00150
Operating Frequency	2402MHz ~ 2480MHz
Modulation	GFSK and π/4-DQPSK
Transfer Rate	Up to 2 Mbps
S/N	NA
Hardware Version	NA
Software Version	20210611_Alice_3_0_1_1
Received Date	2021/7/1

6.2. Wireless Technologies

Wireless technologies	Frequency bands	Operating mode	Duty Cycle used for SAR testing	
Bluetooth	2.4 GHz	BT-BR	73.04%	
Bluetooth	2.4 GHz	BT-EDR	72.68%	



7. Antenna Location



Back View

Antenna	To Horizontal-Up	To Horizontal- Down	To Vertical- Front	To Vertical- Back	To Tip
Bluetooth	3.35	3.33	2.69	2.69	2.96

Unit: mm

8. Dielectric Property Measurements & System Check

8.1. Dielectric Property Measurements

The temperature of the tissue-equivalent medium used during measurement must also be within 18° C to 25° C and within $\pm 2^{\circ}$ 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.

The dielectric constant (ϵ r) and conductivity (σ) of typical tissue-equivalent media recipes are expected to be within \pm 5% of the required target values; but for SAR measurement systems that have implemented the SAR error compensation algorithms documented in IEEE Std 1528-2013, 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 \pm 10%. This is limited to frequencies \leq 3 GHz.

Tissue Dielectric Parameters

FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

Target Frequency (MHz)	He	ad
raiget riequelicy (ivii iz)	ϵ_{r}	σ (S/m)
150	52.3	0.76
300	45.3	0.87
450	43.5	0.87
835	41.5	0.90
900	41.5	0.97
915	41.5	0.98
1450	40.5	1.20
1610	40.3	1.29
1800 – 2000	40.0	1.40
2450	39.2	1.80
3000	38.5	2.40

IEEE Std 1528-2013

Refer to Table 3 within the IEEE Std 1528-2013

IC RSS-102 Issue 5

Refer to Annex D - Body Tissue Equivalent Liquid

Dielectric Property Measurements Results:

Date	Tissue	Frequency	Rela	tive Permittivity	y (er)	Conductivity (σ)			
	Туре	(MHz)	Measured	Target	Delta (%)	Measured	Target	Delta (%)	
		2400	37.73	39.29	-3.96	1.750	1.76	-0.33	
		2402	37.72	39.29	-3.99	1.752	1.76	-0.32	
2024/7/4	Usad	2441	37.66	39.22	-3.97	1.799	1.79	0.41	
2021/7/1	Head	2450	37.63	39.20	-4.02	1.808	1.80	0.47	
		2480	37.52	39.16	-4.19	1.829	1.83	-0.23	
		2500	37.42	39.14	-4.38	1.852	1.85	-0.15	
		2400	38.68	39.29	-1.54	1.819	1.76	3.59	
		2402	38.65	39.29	-1.62	1.820	1.76	3.58	
0004/7/0	Usad	2441	38.46	39.22	-1.93	1.866	1.79	4.12	
2021/7/2	Head	2450	38.42	39.20	-1.98	1.876	1.80	4.24	
		2480	38.44	39.16	-1.85	1.907	1.83	4.05	
		2500	38.35	39.14	-2.01	1.925	1.85	3.79	

8.2. 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 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.

Date	Tissue Type	Dipole S/N	Input Power (mW)	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Delta 1g ±10 (%)	Measured 10g SAR (W/kg)		Normalized 10g SAR (W/kg)	Delta 10g ±10 (%)	Plot No.
2021/7/1	Head	D2450V2-988	250	13.2	52.20	52.8	1.15	6.22	23.90	24.88	4.10	1
2021/7/2	Head	D2450V2-988	250	13.70	52.20	54.8	4.98	6.01	23.90	24.04	0.59	2

9. RF Exposure Conditions (Test Configurations)

Wireless technologies	RF Exposure Conditions	DUT to User Separation	Test Position	Antenna to edge/surface	SAR Required	Note
	3.35	Horizontal-Up	<5mm	Yes		
		3.33	Horizontal-Down	<5mm	Yes	
Bluetooth	Head	2.69	Vertical-Front	<5mm	Yes	
		2.69	Vertical-Back	<5mm	Yes	
		2.96	Tip	<5mm	Yes	

10. Conducted Output Power Measurements

10.1. Bluetooth

Average Power Measured Results

Band	Mode	Data Rate	Ch#	Freq. (MHz)	Meas. Avg Pwr (dBm)	Tune-up Limit (dBm)	SAR Test (Yes/No)	
Bluetooth		1 Mbps	0	2402	7.92	8.0		
	BR		39	2441	7.90	8.0	No	
			78	2480	7.70	8.0		
	EDR	EDR 2 Mbps	0	2402	5.18	5.5		
			39	2441	5.16	5.5	No	
			78	2480	4.96	5.5		

11. Measured and Reported (Scaled) SAR Results

SAR Test Reduction criteria are as follows:

KDB 447498 D01 General RF Exposure Guidance:

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

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

11.1. Test Condition

Test Item	Test Site No.	Environmental Condition	Test Date	Tested by
SAR	SAR1	21.9°C	2021/7/1 ~ 2021/7/2	Edison Hu

11.2. Bluetooth

Mode Dist. (mm)	Dist	Test Position	Ch #.	Freg.	Duty	Power (dBm)		Power	1-g SAR (W/kg)		Plot
				(MHz)	Cycle	Tune-up Limit	Meas.	Drift	Meas.	Scaled	No.
Bluetooth	5	Horizontal-Up	0	2402	73.04%	8.0	7.92	0.02	0.185	0.258	
Bluetooth	5	Horizontal-Up	39	2441	73.04%	8.0	7.90	0.15	0.237	0.332	
Bluetooth	5	Horizontal-Up	78	2480	73.04%	8.0	7.70	0.17	0.261	0.383	1
Bluetooth	5	Horizontal- Down	0	2402	73.04%	8.0	7.92	0.14	0.155	0.216	
Bluetooth	5	Vertical-Front	0	2402	73.04%	8.0	7.92	0.17	0.117	0.163	
Bluetooth	5	Vertical-Back	0	2402	73.04%	8.0	7.92	0.12	0.097	0.135	
Bluetooth	5	Tip	0	2402	73.04%	8.0	7.92	0.14	0.006	0.009	

Appendixes

Refer to separated files for the following appendixes.

4789988012-US-S0-V0_Appendix A: DUT and SAR Setup Photos

4789988012-US-S0-V0_Appendix B: SAR System Check Plots

4789988012-US-S0-V0_Appendix C: Highest SAR Test Plots

4789988012-US-S0-V0_Appendix D: SAR Probe and Dipole Calibration Certificates

END OF REPORT